

# The Catalogue

Hangcha Material Handling.



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ISO14001  
ISO14001:2015



ISO9001  
ISO9001:2015



HANGCHA trucks conform  
to the European Safety  
Requirements.

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*The World of Hangcha*





46 YEARS OF  
EXPERIENCE IN  
FORKLIFT TRUCK



## Welcome to HANGCHA!

ZHEJIANG HANGCHA IMP. & EXP. Co. Ltd. is a subsidiary of HANGCHA Group, and is responsible for all import, export activities, sales channels and marketing network management of HANGCHA Group.

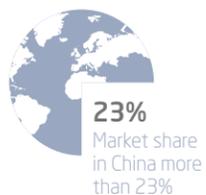
We provide material handling equipment, spare parts, marketing and technical support through our international dealer's network to a wide range of all kinds of customers. Currently our sales network consists of more than 120 dealers cover more than 150 countries in Europe, Africa, Asia, Oceania, North America and Latin America.

Our network is highly professional and can provide all the necessary services and support to customers.

Our products have gained a solid reputation with our customers for being of the highest quality, for their durability and reliability.

HANGCHA offers a complete product range of material handling equipment.

From 1.0 - 48.0t internal combustion engine and 1.0 - 16.0t electric counterbalance forklift trucks, a full range of warehouse equipment from electric pallet trucks to reach trucks, 3.0 - 6.0t side loaders, empty container handlers, reach stackers, tow tractors and more.



[www.hcforlift.com](http://www.hcforlift.com)

Pallet truck	     	03-38
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Pallet stacker	  	85-118
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Reach truck		162-220
Electric tow tractor/ platform	 	221-250
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# THE PALLET TRUCK WITH Li-Ion TECHNOLOGY

A series mini walkie pallet truck / Li-Ion will replace the hand pallet truck perfectly. It can be used in such as retail environment, pharmaceutical factory... especially in narrow aisle.



130kg

Service weight (including battery): 130kg, easy control



## A series Mini Walkie Pallet Truck / Li-Ion

with capacity of 1,200kg



1 container 108 units

Low transportation cost:  
108 units can be loaded in one 40GP



1330 mm  
Turning radius



## A series Mini Walkie Pallet Truck / Li-Ion specification

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.
	1.2	Manufacturer's type designation	CBD12-AMC1-I
Weight	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)
	1.6	Load centre distance	c (mm)
	1.8	Load distance, centre of drive axle to fork	x (mm)
	1.9	Wheelbase	y (mm)
Tyres, chassis	2.1	Service Weight(Including battery)	kg
		Battery weight	kg
Dimensions	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	PU
	3.2	Tyre size, front	φ210x70
	3.3	Tyre size, rear	φ75x65
	3.4	Additional wheel (dimensions)	/
	3.5	Wheels, number front / rear (x = driven wheels)	1x/4
	3.6	Tread, front	b <sub>10</sub> (mm)
	3.7	Tread, rear	b <sub>11</sub> (mm)
Performance data	4.4	Lift	h <sub>3</sub> (mm)
	4.15	Fork height,lowered	h <sub>13</sub> (mm)
	4.19	Overall length	l <sub>1</sub> (mm)
	4.21	Overall width	b <sub>1</sub> (mm)
	4.22	Fork dimensions	s/e/l (mm)
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)
	4.35	Turning radius	W <sub>a</sub> (mm)
	4.36	Aisle width for pallets 1000 x 1200 crossways	Ast(mm)
	4.37	Aisle width for pallets 800 x 1200 lengthways	Ast(mm)
Electric engine	5.1	Travel speed,laden/unladen	km/h
	5.2	Lift speed,laden/unladen	m/s
	5.3	Lowering speed,laden/unladen	m/s
	5.8	Max Gradeability,laden/unladen	%
	6.1	Drive motor rating S2 60 min	kW
	6.2	Lift motor rating at S3 15%	kW
	6.4	Battery voltage,rated capacity	V/Ah
	8.1	Type of drive control	DC
	9.1	Manufacturer	Curtis

Note: 1) When fork lowered,+55mm; 2)According to the VDI2198 standard,+350mm; 3)According to the VDI2198 standard,+195mm.



High efficient:  
Full electric control, travelling- lifting- lowering



# QUICK CHARGING, LONG WORKING TIME;

**1200 CYCLES**  
**3 YEARS WARRANTY**  
**1 YEAR STANDBY LIFE**

Remaining capacity of lithium-ion battery is 70% after 1200 cycles, and warranty period of the battery is 3 years or 6000 hours.

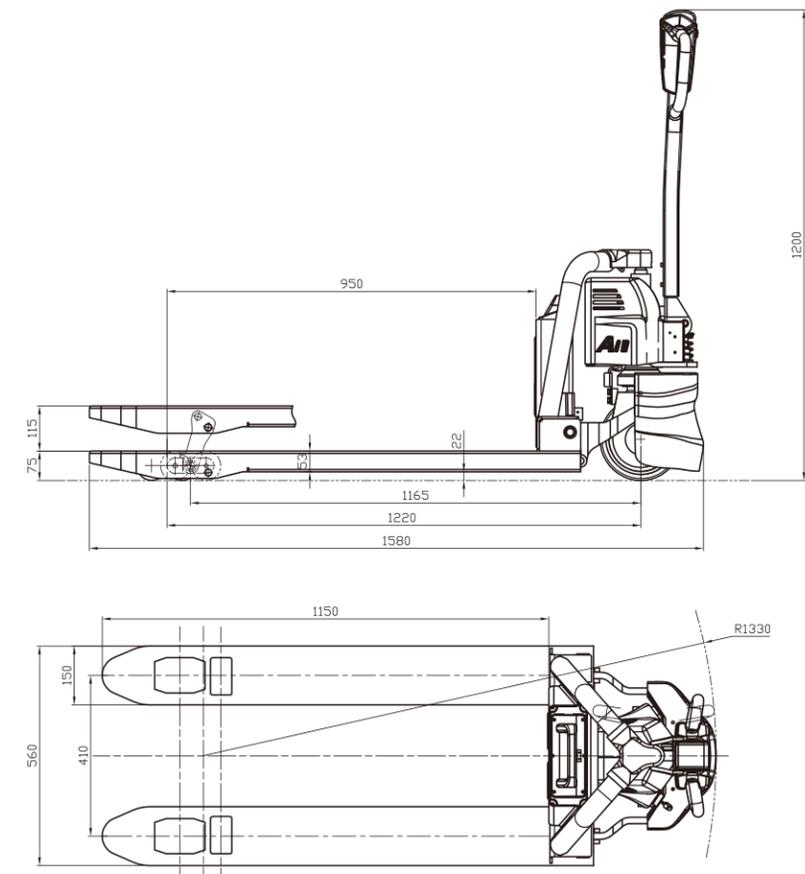
Power loss of the battery is extremely low when the power is OFF, and the standby state can last for a year with no reduction of battery service life.

**100 %**

**2 hours charge**



**3.5 hours working time**





# Everything Works Better. Because More Safety & Easy.

## Safety:

- With the functions of release braking, reverse braking and emergency braking to ensure safe driving.
- Anti-roll back function to ensure safe operation.
- The emergency reverse button on the handle can effectively prevent the driver from being injured in an emergency occurring when the truck is driving forwards.
- With the dual protection by the electronic lifting limit and mechanical limit switches that are provided for the standard configuration, the impact caused by lifting to the top can be avoided, the motor can be effectively protected and the safety of the goods can be ensured.



## Maintenance:

- The lithium battery can be charged quickly and replaced easily.
- The novelty-designed handle has key switches that can be replaced separately.
- Power display can prompt users to charge in time.
- With a hood that can be opened very easily to expose all components and facilitate the maintenance of pallet.
- With all spindles equipped with self-lubricated sleeves and oil cups to facilitate maintenance and a long service life.



## A series Mini Walkie Pallet Truck / Li-Ion

with capacities of 1,500 to 2,000kg

The A series lithium battery mini pallet truck is a new generation product recently developed by Hangcha for warehousing and logistics applications. Using permanent magnet drive technology and with advanced performance, comfortable, safe and reliable operations and low costs, it is an ideal tool for loading, unloading and handling palletized goods in warehouses, supermarkets, workshops and homes.



# Appearance and Ergonomics.



## Appearance:

- The A series mini pallet truck adopts a professional industrial design in appearance. The truck has a smooth vivid profile, a compact shape and a fully ergonomic design.
- With a large number of steel plate stamping and injection molding processes to enable a robust and durable product that meets environmental protection requirements.



## High performance:

- With high power and 1.5 - 2 tons load capacity to meet the handling needs of most customers.
- DC permanent magnet / permanent magnet synchronous traction motor provides excellent performance and low heat generation.
- The truck has a regenerative braking function and can prevent sliding down a ramp.



High Power



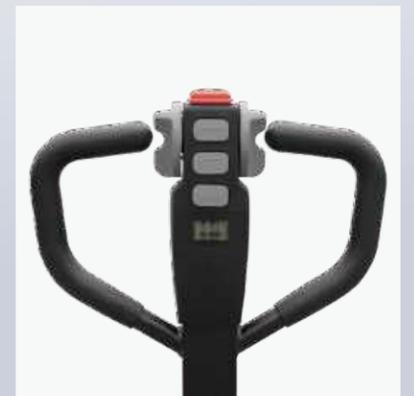
High-end Cell



Code Lock

## Comfort:

- The newly-developed control joystick is reliable, stylish and compact and all operations can be completed with one hand.
- The code lock can be used more conveniently.
- The low steering resistance design enables easy steering.
- With a high-end cell and multiple safety protection systems, the high-performance lithium battery has a long service life, maintenance-free, safe and reliable and can be charged quickly and replaced easily.
- Thanks to the compact, lightweight and flexible design, the truck with upright walking function can be operated very easily. It can be operated in narrow aisles, e.g., in a container.
- The clearance of forks are only 80mm, it can fit more pallets.



# There Are Many Sides To Reliability.



## Reliability:

- The innovative structural design can prevent the harness and electrical parts from moving together with the lifting parts, making the truck highly reliable.
- The truck can hibernate automatically. When not used for a period of time, the truck will hibernate automatically to effectively protect the battery and prolong the battery's service time.
- All wires and cables connected with a water-proof plug and connector, providing reliable protection and significantly improves the reliability.
- With a low-noise low-vibration high-performance hydraulic power unit to enable stable and reliable lifting and lowering.
- With an electronic lifting limit switch to avoid overflow from the hydraulic power unit, save more energy and protect the motor, the switch has high reliability and long life.
- The interlock switch is a non-contact proximity switch with high reliability.



Save more energy



Hibernate Automatically



Water-proof



## A Series Mini Walkie Pallet Truck / Li-Ion Specification

Distinguishing mark	Item No.	Description	HANGCHA GROUP CO.,LTD.				
			CBD15-AMJ-SI	CBD15-AMA-SI	CBD20-AMA-SI		
Distinguishing mark	1.1	Manufacturer					
	1.2	Manufacturer's type designation	CBD15-AMJ-SI	CBD15-AMA-SI	CBD20-AMA-SI		
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	Pedestrian	Pedestrian		
	1.5	Rated capacity/rated load	Q (kg)	1500	1500	2000	
	1.6	Load centre distance	c (mm)	600	600	600	
	1.8	Load distance, centre of drive axle to fork	x (mm)	960	960	960	
	1.9	Wheelbase	y (mm)	1123 <sup>3)</sup>	1123 <sup>3)</sup>	1123 <sup>3)</sup>	
	Weight	2.1	Service Weight(Including battery)	kg	140	140	150
			Battery weight	kg	6.25	6.25	7.7
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	
	3.2	Tyre size, front		Φ210x70	Φ210x70	Φ210x70	
	3.3	Tyre size, rear		Φ80x64	Φ80x64	Φ80x64	
	3.5	Wheels, number front / rear (x = driven wheels)		1x/4	1x/4	1x/4	
	3.7	Tread, rear	b <sub>11</sub> (mm)	400	400	400	
	Dimensions	4.4	Lift	h <sub>3</sub> (mm)	120	120	120
4.15		Fork height,lowered	h <sub>13</sub> (mm)	80	80	80	
4.19		Overall length	l <sub>1</sub> (mm)	1562	1562	1562	
4.21		Overall width	b <sub>1</sub> (mm)	560	560	560	
4.22		Fork dimensions	s/e/l (mm)	50/160/1150	50/160/1150	50/160/1150	
4.25		Distance between fork-arms	b <sub>5</sub> (mm)	560/680	560/680	560/680	
4.32		Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	30	30	30	
4.34.1		Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm)	1763 <sup>1)3)</sup>	1763 <sup>1)3)</sup>	1763 <sup>1)3)</sup>	
4.34.2		Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm)	1813 <sup>2)3)</sup>	1813 <sup>2)3)</sup>	1813 <sup>2)3)</sup>	
4.35	Turning radius	W <sub>a</sub> (mm)	1296 <sup>3)</sup>	1296 <sup>3)</sup>	1296 <sup>3)</sup>		
Performance data	5.1	Travel speed,laden/unladen	km/h	4.5/4.8	4.5/4.8	4.5/4.8	
	5.2	Lift speed,laden/unladen	m/s	0.025/0.035	0.025/0.035	0.025/0.035	
	5.3	Lowering speed,laden/unladen	m/s	0.05/0.040	0.05/0.040	0.05/0.040	
	5.8	Max Gradeability,laden/unladen	%	6/15	8/15	6/15	
Electric Engine	6.1	Drive motor rating S2 60 min	kW	0.65	0.65	0.65	
	6.2	Lift motor rating at S3 15%	kW	0.8	0.8	0.8	
	6.4	Battery voltage,rated capacity	V/Ah	24/24	24/24	24/30	
	8.1	Type of drive control		DC	PMSM	PMSM	

### Standard Specification:

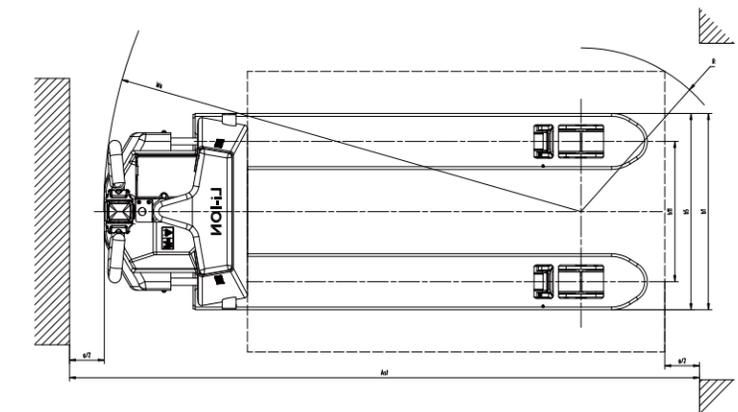
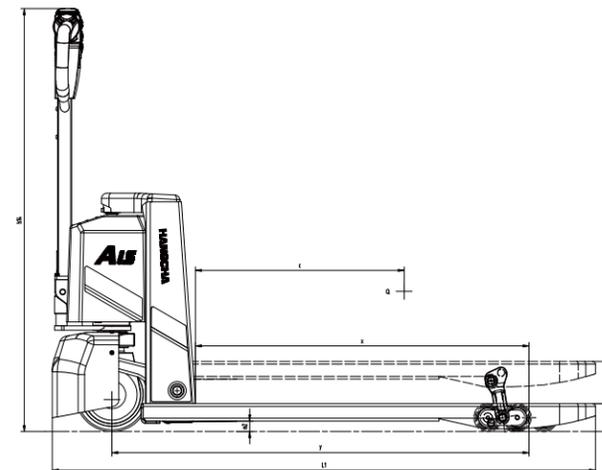
- DC permanent magnet / permanent magnet synchronous traction motor
- Dual load wheels
- Fork interval: 560mm
- Fork length: 1150mm
- Code lock
- Emergency power off switch
- Multi-function meter
- High-performance lithium battery
- Non-contact interlock switch
- Electronic lifting limit switch
- Upright walking
- Horn

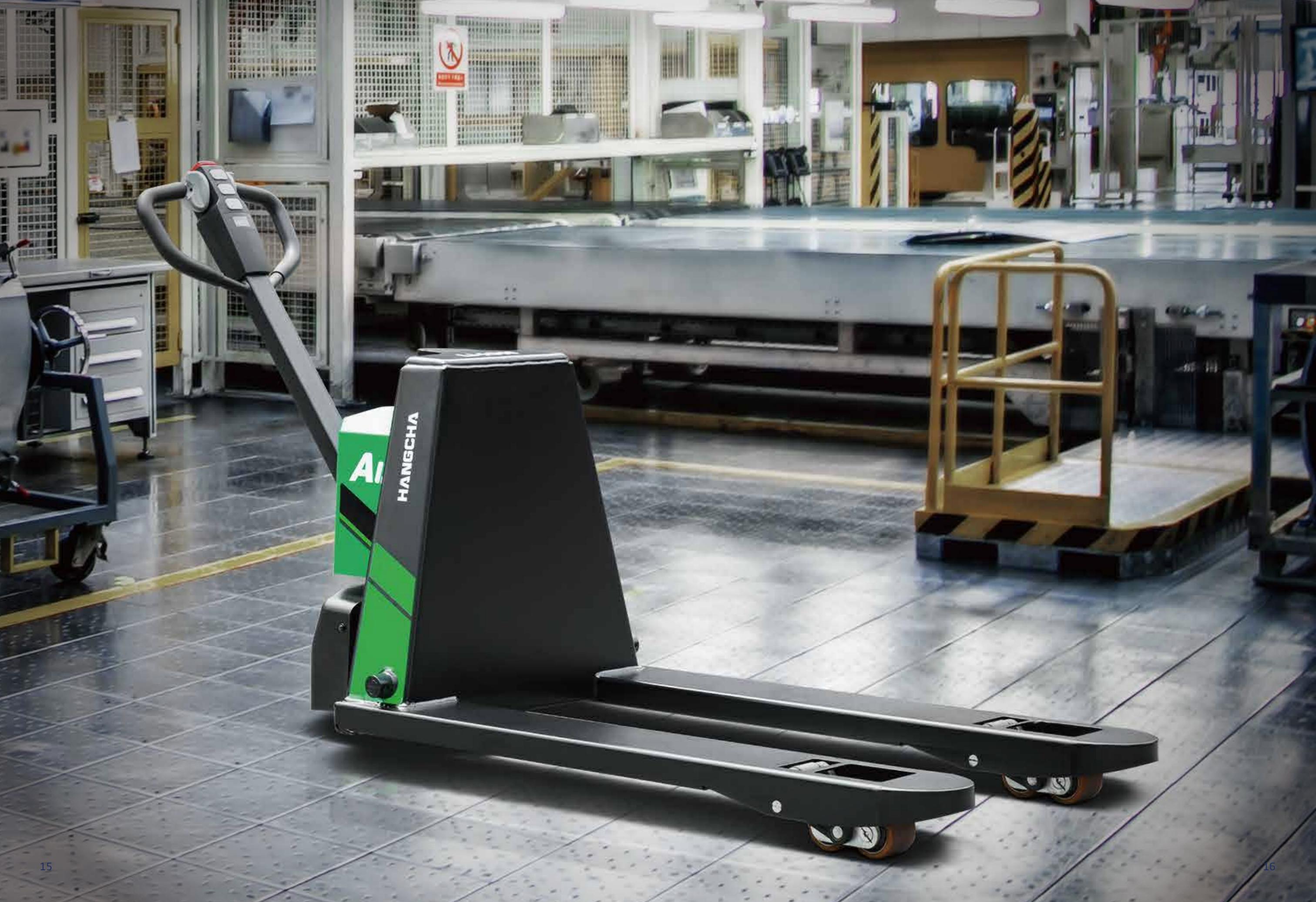
### Options:

- Fork interval: 680mm
- Fork length: 1220mm
- Single load wheel
- Key switch



Note: 1). VDI 2198: +345mm  
2). VDI 2198: +192mm  
3). When fork lowered,+76mm







**LI-ION**  
TECHNOLOGY  
INNOVATIVE LITHIUM-ION

## A series Mini Walkie Pallet Truck / Li-Ion with capacities of 1,500/2,000kg

The A Series 1.5t & 2t Mini Lithium-ion Pallet Trucks are new generation of products developed by Hangcha for warehouse and logistics applications. They feature fast charging, advanced performance, comfortable operation, safety, reliability and low maintenance cost with the Li-Ion technology.

The trucks are ideal tool for loading, unloading, and handling palletized goods in warehouses, supermarkets, workshops and homes.

### Appearance

- / The A Series 1.5t & 2t Mini Lithium-ion Pallet Trucks are completed with specialized industrial design of appearance. The trucks feature smooth lines and affluent sense of movement, and compact profile, with full consideration being given to ergonomics, in accord with the latest appearance design trend.
- / They are manufactured with a large number of steel plate stamping and injection molding technologies, featuring solidness, durability, and high grade, in compliance with environmental requirements.

### High Performance

- / With strong power, they can satisfy the handling demand of most customers, with 6h battery life.
- / With permanent magnet travel motor, they feature excellent performance and low heat emission.
- / The latest CURTIS permanent magnet control system offers excellent, high-efficiency, and stable control performance.
- / Regenerative brake of the pallet truck prevents it from sliding on a slope.
- / Their controllers, hydraulic power packs, switches, plug connectors, and other important parts are all of renowned domestic and abroad brands.
- / The battery can be fully charged in 2 hours thanks to the fast charging technology, and life of battery cells is up to 1200 cycles.
- / High-quality and high rate battery cells, with lattice tandem & parallel combination technology, offer excellent performance.

### Comfort

- / Truck structure of optimized design guarantees terrific operating view of the truck.
- / With small sizes, the operation is easy, flexible and extremely convenient, and the upright-tiller running function allows it to work within confined space, such as container.
- / Standard height of fork is 80mm, and guiding device is added to facilitate access and exit of pallets (including closed-deck pallets).
- / The battery can be removed from truck side, and features small volume and light weight, and can be replaced easily and quickly;
- / Charging can be completed without removing the battery out from the truck.

### Reliability

- / The three-point support design is applied, and side support system is provided to guarantee safety and stability.
- / With optimized design, and lifting rod is steady and reliable, bearing small force.
- / All plug connectors are all waterproof, and all wires and cables have reliable protection, which increases reliability of electrical system significantly.
- / The cutting-edge hydraulic power unit features low noise, small vibration, and stable and reliable rising and declining.
- / Stamping molded fork has higher strength and impact resistance, with even higher working efficiency by working together with the fork-tip guiding function.
- / The interlock switch is of non-contact proximity switch, with extremely high reliability.
- / One-piece iron wheel hood offers good protection to truck body against external impact.
- / The built-in safety protection system of the battery can monitor voltage, temperature, and current of the battery in real time, and guarantee that the battery works safely.
- / The battery is placed inside the chassis, which can prevent the battery from damage because of impact.



Easy for exchanging battery



The upright-tiller running function allows it to work within confined space, such as container



The modular tiller is simple but reliable and beautiful, all parts inside it can be replaced separately and all operations can be done easily with one hand



Body feature smooth lines and affluent sense of movement, and compact profile, in accord with the latest appearance design trend



The charger has compact body and is easy for carry



**100 %**

**2 hours charge 6 hours working time**



## Safety

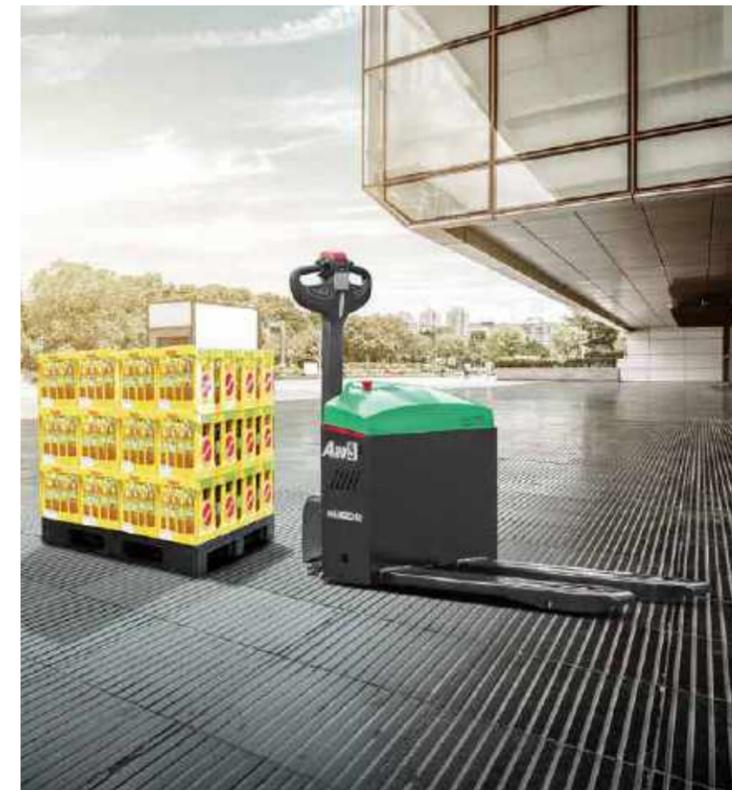
- / Release braking, reverse braking, and emergency braking can ensure safety of traveling;
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency reversing button at top of the tiller can avoid the driver from injury effectively in case of emergency during backward driving of the truck;
- / Dual protection with electronic lifting limit and smart controller limit of standard configuration avoids impact when fork is lifted to top end of mast, offers effective protection to working motor, and guarantees safety of goods.
- / The truck goes into sleep mode automatically after 30-min standby, which is safe and energy efficient.

## Maintenance

- / Battery indicator will prompt the user to charge the battery timely.
- / Engine cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine.
- / All rotating shafts are equipped with lubricating sleeve and oil cup, which is convenient for maintenance and has a long service life.

## Standard Specification

- / Permanent magnet brushless drive motor (2.0t)
- / Permanent magnet drive motor (1.5t)
- / Emergency power off switch
- / Battery meter
- / PU wheels
- / Fork length 1150mm
- / Outer distance of forks 560mm
- / Electronic lifting limit
- / Non-contact interlock switch
- / Modular tiller
- / Electric horn
- / High-performance lithium-ion battery
- / Upright-tiller creep speed running
- / Guide fork for closed-deck pallets
- / Auxiliary wheels (2.0t)
- / Double load wheels
- / Fast charging
- / Automatic sleep function



## Options

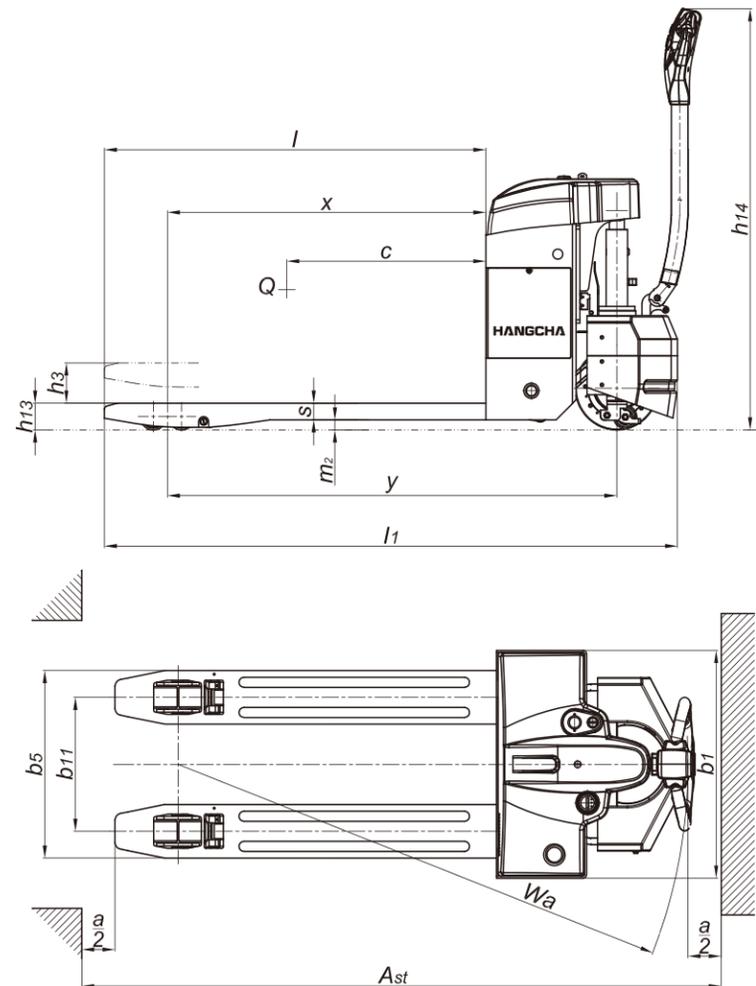
- / Alternative fork lengths and widths
- / Single load wheel
- / PIN lock
- / 75mm distance from fork surface to ground



## A series 1.5t Mini Walkie Pallet Truck / Li-Ion

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CBD15-AMC1-I	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian	
	1.5	Rated capacity/rated load	Q (kg)	1500	
	1.6	Load centre distance	c (mm)	600	
	1.8	Load distance, centre of drive axle to fork	x (mm)	950	
Weight	2.1	Service Weight(Including battery)	kg	190	
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	
	3.2	Tyre size, front		Φ210x70	
	3.3	Tyre size, rear		2×Φ80x64	
	3.4	Additional wheel (dimensions)		/	
	3.5	Wheels, number front / rear (x = driven wheels)		1x/4	
	3.6	Tread, front	b <sub>10</sub> (mm)	/	
	3.7	Tread, rear	b <sub>11</sub> (mm)	400	
Dimensions	4.4	Lift	h <sub>3</sub> (mm)	120	
	4.15	Fork height, lowered	h <sub>13</sub> (mm)	80	
	4.19	Overall length	l <sub>1</sub> (mm)	1669	
	4.21	Overall width	b <sub>1</sub> (mm)	568	
	4.22	Fork dimensions	s/e/l (mm)	50/160/1150	
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	560/680	
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	30	
4.35	Turning radius	Wa (mm)	1400 <sup>1)</sup>		
Performance data	5.1	Travel speed, laden/unladen	km/h	4.5/4.9	
	5.2	Lift speed, laden/unladen	m/s	0.05/0.06	
	5.3	Lowering speed, laden/unladen	m/s	0.04/0.045	
	5.8	Max Gradeability, laden/unladen	%	6/15	
Electric engine	6.1	Drive motor rating S2 60 min	kW	0.65	
	6.2	Lift motor rating at S3 15%	kW	0.8	
	6.4	Battery voltage, rated capacity	V/Ah	24/40	
	8.1	Type of drive control		DC	
	9.1	Manufacturer		Curtis	

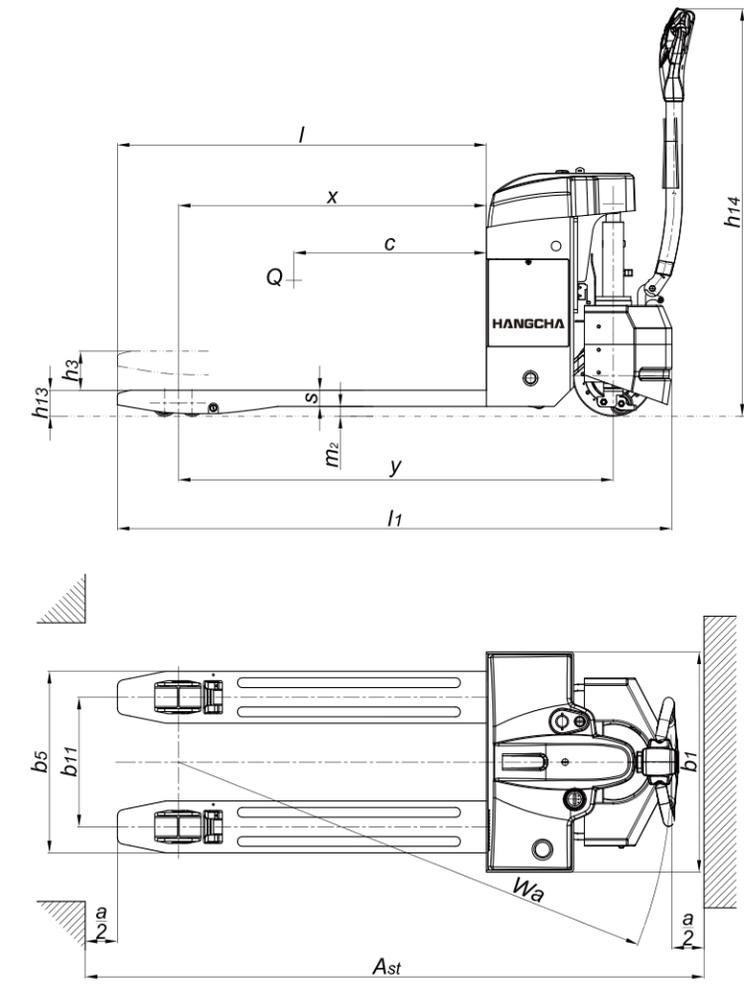
Note: 1). When fork lowered, +60mm



## A series 2.0t Mini Walkie Pallet Truck / Li-Ion

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CBD20-AMC1-I	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian	
	1.5	Rated capacity/rated load	Q (kg)	2000	
	1.6	Load centre distance	c (mm)	600	
	1.8	Load distance, centre of drive axle to fork	x (mm)	960	
Weight	2.1	Service Weight(Including battery)	kg	270	
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	
	3.2	Tyre size, front		Φ250x80	
	3.3	Tyre size, rear		2×Φ80x64	
	3.4	Additional wheel (dimensions)		Φ70x40	
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4	
	3.6	Tread, front	b <sub>10</sub> (mm)	432	
	3.7	Tread, rear	b <sub>11</sub> (mm)	400	
Dimensions	4.4	Lift	h <sub>3</sub> (mm)	120	
	4.15	Fork height, lowered	h <sub>13</sub> (mm)	80	
	4.19	Overall length	l <sub>1</sub> (mm)	1728	
	4.21	Overall width	b <sub>1</sub> (mm)	680	
	4.22	Fork dimensions	s/e/l (mm)	50/160/1150	
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	560/680	
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	30	
4.35	Turning radius	Wa (mm)	1482 <sup>1)</sup>		
Performance data	5.1	Travel speed, laden/unladen	km/h	4/5.5	
	5.2	Lift speed, laden/unladen	m/s	0.027/0.040	
	5.3	Lowering speed, laden/unladen	m/s	0.042/0.038	
	5.8	Max Gradeability, laden/unladen	%	8/16	
Electric engine	6.1	Drive motor rating S2 60 min	kW	0.8	
	6.2	Lift motor rating at S3 15%	kW	0.8	
	6.4	Battery voltage, rated capacity	V/Ah	48/20	
	8.1	Type of drive control		DC	
	9.1	Manufacturer		Curtis	

Note: 1). When fork lowered, +56mm





## A Series Pallet Truck Mini Range II

with capacities of 1,500kg

The A series pallet truck mini range II has been engineered to be both powerful and flexible to meet the requirements of many demanding applications. Whether it's supermarket work, delivery service, stock replenishment or heavy manufacturing, the A series pallet truck mini range II has the strength and durability to minimise your total cost of ownership.

### Appearance

- / A series pallet truck mini range II applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes, which is robust, durable, and also environmental compliance.

### High Performance

- / Rated capacity 1500kg, meet the needs of the majority of customers.
- / Powered by traction motor not only has good acceleration and perfect performance, but also low heat.
- / Latest CURTIS control system, precise and smooth.
- / Regenerative braking for battery recovery during travel speed reduction, anti-slope on gradient.
- / All key parts such as tiller, switches, connectors, battery indicator and hour meter all adopt the famous brand.

### Reliability

- / 5-pivot design provide longer working life.
- / Imported waterproof connectors, all wires and cables are protected, greatly improve the reliability of the electric system.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch formed forks to provide more strength and tip guide to provide higher efficient operation.
- / Using non-contact proximity switch, improves safety and reliability.

### Safety

- / Three braking system of regenerative braking, reverse current braking, parking brake, insures the safe operation.
- / Anti-slope on gradient can keep the safety.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / The standard equipped electronic lifting limitation protect the pump motor from damaging dramatically and more energy saving.



Rema tiller head



Auxillary wheels are equipped to have better stability



Modern outline design



Tandem load wheel



## Standard Specification

- / Permanent magnet drive motor
- / CURTIS permanent magnet controller
- / Emergency switch
- / Multi-function battery indicator
- / PU wheel
- / 1150mm fork length
- / 560mm outside fork width
- / Electronic lifting limitation
- / Non-contact proximity switch
- / Till made by REMA
- / Horn
- / Maintenance free battery
- / Internal charger
- / Walking upright
- / Guide device
- / Additional wheel
- / Tandem load wheel

## Options

- / Different length of fork
- / Different width of outside fork
- / Single load wheel

## Comfort

- / Simple and beautiful tiller made by REMA designed to make the operator feel comfortable, all the operation can be completed by one hand.
- / Optimized designing structure to offer a good visibility and easy entrance of the pallet.
- / Built-in charger and maintenance free gel battery adopted to provide convenient usage.
- / The compact body and semicircular design provide an ideal operation in limited space, and the ability of walking upright greatly increases the convenience in the container.
- / Standard fork height 80mm, equipped the guide device easy to get in pallets (including sealing pallets).
- / Side battery change is standard feature.

## Maintenance

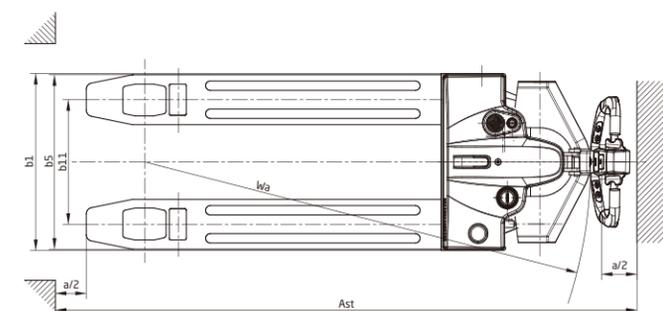
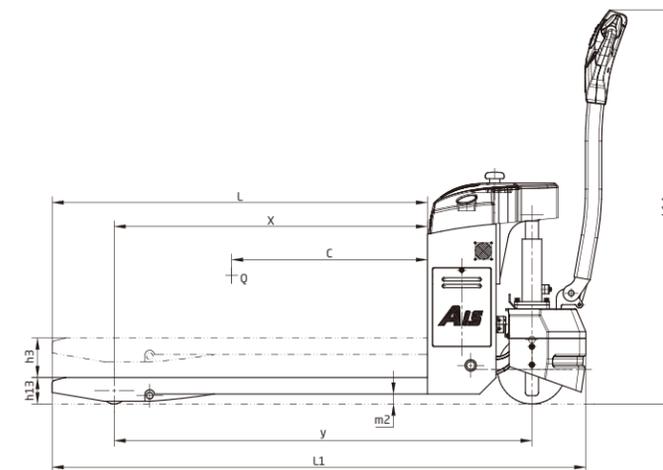
- / Built-in charger and maintenance free gel battery, you don't need to worry about them.
- / Integrated battery indicator, hour meter and self-diagnostic instrument.
- / Full opened hood, easy accessibility of all components, is easy for service.
- / All shafts installed lubricated shaft sleeve and oil cup, provide convenient maintenance and long service life.



## A Series Mini Range Pallet Truck II

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation	CBD15-A2MC1	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	
	1.5	Rated capacity/rated load	Q (kg/lb)	1500/3307
	1.6	Load centre distance	c (mm/in)	600/23.6
Weight	1.8	Load distance, centre of drive axle to fork	x (mm/in)	960/37.8
	1.9	Wheelbase	y (mm/in)	1285/50.6
Tyres, chassis	2.1	Service Weight(Including battery)	kg/lb	220/485
		Battery weight	kg/lb	50/110
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU
	3.2	Tyre size, front	mm/in	Φ210x70 / Φ8.3x2.8
	3.3	Tyre size, rear	mm/in	2×Φ80x64 / 2×Φ3.1x2.5
	3.4	Additional wheel (dimensions)	mm/in	Φ70x40 / Φ2.8x1.6
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4
Dimensions	3.6	Tread, front	b <sub>10</sub> (mm/in)	404/15.9
	3.7	Tread, rear	b <sub>11</sub> (mm/in)	400/15.7
	4.4	Lift	h <sub>3</sub> (mm/in)	120/4.7
	4.15	Fork height,lowered	h <sub>13</sub> (mm)	80/3.1
	4.19	Overall length	l <sub>1</sub> (mm/in)	1669/65.7
	4.21	Overall width	b <sub>1</sub> mm (in)	568/22.4
	4.22	Fork dimensions	s/e/l mm (in)	50/160/1150 (2.0/6.3/45.3)
	4.25	Distance between fork-arms	b <sub>5</sub> mm (in)	560/680 (22.0/26.8)
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	30/1.2
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm/in)	1850/72.8 <sup>1)</sup>
4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm/in)	1900/74.8 <sup>2)</sup>	
4.35	Turning radius	W <sub>a</sub> (mm/in)	1400/55.1 <sup>3)</sup>	
Performance data	5.1	Travel speed,laden/unladen	km/h (mph)	4.5/4.9 (2.80/3.04)
	5.2	Lift speed,laden/unladen	m/s (ft/min)	0.050/0.060 (9.84/11.81)
	5.3	Lowering speed,laden/unladen	m/s (ft/min)	0.040/0.045 (7.87/8.86)
	5.8	Max Gradeability,laden/unladen	%	6/15
Electric engine	6.1	Drive motor rating S2 60 min	kw/hp	0.65/0.87
	6.2	Lift motor rating at S3 15%	kw/hp	0.8/1.07
	6.4	Battery voltage,rated capacity	V/Ah	2x12/70
8.1	Type of drive control		DC	
9.1	Manufacturer		Curtis	

Note: 1). VDI 2198: +358/14.1mm/in 2). VDI 2198: +200/7.9mm/in 3). When fork lowered,+60/2.4mm/in





## J Series Electric Pallet Truck Specification

		HANGCHA GROUP CO.,LTD.		
Characteristics	1.1	Manufacturer		
	1.2	Model	CBD15-JL3	CBD18-JL3      CBD20-JL3
	1.3	Power unit	Electric	Electric      Electric
	1.4	Operation	Pedestrian	Pedestrian      Pedestrian
	1.5	Rated traction weight	Q (t)	1.5      1.8      2.0
	1.6	Load centre	c (mm)	600      600      600
	1.8	Axle centre to fork face	x (mm)	944      944      944
	1.9	Wheel base	y (mm)	1243      1243      1243
	Weights	2.1	Service weight with battery	kg
Wheels, Tyres	3.1	Wheels type		PU      PU      PU
	3.2	Driving wheel size	Φ×w(mm)	Φ210×70      Φ210×70      Φ210×70
	3.3	Bearing wheel size	Φ×w(mm)	Φ80×60      Φ80×60      Φ80×60
	3.5	Wheels, number front/rear (x = driven)		1x/4      1x/4      1x/4
	3.7	Track width	b <sub>11</sub> (mm)	400/535      400/535      400/535
Dimensions	4.4	Lift	h <sub>3</sub> (mm)	200      200      200
	4.9	Overall height(with handle)	h <sub>14</sub> (mm)	740/1160      740/1160      740/1160
	4.15	lowered height	h <sub>13</sub> (mm)	85      85      85
	4.19	Overall length	l <sub>1</sub> (mm)	1603      1603      1603
	4.20	Length to fork face	l <sub>2</sub> (mm)	453      453      453
	4.21	Overall width	b <sub>2</sub> / b <sub>2</sub> (mm)	550/685      550/685      550/685
	4.22	Fork dimensions	s/e/l (mm)	50/150/1150      50/150/1150      50/150/1150
	4.25	Width of forks	b <sub>5</sub> (mm)	550/685      550/685      550/685
	4.32	Min.Ground clearance	m <sub>2</sub> (mm)	35      35      35
	4.33	Aisle width with pallet 1000 x 1200 across forks	A <sub>st</sub> (mm)	1804      1804      1804
4.34	Aisle width with pallet 800 x 1200 along forks	A <sub>st</sub> (mm)	1854      1854      1854	
4.35	Min.Turning radius	W <sub>a</sub> (mm)	1398      1398      1398	
Perfor- mance	5.1	Travel speed,laden/unladen	(km/h)	4.2/4.5      4.2/4.5      4.2/4.5
	5.8	Maximum climbing ability, with/without load	(%)	5/10      5/10      5/10
	5.10	Service brake		Electromagnetic      Electromagnetic      Electromagnetic
Drive	6.1	Drive motor, 60 minute rating	(kW)	0.75      0.75      0.75
	6.2	Lift motor rating at S3 15%	(kW)	0.8      0.8      0.8
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		no      no      no
	6.4	Battery voltage/rated capacity	(V/Ah)	24/20      24/20      48/20
	6.5	Battery weight (± 5%)	(kg)	6      6      10.2
Others	8.1	Type of drive control		DC      DC      DC
	8.4	Noise level at operator's ear	(dB(A))	≤70      ≤70      ≤70
	10.5	Steering type		Mechanical steering      Mechanical steering      Mechanical steering

### Option:

Auxiliary wheels  
 Rema handle with Pin Code  
 Lithium battery 24V/30Ah, 24V/40Ah, 24V/60Ah (for 1.5-1.8t)  
 Lithium battery 48V/30Ah (for 2.0t)

## J Series Electric Pallet Truck / Li-ion

with capacity of 1,500 to 2,000kg

/ The truck is simple and dexterous,with small turning radius and small weight.It is suitable for ultra-narrow channel operation.

/ The truck has compact and reliable structure.The oil pipeline and line are wrapped in the truck body which is safe and beautiful and convenient for user maintenance.

/ The truck adopts integrated handle design integrating key switch and electric meter which is simple and comfortable for operation.

/ Hand-held lithium battery makes battery changing easier and more convenient.

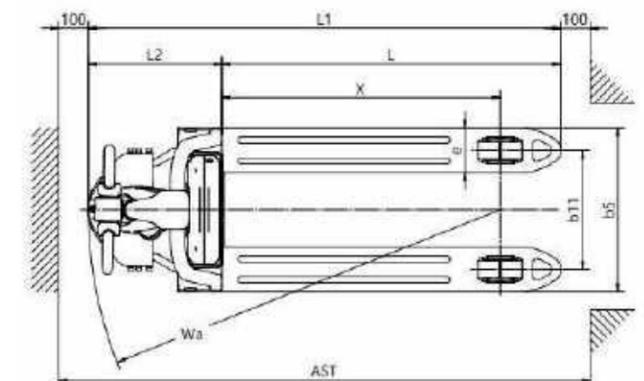
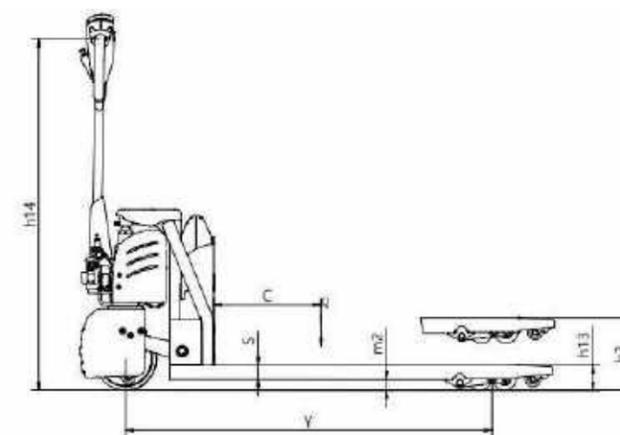
/ Standard configuration of emergency stop switch and emergency reverse device ensure truck safety.

/ The truck is assembled with power-off braking function.The truck is braked as soon as the handle is loosened or pressed to the bottom.

/ Electromagnetic braking and motor braking are used to ensure the safety of driving.



Option: Lowering with electric power

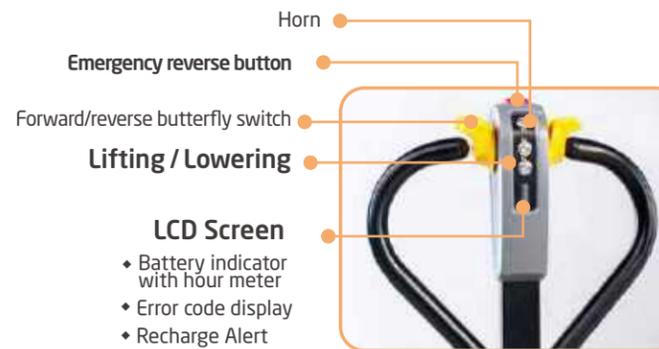




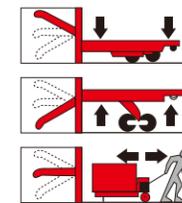
# WS Series Electric Pallet Truck With Lithium Battery

with capacities of 1,500/1,800kg

## CHARACTERISTICS



Multi-function Handle (Full Electric)



Multi-function Ergonomic Handle (Semi-electric)



Integral Forks: Ideal design for closed pallet(single load wheel)



Manual: Lifting/Lowering



Electric Lifting/Lowering



Lithium battery pack

## OPTIONS



Single PU wheel



Double PU wheel



Protection cover



Manual: Lifting/Lowering(Quick Lift)



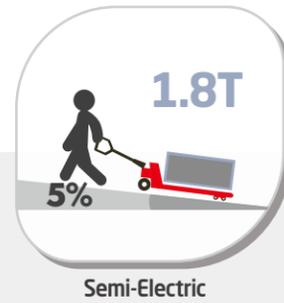
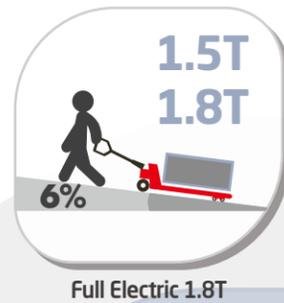
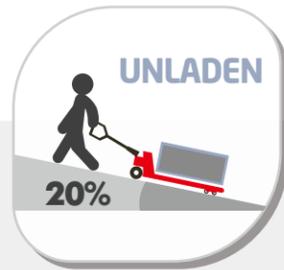
Fast Charger 2hrs

# PERFORMANCE



— UNLADEN 5Km/h

+ LADEN 4Km/h Full Electric 3.5Km/h Semi-Electric

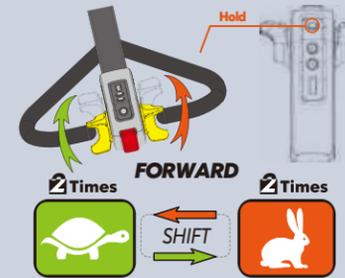


**Gradeability**

# SMART FUNCTION

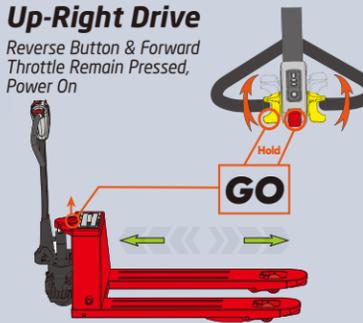
## SMART FUNCTION 01

**Turtle Speed**  
Horn Remains Pressed & Forward 2 times



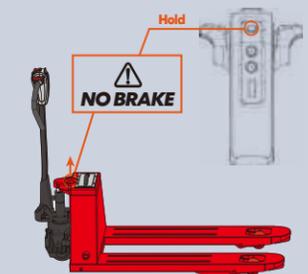
## SMART FUNCTION 02

**Up-Right Drive**  
Reverse Button & Forward Throttle Remain Pressed, Power On



## SMART FUNCTION 03

**Engineering Mode (Brake Release)**  
Horn Remains Pressed, Power On

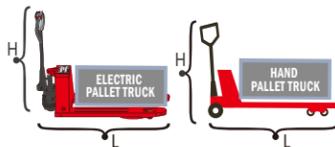


⚠ In up-right drive mode, vehicle will move when handle is operated at any position. Please avoid misoperation.

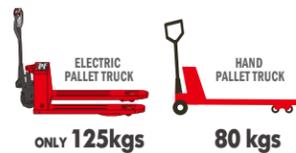
⚠ Brake release mode is only for emergencies, not allowed for vehicle with normal conditions.

**BUILT TO WORK 24 HOURS**

**SMART SIZE ALMOST SAME**

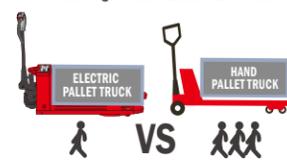


**LIGHT WEIGHT**



**EFFICIENCY**

3 Times Higher Than Manual Pallet Truck

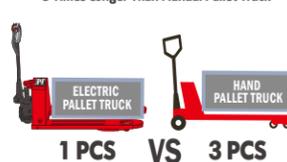


**EASY MAINTENANCE**



**LIFETIME**

3 Times Longer Than Manual Pallet Truck



**PAY A LITTLE MORE SAVE MUCH MORE**

# MAINTENANCE SO EASY

**5 YEAR WARRANTY CHASSIS**

**Brushless drive motor, maintenance free**

**Lithium-ion Lithium battery maintenance free**

**Recharge Alert**

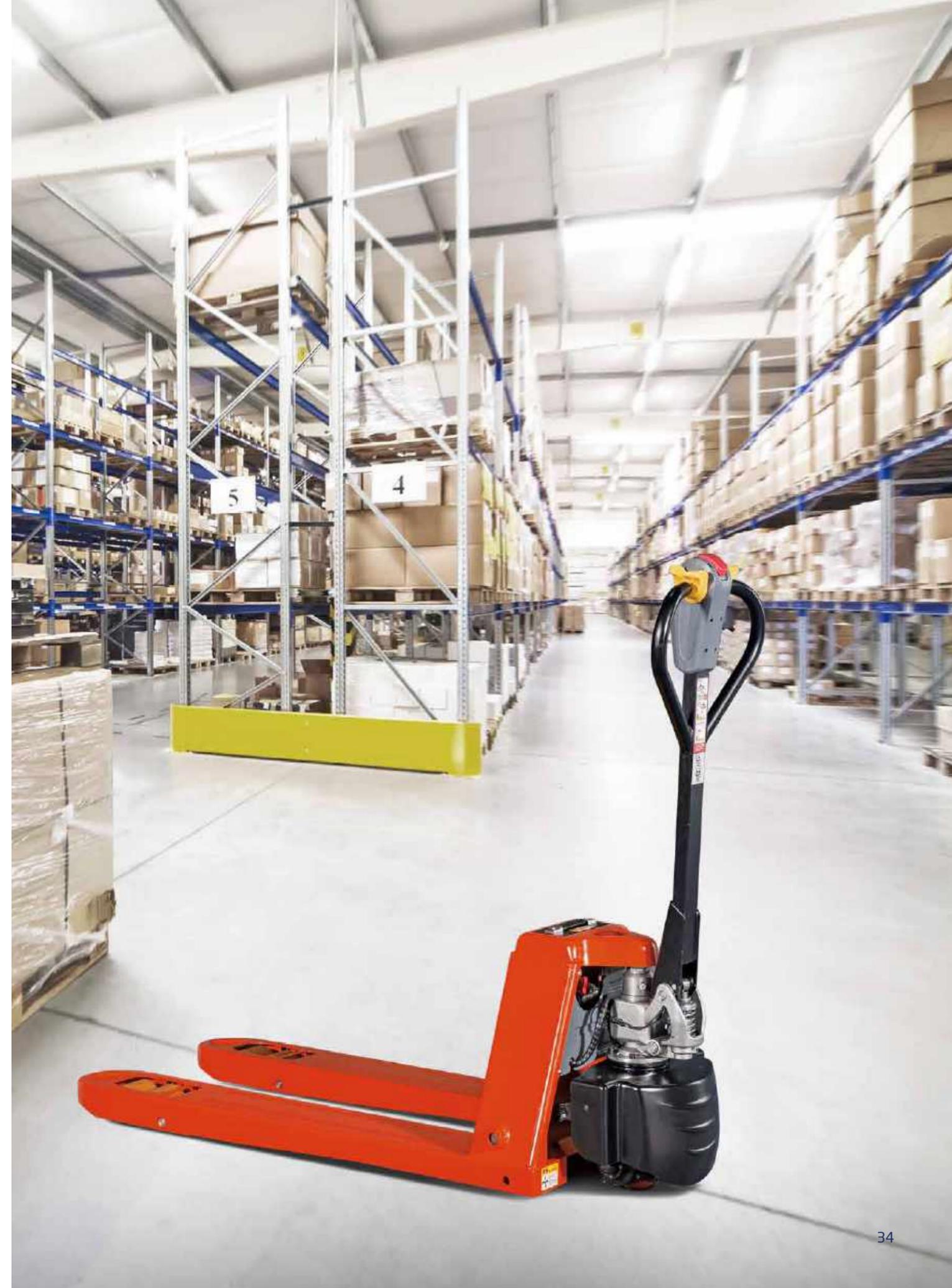
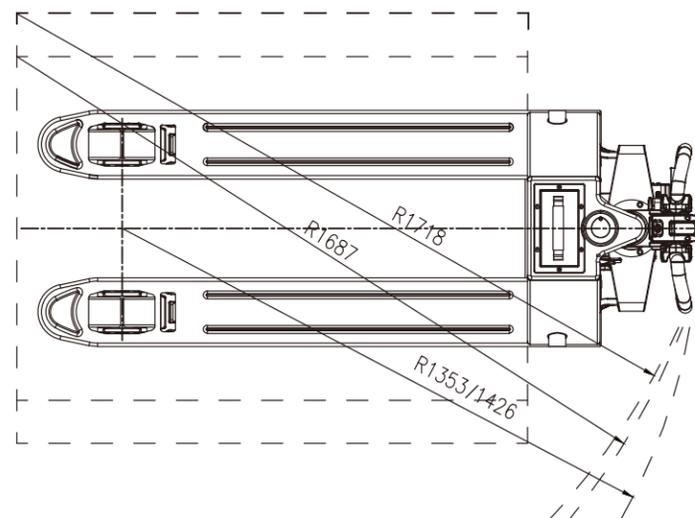
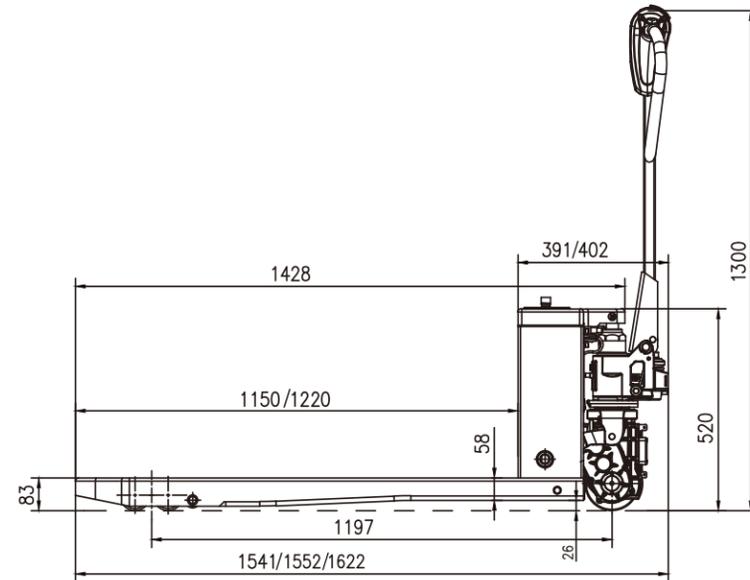
**Error code display**

**6s Replace Battery**

**60s Replace Drive Wheel**

## WS Series Electric Pallet Truck With Lithium Battery Specification

		HANGCHA GROUP CO.,LTD.					
Characteristics	Manufacturer						
	Model	CBD18-WS-SE	CBD18-WS-SEQ	CBD15-WS	CBD18-WS		
	1.1 Capacity	kg	1800	1800	1500	1800	
	1.2 Load center	mm	600	600	600	600	
	1.3 Standard overall fork width	mm	550/685	550/685	550/685	550/685	
	1.4 Fork length	mm	1150/1220	1150/1220	1150/1220	1150/1220	
	1.5 Overall length	mm	1552/1622	1552/1622	1552/1622	1552/1622	
	1.6 Overall height (with tiller)	mm	1300	1300	1300	1300	
	1.7 Rear body width	mm	550/685	550/685	550/685	550/685	
1.8 Minimum turning radius	mm	1353/1426	1353/1426	1353/1426	1353/1426		
Performance	2.1 Max. Traveling speed	laden	km/h	3.5	3.5	4	4
		unladen	km/h	5	5	5	5
	2.2 Gradeability	laden	%	5	5	6	6
		unladen	%	20	20	20	20
2.3 Traveling	kw	DC 0.75 Brushless	DC 0.75 Brushless	DC 0.75 Brushless	DC 1.0 Brushless		
2.4 Lifting	kw	Hydraulic	QUICK LIFT	DC 0.5	DC 0.5		
Battery	4.1 Voltage	v	48	48	48	48	
	4.2 Capacity/type	Ah	10 Ah Lithium	10 Ah Lithium	10 Ah Lithium	10 Ah Lithium	
Brake type	5.1 Travel brake		Regenerate	Regenerate	Regenerate	Regenerate	
	5.2 Brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic	
Controller	6.1 Controller		STAXXB1501	STAXXB1501	STAXXB1501	STAXXB1501	





## A Series Mini Pallet Truck

with capacities of 2,000kg

The A Series 2.0t Mini Pallet Truck is a new product developed by Hangcha for warehouse and logistics applications. With the state-of-the-art permanent magnet brushless drive technology, and the 48V system, features advanced performance, comfortable operation, safety and reliability, and low maintenance cost, and is an ideal vehicle for loading, unloading, and handling palletized goods in warehouses, supermarkets, workshops and homes.

### Appearance

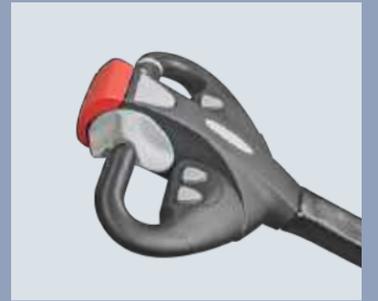
- / The A Series Pallet Truck is completed with specialized industrial design of appearance. The entire truck features smooth lines and affluent sense of movement, and compact profile, with full consideration being given to ergonomics, in accord with the latest appearance design trend.
- / It is manufactured with a large number of steel plate stamping and injection molding technologies, featuring solidness, durability, and high grade, in compliance with environmental requirements.

### Safety

- / Release braking, reverse braking, and three types of emergency braking can ensure safety of traveling;
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency reversing button at top of the tiller can avoid the driver from injury effectively in case of emergency during backward driving of the truck;
- / Dual protection with electronic lifting limit and smart controller limit of standard configuration avoids impact when fork is lifted to top end of mast, offers effective protection to working motor, and guarantees safety of goods.

### Comfort

- / The REMA tiller of latest development is simple but reliable and beautiful, and all operations can be done easily with one hand.
- / Truck structure of optimized design guarantees terrific operating view of the truck.
- / Built-in charger and rubber enclosed maintenance-free battery are very convenient for use.
- / With small sizes, the operation is easy, flexible and extremely convenient, and the upright-tiller running function allows it to work within confined space, such as container.
- / Standard height of fork is 80mm, and guiding device is added to facilitate access and exit of pallets (including closed-deck, American, European double-deck pallets).
- / With integrated battery assembly, and nylon guiding device is added at base plate for easy battery replaced by laterally moving the device.



Rema tiller



Additional wheels are equipped to have better stability



Modern outline design



Battery side roll out

## Reliability

- / The three-point support design is applied, and side support system and elastic auxiliary wheels are provided to guarantee safety and reliability.
- / With optimized design, the lifting rod is steady and reliable, bearing small force.
- / All plug connectors are imported and waterproof, and all wires and cables have reliable protection, which increases reliability of electrical system significantly.
- / The cutting-edge hydraulic power unit features low noise, small vibration, and stable and reliable rising and declining.
- / Stamping molded fork has higher strength and impact resistance, with even higher working efficiency by working together with the fork-tip guiding function.
- / The interlock switch is of non-contact proximity switch, with extremely high reliability.
- / One-piece iron wheel hood offers good protection to truck body against external impact.

## High Performance

- / The load capacity is 2.0t, which can satisfy the handling demand of most customers, with 6h battery life.
- / With stronger power, full-load gradeability of the truck can reach 8%.
- / It is equipped with permanent magnet brushless drive motor, with excellent performance, and a new 48V power supply system, with extremely low heat generation.
- / The latest CURTIS permanent magnet brushless control system offers excellent, high-efficiency, and stable control performance.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Controllers, tiller, switches, plug connectors, battery condition meter, timer and other important parts are all of renowned domestic and abroad brands.

## Maintenance

- / As standard configuration, built-in charger and maintenance-free battery require no maintenance work.
- / Battery indicator will prompt the user to charge the battery timely.
- / Engine cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine.
- / All rotating shafts are equipped with lubricating sleeve and oil cup, which is convenient for maintenance and has a long service life.

## Standard specification

- / 48V permanent magnet brushless drive motor
- / CURTIS permanent magnet brushless controller
- / VIBO hydraulic power unit
- / Emergency power off switch
- / Battery indicator
- / PU wheels
- / Fork length 1150mm
- / 560mm outer distance between forks
- / 80mm distance from fork surface to ground
- / Electronic lifting limit
- / Non-contact interlock switch
- / REMA multi-function tiller
- / Horn
- / Maintenance-free gel battery
- / Built-in charger
- / Upright-tiller creep speed running
- / Elastic additional wheels
- / Tandem load wheels

## Options

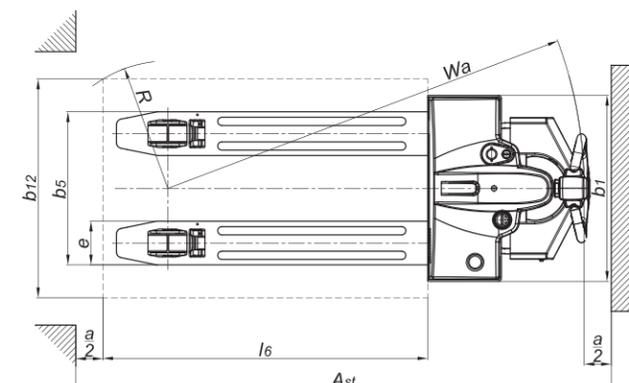
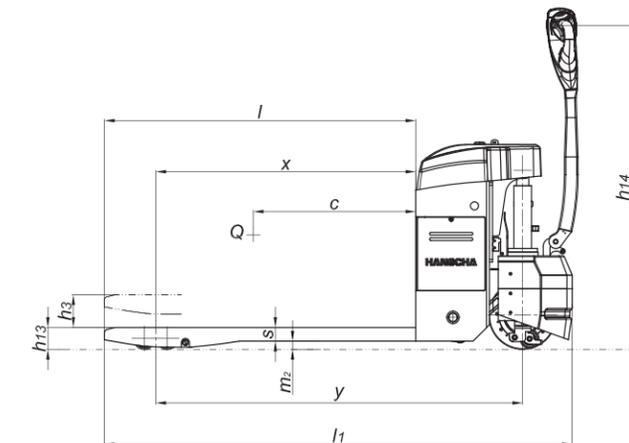
- / Various fork lengths
- / Various outer distances between forks
- / Single load wheel
- / Coded lock
- / 75mm ground clearance



## A Series Mini Pallet Truck specification

		HANGCHA GROUP CO.,LTD.		
Distinguishing mark	1.1	Manufacturer	CBD20-AMC1	
	1.2	Manufacturer's type designation	Pedestrian	
	1.4	Operator type	2000	
	1.5	Rated load	Q (kg)	600
	1.6	Load centre distance	c (mm)	960
Weight	1.8	Load distance, centre of drive axle to fork	x (mm)	1299 <sup>1)</sup>
	2.1	Service Weight(Including battery)	kg	340
Tyres, chassis		Battery weight	kg	80
	3.1	Tyres		PU
	3.2	Tyre size,front	mm	φ250x80
	3.3	Tyre size, rear	mm	φ80x64
	3.4	Additional wheel (dimensions)	mm	φ70x40
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4
	3.6	Tread, front	b <sub>10</sub> (mm)	432
Dimensions	3.7	Tread, rear	b <sub>11</sub> (mm)	400
	4.4	Lift	h <sub>3</sub> (mm)	120
	4.15	Height,lowered	h <sub>13</sub> (mm)	80
	4.19	Overall length	l <sub>1</sub> (mm)	1728
	4.21	Overall width	b <sub>1</sub> (mm)	680
	4.22	Fork dimensions	s/e/l (mm)	50/160/1150
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	560
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	30
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm)	1955 <sup>1)2)</sup>
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm)	2005 <sup>1)3)</sup>
4.35	Turning radius	W <sub>a</sub> (mm)	1482 <sup>1)</sup>	
Performance data	5.1	Travel speed,laden/unladen	km/h	4/5.5
	5.2	Lift speed,laden/unladen	m/s	27/40
	5.3	Lowering speed,laden/unladen	m/s	42/38
	5.8	Max Gradeability,laden/unladen	%	8/16
Electric engine	6.1	Drive motor rating	kW	0.8
	6.2	Lift motor rating	kW	0.8
	6.4	Battery voltage,nominal capacity	V/Ah	4x12/50
	8.1	Type of drive control		Curtis DC

Note: 1). Load section lowered+56mm; 2). VDI 2198:+361mm; 3). VDI 2198:+201mm.





## A Series Pallet Truck Basic Range

with capacities of 2,000kg

### High Performance

- / AC travelling motor applied to provide excellent acceleration, good gradeability, low heat, no carbon brush and maintenance free.
- / The latest CURTIS AC control system provides accurate and stable control to work more efficient.
- / The applied CANBUS structure to offer more reliable and faster command access.
- / Regenerative brake and slope anti-slide function are offered by this truck.

### Comfort

- / The shock absorption design of foldable platform improves comfort greatly to the operator.
- / Simple and beautiful tiller designed to operate all functions easily even by one hand.
- / Displayed turtle speed function applied to move slowly and helps to stack goods in narrow spaces.
- / Optimized designing structure to offer a good visibility and easy entrance of the pallet.
- / The compact body and big rounded design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability.

### Reliability

- / Five-pivot with low centre of gravity design and high strength steel frame structure chassis provide larger residual load capability and longer working life.
- / Water-proof plugs and connectors applied to provide a reliable protection to electric system.
- / The adopted unique floating suspension system ensures good driving wheels' grip and excellent stability.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch-formed forks to provide more strength and tip guide to provide higher efficient operation.
- / The power plug is fixed on the truck body to avoid damage from battery installment.

### Safety

- / With three braking types: releasing brake, reversing brake and emergency brake, the driving safety has been ensured.
- / The applied slope anti-slip function ensures the safety of the operation.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / The standard equipped electronic lifting limitation and intellectual control limitation to offer double protection to working motor and loads from damaging.



### Standard Specification

- |                            |  |
|----------------------------|--|
| / Horn                     | / Hydraulic power unit                 |
| / Pedal (only CBD20-AEC1S) | / 540mm outside fork width             |
| / AC drive wheel           | / Electronic lifting limitation        |
| / Tandem load wheels       | / Emergency disconnect switch          |
| / 1150mm fork length       | / Multi-function battery indicator     |
| / CURTIS AC controller     | / CAN-bus system multi-function tiller |

### Options

- / Load backrest
- / Guide roller of pallet
- / Handrail
- / 210Ah, 240Ah, battery
- / Different outside fork width (560mm, 600mm, 650mm, 680mm, 700mm)
- / Cold store protection (-30 C)
- / Different length of forks (1220mm, 1400mm, 1600mm, 2000mm, 2150mm, 2400mm)



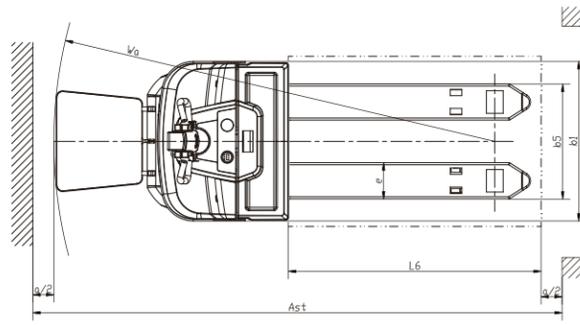
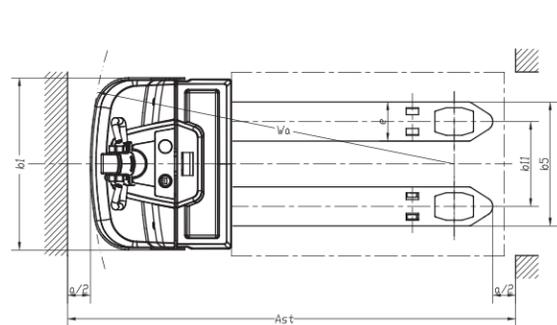
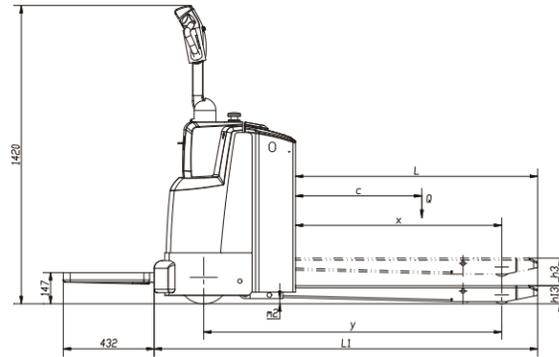
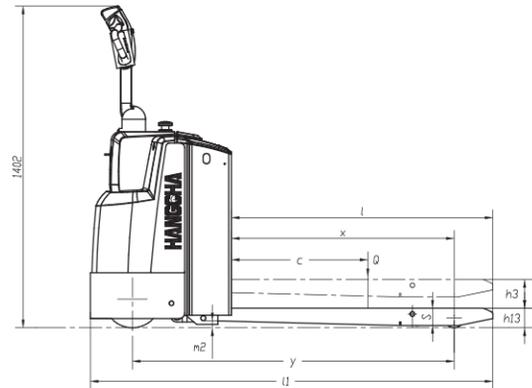
Stand-on

## A Series Pallet Truck Basic Range

Distinguishing mark			HANGCHA GROUP CO.,LTD.	
	1.1	Manufacturer		CBD20-AEC1S
1.2	Manufacturer's type designation		Standing	Pedestrian
1.4	Operator type: hand, pedestrian, standing, seated, order-picker			
1.5	Rated capacity/rated load	Q (kg/lb)	2000/4409	2000/4409
1.6	Load centre distance	c (mm/in)	600/23.6	600/23.6
1.9	Wheelbase	y (mm/in)	1415/55.7	1415/55.7
Weight				
2.1	Service Weight	kg/lb	540/1190	490/1080
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	PU	PU
	3.2	Tyre size, front	mm/in	Φ250x80/9.8x3.1
	3.3	Tyre size, rear	mm/in	Φ85x70/3.3x2.8
	3.4	Additional wheel (dimensions)	mm/in	Φ100x40/3.9x1.6
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4
	3.6	Tread, front	b10 (mm/in)	534/21
	3.7	Tread, rear	b11 (mm/in)	370/14.6
Dimensions	4.4	Lift	h3 (mm/in)	125/4.9
	4.15	Fork height,lowered	h13 (mm/in)	85/3.3
	4.19	Overall length	l1 (mm/in)	1820(2252)/71.7(88.7)
	4.21	Overall width	b1 (mm/in)	750/29.5
	4.22	Fork dimensions ISO 2331	s/e/l (mm/in)	64x170x1150(2.5x6.7x45.3)
	4.25	Distance between fork-arms	bs (mm/in)	540/680(21.3/26.8)
	4.32	Ground clearance,center of wheelbase	m2 (mm/in)	25/1
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm/in)	1967/77.4
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm/in)	2017/79.4
	4.35	Turning radius	Wa (mm/in)	1597/62.9
Performance data	5.1	Travel speed,laden/unladen	km/h(mph)	5.0/5.0(3.1/3.1)
	5.2	Lift speed,laden/unladen	m/s(ft/min)	0.030/0.045(5.9/8.9)
	5.3	Lowering speed,laden/unladen	m/s(ft/min)	0.050/0.035(9.8/6.9)
	5.8	Max.Gradeability,laden/unladen	%	6/15
	5.10	Service brake		Eletromagnetic
Electric engine	6.1	Drive motor rating S2 60 min	kw/hp	1.1/1.5
	6.2	Lift motor rating at S3 15%	kw/hp	0.8/1.1
	6.4	Battery voltage,rated capacity	V/Ah	24/165
	8.1	Type of drive control		AC
9.1	Manufacturer		CURTIS	CURTIS

Note: 1). When fork lowered,+68mm/+2.68in

2). When fork lowered,+40mm/+1.57in



## A Series Pallet Truck Hi Range

with capacities of 2,000 to 3,000kg

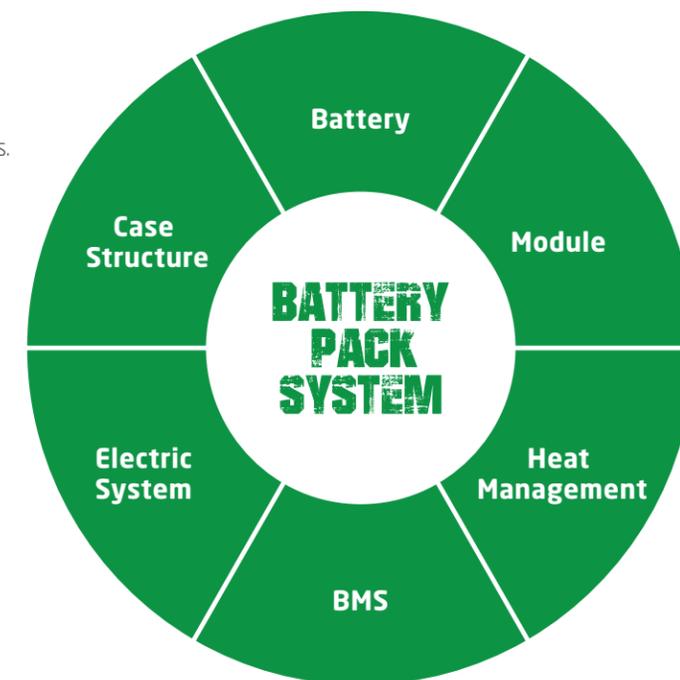
# LET THE LITHIUM POWER BE REEL



## INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion  
2 hours  
100%

Lead-acid batteries  
8-10 hours 100%

**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-Ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

### Li-Ion Battery Pack specification

Type		CBD20-AC1S-1	CBD30-AC1S-1	CBD20-AC1-1	CBD30-AC1-1
Li-Ion battery	V/Ah	24/120	24/120	24/120	24/120
Li-Ion battery,Optional	V/Ah	24/202	24/202	/	/
Titans charger		SPC-24100	SPC-24100	SPC-24100	SPC-24100



HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.



**5 YEARS  
WARRANTY**



## High Performance

- / AC travelling motor applied to provide excellent acceleration, good gradeability, low heat, no carbon brush and maintenance free.
- / The latest CURTIS AC control system provides accurate and stable control to work more efficient.
- / The applied CAN-BUS structure to offer more reliable and faster command access.
- / Regenerative brake and slope anti-slide function are offered by this truck.
- / Stand-on type with high power drive motor, provides fast travel speed and good gradeability.

## Reliability

- / Five-pivot with low centre of gravity design and high strength steel frame structure chassis provide larger residual load capacity and longer working life.
- / Water-proof plugs and connectors applied to provide a reliable protection to electric system.
- / The adopted unique floating suspension system ensures good driving wheels grip and excellent.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch-formed forks to provide more strength and tip guide to provide higher efficient operation.
- / H-type mast profile section to provide more stable and rigid performance.
- / The power plug is fixed on the truck body to avoid damage from battery installment.
- / Pedestrian type use the new design drive system, the drive motor will not accompany the tiller rotation, it can keep all the cable connect to the drive motor avoid being bent.
- / Using non-contact proximity switch, it can provides long life and reliable operation.

## Safety

- / With three braking types: releasing brake, reversing brake and emergency brake, the driving safety has been ensured.
- / The applied slope anti-slip function ensures the safety of the operation.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / Lifting limitation switch to offer protection to the loads from damaging.
- / Turning speed is automatically reduced when steering only for stand-on.

## Maintenance

- / AC motor with no cabin brush, don't need maintenance, lower cost.
- / Rear cover can be completely open, operator can see all the components, so the maintenance is very convenient.
- / All shafts installed lubricated shaft sleeve and oil cup, provide convenient maintenance and long service life.

## Comfort

- / The shock absorption design of foldable platform improves comfort greatly to the operator.
- / The new designed floating suspension driving system, adjustable automatically with loads, offers the driving wheels sufficient power.
- / Simple and beautiful tiller designed to operate all functions easily even by one hand.
- / Displayed turtle speed function applied to move slowly and helps to stack goods in narrow spaces.
- / Optimized designing structure to offer a good visibility and easy entrance of the pallet.
- / The compact body and big rounded design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability.
- / Customer can choose different width of outside fork and length of forks to fit variable pallet.

## Standard Specification

- / Horn
- / AC drive motor
- / PU drive wheel
- / Pedal and handrail
- / Tandem load wheels
- / 1150mm fork length
- / CURTIS AC controller
- / Hydraulic power unit
- / 540mm outside fork width
- / Electronic lifting limitation
- / Emergency disconnect switch
- / Multi-function battery indicator
- / CAN-bus system multi-function tiller
- / Electric steering (stand on pallet)

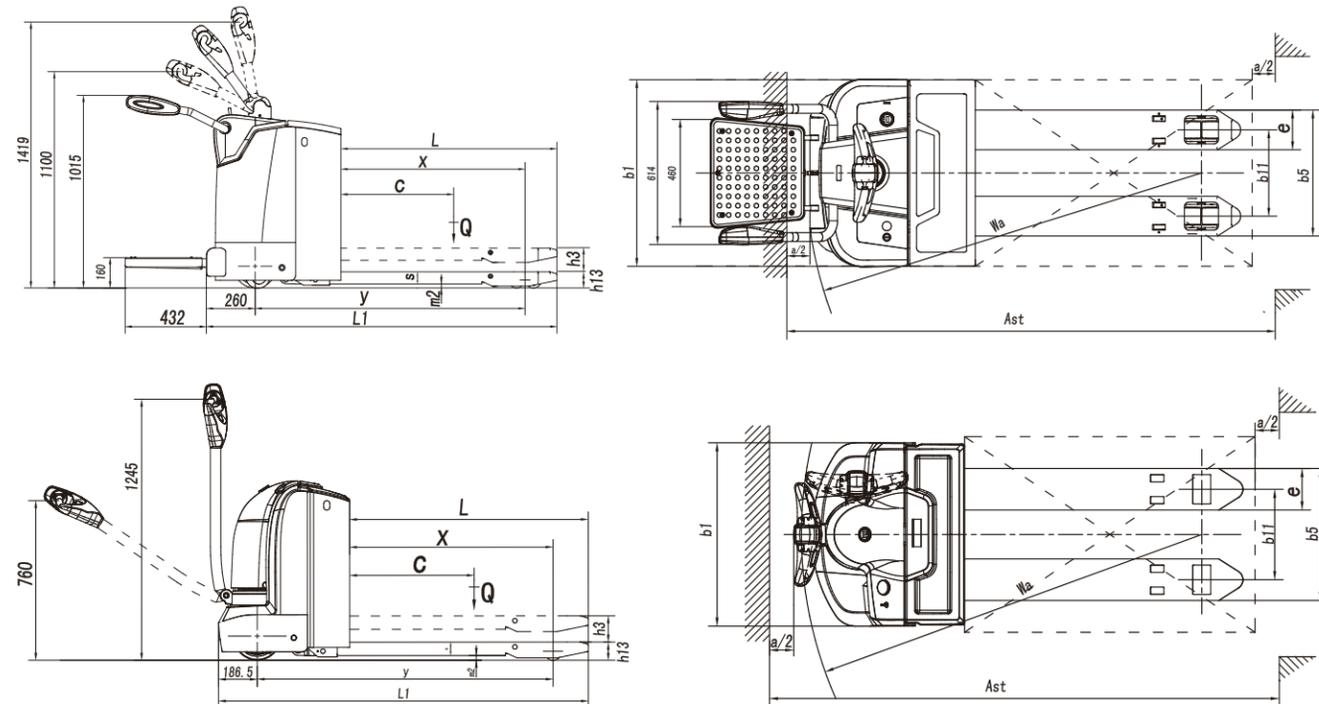
## Options

- / Different length of forks
- / Different width of outside fork
- / Cold store protection (-30 C)
- / Pedestrian:210Ah~240Ah
- / Stand-on:240Ah~340Ah
- / Guide roller of pallet
- / Load backrest
- / Automatic charger

## A Series Pallet Truck Hi Range

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.				
	1.2	Manufacturer's type designation		CBD20-AC15 CB050-A235	CBD20-AC1	CBD30-AC15 CB050-A235	CBD30-AC1
1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Standing	Pedestrian	Standing	Pedestrian	
1.5	Rated capacity/ rated load	Q (kg)/(lb)	2000/4409	2000/4409	3000/6614	3000/6614	
1.6	Load centre distance	c (mm/in)	600/23.6	600/23.6	600/23.6	600/23.6	
1.9	Wheelbase	y (mm/in)	1369/53.9 <sup>1)</sup>	1357/53.4 <sup>1)</sup>	1369/53.9 <sup>1)</sup>	1357/53.4 <sup>1)</sup>	
Weight	2.1	Service Weight	kg/lb	726/1600	544/1199	750/1654	564/1243
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU
	3.2	Tyre size, front	mm/in	φ230x75/φ9.1x3.0	φ230x75/φ9.1x3.0	φ230x75/φ9.1x3.0	φ230x75/φ9.1x3.0
	3.3	Tyre size, rear	mm/in	φ85x70/φ3.3x2.8	φ85x70/φ3.3x2.8	φ85x70/φ3.3x2.8	φ85x70/φ3.3x2.8
	3.4	Additional wheel (dimensions)	mm/in	φ125x50/φ4.9x2.0	φ100x40/φ3.9x1.6	φ125x50/φ4.9x2.0	φ100x40/φ3.9x1.6
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4	1x+2/4	1x+2/4	1x+2/4
	3.6	Tread, front	b10 (mm/in)	575/22.6	480/18.9	575/22.6	480/18.9
	3.7	Tread, rear	b11 (mm/in)	370/14.6	370/14.6	370/14.6	370/14.6
Dimensions	4.4	Lift	h3 (mm/in)	125/4.9	125/4.9	125/4.9	125/4.9
	4.15	Fork height, lowered	h13 (mm/in)	85/3.35	85/3.35	85/3.35	85/3.35
	4.19	Overall length	l1 (mm/in)	1867/73.5	1781/70.1	1867/73.5	1781/70.1
		Overall length (unfold the pedal)	l1 (mm/in)	2299/90.5		2299/90.5	
	4.21	Overall width	b1 (mm/in)	800/31.5	750/29.5	800/31.5	750/29.5
	4.22	Fork dimensions ISO 2331	s/e/l mm/in	64/170/1150 (2.5/6.7/45.2)	64/170/1150 (2.5/6.7/45.2)	64/170/1150 (2.5/6.7/45.2)	64/170/1150 (2.5/6.7/45.2)
	4.25	Distance between fork-arms	b5 mm/in	540/680 (21.3/26.8)	540/680 (21.3/26.8)	540/680 (21.3/26.8)	540/680 (21.3/26.8)
	4.32	Ground clearance, center of wheelbase	m2 (mm/in)	25/0.98	25/0.98	25/0.98	25/0.98
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm/in)	1997/78.6 <sup>2)</sup>	1955/77 <sup>2)</sup>	1997/78.6 <sup>2)</sup>	1955/77 <sup>2)</sup>
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm/in)	2047/80.6 <sup>2)</sup>	2005/78.9 <sup>2)</sup>	2047/80.6 <sup>2)</sup>	2005/78.9 <sup>2)</sup>
	4.35	Turning radius	Wa mm/in	1627/2040 <sup>1)</sup> (64.1/80.3)	1585 <sup>1)</sup> (62.4)	1627/2040 <sup>1)</sup> (64.1/80.3)	1585 <sup>1)</sup> (62.4)
Performance data	5.1	Travel speed, laden/unladen	km/h(mph)	9.0/9.5 (5.6/5.9)	6.0/6.0(3.7/3.7)	7.5/9.5(4.7/5.9)	5.0/6.0(3.1/3.7)
	5.2	Lift speed, laden/unladen	m/s (ft/min)	0.047/0.065 (9.3/12.8)	0.047/0.065 (9.3/12.8)	0.036/0.051 (7.1/10.0)	0.036/0.051 (7.1/10.0)
	5.3	Lowering speed, laden/unladen	m/s (ft/min)	0.075/0.070 (1.48/13.8)	0.073/0.070 (1.44/13.8)	0.060/0.055 (1.18/10.8)	0.060/0.055 (1.18/10.8)
	5.8	Max. Gradeability, laden/unladen	%	10/16	8/20	8/16	6/20
Electric engine	6.1	Drive motor rating S2 60 min	kW/hp	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0
	6.2	Lift motor rating at S3 15%	kW/hp	2.2/3.0	2.2/3.0	2.2/3.0	2.2/3.0
	6.4	Battery voltage, rated capacity (Lead-acid)	V/Ah	24/240	24/210	24/280	24/240
		Battery voltage, rated capacity, Optional	V/Ah	~24/340	~24/240	~24/340	~24/240
	8.1	Type of drive control		AC	AC	AC	AC
9.1	Manufacturer		CURTIS/ZAPI	CURTIS	CURTIS/ZAPI	CURTIS	

Note: 1), When fork lowered, +68mm/+2.68in, 2), When fork lowered, +40mm/+1.57in



## A Series Walkie Pallet Jack

with capacities of 4,500lbs

A series walking pallet truck is newly developed logistics handling equipment developed by Hangcha for the North American market. The AC drive control technology provides advanced performance, comfortable operation, safe and reliable, low maintenance costs. It can be use for loading and unloading in warehouses, supermarkets and workshops.



# MORE POWER TO MOVE



## Appearance

- / A series pallet truck applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes for front and back guard, which is robust, durable, and also environmental compliance.

## Performance

- / AC travelling motor applied to provide excellent acceleration, good gradeability, low heat, no carbon brush and maintenance free.
- / The latest CURTIS AC control system provides accurate and stable control to work more efficient.
- / The applied CAN-BUS structure can offer more reliable and faster command access.
- / Regenerative brake and slope anti-slide function are offered by this truck.

## Comfort

- / Turtle speed function can keep the slow move when the tiller is vertical direction, the truck can stack goods even in narrow space.
- / Optimized design structure to offer a good visibility and easy entrance of the pallet.
- / The compact body and big rounded design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability.

## Safety

- / The power plug is fixed on the truck body to avoid damage from battery installment.
- / The applied slope anti-slip function ensures the safety of the operation.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / Lifting limitation switch to offer protection to the loads from damaging.



Simple and beautiful tiller designed to operate all functions easily even by one hand. Displayed turtle speed function applied to move slowly and helps to stack goods in narrow spaces



Built-in charger and maintenance free battery



Punch-formed forks to provide more strength and tip guide to provide higher efficient operation



The battery compartment is sized to fit either a 12-85-5 industrial battery in its 7.8 inch compartment for heavier throughput applications



Greater clearance over docks, lift gates and curbs means less wear and tear to carriage and components



## Standard features

- / 24 volt electrical system
- / CAN BUS communication
- / Curtis AC Controller
- / 7.8" Battery Compartment
- / PU drive tire
- / Maintenance-Free battery 150Ah
- / Built-in charger
- / SB-175 battery connector (red)
- / Battery disconnect handle
- / Key switch
- / Multi-function meter
- / Electric horn
- / Upright-tiller creep speed running
- / PU load wheel
- / Single load wheel
- / Balance leg

## Reliability

- / High strength steel frame structure chassis provide larger residual load capacity and longer working life.
- / Water-proof plugs and connectors applied to provide a reliable protection to electric system.
- / The limit switch of lifting motor eliminates overflow of the hydraulic power unit, which is more energy efficient, and can protect the motor of power unit.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / The power plug (Andersen) is fixed on the truck body to avoid damage from battery installment.

## Maintenance

- / AC motor with no cabin brush, don't need maintenance, lower cost.
- / Integrated battery indicator, hour meter and self-diagnostic instrument are all easy for maintenance.
- / Rear cover can be completely open, operator can see all the components, so the maintenance is very convenient.
- / All shafts installed lubricated shaft sleeve and oil cup, provide convenient maintenance and long service life.



## Optional equipment

- / Maintenance-Free battery 225Ah
- / Industrial battery 240Ah
- / Load Backrest
- / PIN code access
- / Rubber drive tire
- / Balance wheels

## A Series Walkie Pallet Jack Specification

			HANGCHA GROUP CO.,LTD.		
Distinguishing mark	1.1	Manufacturer	HCFA Model		
	1.2	Manufacturer's type designation	CBD20-AC1-NA		
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Walkie		
	1.5	Rated capacity/rated load	Q (kg/lb)	2000/4500	
	1.6	Load centre distance	c (mm/in)	600/24	
	1.8	Load distance, centre of drive axle to fork	x (mm/in)	1000/39	
	1.9	Wheelbase	y (mm/in)	1424/56	
	Weight	2.1	Service Weight Without Battery	kg/lb	360/795
	Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	PU	
3.2		Tyre size, front	mm/in	Φ230×75/Φ9×3	
3.3		Tyre size, rear	mm/in	Φ82.5×114/Φ3.25×4.5	
3.4		Additional wheel (dimensions)	mm/in	/	
3.5		Wheels, number front / rear (x = driven wheels)		1x/2	
3.6		Tread, front	b10 (mm/in)	/	
3.7		Tread, rear	b11 (mm/in)	510/20	
Dimensions	4.4	Lift	h3 (mm/in)	140/5.5	
	4.15	Fork height,lowered	h13 (mm/in)	85/3.35	
	4.19	Overall length	l1 (mm/in)	1770/70	
	4.20	Length to face of forks	l2 (mm/in)	620/24.4	
	4.21	Overall width	b1 (mm/in)	710/28	
	4.22	Fork dimensions	s/e/l (mm/in)	60/170/1150(2.36/6.7/45)	
	4.25	Distance between fork-arms	b5 (mm/in)	680/27	
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	23/0.9	
	4.35	Turning radius	Wa (mm/in)	1530/60 <sup>1)</sup>	
Performance data	5.1	Travel speed,laden/unladen	kph(mph)	6/6(3.7/3.7)	
	5.2	Lift speed,laden/unladen	m/s(ft/min)	0.045/0.06(9/12)	
	5.3	Lowering speed,laden/unladen	m/s(ft/min)	0.05/0.04(10/8)	
	5.8	Max Gradeability,laden/unladen	%	10/16	
Electric-engine	6.1	Drive motor rating S2 60 min	kw/hp	1.3/1.74	
	6.2	Lift motor rating at S3 10%	kw/hp	1.2/1.6	
	6.4	Battery voltage,rated capacity	V/Ah	24/150	
	8.1	Type of drive control		AC	
	9.1	Manufacturer		Curtis	

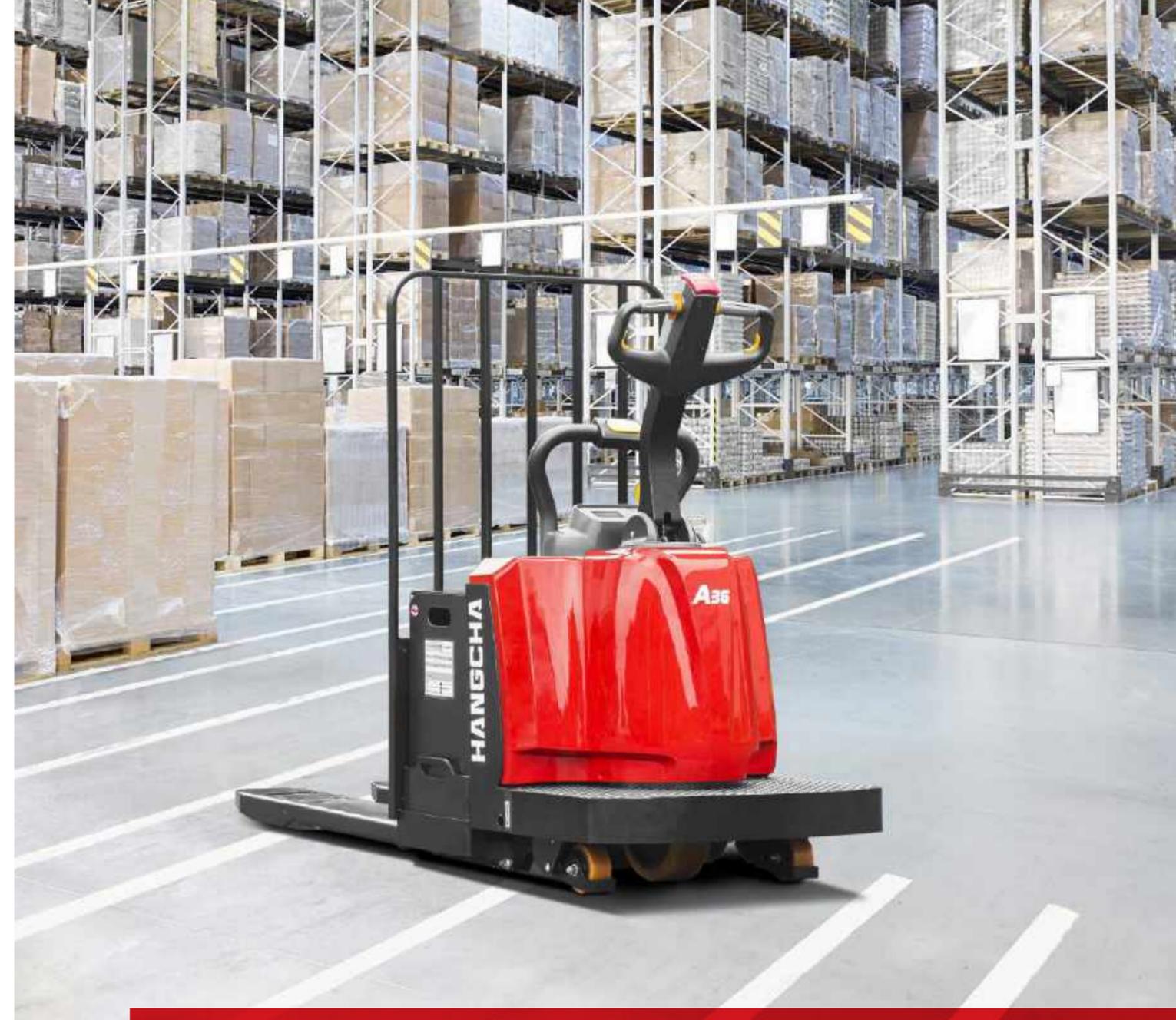
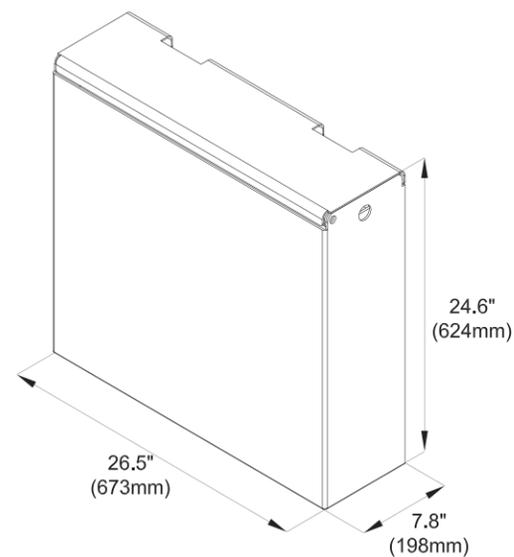
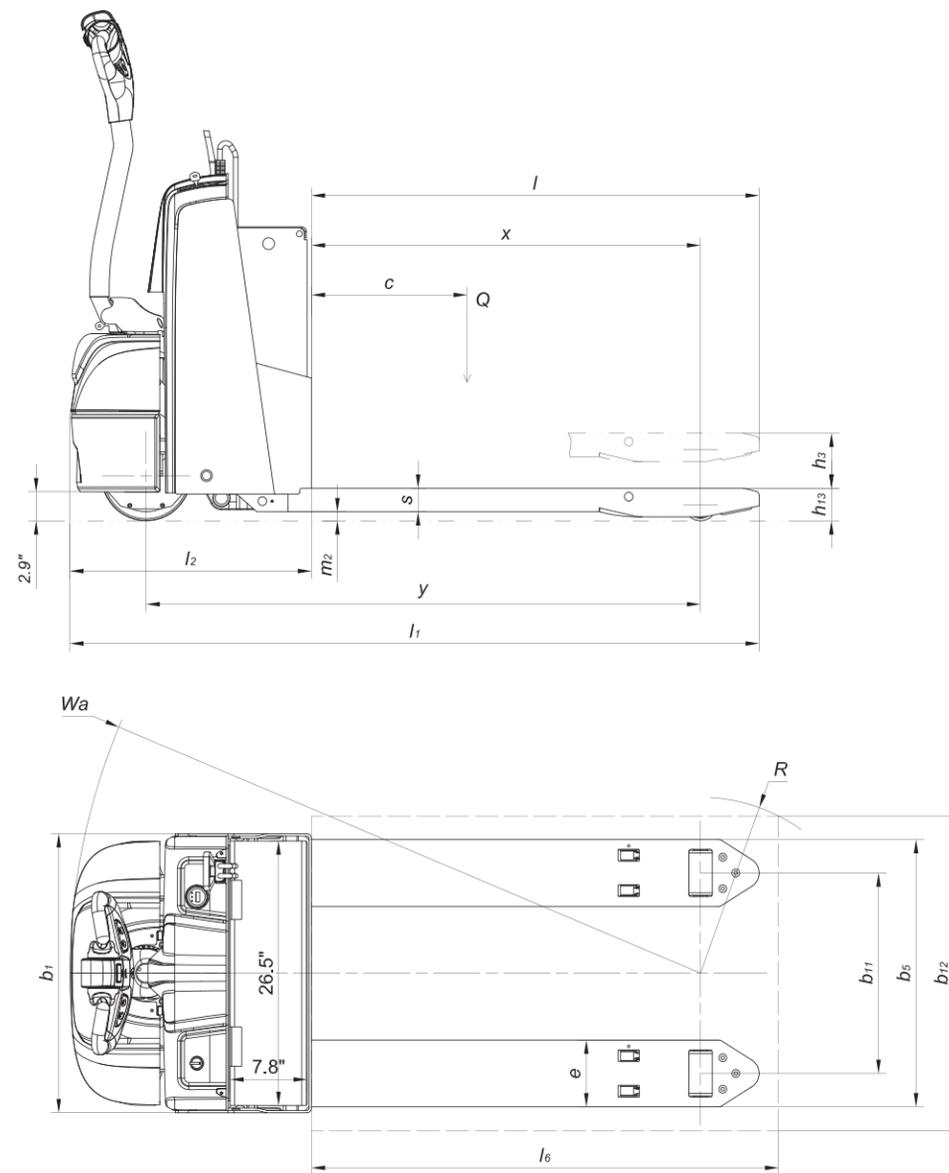
Note: 1). When fork lowered,+90mm/3.5in

## Aisle Guide

### Aisle requirement-right angle stack<sup>①</sup>

Fork length (actual)	in(mm)	29.5(750)	33.5(850)	39.4(1000)	43.3(1100)	45.3(1150)	57.1(1450)	57.1(1450)	
Load length (nominal fork length)									
Load width		in(mm)	32(813)	36(914)	42(1067)	46(1168)	48(1219)	54(1372)	60(1524)
	40(1016)	in(mm)	66.9(1700)	70.9(1800)	76.8(1950)	80.7(2050)	82.7(2100)	88.6(2250)	94.5(2400)
	44(1118)	in(mm)	68.7(1746)	72.7(1846)	78.6(1996)	82.5(2096)	84.5(2146)	90.4(2296)	96.3(2446)

<sup>①</sup>Add a minimum of 12in (300 mm) for maneuverability.



## A Series End Control Rider Pallet Truck

with capacities of 8,000lbs

The CBD36-AC1S-NA pallet truck is designed for high-intensity work conditions specially, and is suitable for various handling and picking operations, featuring excellent performance, safety and reliability, and lower maintenance cost for operations.

## Simple/ Solid/ Smart



### Reliability

- / The design of pallet truck frame of high-strength steel plate can satisfy various work conditions, with long service life.
- / Box-type stamped fork features higher strength and impact resistance, with excellent strength and rigidity.
- / Water-proof plug connectors offer reliable protection for all cables, which increases reliability of the electrical system significantly.
- / The limit switch of lifting motor eliminates overflow of the hydraulic power unit, which is more energy efficient, and can protect the motor of power unit.

### Comfort

- / Low-noise reduction gear box and high-elasticity PU traction wheel result in low noise.
- / Additional wheels supported with PU blocks and springs realize more stable travelling.
- / Inner concave design at bottom of machine hood offers larger room for operator's feet.

### High Performance

- / The AC driving motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The CANBUS bus structure realizes faster and more reliable communication for the entire machine.
- / The operating handle has a Picking button as standard configuration, so the pallet truck may be operated at the side to increase efficiency of picking operation.
- / Regenerative brake of the pallet truck prevents it from sliding on a slope.

### Appearance

- / Integrated machine hood, smooth lines, full of dynamics, in compliance with environmental requirements.
- / Frame and fork of stamped steel plates, solid and reliable.

### Safety

- / Release braking, reverse braking, and three types of emergency braking can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency braking button on top of operating handle can avoid the driver from injury effectively in case of emergency during backward driving of the pallet truck.

### Standard

- / High-efficiency AC driving motor
- / High-performance PU driving wheels
- / CURTIS AC controller
- / High-performance hydraulic power unit
- / Anti-skid pedal pad for standing operation
- / CANBUS multi-functional operating handle
- / Multi-functional interactive instruments
- / PU buffering elastic auxiliary wheels
- / Electromagnetic brake
- / Load backrest



The roomy platform features low steps heights to reduce fatigue, and cushioned lean pads (Opt.) allow the operator to adjust stance throughout the shift, enhancing operator comfort



The load backrest is secured with high-strength bolts, which can protect the operator effectively



The CURTIS AC control system offers accurate and stable work, and higher efficiency

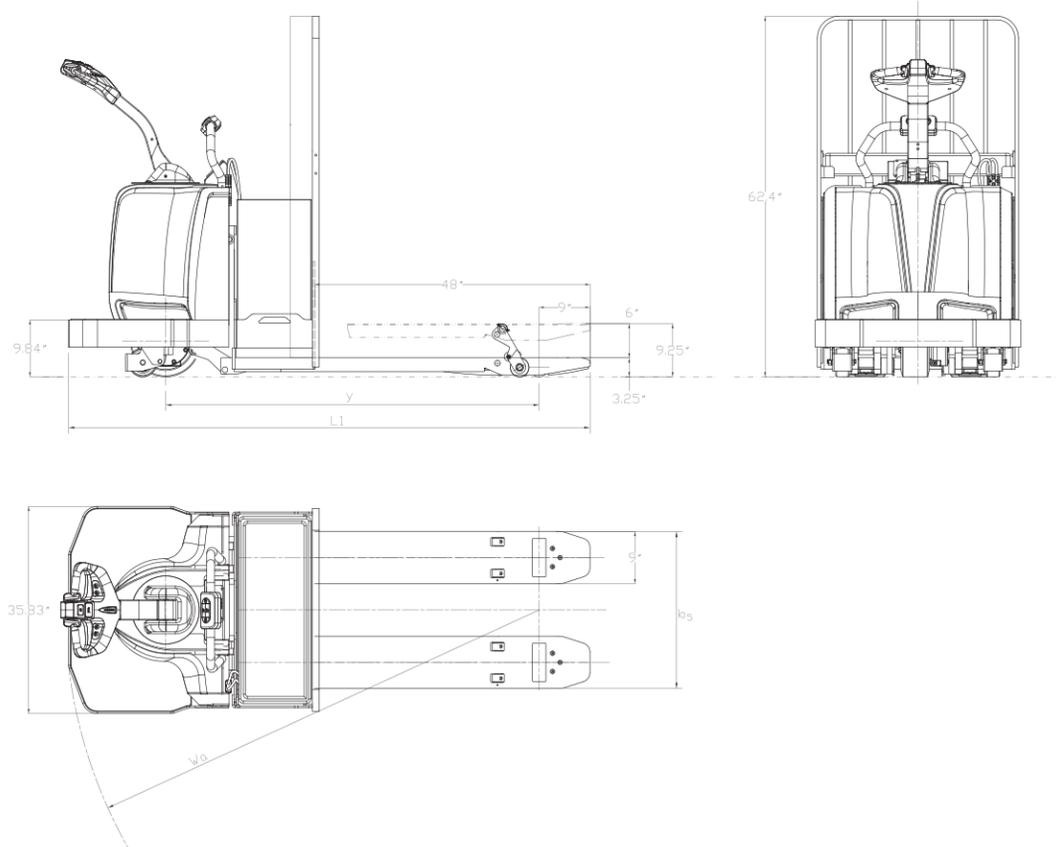


FREI tiller

## A Series End Control Rider Pallet Truck

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
	1.2	Manufacturer's type designation		CBD36-AC1S-NA
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric
	1.4	Operator type		Rider
	1.5	Rated capacity/rated load	Q(lb)	8000
	1.6	Load centre distance	c(in)	24
	1.8	Load distance, centre of drive axle to fork	x(in)	39.1
	1.9	Wheelbase	y(in)	65.2
	Weight	2.1	Service weight	lb
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane
	3.2	Tyre size, front	in	12.2×4.3
	3.3	Tyre size, rear	in	2-3.25×6.5
	3.4	Additional wheel (dimensions)	in	2-5×2.4
Dimensions	4.4	Lift	h <sub>3</sub> (in)	6
	4.15	Fork height,lowered	h <sub>13</sub> (in)	3.25
	4.19	Overall length	l <sub>1</sub> (in)	91
	4.20	Head Length	l <sub>2</sub> (in)	43
	4.21	Overall width	b <sub>1</sub> (in)	36
	4.25	Distance between fork-arms	b <sub>5</sub> (in)	27.1
	4.35	Turning radius	W <sub>a</sub> (in)	82.7
Performance Data	5.1	Travel speed,laden/unladen	mph	5.6/8.7
	5.8	Max Gradeability,laden/unladen	%	8/15
	5.10	Service brake		Electromagnetic
Electric-engine	6.4	Battery voltage, nominal capacity K5	V/Ah	24V/400Ah

Model		CBD27-AC1S-NA		CBD36-AC1S-NA	
Voltage		V	24	24	24
Battery Compartment	"X" Max.	mm (in)	810(31.9)	810(31.9)	810(31.9)
	"Y" Max.	mm (in)	327(12.9)	327(12.9)	327(12.9)
	"Z" Max.	mm (in)	593(23.3)	593(23.3)	593(23.3)
Batt.Wt.	Maximum	Kg (lb)	866(1910)	866(1910)	866(1910)
	Minimum	Kg (lb)	310(685)	310(685)	310(685)



## A Series Rider Pallet Truck

with capacities of 2,000 to 3,000kg

The rider pallet truck is one of the A series pallet truck models. Using the latest AC drive technology, advanced performance, comfort, safe, reliable, low maintenance cost, is the ideal tool for heavy duty and long distance transport operations.

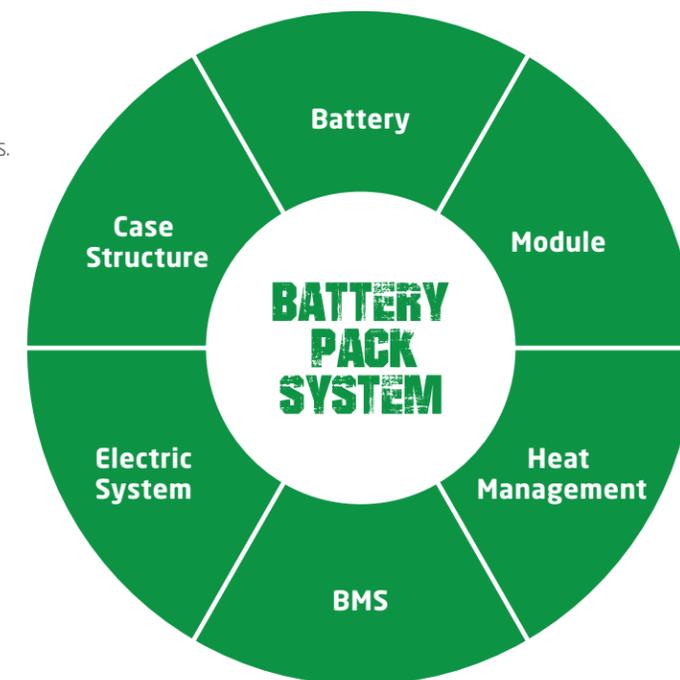
# LET THE LITHIUM POWER UNLEASH



## INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion  
**2 hours**  
**100%**

Lead-acid batteries  
**8-10 hours** 100%

**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-Ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

### Li-Ion Battery Pack specification

Type		CBD20-ABC1S-ISU	CBD30-ABC1S-ISU	CBD20-AC1S-ISU	CBD30-AC1S-ISU
Li-Ion battery	V/Ah	24/120	24/120	24/120	24/120
Li-Ion battery,Optional	V/Ah	24/202	24/202	24/202	24/202
Titans charger		SPC-24100	SPC-24100	SPC-24100	SPC-24100



HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.



**5 YEARS**  
**WARRANTY**

# Environment/ Efficiency/ Economy



## Appearance

- / A series electric rider pallet truck applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes for front and back guard, which is robust, durable, and also environmental compliance.

## High Performance

- / Electric power steering (EPS) is standard specification, which provides flexible operation.
- / Powered by AC traction motor not only has good acceleration and climbing performance, but also low heat, brushless, maintenance-free.
- / Latest AC control system, precise and smooth.
- / CAN-BUS connection enables all truck data can be read out for inspection, and also improves the data transition more quick and reliable.
- / Regenerative braking for battery recovery during travel speed reduction, anti-slope on gradient.
- / All key parts such as switches, connectors, battery indicator and hour meter all adopt the famous brand.

## Safety

- / Automatic deceleration during turning.
- / Punch-formed frame provide more safety to the operator.
- / Three braking system of regenerative braking, reverse current braking, parking brake, insures the safe operation.
- / Anti-slope on gradient can keep the safety.
- / The braking button on the tiller head can effectively avoid the harm to the driver.
- / The standard equipped electronic lifting limitation protect the pump motor from damaging dramatically and more energy saving.
- / Displayed turtle speed function applied to move slowly and helps to stack goods in narrow space.

## Maintenance

- / AC motor without carbon brushes, maintenance-free, cost saving.
- / Integrated battery indicator, hour meter and self-diagnostic instrument.
- / Full opened hood, easy accessibility of all components, is easy for service.
- / All shafts installed lubricated shaft sleeve and oil cup, provide convenient maintenance and long service life.



The pedal applies shock absorption design, greatly improve the operator's comfort, reduce the fatigue



Optimized designing structure to offer a good visibility and easy entrance of the pallet



Side battery change is standard feature



Simple and beautiful tiller designed to make the operator feel comfortable, all the operation can be completed by one hand

5-pivot with low centre of gravity design and high strength steel frame structure chassis provide larger residual load capability and longer working life.



Powered by AC traction motor not only has good acceleration and climbing performance, but also low heat, brushless, maintenance-free

Electric power steering (EPS) is standard specification, which provides flexible operation

## Reliability

- / Adopted unique floating suspension system ensures good driving wheels' grip and excellent stability.
- / Imported waterproof connectors, all wires and cables are protected, greatly improve the reliability of the electric system.
- / Using non-contact proximity switch, improves safety and reliability.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch formed forks to provide more strength and tip guide to provide higher efficient operation.
- / The power plug is fixed on the truck body to avoid damage from battery installment.

## Comfort

- / Smooth driving and more comfortable operating experience thanks to a new design of the floating drive suspension system.
- / The compact body and semicircular design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability.

## Standard Specification

- / AC drive motor
- / AC controller
- / Electric Power Steering (EPS)
- / Emergency switch
- / 1150mm fork length
- / Side battery change
- / Multi-function battery indicator
- / CAN-bus technology
- / 540mm outside fork width
- / Automatic speed reduction when cornering
- / Imported hydraulic unit
- / Brake switch

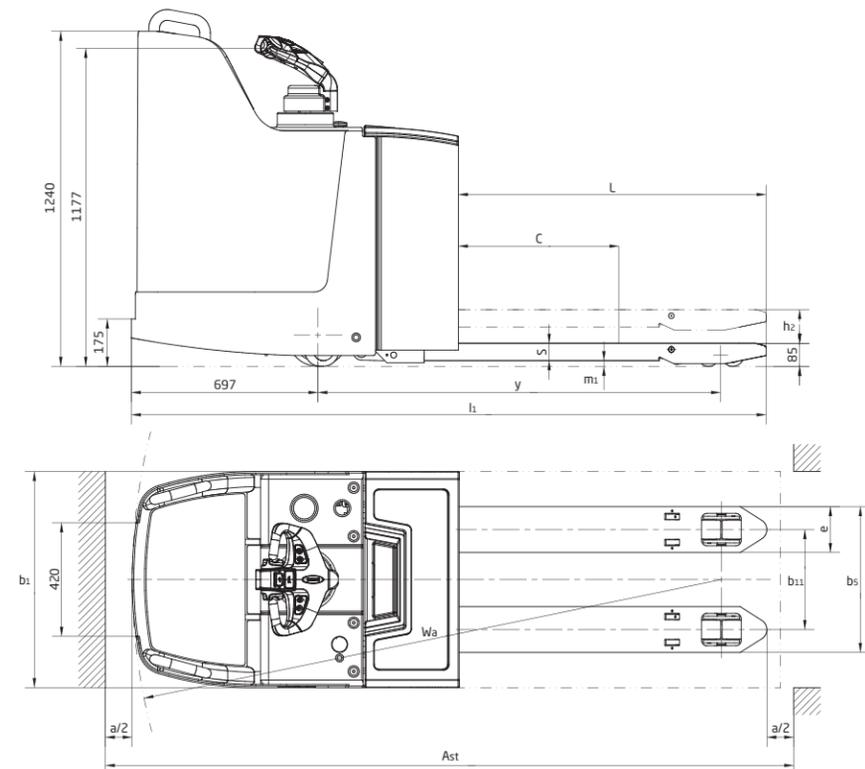
## Options

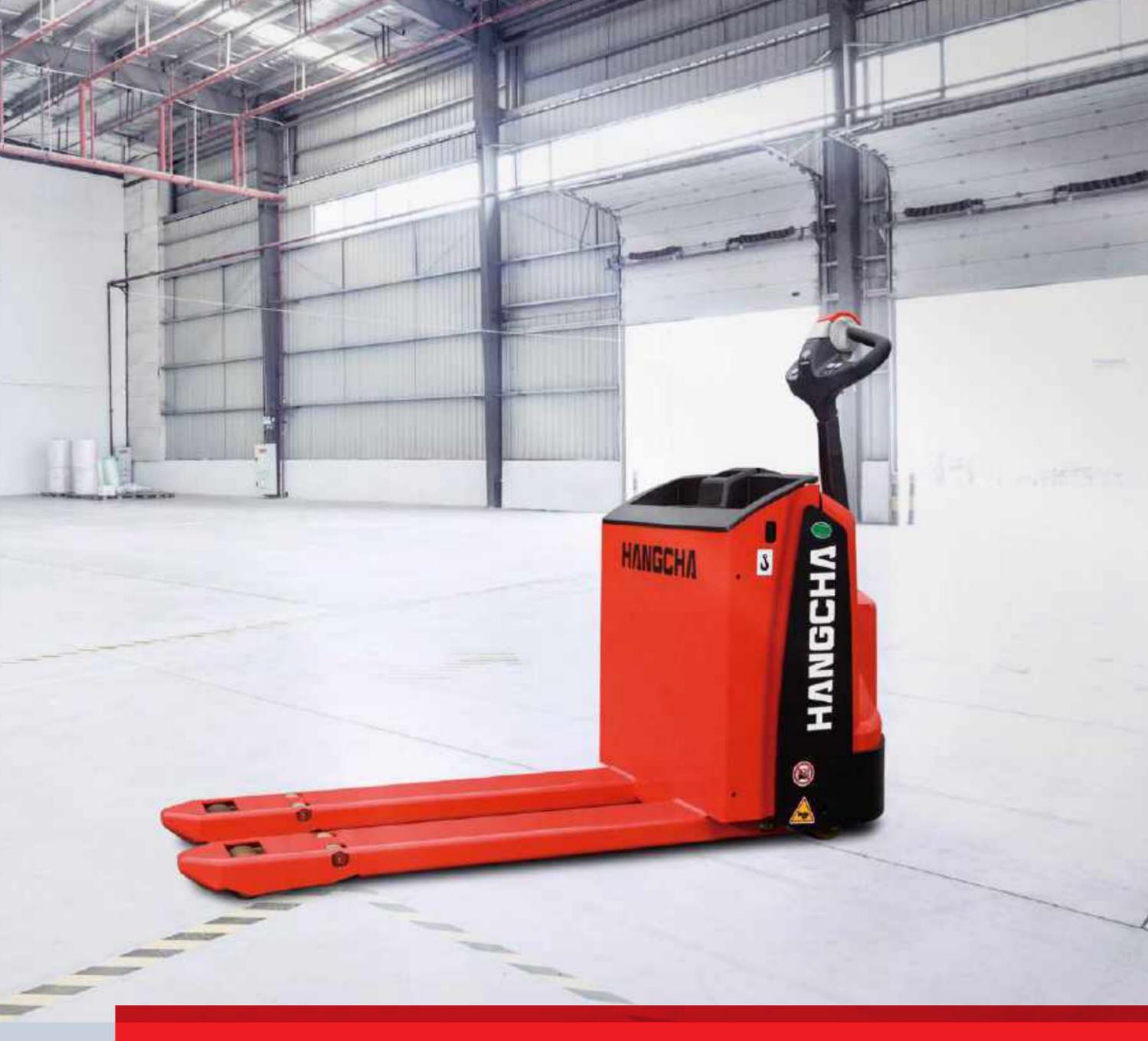
- / Different length of fork
- / Different capacity of battery

## A Series Rider Pallet Truck

		HANGCHA GROUP CO.,LTD.					
Distinguishing mark	1.1	Manufacturer					
	1.2	Manufacturer's type designation		CBD20-ABC1S-SU CBD20-ABZ3S-SU	CBD20-AC1S-SU CBD20-AZ3S-SU	CBD30-ABC1S-SU CBD30-ABZ3S-SU	CBD30-AC1S-SU CBD30-AZ3S-SU
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Standing	Standing	Standing	Standing
	1.5	Rated capacity/rated load	Q (kg)	2000	2000	3000	3000
	1.6	Load centre distance	c (mm)	600	600	600	600
Weight	1.9	Wheelbase	y (mm)	1505	1505	1505	1505
	2.1	Service Weight	kg	825	880	880	920
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU
	3.2	Tyre size, front		Φ85×80	Φ85×80	Φ85×80	Φ85×80
	3.3	Tyre size, rear		Φ230×75	Φ230×75	Φ230×75	Φ230×75
	3.4	Additional wheels (dimensions)		Φ125×50	Φ125×50	Φ125×50	Φ125×50
	3.5	Wheels, number front / rear (x = driven wheels)		1×+2/4	1×+2/4	1×+2/4	1×+2/4
	3.6	Tread, front	b <sub>10</sub> (mm)	575	575	575	575
3.7	Tread, rear	b <sub>11</sub> (mm)	370	370	370	370	
Dimensions	4.3	Free lift	h <sub>z</sub> (mm)	125	125	125	125
	4.19	Overall length	l <sub>1</sub> (mm)	2372	2372	2372	2372
	4.21	Overall width	b <sub>i</sub> (mm)	800	800	800	800
	4.22	Fork dimensions ISO 2331	s/e/l (mm)	64/170/1150	64/170/1150	64/170/1150	64/170/1150
	4.25	Distance between fork-arms	b <sub>s</sub> (mm)	540/680	540/680	540/680	540/680
	4.31	Ground clearance, laden, below mast	m <sub>i</sub> (mm)	21	21	21	21
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm)	2504 <sup>1)</sup>	2504 <sup>1)</sup>	2504 <sup>1)</sup>	2504 <sup>1)</sup>
4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm)	2554 <sup>2)</sup>	2554 <sup>2)</sup>	2554 <sup>2)</sup>	2554 <sup>2)</sup>	
4.35	Turning radius	W <sub>a</sub> (mm)	2134 <sup>3)</sup>	2134 <sup>3)</sup>	2134 <sup>3)</sup>	2134 <sup>3)</sup>	
Performance data	5.1	Travel speed, laden/unladen	km/h	6.5/7.0	9.0/9.5	5.5/7.0	7.5/9.5
	5.2	Lift speed, laden/unladen	m/s	0.047/0.064	0.047/0.064	0.036/0.053	0.036/0.053
	5.3	Lowering speed, laden/unladen	m/s	0.075/0.071	0.075/0.071	0.060/0.058	0.060/0.058
	5.8	Max. gradeability, laden/unladen	%	5/16	8/16	5/16	8/16
	5.10	Service brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic
Electric engine	6.1	Drive motor rating S2 60 min	kW	1.5	2.2	1.5	2.2
	6.2	Lift motor rating at S3 15%	kW	DC 2.2	DC 2.2	DC 2.2	DC 2.2
		Steering motor	kW	DC 0.2	DC 0.2	DC 0.2	DC 0.2
	6.4	Battery voltage, nominal capacity K5 (Lead-acid)	V/Ah	24/240	24/280	24/280	24/340
		Battery voltage, rated capacity, Optional	V/Ah	24/~340	24/~340	24/~340	-
	8.1	Type of drive unit		AC traction	AC traction	AC traction	AC traction
	9.1	Manufacturer/Type		CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI
10.7	Sound pressure level at the driver's seat	dB (A)	≤75	≤75	≤75	≤75	

Note: 1). VDI 2198: +430mm 2). VDI 2198: +236mm 3). When fork lowered,+68mm





## T Series Premium Range Pallet Truck

with capacities of 2,000kg

### Durability

- / Durable frame construction, with integrated welded forks brings the truck high rigidity, and long working life.
- / New butterfly drive controller is more easy for operator.
- / Integrated ZF transmission system, more reliable.

### Productivity

- / Compacted chassis design, makes the truck operated in limited spacious.
- / Powerful AC traction motor with Curtis control system.
- / Applied MOSEFET high frequency control.
- / Germany WICKE wheel.
- / Unique steering pivot design, which makes the drive motor suspends during steering.
- / Shock absorber are standard specification for the caster wheel, prolong the truck's working life time.

### Ergonomics

- / Tiller is ergonomically designed for Max. driver's comfort.
- / Dual lift/lower button controls allow operation by either hand.
- / Creep speed control button is available.
- / Conductor belt is standard specification.

### Serviceability

- / Battery discharge indicator with lifting interrupt as standard specification when 20% battery capacity available and inform the operator of recharge requirement.
- / IP54 environment sealing, which protect the inside componets.
- / Open the back cover, every components are easy to reach.

### Standard Specification

- / Poly. Drive wheel and load wheels
- / AC drive motor and control system
- / Emergency cut off switch
- / Combined hydraulic unit
- / LED panel
- / 220Ah battery



### Options

- / 900mm, 923mm, 973mm, 1000mm, 1019mm, 1023mm, 1125mm, fork length
- / 520mm, 560mm, 670mm fork distances
- / Tandem load wheel
- / High frequency auto charger



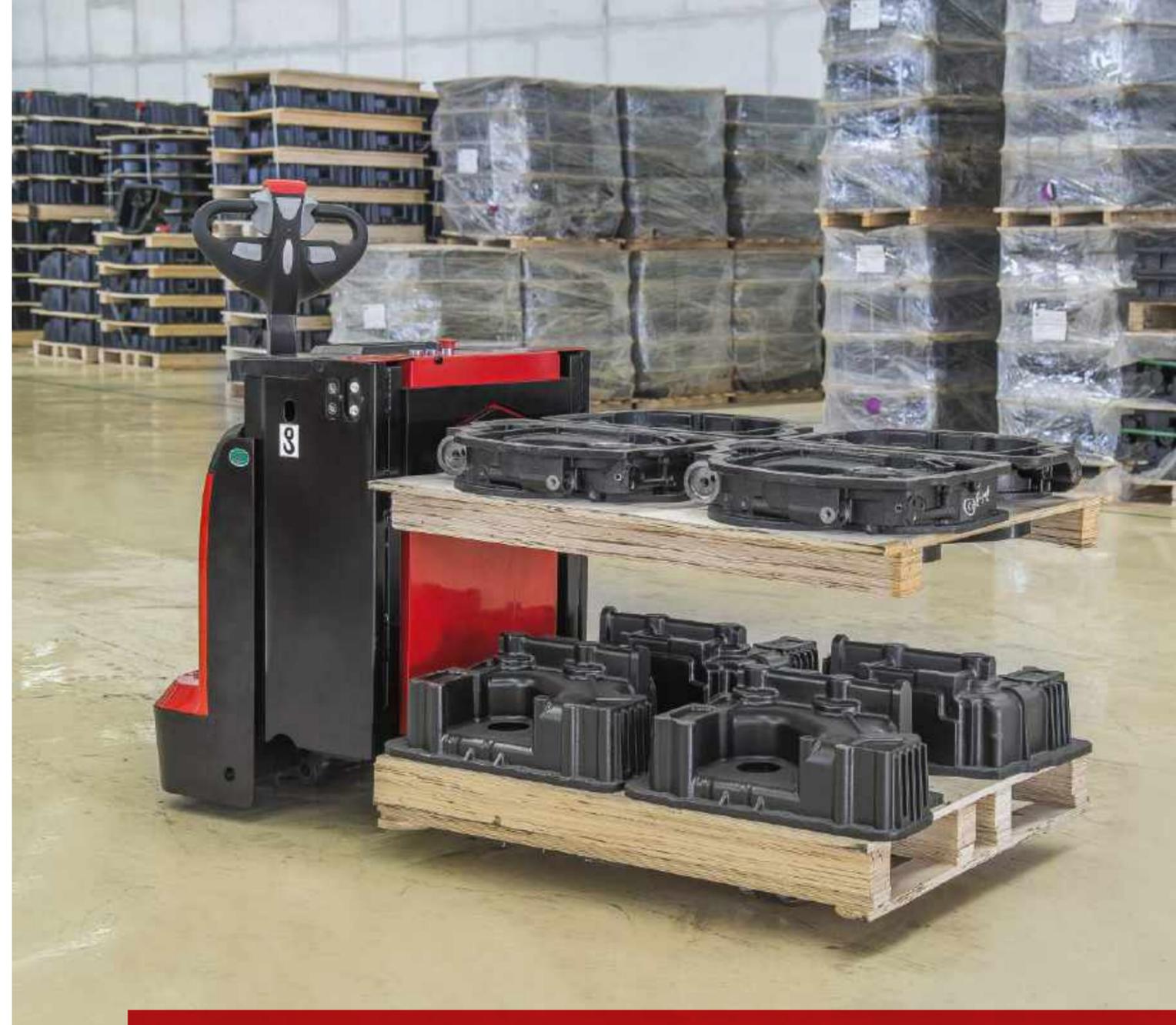
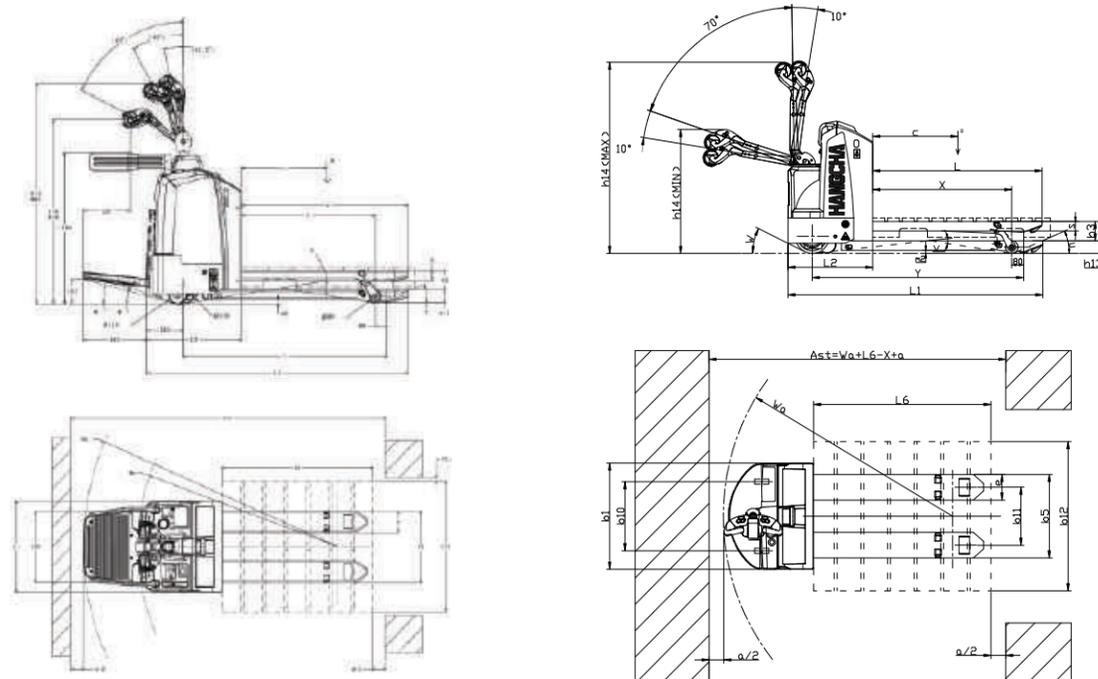
Stand-on

## T Series Premium Range Pallet Truck

		HANGCHA GROUP CO.,LTD.						
Distinguishing mark	1.1	Manufacturer						
	1.2	Manufacturer's type designation	CBD20-TC1	CBD20-TC1	CBD20-TSC1	CBD20-TSC1		
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	ELECTRIC	ELECTRIC	ELECTRIC	ELECTRIC		
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	Pedestrian	Standing	Standing		
	1.5	Rated capacity/rated load	Q (kg/lb)	2000/4409	2000/4409	2000/4409	2000/4409	
	1.6	Load centre distance	c (mm/in)	587/23.1	586/23.0	587/23.1	586/23.0	
	1.8	Load distance, centre of drive axle to fork	x (mm/in)	942/37.0	893/35.2	942/37.0	893/35.2	
	1.9	Wheelbase	y (mm/in)	1352/53.2	1304/51.3	1352/53.2	1304/51.3	
		Wheelbase type		Single load wheels (Long wheelbase)	*Tandem load wheels (short wheelbase)	*Single load wheels (Long wheelbase)	Tandem load wheels (short wheelbase)	
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		poly	poly	poly	poly	
	3.2	Tyre size, front	mm/in	Φ250x100 / Φ9.8x3.9	Φ250x100 / Φ9.8x3.9	Φ250x100 / Φ9.8x3.9	Φ250x100 / Φ9.8x3.9	
	3.3	Tyre size, rear	mm/in	Φ85x110/Φ3.3x4.3	Φ85x95/Φ3.3x3.7	Φ85x110/Φ3.3x4.3	Φ85x95/Φ3.3x3.7	
	3.4	Additional wheel (dimensions)	mm/in	Φ100x40/Φ3.9x1.6	Φ100x40/Φ3.9x1.6	Φ125x50/Φ4.9x2.0	Φ125x50/Φ4.9x2.0	
	3.5	Wheel number front/rear(x=Drive wheels)		1x+2/2	1x+2/4	1x+2/2	1x+2/4	
	3.6	Tread, Front	b <sub>10</sub> (mm/in)	461/18.1	461/18.1	461/18.1	461/18.1	
	3.7	Tread, Rear	b <sub>11</sub> (mm/in)	390/15.4	390/15.4	390/15.4	390/15.4	
Dimensions	4.4	Lift	h <sub>1</sub> (mm/in)	130/5.1	130/5.1	130/5.1	130/5.1	
	4.9	Height drawbar in driving position min./max.	h <sub>14</sub> mm/(in)	829/1288 (32.6/50.7)	829/1288 (32.6/50.7)	1219/1459 (48.0/57.4)	1219/1459 (48.0/57.4)	
	4.15	Height, lowered	h <sub>13</sub> (mm/in)	83/3.3	83/3.3	83/3.3	83/3.3	
	4.19	Overall length ( pedal folden/unfolden)	l <sub>1</sub> mm/(in)	1751/68.9	1749/68.9	1844/2289 (72.6/90.1)	1842/2287 (72.5/90.0)	
	4.20	Length to face of forks	l <sub>2</sub> (mm/in)	578/22.8	578/22.8	671/26.4	671/26.4	
	4.21	Overall width	b <sub>1</sub> (mm/in)	712/28.0	712/28.0	712/28.0	712/28.0	
	4.22	Fork dimensions ISO 2331	s/e/l mm/(in)	64/170/1173 (2.5/6.7/46.2)	64/170/1171 (2.5/6.7/46.1)	64/170/1173 (2.5/6.7/46.2)	64/170/1171 (2.5/6.7/46.1)	
	4.25	Distance between fork-arms	b <sub>2</sub> (mm/in)	560/22.0	560/22.0	560/22.0	560/22.0	
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	21/0.8	21/0.8	21/0.8	21/0.8	
	4.34.1	Aisle width for pallets 1000 x 1200 crossways (pedal folden/unfolden)	A <sub>s1</sub> mm/(in)	1980/78.0	1979/77.9	2050/2488 (80.7/98.0)	2050/2488 (80.7/98.0)	
	4.34.2	Aisle width for pallets 800 x 1200 lengthways (pedal folden/unfolden)	A <sub>s2</sub> mm/(in)	2007/79.0	2008/79.1	2077/2515 (81.8/99.0)	2079/2517 (81.9/99.1)	
	4.35	Turning radius (pedal folden/unfolden)	W <sub>a</sub> mm/(in)	1549/61.0	1501/59.1	1619/2057 (63.7/81.0)	1572/2010 (61.9/79.1)	
	Performance data	5.1	Travel speed, laden/unladen	km/h mph	6.0/6.0 3.7/3.7	6.0/6.0 3.7/3.7	6.0/6.0/8.0/8.0 (3.7/3.7/5.0/5.0)	6.0/6.0/8.0/8.0 (3.7/3.7/5.0/5.0)
5.2		Lift speed, laden/unladen	m/s (ft/min)	0.04/0.05 (7.9/9.8)	0.04/0.05 (7.9/9.8)	0.04/0.05 (7.9/9.8)	0.04/0.05 (7.9/9.8)	
5.3		Lowering speed, laden/unladen	m/s (ft/min)	0.09/0.04 (17.7/7.9)	0.09/0.04 (17.7/7.9)	0.09/0.04 (17.7/7.9)	0.09/0.04 (17.7/7.9)	
5.7		Gradeability,laden/unladen	%	10.0/15	10.0/15	10.0/15	10.0/15	
		Gradeability(pedestrian)	U/V/W(%)	34/15/38	34/16/38	34/15/29	34/16/29	
		Gradeability(Standing)	U/V/W(%)	/	/	34/15/24	34/16/24	
5.8		Max. Gradeability, laden/unladen	%	14.5/20	14.5/20	14.5/20	14.5/20	
5.10		Service brake		Electric	Electric	Electric	Electric	
Electric engine		6.1	Drive motor rating S2 60 min	kW/hp	1.25/1.7	1.25/1.7	1.7/2.3	1.7/2.3
		6.2	Lift motor rating at S3 15%	kW/hp	1.2/1.6	1.2/1.6	1.2/1.6	1.2/1.6
	6.3	Battery acc. to DIN 43531/35/36 A,B,C, no		B	B	B	B	
		Battery dimensions	l/b/h (mm/in)	212x624x627 / 8.3x24.6x24.7		283x624x627 / 11.1x24.6x24.7		
	6.4	Battery voltage, nominal capacity K5	V/Ah	24/220	24/220	24/330	24/330	
	6.5	Battery weight	kg/lb	212/467	212/467	312/688	312/688	
	6.6	Energy consumption acc. to VDI cycle	kWh/h	0.384	0.384	0.43	0.43	
10.7	Sound pressure level at the driver's seat	dB(A)	<70	<70	<70	<70		

Note: Specifications are subject to change without notice.

\* Optional



## A Series Pallet Truck With High Lift with capacities of 2,000kg

The A series pallet with high lift is a pedestrian pallet truck which can also be used for order picking and light stacking operations. In addition to the support arm lift the load can be raised to an overall height of 675 mm via a simplex mast contained in the battery compartment. This height adjustment is really appreciated when order picking, restocking shelves in retail stores or assembly line activities in manufacturing industries.

## Stability

- / Integrated mast matched to chassis width.
- / High resistance fork carriage and load arms made of robust pressed steel.

## Performance

- / The arms have high lifting function, and there is better trafficability.
- / With the design of handling by the double pallets (upper and lower pallets), it cannot only meet the light stacking work demand, but also can improve the material handling efficiency.
- / The powerful lift & AC traction motors supply the performance needed to achieve a high level of productivity.
- / With the latest CURTIS control system, control is precise and stable, efficiency is higher.
- / With CANBUS bus structure, the communication of the truck is faster and reliable.
- / The truck has the regenerative braking, and has anti-sliding protection at the ramp.

## Comfort

- / All commands integrated to the tiller, the function buttons can be operated in comfortable way.
- / For safe use in confined areas, tiller operates in vertical position via crawl speed button.
- / Additional buttons located on the truck side allows the operator for example to pick goods at a comfortable height.
- / Long tiller arm reduces steering effort to maximise manoeuvrability.

## Maintenance

- / No carbon brushes – maintenance-free traction motor.
- / Extensive instrument display allow the operator to monitor the situation at a glance.
- / Easy access to all parts with one-piece back panel, maintenance is very convenient.

## Reliability

- / With five-supporting-point and low gravity center design, a rugged construction makes the pallet truck that can be relied on.
- / With the non-contact proximity switch, such switch has long service life and can operate reliably.
- / The lifting electric limit switch is provided, the hydraulic power unit will not have overflow. It is more energy-saving, and the power unit motor can also be protected.
- / The sturdy mast and the durable carriage are made of high-grade rolled steel contributing to a long truck life as well as fast, easy and safe load handling.
- / The stamped and formed forks have higher strength and shock resistance.

## Safety

- / The release braking, reverse braking and emergency braking to ensure the truck running safety.
- / No roll-back when starting on a slope.
- / The truck has the lowering intelligent protection function. When the forks are less than 150mm away from the ground, the side lowering button is ineffective.
- / With the emergency reverse button at the head of the handle, when the truck runs back and there is emergency, it can effectively prevent the driver from injury.

## Standard specification

- / AC traction motor
- / CURTIS controller
- / Additional buttons for lifting/lowering the forks on chassis side
- / Multi-functional instrument
- / Polyurethane dual load wheels
- / Fork length: 1150mm
- / Distance between fork-arms: 560mm
- / Initial lifting: 125mm
- / CAN bus multi-functional handle
- / Lifting electric limit
- / Horn
- / Key switch
- / Crawl speed function
- / Upright-tiller creep speed running
- / Auto reverse safety switch

## Options

- / Load backrest
- / Automatic picking function
- / Password lock
- / Cold storage



The truck benefits from a long tiller with a low mounting point ensuring a large safety clearance between operator & chassis



Automatic picking functions (OPT) enable all kind of loads to be lifted or lower quickly and without fatigue



Easy battery charging - suitable for any convenient electric outlet



The support arm lift capacity is 2000 kg while the mast lift capacity is 800 kg

**Power/  
Manoeuvrable/  
Compact**

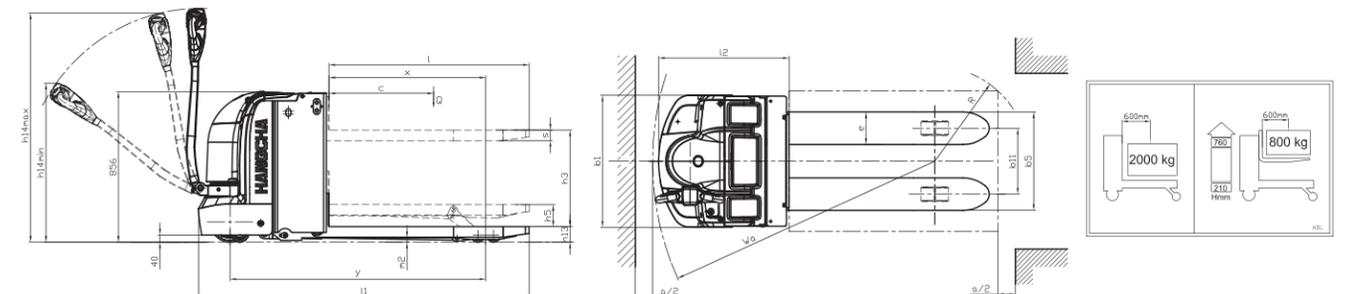


## A Series Pallet Truck With High Lift Specification

Distinguishing marks	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation	CBD20-AC1-L	
	1.3	Drive:electric(battery or mains),diesel,petrol,fuel gas	Electric	
	1.4	Operator type:hand,pedestrian,standing,seated,order-picker	Pedestrian	
	1.5	Load capacity/rated load	Q (kg/lb)	2000/4000
		Load capacity mast lift	Q (kg/lb)	800/1800
		Load capacity support arm lift	Q (kg/lb)	2000/4000
	1.6	Load centre distance	c(mm/in)	600/24
	1.8	Load distance, centre of drive axle to fork	x(mm/in)	840 <sup>1)</sup> /33 <sup>1)</sup>
1.9	Wheelbase	y(mm/in)	1409 <sup>1)</sup> /55.5 <sup>1)</sup>	
Weights	2.1	Service Weight without battery	kg/lb	536/1200
Wheels, Chassis	3.1	Tyres:solid rubber,superelastic,pneumatic,polyurethane		PU
	3.2	Tyre size, front	mm/in	Φ230×75
	3.3	Tyre size, rear	mm/in	Φ80×70
	3.4	Additional wheels (dimensions)	mm/in	Φ100×40
	3.5	Wheels, number front / rear (x = driven wheels)		1×+2/4
	3.6	Tread, front	b <sub>10</sub> (mm/in)	480/18.9
	3.7	Tread, rear	b <sub>11</sub> (mm/in)	375/14.8
Dimensions	4.4	Lift	h <sub>3</sub> (mm/in)	550/21.7
	4.5	Initial lift	h <sub>5</sub> (mm/in)	125/4.9
	4.9	Height of tiller in drive position min./max.	h <sub>14</sub> (mm/in)	960/1320 (37.8/52)
	4.15	Height, lowered	h <sub>13</sub> (mm/in)	90/3.5
	4.19	Overall length	l <sub>1</sub> (mm/in)	1899/74.8
	4.20	Length to face of forks	l <sub>2</sub> (mm/in)	749/29.5
	4.21	Overall width	b <sub>1</sub> (mm/in)	750/29.5
	4.22	Fork dimensions	s/e/l (mm/in)	60/185/1150 (2.4/7.3/45.3)
	4.25	Distance between fork-arms	b <sub>5</sub> (mm/in)	560/22
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	25/0.98
4.33	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm/in)	2442 <sup>1)</sup> /96.1 <sup>1)</sup>	
4.34	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm/in)	2360 <sup>1)</sup> /92.9 <sup>1)</sup>	
4.35	Turning radius	W <sub>a</sub> (mm/in)	1620 <sup>1)</sup> /63.8 <sup>1)</sup>	
Performance data	5.1	Travel speed, laden/unladen	kph (mph)	6.0/6.0 (3.7/3.7)
	5.2	Lift speed, laden/unladen	m/s (ft/min)	0.120/0.170 (23.62/33.46)
	5.3	Lowering speed, laden/unladen	m/s (ft/min)	0.150/0.130 (29.53/25.6)
	5.8	Max.gradeability, laden/unladen	%	8/20
	5.10	Service brake		Electromagnetic braking
Electric-motor	6.1	Drive motor rating S2 60 min.	kw/hp	1.5/2.0
	6.2	Lift motor rating at S3 5%	kw/hp	2.2/2.95
	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		3PZB210
	6.4	Battery voltage/nominal capacity K5	V/Ah	24/210
	6.5	Battery weight	kg/lb	194/428
Others	8.1	Type of drive control		AC SpeedControl
	8.4	Sound pressure level at the driver's seat	dB(A)	70

Note:1.)Load section raised / lowered: + 64mm(2.5in)

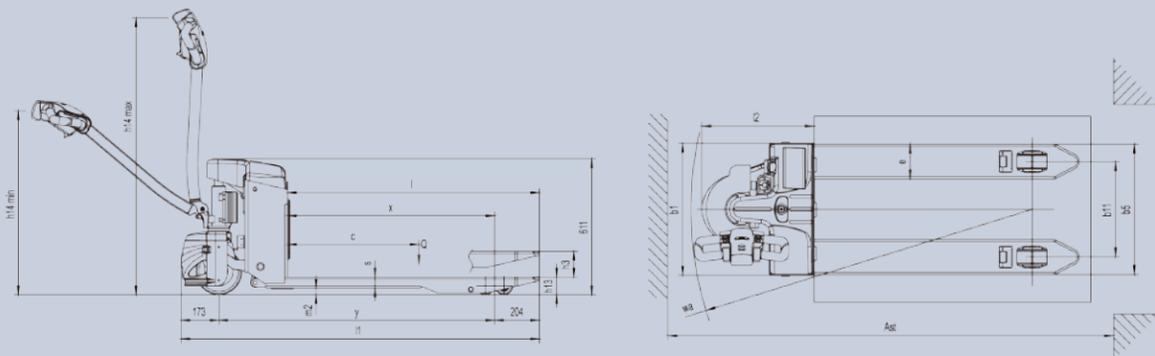
Specifications are subject to change without notice.





## Replace of Hand Pallet Truck

with capacities of 1,500kg



## Replace of Hand Pallet Truck

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
	1.2	Manufacturer's type designation		CBD15-W-SE
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Semi-electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		pedestrian
	1.5	Load capacity	Q (kg/lb)	1500/3307
Weight	2.1	Service weight	kg/lb	140/309
Tyres, chassis	3.1	Tyre type		PU
Dimensions	4.4	Lift height	h <sub>3</sub> (mm/in)	115/4.5
	4.15	Fork lowered	h <sub>13</sub> (mm/in)	85/3.3
	4.19	Overall length	l <sub>1</sub> (mm/in)	1580/62.2
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm/in)	560/22.0
	4.22	Fork dimensions	s/e/l mm/(in)	50/150/1150 (2.0/5.9/45.3)
	4.25	Outside fork width	b <sub>s</sub> mm/(in)	560/685 (22.0/27.0)
	4.34.1	Aisle width,1000×1200 pallet crossways	A <sub>st</sub> (mm/in)	1697/66.8
4.34.2	Aisle width,800×1200 pallet lengthways	A <sub>st</sub> (mm/in)	1697/66.8	
4.35	Outer turning radius	W <sub>a</sub> (mm/in)	1380/54.3	
Performance data	5.1	Travel speed, laden/unladen	km/h	3.5/4 2.2/2.5
	5.8	Maximum gradeability, laden/ unladen	%	3/6
Electric engine	6.1	Drive motor rating S≥ 60 min	kW	0.65/0.87
	6.4	Battery voltage/rated capacity	V/Ah	24/24

### Application

/ Entry level semi electric pallet truck for your new choice, release the handling strength, reduce the handling cost, decrease manual work.

### Safety

/ Handy emergency disconnect button & durable driving unit ensure working safety.

### Easy Operating & Maintenance

/ 1.5t load capacity, the most compact design, electric driving and manual lifting with small turning radius to save the operating and working space. Ergonomic design switch box for accurate and easy operating. Built-in charger, maintenance free battery to reduce the maintenance cost. Assembly components are easy for diagnosis and replacing.

### Options

/ Fork length - 800/915/1000/1070/1100/1300/1400mm  
 / Fork width - 520/600mm  
 / Single load wheel  
 / Lowered fork height for light load - 75mm/40mm(<1000kg)

### High Stability

/ Leading designed handle switch and controller system, revolutionary to reduce the electronic parts defects rate.  
 / Unique drive system with high energy-efficiency to increase the reliability deeply. Fitted with hydraulic pump from HPT, reduce the hydraulic system defects rate. Reverse-back button, emergency stop button, slope antiskid resistance, drive wheel cover to increase the safety of the operator.





**LI-ION**  
TECHNOLOGY  
INNOVATIVE LITHIUM-ION

## J Series Electric Pallet Truck / Li-ion

with capacities of 1,500kg

## Introduction

- / The vehicle is simple,smart,reliable and easy to operate.Compact structure,small turning radius and light weight,it can be used in freight elevators.Low noise and high performance;
- / Reasonable structural design,so that the machine has a strong skeleton structure while maintaining a light weight.Fully open design for easy maintenance and maintenance;
- / The use of universal manual truck hydraulic pump to reduce hydraulic system failure;
- / The whole machine adopts open design.It is simple and convenient to disassemble and replace the battery.When the battery is exhausted,you can quickly replace another battery(optional),effectively extending the working time by twice.
- / Back anti-collision switch,power supply emergency cut off,the service brake uses electromagnetic brake and motor brake double guarantee, fully consider the operator's physical strength>manual lowering function,adjust the falling speed by pulling the angle of the handle;
- / The auxiliary wheels on both sides increase the stability of the driving.



## CBD15 specification

			HANGCHA GROUP CO.,LTD.	
Characteristics	1.1	Manufacturer	CBD15-JC1-I	
	1.2	Model	Electric	
	1.3	Power unit	Pedestrian	
	1.4	Operation		
	1.5	Rated traction weight	Q (t)	1.5
	1.6	Load centre	c (mm)	600
	1.8	Axle centre to fork face	x (mm)	944
	1.9	Wheel base	y (mm)	1243
	Weights	2.1	Service weight with battery	kg
Wheels/Tyres	3.1	Wheels type		PU
	3.2	Driving wheel size	Φ×w(mm)	Φ210×70
	3.3	Bearing wheel size	Φ×w(mm)	Φ80×60
	3.5	Wheels, number front/rear (x = driven)		1x+2/4
	3.7	Track width	b11 (mm)	390/535
Dimensions	4.4	Lift	h3 (mm)	200
	4.9	Overall height(with handle)	h1.4 (mm)	610/1212
	4.15	lowered height	h1.3 (mm)	85
	4.19	Overall length	l1 (mm)	1615
	4.20	Length to fork face	l2 (mm)	465
	4.21	Overall width	b1/ b2 (mm)	550/685
	4.22	Fork dimensions	s/e/l (mm)	50/150/1150
	4.25	Width of forks	bs (mm)	550/685
	4.32	Min.Ground clearance	m2 (mm)	35
	4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	1815
	4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	1865
4.35	Min.Turning radius	Wa (mm)	1405	
Perfor- mance	5.1	Travel speed,laden/unladen	(km/h)	4.2/4.5
	5.8	Maximum climbing ability, with/without load	(%)	5/8
	5.10	Service brake		Electromagnetic
Drive	6.1	Drive motor, 60 minute rating	(kW)	0.75
	6.2	Lift motor rating at S3 15%	(kW)	0.8
	6.3	Battery according to DIN 43531/35/36 AB,C,no		no
	6.4	Battery voltage/rated capacity	(V/Ah)	24/35
	6.5	Battery weight (± 5%)	(kg)	7
Others	8.1	Type of drive control		DC
	8.4	Noise level at operator's ear	(dB(A))	≤70



## J Series Semi-electric Pallet Truck

with capacities of 2,000kg

## Introduction

The Hangcha J-series suits all types of light-duty applications, such as horizontal transport, loading/unloading and order picking. It is designed for smooth, and quiet operation and easy handling. This truck is equipped with emergency stop, electromagnetic brake and motor brake to guarantee the operator's safety. Thanks to the built-in charger, it's convenient for charging. Quick replacement of battery makes it easy for maintenance. This allows you to easily monitor its activity and improve its productivity, safety and efficiency.

- / Small size, light weight, easy to operate;
- / Built-in charger is convenient for charging
- / Perfect for tight spaces;
- / Emergency stop and double brakes.



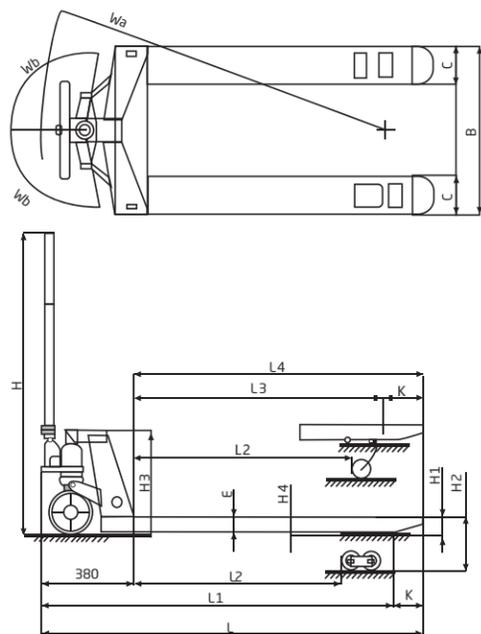
## Semi-electric Pallet Truck Specification

			HANGCHA GROUP CO.,LTD.
Characteristics	1.1	Manufacturer	CBD20-JSM
	1.2	Manufacturer's type designation	Electric
	1.3	Drive type	Walkie
	1.4	Manner of operation	2
	1.5	Load Capacity	Q (t)
	1.6	Load Centre	c (mm)
	1.8	Distance between fork backrest and front wheel	x (mm)
	1.9	Wheel Base	y (mm)
	1.9		
Weights	2.1	Service Weight (with battery)	kg
			155
Wheels/Tyres	3.1	Tire material	PU
	3.2	Driving wheel size	Φ×w(mm)
	3.3	Front wheel size	Φ×w(mm)
	3.5	Qty of wheel, Front/Rear (x=driving wheel)	
	3.7	Tread	b <sub>11</sub> (mm)
	4.4	Lifting Height	h <sub>3</sub> (mm)
	4.9	The height of handle in the operation position	h <sub>14</sub> (mm)
Dimensions	4.15	Lowered fork height	h <sub>13</sub> (mm)
	4.19	Overall Length	l <sub>1</sub> (mm)
	4.20	Body Length	l <sub>2</sub> (mm)
	4.21	Overall Width	b <sub>1</sub> / b <sub>2</sub> (mm)
	4.22	Fork Size	s/e/l (mm)
	4.25	Fork Width	b <sub>s</sub> (mm)
	4.32	Ground clearance under mast	m <sub>2</sub> (mm)
	4.33	Aisle width for pallets 1000*1200 crossways	A <sub>st</sub> (mm)
	4.34	Aisle width for pallets 1000*1200 lengthways	A <sub>st</sub> (mm)
	4.35	Turing Radius	W <sub>a</sub> (mm)
	Performance	5.1	Driving Speed, load/unload
5.8		Maximum gradeability load/unload	(%)
5.10		Brake Type	Electromagnetic brake
6.1		Drive Motor	(kW)
Drive	6.2	Lift Motor	(kW)
	6.3	Battery, according to DIN 43531/35/36 A,B,C,no	/
	6.4	Battery voltage/rate capacity	(V/Ah)
	6.5	Battery Weight (±5%)	(kg)
	Others	8.1	Type of drive control
8.4		Noise level	(dB(A))
10.5		Steering type	Manual steering system



## HD Series Hand Pallet Truck

with capacities of 2,000 to 3,000kg

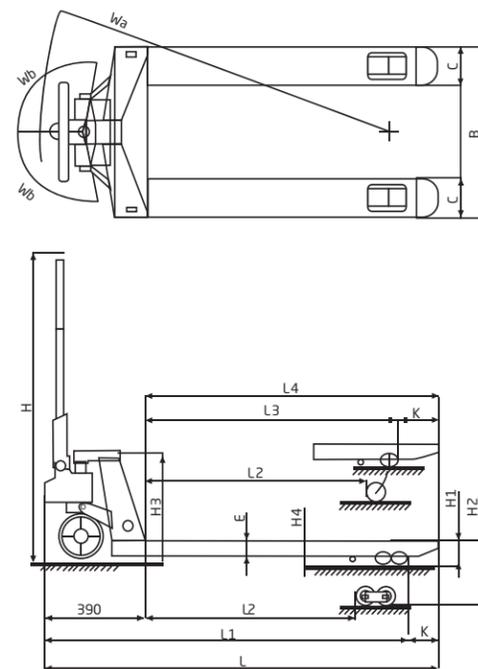


### Specification:

Model	Unit	CBY20-HD		CBY25-HD		CBY30-HD	
Rated Load	Kg	2000		2500		3000	
Size		685×1220	550×1150	685×1220	550×1150	685×1220	550×1150
Distance Between Fork-arms	B mm	685	550	685	550	685	550
Fork Length	L4 mm	1220	1150	1150	1150	1150	1150
Turning radius	Wa mm	1420	1350	1420	1350	1420	1350
Overall Length	L mm	1600	1530	1600	1530	1600	1530
Service Weight	Kg	70	65	75	70	80	75
Fork Size	C×E mm	160×50		160×60			
Lowered Height	H1 mm	75					
Lifting Height	H2 mm	190					
Wheel Size Rear (single)	mm	∅74×93					
Wheel Size Rear (tandem)	mm	∅74×70					
Wheel Size Front	mm	∅180×50					
Overall Height	H mm	1230					

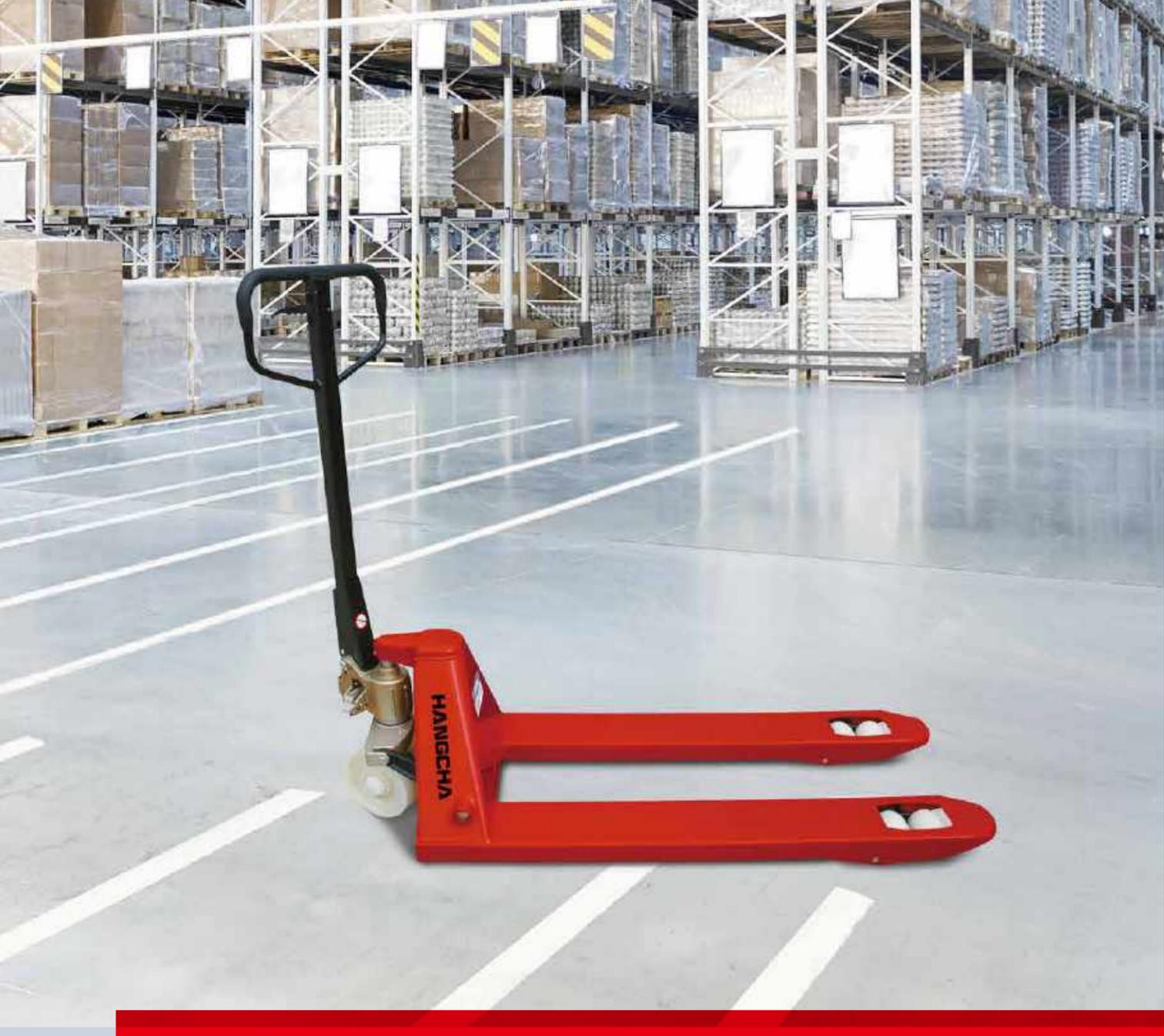
## HA Series Hand Pallet Truck

with capacities of 2,000 to 3,000kg



### Specification:

Model	Unit	CBY20-HA		CBY25-HA		CBY30-HA	
Rated Load	Kg	2000		2500		3000	
Size		685×1220	540×1150	685×1220	540×1150	685×1220	540×1150
Distance Between Fork-arms	B mm	685	540	685	540	685	540
Fork Length	L4 mm	1220	1150	1150	1150	1150	1150
Turning radius	Wa mm	1440	1370	1440	1370	1440	1370
Overall Length	L mm	1610	1540	1610	1540	1610	1540
Service Weight	Kg	70	65	75	70	80	75
Fork Size	C×E mm	160×50		160×60			
Lowered Height	H1 mm	85/75					
Lifting Height	H2 mm	200/190					
Wheel Size Rear (single)	mm	∅80×93/∅74×93					
Wheel Size Rear (tandem)	mm	∅74×70/∅74×70					
Wheel Size Front	mm	∅180×50					
Overall Height	H mm	1240					



# Hand Pallet Truck SBA25

with capacities of 2,500 to 3,500kg

## Introduction

### Innovation Design

Reduce maintenance cost

Improve working efficiency

Increase truck service life

- / High reliability, suitable for a variety of environments. It can be used for 3~5 years under normal maintenance.
- / Casting pump, which prevents any loosening and leakage.
- / High-strength alloy steel fork frame.
- / Set the active safety valve to prevent overloading of operation.
- / 54mm fork thickness ensures high capacity.

- / Optimized round fork tips ensures easy operation;
- / 54mm fork thickness ensures high capacity;
- / Curve design on the fork tips help pallets entry in/out.

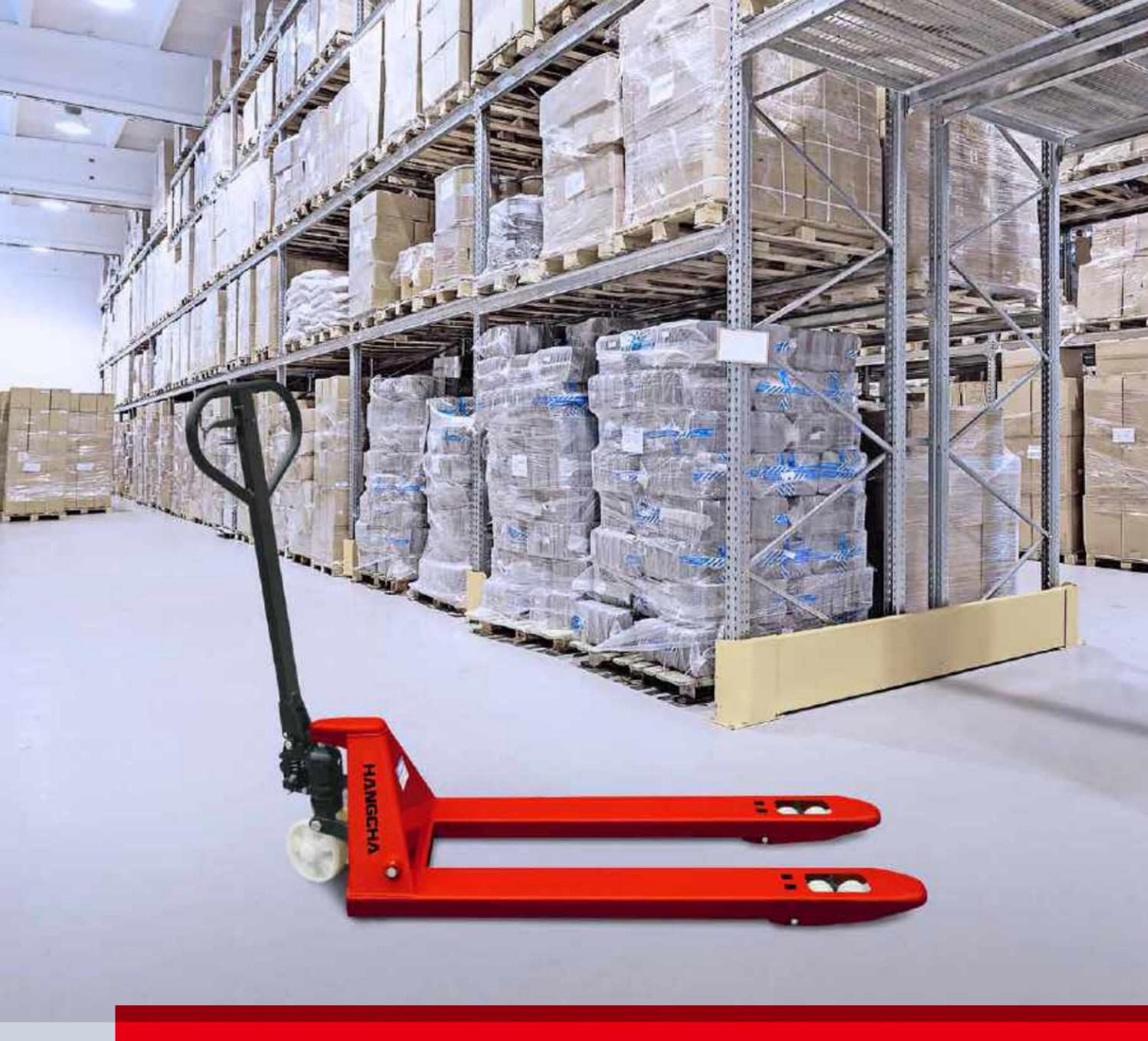


## Hand Pallet Truck

Model		SBA		
Load capacity/rated load	Q (kg/lb)	2500/5512	3000/6614	3500/7716
Load centre distance	C (mm/in)	500/20	500/20	500/20
Wheel size, front	mm/in	Φ180×50 / Φ7×2	Φ180×50 / Φ7×2	Φ180×50 / Φ7×2
Wheel size rear (single)	mm/ (in)	Φ80×93/74×93 (Φ3×3.7/2.9×3.7)	Φ80×93/74×93 (Φ3×3.7/2.9×3.7)	Φ80×93/74×93 (Φ3×3.7/2.9×3.7)
Wheel size rear (tandem)	mm/in	Φ80×70/74×70 (Φ3×2.8/2.9×2.8)	Φ80×70/74×70 (Φ3×2.8/2.9×2.8)	Φ80×70/74×70 (Φ3×2.8/2.9×2.8)
Lifting height	h <sub>3</sub> mm/(in)	200/190 (7.8/7.5)	200/190 (7.8/7.5)	200/190 (7.8/7.5)
Lowered height	h <sub>13</sub> mm/(in)	85/75 (3.4/3)	85/75 (3.4/3)	85/75 (3.4/3)
Overall length	l <sub>1</sub> mm/(in)	1534/1604 (60.4/63)	1534/1604 (60.4/63)	1534/1604 (60.4/63)
Fork length	s/e/l mm [in]	54/160/1150(1220) [2.1/6.3/45(48)]	54/160/1150(1220) [2.1/6.3/45(48)]	54/160/1150(1220) [2.1/6.3/45(48)]
Distance between fork-arms	b <sub>5</sub> mm/(in)	520/550/685 (20/22/27)	520/550/685 (20/22/27)	520/550/685 (20/22/27)
Turning radius	W <sub>a</sub> mm/(in)	1249/1319 (49/52)	1249/1319 (49/52)	1249/1319 (49/52)

\*: Option

forks length is available at:1600mm/63in, 1800mm/71in, 2000mm/79in, 2200mm/87in, 2500mm/98in



## Hand Pallet Truck SBA-D20

with capacities of 2,000kg

## Introduction

- / Optimized round fork tips ensure easy operation;
- / 54mm fork thickness ensures high capacity;
- / Curve design on the fork tips help pallets entry in/out.
  
- / Welding pump, with leaking proof design.
- / With overloading safety valve.
- / Chrome plate piston.
- / Different fork length are available.
- / Option: rubber wheel, nylon wheel, polyurethane wheel.



### Lowering position:

Pull up the finger tip control handle to lower the truck.

### Neutral position:

Stay the position during move.

### Lifting position:

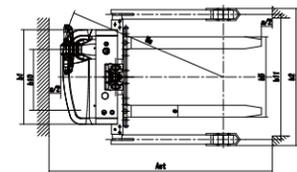
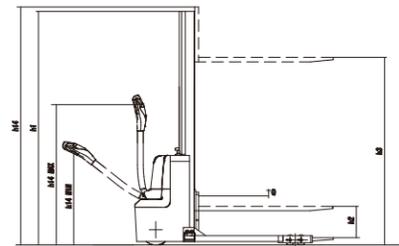
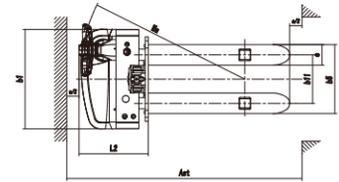
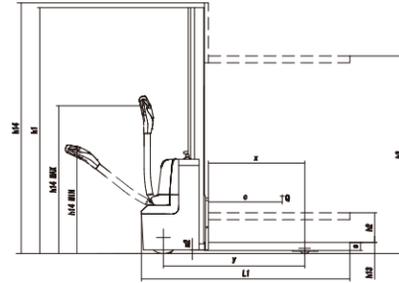
Pull down the tip control, press the handle to raise the truck.



## Hand Pallet Truck

Model		SBA-D20
Load capacity/rated load	Q(kg/lb)	2000/4409
Load centre distance	c (mm/in)	500/20
Net weight	kg/lb	55-65 / 121-143
Wheel size,front	mm/in	φ160×50 / φ6×2
Wheel size rear	mm/in	φ70×60 / φ2.7×2.4
Lifting height	h <sub>3</sub> (mm/in)	190/7.5
Height of tiller in drive position min./max.	h <sub>14</sub> (mm/in)	1234/1224 (48.6/48)
Lowered height	h <sub>13</sub> (mm/in)	75/3
Fork dimensions	s/e/l (mm/in)	54/150/1150(1220) [2.1/6/45(48)]
Distance between fork-arms	b <sub>5</sub> (mm/in)	520/550/685 (20/22/27)
Aisle width for pallets 1000×1200 crossways	A <sub>st</sub> (mm/in)	1730/1800 / (68/71)
Aisle width for pallets 800×1200 crossways	A <sub>st</sub> (mm/in)	1780/1800 / (70/71)

\*: Option



## High Performance

- / Strong power to satisfy most applications of material handling.
- / Latest permanent magnetic system including motor and controller applied to provide excellent, efficient performance.
- / Regenerative brake and slope anti-slide function are offered by this truck.

## Reliability

- / CDD: The adopted four-pivot design to provide reasonable driving wheel balance and good visibility and reliability.
- / The applied lifting system with optimized design is more stable and reliable.
- / Water-proof plugs and connectors applied to provide a reliable protection to electric system.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing.
- / Punch-formed forks to provide more strength and tip guide to provide higher efficient operation.

## Standard Specification

- / Horn
- / PU drive wheel
- / Internal charger
- / Multi-function tiller
- / Tandem load wheels
- / 1150mm fork length
- / Hydraulic power unit
- / Maintenance free battery
- / 560mm outside fork width
- / Permanent magnetic motor
- / Emergency disconnect switch
- / CURTIS permanent magnetic controller
- / 1.5m standard mast

## Comfort

- / Simple and beautiful tiller designed to operate all functions easily even by one hand.
- / Optimized design to offer a good visibility and easy entrance of the pallet.
- / Built-in charger and maintenance free gel battery adopted to provide convenient usage.
- / Compact size to offer smart operations and pass of narrow aisle.

## Safety

- / With three braking types: releasing brake, reversing brake and emergency brake, the driving safety has been ensured.
- / The applied slope anti-slip function ensures the safety of the operation.
- / The emergency button on the tiller head can effectively avoid the harm to the driver in emergent situations when driving in reverse.
- / The standard equipped electronic lifting limitation and soft landing system protect working motor and loads from damaging.

## Options

- / Load backrest
- / 1220mm fork length
- / 680mm outside fork width
- / Cold store protection(-30 C)
- / 2m mast

# A Series Pallet Stacker Mini Range (Single Column)

with capacities of 1,000 to 1,200kg

## 1.0/1.2t Mini Range Pallet Stacker Single Column Specification:

Mast Type	Max Lifting Height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Lowered Height h <sub>1</sub>	Extended Height h <sub>4</sub>	Free Lift	Load Capacity at 600mm/23.6in	
						1.0t/2205lb	1.2t/2646lb
Single cylinder Single mast	1500/59.1	1585/62.4	1979/77.9	1986/78.2	1493/58.8	1000/2205	1200/2646
	1750/68.9	1835/72.2	2229/87.7	2236/87.8	1743/68.6	1000/2205	1200/2646
	2000/78.7	2085/82.1	2479/97.6	2486/97.9	1993/78.5	1000/2205	1200/2646

## A Series Pallet Stacker Mini Range-Single Column

Distinguishing mark	1.1 Manufacturer	HANGCHA GROUP CO.,LTD.			
		CDD10-AMC1	CDD10-AMC1	CTD10-AMC1	CTD12-AMC1
1.2 Manufacturer's type designation					
1.4 Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian	Pedestrian	Pedestrian	Pedestrian
1.5 Rated capacity/rated load	Q (kg/lb)	1000/2205	1200/2646	1000/2205	1200/2646
	1.6 Load centre distance	c (mm/in)	600/23.6	600/23.6	600/23.6
1.9 Wheelbase	y (mm/in)	1197.5/47.1	1197.5/47.1	1197.5/47.1	1197.5/47.1
2.1 Service Weight	kg/lb	500/1102	500/1102	500/1102	500/1102
Tyres, chassis	3.1 Tyres: solid rubber, superelastic, pneumatic, polyurethane	PU	PU	PU	PU
	3.2 Tyre size, front	mm/in	φ250/9.8x80/3.1	φ250/9.8x80/3.1	φ250/9.8x80/3.1
	3.3 Tyre size, rear	mm/in	φ85/3.3x70/2.8	φ85/3.3x70/2.8	φ85/3.3x70/2.8
	3.4 Additional wheel (dimensions)	mm/in	φ125/4.9x50/2	φ125/4.9x50/2	φ125/4.9x50/2
	3.5 Wheels, number front / rear (x = driven wheels)		1x+1/4	1x+1/4	1x+1/4
	3.6 Tread, front	b <sub>10</sub> (mm/in)	520/20.5	520/20.5	520/20.5
	3.7 Tread, rear	b <sub>11</sub> (mm/in)	390/15.4	390/15.4	1060/1170/1370 (39.4/46.1/53.9)
Dimensions	4.4 Lift	h <sub>3</sub> (mm/in)	1500/59.1	1500/59.1	1500/59.1
	4.15 Fork height,lowered	h <sub>13</sub> (mm/in)	90/3.5	90/3.5	50/2.0
	4.19 Overall length	l <sub>1</sub> (mm/in)	1695/66.7	1695/66.7	1695/66.7
	4.21 Overall width	b <sub>1</sub> (mm/in)	800/31.5	800/31.5	1160/1270/1470 (45.7/50/57.9)
	4.22 Fork dimensions ISO 2331	s/e/l (mm/in)	60/170/1150 (2.4/6.7/45.3)	60/170/1150 (2.4/6.7/45.3)	35/100/1070 (1.4/6.7/42.1)
	4.25 Distance between fork-arms	b <sub>5</sub> (mm/in)	560/22.0	560/22.0	210-790/8.3-31.1
	4.32 Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	35/1.4	35/1.4	35/1.4
	4.34.1 Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm/in)	2002/78.8	2002/78.8	2002/78.8
	4.34.2 Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm/in)	2052/80.8	2052/80.8	2052/80.8
	4.35 Turning radius	W <sub>a</sub> (mm/in)	1422/56.0	1422/56.0	1422/56.0
	5.1 Travel speed,laden/unladen	km/h mph	4.2/4.5 2.6/2.8	4.2/4.5 2.6/2.8	4.2/4.5 2.6/2.8
	5.2 Lift speed,laden/unladen	m/s (ft/min)	0.140/0.230 (27.6/45.3)	0.120/0.230 (23.6/45.3)	0.140/0.230 (27.6/45.3)
	5.3 Lowering speed,laden/unladen	m/s (ft/min)	0.180/0.170 (35.4/33.5)	0.180/0.170 (35.4/33.5)	0.180/0.170 (35.4/33.5)
5.8 Max Gradeability,laden/unladen	%	6/10	6/10	6/10	
Electric engine	6.1 Drive motor rating S2 60 min	kW/hp	0.7/0.94	0.7/0.94	0.7/0.94
	6.2 Lift motor rating at S3 15%	kW/hp	2.2/2.95	2.2/2.95	2.2/2.95
	6.4 Battery voltage,rated capacity	V/Ah	2x12/70	2x12/70	2x12/70
8.1 Type of drive control		DC	DC	DC	
9.1 Manufacturer		Curtis	Curtis	Curtis	



## J Series Electric Stacker

with capacities of 1,000 to 1,200kg

Economical J series, load capacity is 1000 to 1200kg. The stacker is with attractive appearance, convenient operation and energy saving. It is widely used in conditions of low intensity and short distances, meeting the demands of most customers.

## Advantages

/ Side-driven design effectively reduces the size of operation channel. With small turning radius and better view, this stacker is suitable for narrow spaces.

/ Though it is economical stacker, it is still equipped with high-power and high-performance lifting pump station, which ensures the goods lifting.

/ The turtle speed switch on the handle makes low speed control more precise.

/ Germany imported waterproof micro-switches are applied in the cold, damp, dusty and other harsh environments.

/ YOUCCI motor drive system is with small size, light weight, low loss and high efficiency.



## J Series Electric Stacker Specification

Manufacturer	HANGCHA GROUP CO.,LTD.					
Model	CDD10-J/CDD12-J					
Load capacity (kg)	1000/1200					
Load capacity on Max. height(kg)	1000/1200	1000/1200	1000/1200	750/900	500/600	300
The max. lifting height(mm)	1600	2000	2500	3000	3500	4000
Load center distance(mm)	600					
Fork length(mm)	1150					
Single fork width(mm)	160					
Overall fork width(mm)	570/695					
Lowered fork height	86					
Fixed leg length(mm)	928					
Single fixed leg width(mm)	124					
Outside width between fixed legs(mm)	534/659					
Turning radius(mm)	1336					
Overall length(mm)	1755					
Overall width(mm)	795					
Extended mast height(mm)	2014	2451	2951	3451	3951	4451
Lowered mast height (mm)	2014	1494	1744	1994	2244	2494
Battery voltage(dimensions)mm	2x12V/100AH (260/169/215)					
The charger	24V/10A					
Lifting Motor	2.2kw.Lift speed,laden/unladen:92/136mm,Lowering speed,laden/unladen:112/98mm/s					
Driving Motor	DC0.75kw.Driving speed:laden/unladen:4.0/4.2km/h					
Working time of fully charged battery	3h					
Service weight(kg)	425	441	453	465	477	489



High-power, high-performance lifting pumping station



The operation handle is for walkie with lengthened design



Four colored LED battery meter



YOUCCI motor drive system



Reinforcing ribs are set between the inner and outer masts



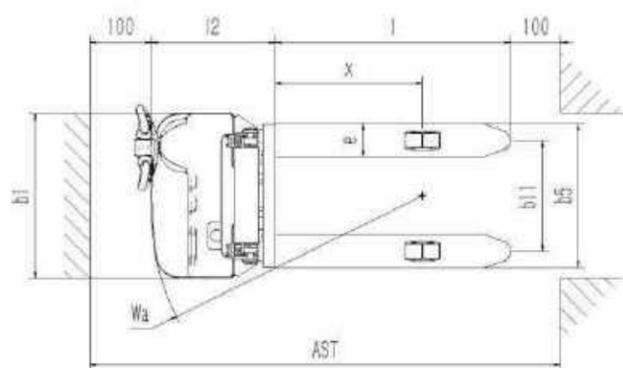
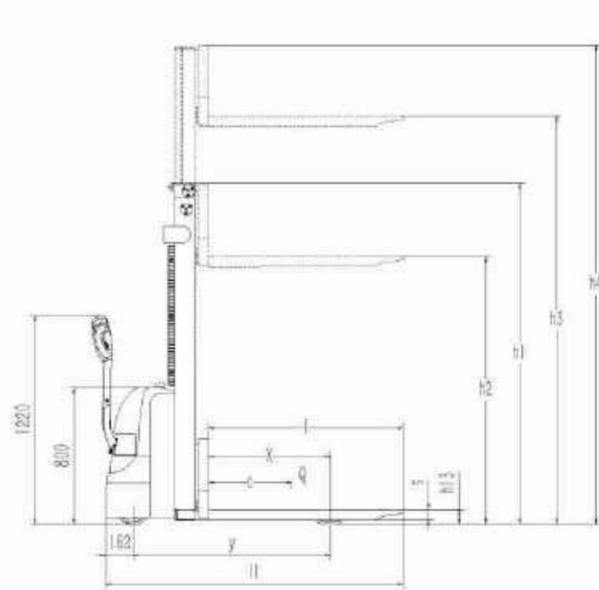
Economical external charger



Germany imported waterproof micro-switches



Key switch and electricity meter are integrated in the handle





## A Series Pallet Stacker Mini Range (Double column)

with capacities of 1,000 to 1,200kg

The A series mini range pallet stacker (double column) has been engineered to be both powerful and flexible to meet the requirements of many demanding applications. Whether it's supermarket work, delivery service, stock replenishment or heavy manufacturing, it has the strength and durability to minimise your total cost of ownership.

### Appearance

- / A series mini range pallet stacker (double column) applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes, which is robust, durable, and also environmental compliance.

### High Performance

- / Rated capacity 1000/1200kg, meet the needs of the majority of customers.
- / Powered by traction motor not only has good acceleration and perfect performance, but also low heat.
- / Latest CURTIS permanent magnet control system, precise and smooth.
- / Regenerative braking for battery recovery during travel speed reduction, anti-slope on gradient.
- / All key parts such as tiller, switches, connectors, battery indicator and hour meter all adopt the famous brand.

### Reliability

- / High strength steel frame structure chassis provide larger residual load capability and longer working life.
- / 4-pivot design provide reasonable load distribution, and the good wheel grip ensuring excellent stability.
- / Imported waterproof connectors, all wires and cables are protected, greatly improve the reliability of the electric system.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / The hydraulic unit and the chassis adopt flexible connection, can absorb vibration from the uneven road.
- / Punch formed forks to provide more strength and tip guide to provide higher efficient operation.

### Comfort

- / Built-in charger and maintenance free gel battery adopted to provide convenient usage.
- / The compact body and semicircular design provide an ideal operation in limited space.



Fully opened hood, easy accessibility of all components, is easy for service



Optimized designing structure to offer a good visibility and easy entrance to the pallet



Built-in charger and maintenance free gel battery, you don't need to worry about them



Simple and beautiful tiller designed to improve the operator's driving comfort



## Safety

- / Three braking system of regenerative braking, reverse current braking, parking brake, insures the safe operation.
- / Anti-slope on gradient can keep the safety.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / Soft landing system applied to protect loads from damaging effectively.

## Maintenance

- / Integrated battery indicator, hour meter and self-diagnostic instrument.
- / All shafts installed lubricated shaft sleeve and oil cup, provide convenient maintenance and long service life.
- / Dismantle the additional wheel don't need to lift the truck.



## Standard Specification

- / Permanent magnet drive motor
- / CURTIS permanent magnet controller
- / Hydraulic unit
- / Emergency switch
- / Multi-function battery indicator
- / PU wheel
- / 1150mm fork length
- / 560mm outside fork width
- / Tiller
- / Horn
- / Maintenance free battery
- / Internal charger

## Options

- / Mast lift height:2000-3600mm
- / 1220/1400mm fork length
- / 680mm outside fork width
- / Cold store protection(-30 C)
- / Load backrest

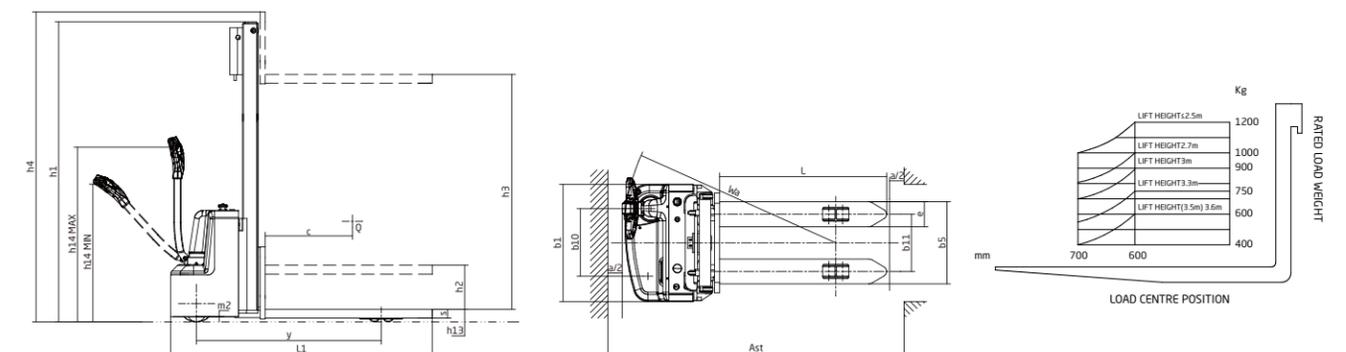
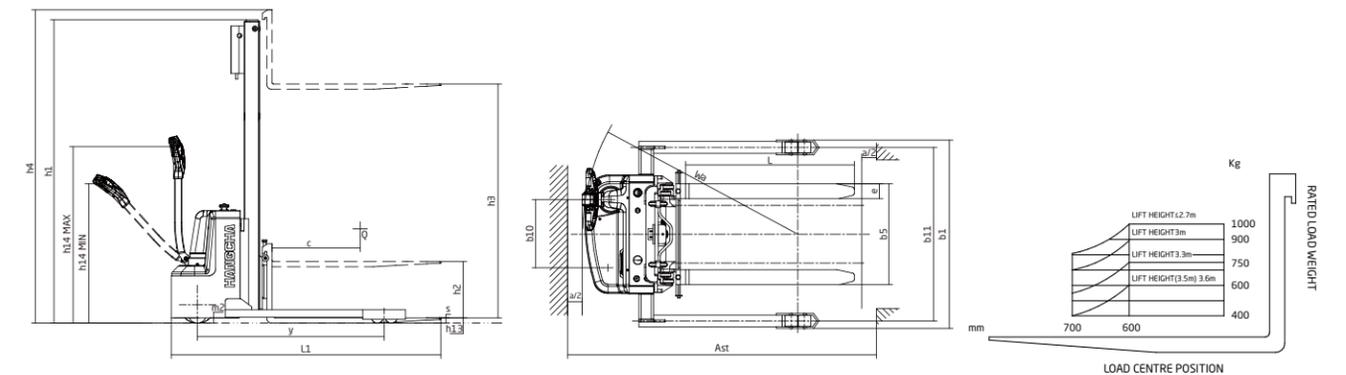
## 1.0/1.2t Mini Range Pallet Stacker Double Column Specification:

Mast Type	Max Lifting Height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Lowered Height h <sub>1</sub>	Extended Height h <sub>4</sub>	Free lift	Load Capacity at 600mm/23.6in	
						1.0t/2205lb	1.2t/2646lb
	mm/in	mm/in	mm/in	mm/in	mm/in	Kg/lb	Kg/lb
Single cylinder duplex mast	2000/78.7	2085/2050 (82.1/80.7)	1545/60.8	2545/100.2	0	1000/2205	1200/2646
	2500/98.4	2585/2550 (101.8/100.4)	1795/70.7	3045/119.9	0	1000/2205	1200/2646
	2700/106.3	2785/2750 (109.6/108.3)	1895/74.6	3245/127.7	0	1000/2205	1200/2646
	3000/118.1	3085/3050 (121.5/120.1)	2045/80.5	3545/139.6	0	900/1984	900/1984
	3300/129.9	3385/3350 (133.3/131.9)	2195/86.4	3845/151.4	0	750/1654	750/1654
	3500/137.8	3585/3550 (141.1/139.8)	2383/93.8	4133/162.7	0	600/1323	600/1323
	3600/141.7	3685/3650 (145.1/143.7)	2431/95.7	4231/166.6	0	600/1323	600/1323

## A Series Pallet Stacker Mini Range-Double Column

Distinguishing mark	HANGCHA GROUP CO.,LTD.			
	1.1	1.2	1.4	1.5
1.1	Manufacturer			
1.2	Manufacturer's type designation	CDD10-AMC1-SZ	CTD10-AMC1-SZ	CDD12-AMC1-SZ
1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	Pedestrian	Pedestrian
1.5	Rated capacity/rated load	Q (kg/lb)	1000/2205	1000/2205
1.6	Load centre distance	c (mm/in)	600/23.6	600/23.6
1.9	Wheelbase	y (mm/in)	1273/50.1	1273/50.1
Weight	2.1	Service Weight(Including battery)	kg/lb	744/1640
		Battery weight	kg/lb	66/146
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU
	3.2	Tyre size, front	mm/in	Φ250x80 / Φ9.8x3.1
	3.3	Tyre size, rear	mm/in	Φ85x70 / Φ3.3x2.8
	3.4	Additional wheel (dimensions)	mm/in	Φ125x50 / Φ4.9x2
	3.5	Wheels, number front / rear (x = driven wheels)		1x+1/4
	3.6	Tread, front	b <sub>10</sub> (mm/in)	520/20.5
	3.7	Tread, rear	b <sub>11</sub> mm / (in)	390 / (15.4)
Dimensions	4.4	Lift	h <sub>3</sub> (mm/in)	3000/118.1
	4.9	Height drawbar in driving position min./max.	h <sub>14</sub> mm / (in)	720/1220 (28.3/48)
	4.15	Fork height,lowered	h <sub>13</sub> (mm/in)	90/3.5
	4.19	Overall length(folded pedal)	l <sub>1</sub> (mm/in)	1800/70.9
	4.21	Overall width	b <sub>1</sub> mm / (in)	800 / (31.5)
	4.22	Fork dimensions	s/e/l mm / (in)	60/170/1150 (2.4/6.7/45.3)
	4.25	Distance between fork-arms	b <sub>5</sub> mm/(in)	560/22
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	35/1.4
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm/in)	2016/79.4 <sup>1)</sup>
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm/in)	2066/81.3 <sup>2)</sup>
4.35	Turning radius	W <sub>a</sub> (mm/in)	1466/57.7	
Performance data	5.1	Travel speed,laden/unladen	km/h (mph)	4.0/4.5 (2.5/2.8)
	5.2	Lift speed,laden/unladen	m/s (ft/min)	0.120/0.190 (23.62/37.40)
	5.3	Lowering speed,laden/unladen	m/s (ft/min)	0.140/0.150 (27.56/25.53)
	5.8	Max Gradeability,laden/unladen	%	6/10
Electric engine	6.1	Drive motor rating S2 60 min	kW/hp	0.7/0.94
	6.2	Lift motor rating at S3 15%	kW/hp	2.2/2.95
	6.4	Battery voltage,rated capacity	V/Ah	2x12/106
	8.1	Type of drive control		DC
9.1	Manufacturer		Curtis	

Note: 1). VDI 2198: +282/11.1mm/in 2). VDI 2198: +166/6.5mm/in 3). VDI 2198: +409/16.1mm/in 4). VDI 2198: +156/6.1mm/in





## A Series Pallet Stacker Truck Basic Range

with capacities of 1,200 to 1,600kg

### High Performance

- / AC travelling motor applied to provide excellent acceleration, good gradeability, low heat, no carbon brush and maintenance free.
- / The latest CURTIS AC control system provides accurate and stable control to work more efficient.
- / The applied CANBUS structure to offer more reliable and faster command access.
- / Regenerative brake and slope anti-slide function are offered by this truck.

### Comfort

- / The shock absorption design of foldable platform improves comfort greatly to the operator.
- / The new designed floating suspension system made steering operation more flexible and convenient.
- / Simple and beautiful tiller designed to operate all functions easily even by one hand.
- / Displayed turtle speed function applied to move slowly and helps to stack goods in narrow spaces.
- / Optimized designing structure to offer a good visibility and easy entrance of the pallet.
- / The compact body and big rounded design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability.

### Reliability

- / Five-pivot with low centre of gravity design and high strength steel frame structure chassis provide larger residual load capability and longer working life.
- / Water-proof plugs and connectors applied to provide a reliable protection to electric system.
- / The adopted unique floating suspension system ensures good driving wheels' grip and excellent stability.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch-formed forks to provide more strength and tip guide to provide higher efficient operation.
- / H-type mast profile section to provide more stable and rigid performance.
- / The power plug is fixed on the truck body to avoid damage from battery installment.

### Safety

- / With three braking types: releasing brake, reversing brake and emergency brake, the driving safety has been ensured.
- / The applied slope anti-slip function ensures the safety of the operation.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / Soft landing system applied to protect loads from damaging effectively.

### Standard Specification

- / Horn
- / Pedal (only for Stand-on)
- / AC drive motor
- / PU drive wheel
- / Tandem wheels
- / 2.7m duplex mast
- / Soft landing system
- / CURTIS AC controller
- / 1150mm fork length
- / Hydraulic power unit
- / 570mm outside fork width
- / Emergency disconnect switch
- / Multi-function battery indicator
- / CAN-bus system multi-function tiller
- / Sensitive lowering

### Options

- / 240Ah battery
- / Load backrest
- / Side access battery
- / Mast protection
- / 680mm outside fork width
- / Different mast lifting heights (2m-4.5m)
- / Cold store protection (-30 °C)
- / Different length of forks (1220mm,1400mm ,1600mm)
- / Handrail
- / Overhead guard
- / Straddle leg



Straddle leg



Stand-on

# A Series Pallet Stacker Truck Basic Range

Distinguishing mark	HANGCHA GROUP CO.,LTD.													
	1.1	1.2	1.4	1.5	1.6	1.9	2.1	3.1	3.2	3.3	3.4	3.5	3.6	3.7
1.1	Manufacturer													
1.2	Manufacturer's type designation	CDD12-AEC1S	CDD12-AEC1	CDD14-AEC1S	CDD14-AEC1	CDD16-AEC1S	CDD16-AEC1	CTD12-AEC1S	CTD12-AEC1	CTD14-AEC1S	CTD14-AEC1	CTD16-AEC1S	CTD16-AEC1	
1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	
1.5	Rated capacity/rated load	Q (kg/lb)	1200/2646	1200/2646	1400/3086	1400/3086	1600/3527	1600/3527	1400/3086	1200/2646	1200/2646	1400/3086	1400/3086	
1.6	Load centre distance	c (mm/in)	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	
1.9	Wheelbase	y (mm/in)	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	1378 <sup>1)</sup> /54.3	
2.1	Service Weight	kg/lb	1030/2271	990/2183	1040/2293	1000/2205	1060/2337	1020/2249	1120/2469	1080/2381	1020/2249	1080/2381	1140/2513	
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	
3.2	Tyre size, front	mm/in	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	φ250×80/9.8×3.1	
3.3	Tyre size, rear	mm/in	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	φ85×70/3.3×2.8	
3.4	Additional wheel (dimensions)	mm/in	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	φ125×50/4.9×2	
3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	
3.6	Tread, front	b <sub>10</sub> (mm/in)	620/24.4	620/24.4	620/24.4	620/24.4	620/24.4	620/24.4	620/24.4	620/24.4	620/24.4	620/24.4	620/24.4	
3.7	Tread, rear	b <sub>11</sub> (mm/in)	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	1000/1170/1370(39.4/46.1/53.9)	1000/1170/1370(39.4/46.1/53.9)	1000/1170/1370(39.4/46.1/53.9)	1000/1170/1370(39.4/46.1/53.9)	1000/1170/1370(39.4/46.1/53.9)	
4.4	Lift	h <sub>1</sub> (mm/in)	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	
4.15	Fork height,lowered	h <sub>12</sub> (mm/in)	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	50/2	50/2	50/2	50/2	50	
4.19	Overall length	l <sub>1</sub> (mm/in)	2063 <sup>2)</sup> (2495 <sup>2)</sup> /81.2(98.2)	2013 <sup>2)</sup> /79.3	2063 <sup>2)</sup> (2495 <sup>2)</sup> /81.2(98.2)	2013 <sup>2)</sup> /79.3	2063 <sup>2)</sup> (2495 <sup>2)</sup> /81.2(98.2)	2013 <sup>2)</sup> /79.3	2013 <sup>2)</sup> (2445 <sup>2)</sup> /79.3(96.3)	1963 <sup>2)</sup> /77.3	2013 <sup>2)</sup> (2445 <sup>2)</sup> /79.3(96.3)	1963 <sup>2)</sup> /77.3	2013 <sup>2)</sup> (2445 <sup>2)</sup> /79.3(96.3)	
4.21	Overall width	b <sub>1</sub> (mm/in)	860/33.9	860/33.9	860/33.9	860/33.9	860/33.9	860/33.9	1100/1270/1470(43.3/50/57.9)	1100/1270/1470(43.3/50/57.9)	1100/1270/1470(43.3/50/57.9)	1100/1270/1470(43.3/50/57.9)	1100/1270/1470(43.3/50/57.9)	
4.22	Fork dimensions ISO 2331	s/e/l (mm/in)	60x185x1150/2.4x7.3x45.3	60x185x1150/2.4x7.3x45.3	60x185x1150/2.4x7.3x45.3	60x185x1150/2.4x7.3x45.3	60x185x1150/2.4x7.3x45.3	60x185x1150/2.4x7.3x45.3	35x100x1070/1.4x3.9x42.1	35x100x1070/1.4x3.9x42.1	35x100x1070/1.4x3.9x42.1	35x100x1070/1.4x3.9x42.1	35x100x1070/1.4x3.9x42.1	
4.25	Distance between fork-arms	b <sub>2</sub> (mm/in)	570/680(22.4/26.8)	570/680(22.4/26.8)	570/680(22.4/26.8)	570/680(22.4/26.8)	570/680(22.4/26.8)	570/680(22.4/26.8)	210-790/8.3-31.1	210-790/8.3-31.1	210-790/8.3-31.1	210-790/8.3-31.1	210-790/8.3-31.1	
4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	40/1.6	40/1.6	40/1.6	40/1.6	40/1.6	
4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm/in)	2280 <sup>2)</sup> /89.8	2220 <sup>2)</sup> /87.4	2280 <sup>2)</sup> /89.8	2220 <sup>2)</sup> /87.4	2280 <sup>2)</sup> /89.8	2220 <sup>2)</sup> /87.4	2310 <sup>2)</sup> /90.9	2250 <sup>2)</sup> /88.6	2310 <sup>2)</sup> /90.9	2250 <sup>2)</sup> /88.6	2310 <sup>2)</sup> /90.9	
4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm/in)	2330 <sup>2)</sup> /91.7	2270 <sup>2)</sup> /89.4	2330 <sup>2)</sup> /91.7	2270 <sup>2)</sup> /89.4	2330 <sup>2)</sup> /91.7	2270 <sup>2)</sup> /89.4	2300 <sup>2)</sup> /92.9	2360 <sup>2)</sup> /92.9	2300 <sup>2)</sup> /92.9	2360 <sup>2)</sup> /92.9	2300 <sup>2)</sup> /92.9	
4.35	Turning radius	W <sub>s</sub> (mm)	1630 <sup>1)</sup> /64.2	1570 <sup>1)</sup> /61.8	1630 <sup>1)</sup> /64.2	1570 <sup>1)</sup> /61.8	1630 <sup>1)</sup> /64.2	1570 <sup>1)</sup> /61.8	1630 <sup>1)</sup> /64.2	1570 <sup>1)</sup> /61.8	1630 <sup>1)</sup> /64.2	1570 <sup>1)</sup> /61.8	1630 <sup>1)</sup> /64.2	
5.1	Travel speed,laden/unladen	km/h(mph)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	5/5(3.1/3.1)	
5.2	Lift speed,laden/unladen	m/s(ft/min)	0.100/0.160(19.7/31.5)	0.100/0.160(19.7/31.5)	0.100/0.160(19.7/31.5)	0.100/0.160(19.7/31.5)	0.120/0.180(23.6/35.4)	0.120/0.180(23.6/35.4)	0.100/0.160(19.7/31.5)	0.100/0.160(19.7/31.5)	0.100/0.160(19.7/31.5)	0.100/0.160(19.7/31.5)	0.120/0.180(23.6/35.4)	
5.3	Lowering speed,laden/unladen	m/s(ft/min)	0.130/0.140(25.6/27.5)	0.130/0.140(25.6/27.5)	0.130/0.140(25.6/27.5)	0.130/0.140(25.6/27.5)	0.140/0.150(27.5/29.5)	0.140/0.150(27.5/29.5)	0.130/0.140(25.6/27.5)	0.130/0.140(25.6/27.5)	0.130/0.140(25.6/27.5)	0.130/0.140(25.6/27.5)	0.140/0.150(27.5/29.5)	
5.8	Max Gradeability,laden/unladen	%	6/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10	
5.10	Service brake		Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	Eletromagnetic	
6.1	Drive motor rating S2 60 min	kw/hp	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	1.1/1.5	
6.2	Lift motor rating at S3 15%	kw/hp	2.2/3.0	2.2/3.0	2.2(3 <sup>1)</sup> /3(4)	2.2(3 <sup>1)</sup> /3(4)	2.2(3 <sup>1)</sup> /3(4)	3/4	2.2/3.0	2.2/3.0	2.2/3.0	2.2(3 <sup>1)</sup> /3(4)	2.2(3 <sup>1)</sup> /3(4)	
6.4	Battery voltage,rated capacity	V/Ah	24/210	24/210	24/210	24/210	24/240	24/210	24/210	24/210	24/210	24/210	24/240	
8.1	Type of drive control		AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	
9.1	Manufacturer		CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	

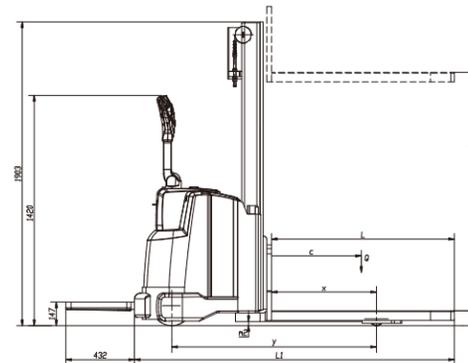
Note: 1)Mast with double lifting cylinders(including Triplex mast)+47mm(+1.9in) 2)Duplex mast with double lifting cylinders+47mm and Triplex mast+68mm(+2.7in)

B: Straddle leg

## 1.2-1.6t Basic Range Pallet Stacker Truck Specification:

Mast Type	Max Lifting Height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Lowered Height h <sub>1</sub>	Extended Height h <sub>4</sub>	Free lift	Load Capacity at 600mm/23.6in		
						1.2t	1.4t	1.6t
	mm/in	mm/in	mm/in	mm/in	mm/in	kg/lb	kg/lb	kg/lb
Single cylinder duplex mast	2000/78.7	2090/82.3	1553/61.1	2553/100.5	90/3.5	1200/2646	1400/3086	1600/3527
	2500/98.4	2590/102.0	1803/71.0	3053/120.2	90/3.5	1200/2646	1400/3086	1600/3527
	2700/106.3	2790/109.8	1902/74.5	3253/128.1	90/3.5	1200/2646	1400/3086	1450/3197
	3000/118.1	3090/121.7	2053/80.8	3553/140.0	90/3.5	1200/2646	1250/2756	1300/2866
	3300/129.9	3390/133.5	2203/86.7	3853/151.2	90/3.5	1100/2425	1100/2425	1150/2535
	3500/137.8	3590/141.3	2388/94.0	4138/162.9	90/3.5	950/2094	950/2094	1000/2205
	3600/141.7	3690/145.3	2438/96.0	4238/166.9	90/3.5	950/2094	950/2094	1000/2205
Double cylinders Duplex wide view	2000/78.7	2090/82.3	1542/60.7	2542/100.1	90/3.5	1200/2646	1400/3086	1600/3527
	2500/98.4	2590/102.0	1792/70.6	3042/119.8	90/3.5	1200/2646	1400/3086	1600/3527
	2700/106.3	2790/109.8	1892/74.5	3242/127.6	90/3.5	1200/2646	1400/3086	1450/3197
	3000/118.1	3090/121.7	2042/80.4	3542/139.4	90/3.5	1200/2646	1250/2756	1300/2866
	3300/129.9	3390/133.5	2192/86.3	3842/151.3	90/3.5	1100/2425	1100/2425	1150/2535
	3500/137.8	3590/141.3	2292/90.2	4042/159.1	90/3.5	950/2094	950/2094	1000/2205
	3600/141.7	3690/145.3	2342/92.2	4142/163.1	90/3.5	950/2094	950/2094	1000/2205
	3800/149.6	3890/153.1	2442/96.1	4342/170.9	90/3.5	820/1808	820/1808	900/1984
	4000/157.5	4090/161.0	2642/104.0	4642/182.8	90/3.5	750/1653	750/1653	800/1764
	4300/169.3	4390/172.8	2792/109.9	4942/194.6	90/3.5	600/1323	600/1323	650/1433
Duplex full-free wide view	2000/78.7	2090/82.3	1595/62.8	2595/102.2	1090/42.9	1200/2646	1400/3086	1600/3527
	2500/98.4	2590/102.0	1845/72.6	3095/121.9	1340/52.8	1200/2646	1400/3086	1600/3527
	2700/106.3	2790/109.8	1945/76.6	3295/129.7	1440/56.7	1200/2646	1400/3086	1450/3197
	3000/118.1	3090/121.7	2095/82.5	3595/141.5	1590/62.6	1200/2646	1400/3086	1300/2866
	3300/129.9	3390/133.5	2245/88.4	3895/153.3	1740/68.5	1100/2425	1100/2425	1150/2535
	3500/137.8	3590/141.3	2345/92.3	4095/161.2	1840/72.4	950/2094	950/2094	1000/2205
	3600/141.7	3690/145.3	2395/94.3	4195/165.2	1890/74.4	950/2094	950/2094	1000/2205
Triplex full-free wide view	3500/137.8	3590/141.3	1844/72.6	4214/165.9	1220/48.0	950/2094	950/2094	1000/2205
	3600/141.7	3690/145.3	1909/75.2	4409/173.6	1290/50.8	950/2094	950/2094	1000/2205
	3800/149.6	3890/153.1	2009/79.1	4709/185.4	1390/54.7	820/1808	820/1808	900/1984
	4000/157.5	4090/161.0	2109/83.0	5009/197.2	1490/58.7	750/1653	750/1653	800/1764
	4300/169.3	4390/172.8	2159/85.0	5159/203.1	1590/62.6	600/1323	600/1323	650/1433
	4500/177.2	4590/180.7	2259/88.9	5459/214.9	1590/62.6	500/1102	500/1102	600/1323

Note:The mast which h<sub>3</sub>>4500mm(17.72in)(include 4500mm)only suitable for the pallet stacker (outside fork width b<sub>5</sub>≥680mm(26.8in)).





## A Series Pallet Stacker Truck Hi Range

with capacities of 1,200 to 2,000kg

### High Performance

- / AC travelling motor applied to provide excellent acceleration, good gradeability, low heat, no carbon brush and maintenance free.
- / The latest CURTIS AC control system provides accurate and stable control to work more efficient.
- / The applied CANBUS structure to offer more reliable and faster command access.
- / Regenerative brake and slope anti-slide function are offered by this truck.
- / Stand-on type with high power drive motor, provides fast travel speed and good gradeability.

### Reliability

- / Four-pivot with low centre of gravity design and high strength steel frame structure chassis provide larger residual load capacity and longer working life.
- / Water-proof plugs and connectors applied to provide a reliable protection to electric system.
- / The adopted unique floating suspension system ensures good driving wheels grip and excellent.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch-formed forks to provide more strength and tip guide to provide higher efficient operation.
- / H-type mast profile section to provide more stable and rigid performance.
- / The power plug is fixed on the truck body to avoid damage from battery installment.
- / Pedestrian type use the new design drive system, the drive motor will not accompany the tiller rotation, it can keep all the cable connect to the drive motor avoid being bent.
- / Using non-contact proximity switch, it can provides long life and reliable operation.

### Comfort

- / The shock absorption design of foldable platform improves comfort greatly to the operator.
- / The new designed floating suspension driving system, adjustable automatically with loads, offers the driving wheels sufficient power.
- / Simple and beautiful tiller designed to operate all functions easily even by one hand.
- / Displayed turtle speed function applied to move slowly and helps to stack goods in narrow spaces.
- / Optimized designing structure to offer a good visibility and easy entrance of the pallet.
- / The compact body and big rounded design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability.
- / Customer can choose different width of outside fork and length of forks to fit variable pallet.

### Safety

- / With three braking types: releasing brake, reversing brake and emergency brake, the driving safety has been ensured.
- / The applied slope anti-slip function ensures the safety of the operation.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / Soft landing system applied to offer protection to the loads from damaging.
- / Turning speed is automatically reduced when steering only for stand-on.
- / Turtle speed function can keep the slow move when the tiller is vertical direction, the truck can stack goods even in narrow space.
- / Travel speed will be automatically reduced after fork lifting 500mm.

### Maintenance

- / AC motor with no cabin brush, don't need maintenance, lower cost.
- / Rear cover can be completely open, operator can see all the components, so the maintenance is very convenient.
- / All shafts installed lubricated shaft sleeve and oil cup, provide convenient maintenance and long service life.

### Standard Specification

- / Horn
- / AC drive motor
- / Battery
- / PU drive wheel
- / Tandem wheels
- / Fork lift & lower adopts stepless speed regulating
- / Pedal and handrail
- / Soft landing system
- / 1150mm fork length
- / CURTIS AC controller
- / Hydraulic power unit
- / 570mm outside fork width
- / Emergency disconnect switch
- / Multi-function battery indicator
- / CAN-bus system multi-function tiller
- / Electric steering (stand on pallet stacker)

### Options

- / Load backrest
- / Mast protection
- / 240Ah, 340Ah battery
- / Different width of outside fork
- / Different mast lifting heights
- / Cold store protection (-30 C)
- / Side way battery change
- / Different length of forks
- / Overhead guard

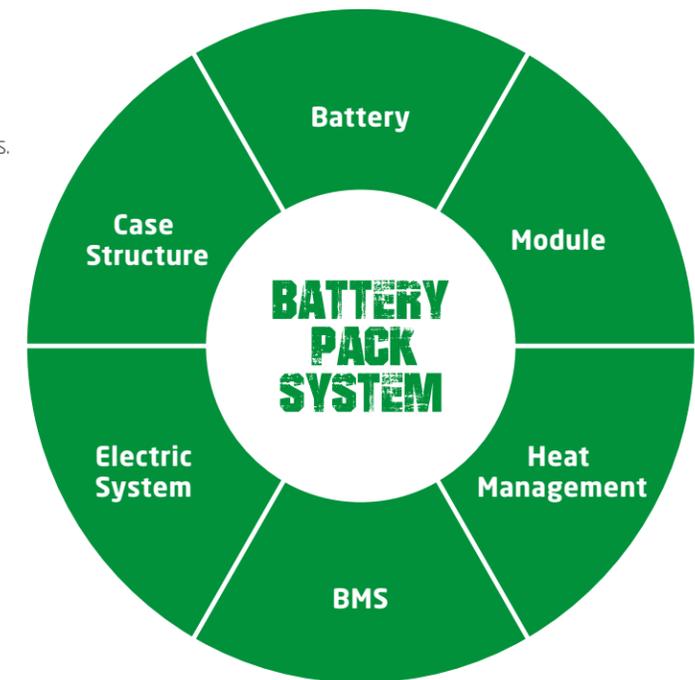
# LET THE LI-IUM POWER BE REEL



## INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

### Li-Ion Battery Pack specification

Type		CDD12-AC1S-I	CDD14-AC1S-I	CDD16-AC1S-I	CDD20-AC1S-I	CTD12-AC1S-I	CTD14-AC1S-I	CTD16-AC1S-I	CTD20-AC1S-I	CDD12-AC1-I	CDD14-AC1-I	CDD16-AC1-I	CDD20-AC1-I
Li-Ion battery	V/Ah	24/120	24/120	24/120	24/120	24/120	24/120	24/120	24/120	24/120	24/120	24/120	24/120
Li-Ion battery,Optional	V/Ah	24/202	24/202	24/202	24/202	24/202	24/202	24/202	24/202	24/202	24/202	24/202	24/202
Titans charger		SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100							



HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.





### 1.2-1.6t Hi Range Pallet Stacker Truck Specification

Mast Type	Max Lifting Height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Lowered Height h <sub>1</sub>	Extended Height h <sub>4</sub>	Free lift	Load capacity at 600mm/23.6 inch		
						1.2t/2646lb	1.4t/3086lb	1.6t/3527lb
	mm/in	mm/in	mm/in	mm/in	mm/in	kg/lb	kg/lb	kg/lb
Double cylinder duplex wide view	2000/78.7	2090/82.3	1542/60.7	2542/100.1	90/3.5	1200/2646	1400/3087	1600/3527
	2500/98.4	2590/102.0	1792/70.6	3042/119.8	90/3.5	1200/2646	1400/3087	1600/3527
	2700/106.3	2790/109.8	1892/74.5	3242/127.6	90/3.5	1200/2646	1400/3087	1600/3527
	3000/118.1	3090/121.7	2042/80.4	3542/139.4	90/3.5	1200/2646	1400/3087	1600/3527
	3300/129.9	3390/133.5	2192/86.3	3842/151.3	90/3.5	1200/2646	1200/2646	1300/2866
	3500/137.8	3590/141.3	2292/90.2	4042/159.1	90/3.5	1070/2359	1070/2359	1130/2491
	3600/141.7	3690/145.3	2342/92.2	4142/163.1	90/3.5	1000/2205	1000/2205	1050/2315
	3800/149.6	3890/153.1	2442/96.1	4342/170.9	90/3.5	920/2028	920/2028	970/2139
	4000/157.5	4090/161.0	2642/104.0	4642/182.8	90/3.5	850/1874	850/1874	900/1984
	4300/169.3	4390/172.8	2792/109.9	4942/194.6	90/3.5	770/1698	770/1698	810/1786
4500/177.2	4590/180.7	2892/113.9	5142/202.4	90/3.5	680/1499	680/1499	710/1565	
Duplex full-free wide view	2000/78.7	2090/82.3	1595/62.8	2595/102.2	1090/42.9	1200/2646	1400/3087	1600/3527
	2500/98.4	2590/102.0	1845/72.6	3095/121.9	1340/52.8	1200/2646	1400/3087	1600/3527
	2700/106.3	2790/109.8	1945/76.6	3295/129.7	1440/56.7	1200/2646	1400/3087	1600/3527
	3000/118.1	3090/121.7	2095/82.5	3595/141.5	1590/62.6	1200/2646	1400/3087	1600/3527
	3300/129.9	3390/133.5	2245/88.4	3895/153.3	1740/68.5	1200/2646	1200/2646	1300/2866
	3500/137.8	3590/141.3	2345/92.3	4095/161.2	1840/72.4	1070/2359	1070/2359	1130/2491
	3600/141.7	3690/145.3	2395/94.3	4195/165.2	1890/74.4	1000/2205	1000/2205	1050/2315
	3500/137.8	3590/141.3	1844/72.6	4214/165.9	1220/48.0	1070/2359	1070/2359	1130/2491
	3700/145.7	3790/149.2	1909/75.2	4409/173.6	1290/50.8	960/2116	960/2116	1010/2227
	4000/157.5	4090/161.0	2009/79.1	4709/185.4	1390/54.7	850/1874	850/1874	900/1984
Triplex full-free wide view	4300/169.3	4390/172.8	2109/83.0	5009/197.2	1490/58.7	770/1698	770/1698	810/1786
	4500/177.2	4590/180.7	2159/85.0	5159/203.1	1590/62.6	680/1499	680/1499	710/1565
	4700/185.0	4790/188.6	2259/88.9	5459/214.9	1590/62.6	600/1323	600/1323	630/1389
	5000/196.9	5090/200.4	2354/92.7	5744/226.1	1700/66.9	500/1102	500/1102	530/1168
	5200/204.7	5290/208.3	2409/94.8	5909/232.6	1790/70.5	440/970	440/970	470/1036
	5500/216.5	5590/220.1	2509/98.8	6209/244.4	1890/74.4	320/705	320/705	350/772

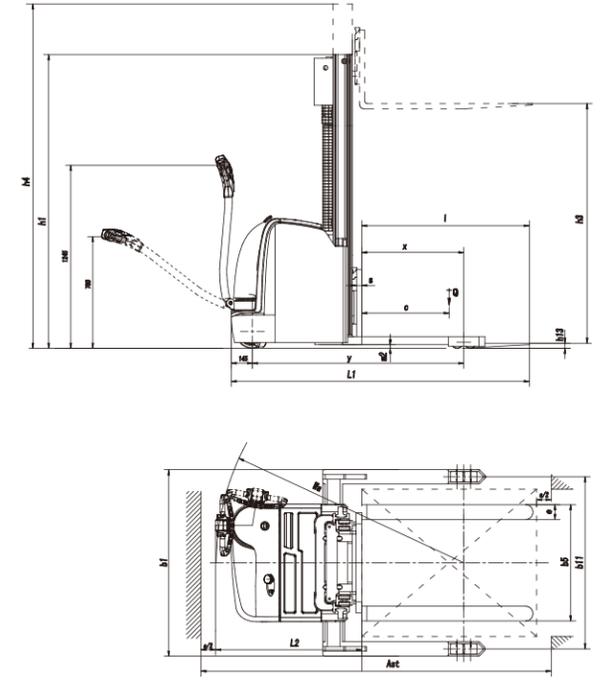
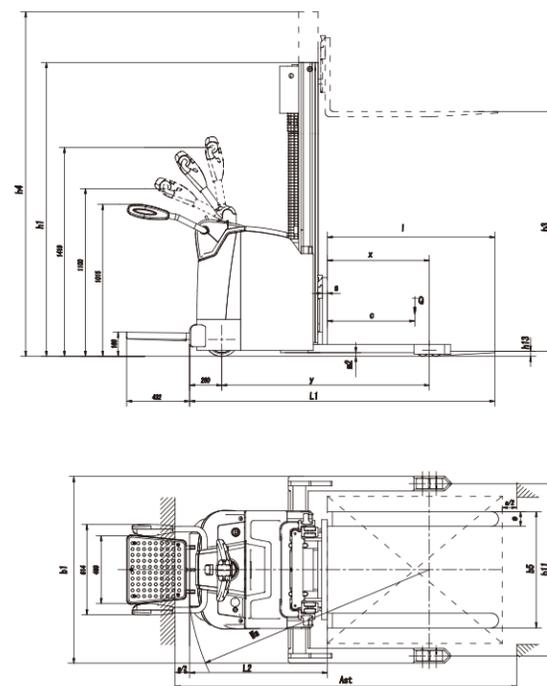
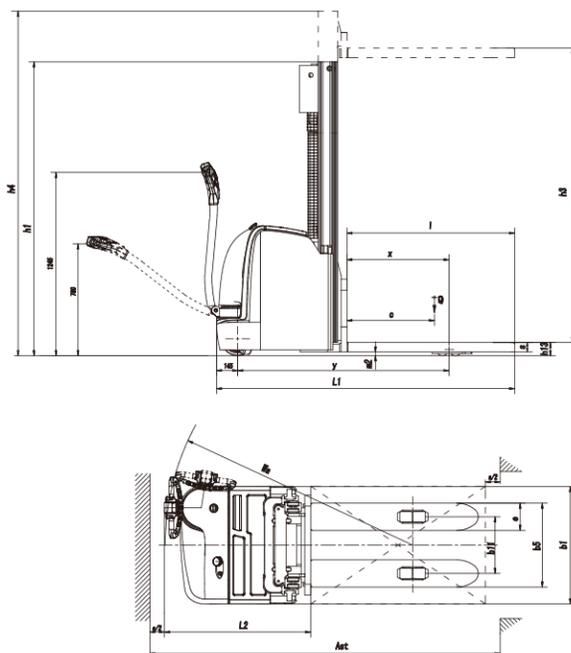
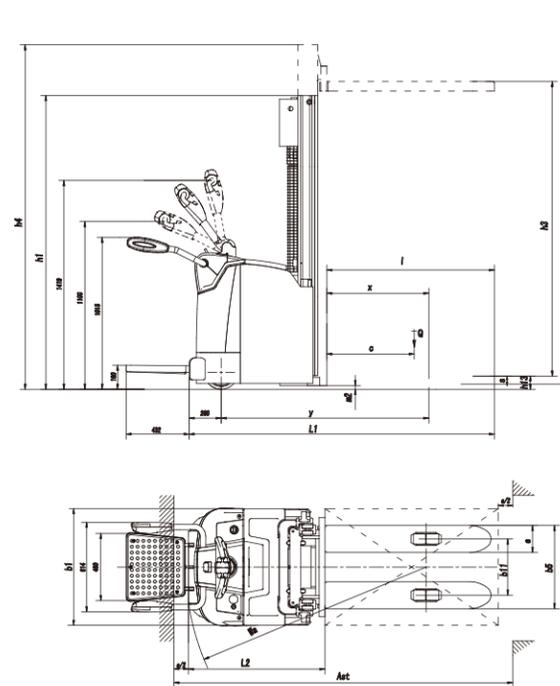
### 2.0t Hi Range Pallet Stacker Truck Specification

Mast Type	Max Lifting Height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Lowered Height h <sub>1</sub>	Extended Height h <sub>4</sub>	Free lift	Load capacity at 600mm/23.6 inch
						2.0t/4409lb
	mm/in	mm/in	mm/in	mm/in	mm/in	kg/lb
Double cylinder duplex wide view	2000/78.7	2090/82.3	1647/64.8	3647/143.6	90/3.5	2000/4409
	2500/98.4	2590/102.0	1897/74.7	3147/123.9	90/3.5	2000/4409
	2700/106.3	2790/109.8	1997/78.6	3347/131.8	90/3.5	1800/3968
	3000/118.1	3090/121.7	2147/84.5	3647/143.6	90/3.5	1600/3527
	3300/129.9	3390/133.5	2297/90.4	3947/155.4	90/3.5	1350/2976
	3500/137.8	3590/141.3	2397/94.4	4147/163.3	90/3.5	1180/2602
	3600/141.7	3690/145.3	2447/96.3	4247/167.2	90/3.5	1100/2425
	3800/149.6	3890/153.1	2547/100.3	4447/175.1	90/3.5	980/2161
	4000/157.5	4090/161.0	2747/108.1	4747/186.9	90/3.5	950/2094
	4300/169.3	4390/172.8	2897/114.1	5047/198.7	90/3.5	860/1896
Duplex full-free wide view	4500/177.2	4590/180.7	2997/118.0	5247/206.6	90/3.5	760/1676
	2000/78.7	2090/82.3	1700/66.9	2700/106.3	1090/42.9	2000/4409
	2500/98.4	2590/102.0	1950/76.8	3200/126.0	1340/52.8	2000/4409
	2700/106.3	2790/109.8	2050/80.7	3400/133.9	1440/56.7	1800/3968
	3000/118.1	3090/121.7	2200/86.6	3700/145.7	1590/62.6	1600/3527
	3300/129.9	3390/133.5	2350/92.5	4000/157.5	1740/68.5	1350/2976
	3500/137.8	3590/141.3	2450/96.5	4200/165.4	1840/72.4	1180/2602
	3600/141.7	3690/145.3	2500/98.4	4300/169.3	1890/74.4	1100/2425
	3500/137.8	3590/141.3	1944/76.5	4314/169.8	1130/44.5	1180/2602
	3700/145.7	3790/149.2	2009/79.1	4509/177.5	1200/47.2	1020/2249
Triplex full-free wide view	4000/157.5	4090/161.0	2109/83.0	4809/189.3	1300/51.1	950/2094
	4300/169.3	4390/172.8	2209/87.0	5109/201.1	1400/55.1	860/1896
	4500/177.2	4590/180.7	2259/88.9	5259/207.0	1500/59.1	760/1676
	4700/185.0	4790/188.6	2359/92.9	5559/218.9	1500/59.1	680/1499
	5000/196.9	5090/200.4	2454/96.6	5844/230.1	1610/63.4	570/1257
	5200/204.7	5290/208.3	2509/98.8	6009/236.6	1700/66.9	510/1124
	5500/216.5	5590/220.1	2609/102.7	6309/248.4	1800/70.9	400/881.8

# A Series Pallet Stacker Truck Hi Range

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.																
			CDD12-AC15 CDD12-AC25	CDD12-AC1 CDD12-AC3	CDD14-AC15 CDD14-AC25	CDD14-AC1 CDD14-AC3	CDD16-AC15 CDD16-AC25	CDD16-AC1 CDD16-AC3	CDD20-AC15 CDD20-AC25	CDD20-AC1 CDD20-AC3	CTD12-AC15 CTD12-AC25	CTD12-AC1 CTD12-AC3	CTD14-AC15 CTD14-AC25	CTD14-AC1 CTD14-AC3	CTD16-AC15 CTD16-AC25	CTD16-AC1 CTD16-AC3	CTD20-AC15 CTD20-AC25	CTD20-AC1 CTD20-AC3	
1.2	1.2	Manufacturer's type designation																	
1.4	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	
1.5	1.5	Rated capacity/rated load	Q (kg)/lb	1200/2646	1200/2646	1400/3087	1400/3087	1600/3527	1600/3527	2000/4409	2000/4409	1200/2646	1200/2646	1400/3087	1400/3087	1600/3527	1600/3527	2000/4409	2000/4409
1.6	1.6	Load centre distance	c (mm)/in	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6	600/23.6
1.9	1.9	Wheelbase	y (mm)/in	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1	1425/56.1
Weight	2.1	Service Weight	kg/lb	1310/2888	1177/2595	1315/2899	1182/2605	1362/3003	1215/2679	1405/3097	1258/2773	1380/3042	1247/2749	1385/3053	1252/2760	1432/3157	1285/2832	1475/3252	1328/2927
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU															
Tyres, chassis	3.2	Tyre size, front	mm/in	φ230x75 / φ9.1x3.0															
	3.3	Tyre size, rear	mm/in	φ85x70 / φ3.3x2.8															
	3.4	Additional wheel (dimensions)	mm/in	φ140x55 / φ5.5x2.2															
	3.5	Wheels, number front / rear (x = driven wheels)		1x1/4															
	3.6	Tread, front	b10 (mm/in)	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7	525/20.7
	3.7	Tread, rear	b11 (mm/in)	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2	385/15.2
	Dimensions	4.4	Lift	h3 (mm/in)	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3	2700/106.3
4.15		Fork height, lowered	h13 (mm)	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5
4.19		Overall length	l1 (mm/in)	2095/82.5 <sup>1)</sup>	2050/80.7 <sup>1)</sup>														
		Overall length(unfold the pedal)	l1 (mm/in)	2527/99.5 <sup>1)</sup>															
4.21		Overall width	b1 (mm/in)	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5	800/31.5
4.22		Fork dimensions ISO 2331	s/e/l mm(in)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)	65/185/1150 (2.6/7.3/45.3)
4.25		Distance between fork-arms	b5 mm(in)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)	570/680 (22.4/26.8)
4.32		Ground clearance, centre of wheelbase	m2 (mm/in)	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2	30/1.2
4.34.1		Aisle width for pallets 1000 x 1200 crossways	Ast (mm/in)	2312/91.1 <sup>1)</sup>	2318/91.3 <sup>1)</sup>														
4.34.2		Aisle width for pallets 800 x 1200 lengthways	Ast (mm/in)	2362/93.1 <sup>1)</sup>	2368/93.2 <sup>1)</sup>														
4.35	Turning radius	Wa (mm/in)	1662/65.4	1668/65.7	1662/65.4	1668/65.7	1662/65.4	1668/65.7	1662/65.4	1668/65.7	1662/65.4	1668/65.7	1662/65.4	1668/65.7	1662/65.4	1668/65.7	1662/65.4	1668/65.7	
Performance data	5.1	Travel speed,laden/unladen	km/h (mph)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)	7.0/7.0 (4.3/4.3)	6.0/6.0 (3.7/3.7)
	5.2	Lift speed,laden/unladen	m/s (ft/min)	0.087/0.133 (1.7/1/26.2)	0.087/0.133 (1.7/1/26.2)	0.129/0.198 (2.5/4/39)	0.129/0.198 (2.5/4/39)	0.108/0.160 (2.1/3/31.5)	0.108/0.160 (2.1/3/31.5)	0.098/0.160 (1.9/3/31.5)	0.098/0.160 (1.9/3/31.5)	0.087/0.133 (1.7/1/26.2)	0.087/0.133 (1.7/1/26.2)	0.129/0.198 (2.5/4/39)	0.129/0.198 (2.5/4/39)	0.108/0.160 (2.1/3/31.5)	0.108/0.160 (2.1/3/31.5)	0.098/0.160 (1.9/3/31.5)	0.098/0.160 (1.9/3/31.5)
	5.3	Lowering speed,laden/unladen	m/s (ft/min)	0.155/0.158 (30.5/31.1)	0.155/0.158 (30.5/31.1)	0.213/0.200 (41.9/39.4)	0.213/0.200 (41.9/39.4)	0.185/0.155 (36.4/30.5)	0.185/0.155 (36.4/30.5)	0.195/0.155 (38.4/30.5)	0.195/0.155 (38.4/30.5)	0.155/0.158 (30.5/31.1)	0.155/0.158 (30.5/31.1)	0.213/0.200 (41.9/39.4)	0.213/0.200 (41.9/39.4)	0.185/0.155 (36.4/30.5)	0.185/0.155 (36.4/30.5)	0.195/0.155 (38.4/30.5)	0.195/0.155 (38.4/30.5)
	5.8	Max Gradeability,laden/unladen	%	10/16	8/16	10/16	8/16	8/16	5/16	8/16	5/16	10/16	8/16	10/16	8/16	10/16	8/16	5/16	8/16
Electric engine	6.1	Drive motor rating S2 60 min	kw/hp	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0	2.2/3.0	1.5/2.0
	6.2	Lift motor rating at S3 15%	kw/hp	2.2/3.0	2.2/3.0	3.0/4.0	3.0/4.0	3.0/4.0	3.0/4.0	3.0/4.0	3.0/4.0	2.2/3.0	2.2/3.0	3.0/4.0	3.0/4.0	3.0/4.0	3.0/4.0	3.0/4.0	3.0/4.0
		Steering motor power	kw/hp	0.2/0.27		0.2/0.27		0.2/0.27		0.2/0.27		0.2/0.27		0.2/0.27		0.2/0.27		0.2/0.27	
	6.4	Battery voltage,rated capacity (Lead-acid)	V/Ah	24/280	24/240	24/280	24/240	24/340	24/280	24/340	24/280	24/340	24/280	24/340	24/280	24/340	24/280	24/340	24/280
	Battery voltage,rated capacity,Optional	V/Ah	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	~24/340	
8.1	Type of drive control		AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	
9.1	Manufacturer		CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	CURTIS/ZAPI	

Note: 1),Triplex Mast+21mm+0.83in





## A Series Electric Counterbalanced Stacker

with capacities of 800 to 2,000kg

Is widely used in pallet stacking, wherever support arm stacker truck cannot operate close pallet and lower pallet. Applied the latest AC drive technology, advanced performance, comfort, safe, reliable, low maintenance cost, easy to operate, and economical to buy is the ideal solution for warehouses, supermarkets, workshop loading/unloading and handling pallets of cargos.

### Appearance

- / A series electric counterbalanced stacker applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes for front and back guard, which is robust, durable, and also environmental compliance.

### High Performance

- / Electric power steering is standard specification, which provides flexible operation.
- / Pump motor controller offers proportional lifting/lowering, low noise, energy consumption reduced by 15%.
- / Powered by AC traction motor not only has good acceleration and climbing performance, but also low heat, brushless, maintenance-free.
- / Latest AC control system, precise and smooth.
- / CAN-BUS connection enables all truck data can be read out for inspection, and also improves the data transition more quick and reliable.
- / Regenerative braking for battery recovery during travel speed reduction, anti-slope on gradient.
- / All key parts such as switches, connectors, battery indicator and hour meter all adopt the famous brand.



Simple and beautiful tiller designed to improve the operator's driving comfort. Optimized designing structure to offer a good visibility and easy entrance to the pallet



Side battery change is standard specification



Fully opened hood, easy accessibility of all components, is easy for service



Mast tilting is the optional feature, offers proportional forward/backward speed



## Safety

- / Travel speed will be automatically reduced after fork lifting height over 500mm.
- / Automatic deceleration during turning.
- / Punch-formed handrails provide more safety to the operator.
- / Three braking system of regenerative braking, reverse current braking, and emergency braking, insures the safe operation.
- / Anti-slope on gradient can keep the safety.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / Soft landing system applied to protect loads from damaging when forks lowering to 100mm to ground.

## Maintenance

- / AC motor without carbon brushes, maintenance-free, cost saving.
- / Integrated battery indicator, hour meter and self-diagnostic instrument.

## Reliability

- / 3-pivot with low centre of gravity design and high strength steel frame structure chassis provide high residual load capability and longer working life.
- / Imported waterproof connectors, all wires and cables are protected, greatly improve the reliability of the electric system.
- / Using non-contact proximity switch, improves safety and reliability.
- / Hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / The REMA tiller made in Germany of latest development is simple but beautiful, and all operations can be done easily with one hand.
- / H-type mast profile section is applied to provide stable lifting and high strength.
- / The power plug is fixed on the chassis to avoid damage during battery replacement.

## Comfort

- / The pedal applies shock absorption design, greatly improves the operator's comfort, reduce the fatigue.
- / The compact body and semicircular design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability.

## Standard Specification

- / AC drive motor
- / Electric power steering
- / 2.7m double cylinder duplex mast
- / Emergency switch
- / The proportional lift & lower control
- / 1070mm fork length
- / Side battery change
- / Multi-function battery indicator
- / PU load wheel
- / CAN bus technology
- / Soft landing system

## Options

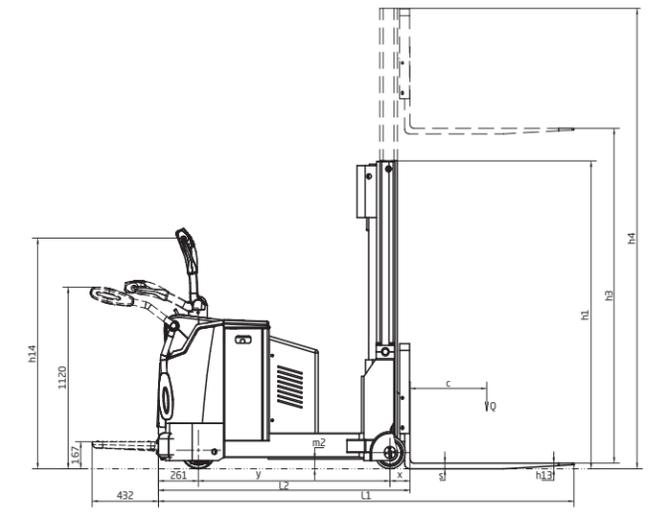
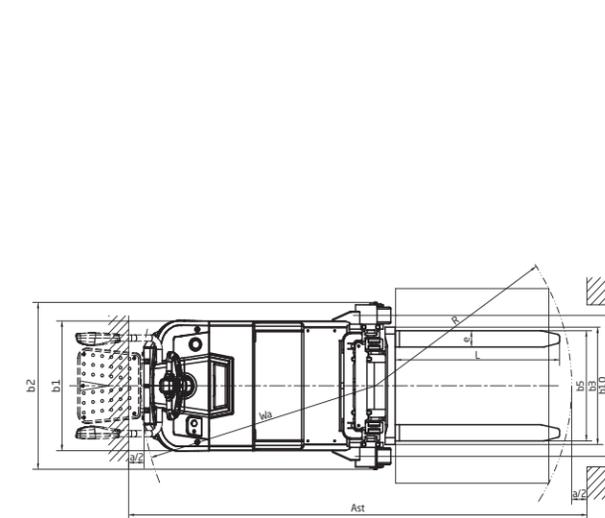
- / Mast lift height:  
Duplex mast 2000-4500mm,  
full free duplex mast: 2000-3600mm,  
triplex mast 0.8t: 3500-5000mm,  
1.2/1.6/2.0t: 3500-5500mm.
- / Mast tilting: Forward 2°/ Backward 6°
- / Different length of fork
- / Load backrest

## A Series Electric counterbalanced stacker

		HANGCHA GROUP CO.,LTD.					
Distinguishing marks	1.1	Manufacturer					
	1.2	Manufacturer's type designation	CPDB08-AC1S CPDB08-AZ3S	CPDB12-AC1S CPDB12-AZ3S	CPDB16-AC1S CPDB16-AZ3S	CPDB20-AC1S CPDB20-AZ3S	
Weights	1.3	Drive:electric(battery or mains),diesel,petrol,fuel gas	electric				
	1.4	Operator type:hand,pedestrian,standing,seated,order-picker	standing				
	1.5	Rated capacity/rated load	Q (kg/lb)	800/1764	1200/2646	1600/3527	2000/4409
	1.6	Load centre distance	c(mm/in)	500/20	500/20	500/20	500/20
	1.8	Load distance, centre of drive axle to fork	x(mm/in)	131/5.2	131/5.2	141/5.6	151/5.9
	1.9	Wheelbase	y(mm/in)	1023/40.3	1150/45.3	1371/54.0	1571/61.9
Wheels, Chassis	2.1	Service Weight incl.battery(see line6.5)	kg/lb	1800/3968	2030/4475	2240/4938	2316/5106
	2.2	Axle loading,laden front/rear	kg (lb)	420/2180 (926/4806)	310/2840 (683/6261)	450/3200 (992/7055)	531/3595 (1171/7926)
	2.3	Axle loading,unladen front/rear	kg (lb)	935/865 (2061/1907)	1090/860 (2403/1896)	1150/900 (2535/1984)	1189/937 (2621/2066)
Basic Dimensions	3.1	Tyres:solid rubber,superelectric,pneumatic,polyurethane	PU				
	3.2	Tyre size, front	mm/in	φ230×75 / φ9.1×3.0	φ230×75 / φ9.1×3.0	φ250×100 / φ9.8×3.9	φ250×100 / φ9.8×3.9
	3.3	Tyre size, rear	mm/in	φ200×100 / φ7.9×3.9	φ200×100 / φ7.9×3.9	φ200×100 / φ7.9×3.9	φ200×100 / φ7.9×3.9
	3.5	Wheels, number front / rear (x = driven wheels)		1×/2	1×/2	1×/2	1×/2
	3.6	Tread, front	b <sub>10</sub> (mm/in)	870/34.3	870/34.3	870/34.3	870/34.3
	4.2	Height,mast lowered	h <sub>1</sub> (mm/in)	1900/74.8	1900/74.8	1900/74.8	1900/74.8
Performance Data	4.4	Lift	h <sub>3</sub> (mm/in)	2700/106.3	2700/106.3	2700/106.3	2700/106.3
	4.9	Height of tiller in drive position min./max.	h <sub>4</sub> mm (in)	1115/1420 (43.9/55.9)	1115/1420 (43.9/55.9)	1115/1420 (43.9/55.9)	1115/1420 (43.9/55.9)
	4.15	Height, lowered	h <sub>13</sub> (mm/in)	35/1.38	35/1.38	35/1.38	45/1.8
	4.19	Overall length	l <sub>1</sub> (mm/in)	2485 <sup>1)</sup> /97.8 <sup>1)</sup>	2612 <sup>1)</sup> /102.8 <sup>1)</sup>	2822 <sup>1)</sup> /111.1 <sup>1)</sup>	3032 <sup>1)</sup> /119.4 <sup>1)</sup>
	4.20	Length to face of forks	l <sub>2</sub> (mm/in)	1415 <sup>1)</sup> /55.7 <sup>1)</sup>	1542 <sup>1)</sup> /60.7 <sup>1)</sup>	1752 <sup>1)</sup> /69.0 <sup>1)</sup>	1962 <sup>1)</sup> /77.2 <sup>1)</sup>
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> mm (in)	800/1030 (31.5/40.6)	800/1030 (31.5/40.6)	800/1030 (31.5/40.6)	800/1030 (31.5/40.6)
	4.22	Fork dimensions	s/e/l mm (in)	35/100/1070 (1.4/3.9/42.1)	35/100/1070 (1.4/3.9/42.1)	35/100/1070 (1.4/3.9/42.1)	45/100/1070 (1.8/3.9/42.1)
	4.24	Fork-carriage width	b <sub>3</sub> (mm/in)	700/27.6	700/27.6	700/27.6	700/27.6
	4.25	Distance between fork-arms	b <sub>5</sub> mm (in)	210~680 (8.3~26.8)	210~680 (8.3~26.8)	210~680 (8.3~26.8)	210~680 (8.3~26.8)
	4.32	Ground clearance, centre of wheelbase	m <sub>z</sub> (mm/in)	60/2.36	60/2.36	60/2.36	60/2.36
Electric motor	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm/in)	2760 <sup>1)</sup> /108.7 <sup>1)</sup>	2810 <sup>1)</sup> /110.6 <sup>1)</sup>	3019 <sup>1)</sup> /118.9 <sup>1)</sup>	3228 <sup>1)</sup> /127.1 <sup>1)</sup>
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm/in)	2870 <sup>1)</sup> /113.0 <sup>1)</sup>	2920 <sup>1)</sup> /115.0 <sup>1)</sup>	3129 <sup>1)</sup> /123.2 <sup>1)</sup>	3339 <sup>1)</sup> /131.5 <sup>1)</sup>
	4.35	Turning radius	l <sub>w</sub> (mm/in)	1380/54.3	1430/56.3	1630/64.2	1830/72.0
Others	5.1	Travel speed, laden/unladen	kph (mph)	5.5/6.0 (3.4/3.7)	5.5/6.0 (3.4/3.7)	5.5/6.0 (3.4/3.7)	5.5/6.0 (3.4/3.7)
	5.2	Lift speed, laden/unladen	m/s (ft/min)	0.160/0.235 (31.50/46.26)	0.145/0.220 (28.54/43.31)	0.135/0.230 (26.57/45.28)	0.110/0.180 (21.65/35.43)
	5.3	Lowering speed, laden/unladen	m/s (ft/min)	0.200/0.200 (39.37/39.37)	0.200/0.200 (39.37/39.37)	0.200/0.200 (39.37/39.37)	0.200/0.200 (39.37/39.37)
	5.7	Gradeability, laden/unladen	%	6/10	6/10	6/10	6/10
	6.1	Drive motor rating S2 60 min.	kw/hp	1.5/2.0	1.5/2.0	3/4.0	3/4.0
6.2	Lift motor rating at S3 15%	kw/hp	2.2/2.95	3.2/4.29	3.2/4.29	3.2/4.29	
6.4	Battery voltage/nominal capacity K5	V/Ah	24/240	24/280	24/350	24/350	
6.5	Battery weight	kg/lb	215/474	250/551	300/661	300/661	
8.1	Type of drive control		AC CURTIS ZAPI	AC CURTIS ZAPI	AC CURTIS ZAPI	AC CURTIS ZAPI	

Note:1).Triplex mast +21mm(0.83in)

Specifications are subject to change without notice.



## 0.8t/1.2t/1.6t Mast specification

Type	Fork lift height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Mast lowered h <sub>1</sub>	Mast extended h <sub>4</sub>	Free lift	Capacity load capacity at 500mm/19.7in			Capacity load capacity at 600mm/24in		
						CPDB08-AC1S	CPDB12-AC1S	CPDB16-AC1S	CPDB08-AC1S	CPDB12-AC1S	CPDB16-AC1S
	mm/in	mm/in	mm/in	mm/in	mm/in	kg/lb	kg/lb	kg/lb	kg/lb	kg/lb	kg/lb
Wide view mast	2000/78.7	2035/80.1	1542/60.7	2542/100.1	0	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	2500/98.4	2535/99.8	1792/70.6	3042/119.8	0	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	2700/106.3	2735/107.7	1892/74.5	3242/127.6	0	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3000/118.1	3035/119.5	2042/80.4	3542/139.4	0	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3300/129.9	3335/131.3	2192/86.3	3842/151.3	0	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3500/137.8	3535/139.2	2292/90.2	4042/159.1	0	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3600/141.7	3635/143.1	2342/92.2	4142/163.1	0	700/1543	1200/2646	1600/3527	600/1323	1100/2425	1450/3197
	3700/145.7	3735/147.0	2392/94.2	4242/167	0	680/1499	1180/2602	1540/3395	580/1279	1070/2359	1400/3086
	3800/149.6	3835/151.0	2442/96.1	4342/170.9	0	660/1455	1150/2535	1480/3263	560/1235	1030/2271	1330/2932
	4000/157.5	4035/158.9	2642/104.0	4642/182.8	0	620/1367	1100/2425	1400/3087	510/1124	980/2161	1250/2756
4300/169.3	4335/170.7	2792/109.9	4942/194.6	0	530/1169	1050/2315	1340/2954	450/992	900/1984	1210/2668	
4500/177.2	4535/178.5	2892/113.9	5142/202.4	0	440/970	1000/2205	1300/2866	350/772	850/1874	1170/2579	
Wide view full free duplex mast	2000/78.7	2035/80.1	1595/62.8	2595/102.2	1035/40.7	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	2500/98.4	2535/99.8	1845/72.6	3095/121.9	1285/50.6	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	2700/106.3	2735/107.7	1945/76.6	3295/129.7	1385/54.5	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3000/118.1	3035/119.5	2095/82.5	3595/141.5	1535/60.4	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3300/129.9	3335/131.3	2245/88.4	3895/153.3	1685/66.6	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3500/137.8	3535/139.2	2345/92.3	4095/161.2	1785/70.3	800/1764	1200/2646	1600/3527	700/1543	1100/2425	1450/3197
	3600/141.7	3635/143.1	2395/94.3	4195/165.2	1835/72.2	700/1543	1200/2646	1600/3527	600/1323	1100/2425	1450/3197
	3700/145.7	3735/147.0	2445/96.3	4295/169.1	1885/74.1	680/1499	1180/2602	1540/3395	580/1279	1070/2359	1400/3086
	3800/149.6	3835/151.0	2495/98.3	4395/173.0	1935/76.0	660/1455	1150/2535	1480/3263	560/1235	1030/2271	1330/2932
	4000/157.5	4035/158.9	2695/106.0	4695/184.8	2135/83.8	620/1367	1100/2425	1400/3087	510/1124	980/2161	1250/2756
4300/169.3	4335/170.7	2845/110.9	4995/196.6	2335/91.6	530/1169	1050/2315	1340/2954	450/992	900/1984	1210/2668	
4500/177.2	4535/178.5	2945/114.9	5195/200.4	2435/95.5	440/970	1000/2205	1300/2866	350/772	850/1874	1170/2579	
4700/185.0	4735/186.4	2259/88.9	5459/214.9	1535/60.4	380/838	950/2094	1220/2690	250/551	760/1676	1100/2425	
5000/196.9	5035/198.2	2354/92.7	5744/226.1	1645/64.8	300/661	800/1764	1000/2205	210/463	650/1433	900/1984	
5200/204.7	5235/206.1	2409/94.8	5909/232.6	1735/68.3	-	680/1499	850/1874	-	540/1190	750/1653	
5500/216.5	5535/217.9	2509/98.8	6209/244.4	1835/72.2	-	550/1213	700/1543	-	400/882	600/1323	

## 2.0t Mast specification

Type	Fork lift height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Mast lowered h <sub>1</sub>	Mast extended h <sub>4</sub>	Free lift	Capacity load capacity at 500mm/19.7in	Capacity load capacity at 600mm/24in
						CPDB20-AC1S	CPDB20-AC1S
	mm/in	mm/in	mm/in	mm/in	mm/in	kg/lb	kg/lb
Wide view mast	2000/78.7	2045/80.5	1647/64.8	2647/104.2	0	2000/4409	1800/3968
	2500/98.4	2545/100.2	1897/74.7	3147/123.9	0	2000/4409	1800/3968
	2700/106.3	2745/108.1	1997/78.6	3347/131.8	0	2000/4409	1800/3968
	3000/118.1	3045/119.9	2147/84.5	3647/143.6	0	2000/4409	1800/3968
	3300/129.9	3345/131.7	2297/90.4	3947/155.4	0	2000/4409	1800/3968
	3500/137.8	3545/139.6	2397/94.4	4147/163.3	0	2000/4409	1800/3968
	3600/141.7	3645/143.5	2447/96.3	4247/167.2	0	1950/4299	1750/3858
	3700/145.7	3745/147.4	2497/98.3	4347/171.1	0	1900/4189	1710/3770
	3800/149.6	3845/151.4	2547/100.3	4447/175.1	0	1840/4057	1660/3660
	4000/157.5	4045/159.3	2747/108.1	4747/186.9	0	1800/3968	1600/3527
4300/169.3	4345/171.1	2897/114.1	5047/198.7	0	1680/3704	1500/3307	
4500/177.2	4545/178.9	2997/118.0	5247/206.6	0	1600/3527	1400/3086	
Wide view full free duplex mast	2000/78.7	2045/80.5	1700/66.9	2700/106.3	1045/41.1	2000/4409	1800/3968
	2500/98.4	2545/100.2	1950/76.8	3200/126.0	1295/51.0	2000/4409	1800/3968
	2700/106.3	2745/108.1	2050/80.7	3400/133.9	1395/54.9	2000/4409	1800/3968
	3000/118.1	3045/119.9	2200/86.6	3700/145.7	1545/60.8	2000/4409	1800/3968
	3300/129.9	3345/131.7	2350/92.5	4000/157.5	1695/66.7	2000/4409	1800/3968
	3500/137.8	3545/139.6	2450/96.5	4200/165.4	1795/70.7	2000/4409	1800/3968
	3600/141.7	3645/143.5	2500/98.4	4300/169.3	1845/72.6	1950/4299	1750/3858
	3700/145.7	3745/147.4	2547/100.3	4447/175.1	1895/74.5	1900/4189	1710/3770
	3800/149.6	3845/151.4	2597/102.3	4547/179.0	1945/76.4	1840/4057	1660/3660
	4000/157.5	4045/159.3	2797/110.1	4847/190.8	2145/82.2	1800/3968	1600/3527
4300/169.3	4345/171.1	2897/114.1	5047/198.7	2245/86.1	1680/3704	1500/3307	
4500/177.2	4545/178.9	2997/118.0	5247/206.6	2345/90.0	1600/3527	1400/3086	
4700/185.0	4745/186.8	2359/92.9	5559/218.9	1545/60.8	1480/3263	1300/2866	
5000/196.9	5045/198.6	2454/96.6	5844/230.1	1655/65.2	1200/2646	1100/2425	
5200/204.7	5245/206.5	2509/98.8	6009/236.6	1745/68.7	1000/2205	900/1984	
5500/216.5	5545/218.3	2609/102.7	6309/248.4	1845/72.6	800/1764	700/1543	



## A Series High Range Stand-on Pallet Stacker With Initial Lift with capacities of 1,200 to 1,600kg

The A Series Pallet Stacker Truck is a new product developed for warehouse and logistics applications. With the latest AC control technology, it features excellent performance, easy operation, safety and reliability, and low maintenance cost, and is an ideal vehicle for loading, unloading, and handling palletized goods in warehouse, supermarket, and workshop. The A series pallet stacker with initial lift offers better reachability with its lifting arms.

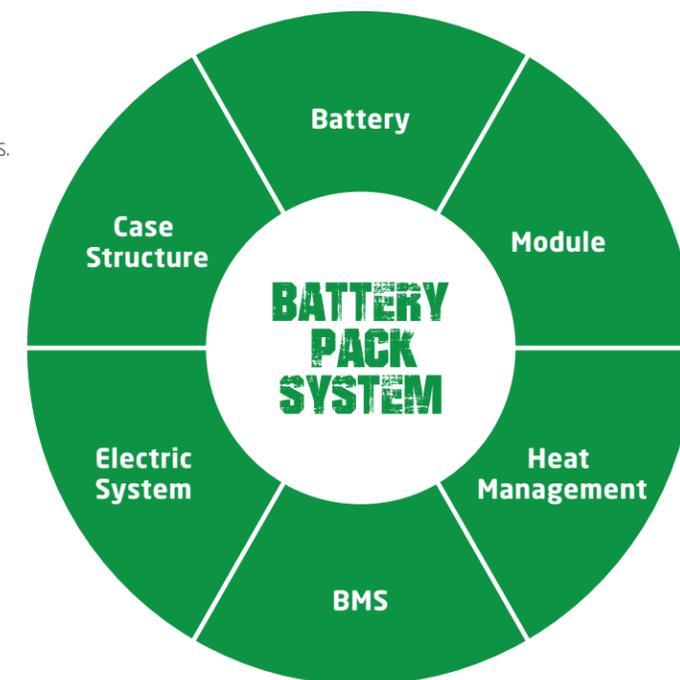
# LI-ION POWER



## INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion  
2 hours  
100%

Lead-acid batteries  
8-10 hours 100%

**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-Ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

### Li-Ion Battery Pack specification

Type		CDD12-AC1S-LI	CDD14-AC1S-LI	CDD16-AC1S-LI
Li-Ion battery	V/Ah	24/120	24/120	24/120
Li-Ion battery,Optional	V/Ah	24/202	24/202	24/202
Titans charger		SPC-24100	SPC-24100	SPC-24100



HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.



**5 YEARS  
WARRANTY**

## Reliability

- / Four-pivots and low-gravity-center design and the high-strength steel plate framed structure feature large residual load capacity, and long service life.
- / All plug connectors are imported and waterproof, and all cables have reliable protection, which increases reliability of electrical system significantly.
- / Non-contact proximity switch features long service life and reliable operation.
- / Electronic lifting limitation eliminates overflow of the hydraulic power unit, which is more energy efficient, and can protect the motor of power unit.
- / The hydraulic power unit features low noise, small vibration, and stable and reliable lifting and lowering.
- / Stamping molded fork has higher strength and impact resistance.
- / Power plug is fastened to truck body, which can avoid damage of plug when battery is replaced.
- / The battery is fixed securely, and battery cover is supported with flexible material, which reduces vibration and noise during operation.

## Safety

- / Traveling speed will be automatically reduced after fork lifting 500mm.
- / Turning speed is automatically reduced when steering.
- / Release braking, reverse braking, and three types of emergency braking can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The belly button on top of operating handle can avoid the driver from injury effectively in case of emergency during backward driving of the pallet truck.
- / The soft landing system reduces declining speed automatically when height from ground to fork is less than 100mm, which provides effective protection for goods.

## Maintenance

- / The brushless, maintenance-free AC driving motor reduces operation cost significantly.
- / The brushless, maintenance-free AC steering motor reduces operation cost significantly (optional).
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / All rotating shafts are equipped with lubricating sleeve and oil cup, which is convenient for maintenance and has a long service life.



## Appearance

- / The A series pallet stacker with initial lift is completed with specialized industrial design of appearance. The entire truck features smooth lines and affluent sense of movement, with full consideration being given to ergonomics, in accord with the latest appearance design trend.
- / It is manufactured with steel plate stamping and injection molding technologies, solid and durable, in compliance with environmental requirements.

## High Performance

- / Center stand-on driving mode and ESP(Electric Steering Power)system offer easier and more flexible operation.
- / The arm initial lifting function offers better reachability. The upper and lower double pallet handling design not only can meet requirements of stacking operation, but also brings higher material handling efficiency.
- / Lifting and lowering stepless speed regulation of the fork is a standard configuration.
- / The high efficiency traction motor realizes high driving speed and strong climbing performance.
- / The AC driving motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and maintenance-free.
- / The latest ZAPI AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS structure makes communication of the entire machine faster and more reliable.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Hydraulic power unit, switches, plug connectors, battery condition meter, timer and other important parts are all of renowned domestic and abroad brands.

## Comfort

- / The lower vibrational pedal offers much higher driving comfort, and reduces fatigue of long-duration operation.
- / The REMA tiller made in Germany is simple but beautiful, and all operations can be done easily with one hand.
- / The tortoise speed switch with light allows the truck to move at slow speed more conveniently, and can stack goods even in confined space.
- / The optimized truck structure guarantees excellent visibility, and easy access and exit of pallet.
- / The design of narrow body with large round corners makes the truck more suitable for operation in concentrated goods shelves, and the wedge-shaped design of truck base offers much higher passing ability.
- / Different distance between fork-arms and fork length are optional, being suitable for handling of various pallets.
- / Side roll out battery can realize easy and fast replacement (optional).



Rema tiller



The integrated stamping molded guardrail offers better protection for the operator



Back cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine



Tandem load wheel

## Standard Specification

- / AC driving motor
- / ZAPI AC controller
- / REMA tiller
- / Imported hydraulic power unit
- / Pedal
- / Emergency power off switch
- / Multi-function battery condition meter
- / Tandem load wheel
- / Initial lift 125mm
- / Fork length 1150mm
- / Outer distance between fork-arms 570mm
- / Electronic lifting limitation
- / Soft landing system
- / Multi-function handle of CAN bus
- / Horn
- / Battery
- / EPS system

## Options

- / Various imported and home-made batteries
- / AC steering motor
- / Different mast height (see parameter list for details)
- / Fork length 1220/1600
- / Outer distance of forks 600/680mm
- / Side roll out battery
- / Automatic battery charger
- / Load backrest
- / Mast shield
- / Lithium battery



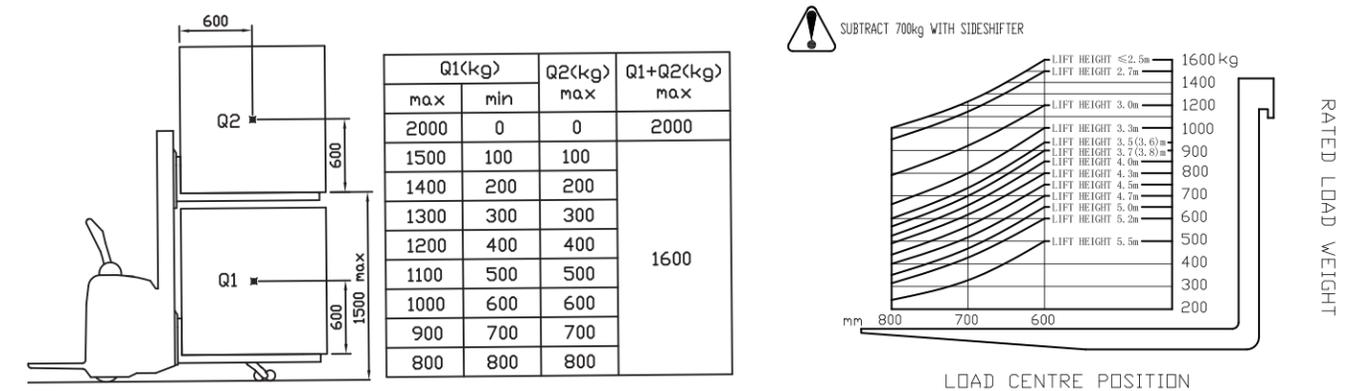
## 1.2t/1.4t/1.6t Mast specification

Type	Fork lift height h <sub>3</sub>	Max.fork height (h <sub>3</sub> +h <sub>13</sub> )	Mast lowered h <sub>1</sub>	Mast extended h <sub>4</sub>	Free lift height	Load capacity at 600mm		
						1.2t	1.4t	1.6t
	mm	mm	mm	mm	mm	kg	kg	kg
Wide view duplex mast	2000	2090	1582	2582	90	1200	1400	1600
	2500	2590	1832	3082	90	1200	1400	1600
	2700	2790	1932	3282	90	1200	1300	1500
	3000	3090	2082	3582	90	1130	1130	1200
	3300	3390	2232	3882	90	950	950	1000
	3500	3590	2332	4082	90	900	900	940
	3600	3690	2382	4182	90	890	890	930
	3700	3790	2432	4282	90	850	850	900
	3800	3890	2482	4382	90	840	840	890
	4000	4090	2682	4682	90	800	800	850
4300	4390	2832	4982	90	750	750	800	
4500	4590	2932	5182	90	700	700	750	
Full free duplex mast	2000	2090	1635	2635	1090	1200	1400	1600
	2500	2590	1885	3135	1340	1200	1400	1600
	2700	2790	1985	3335	1440	1200	1300	1500
	3000	3090	2135	3635	1590	1130	1130	1200
	3300	3390	2285	3935	1740	950	950	1000
	3500	3590	2385	4135	1840	900	900	940
Full free triplex mast	3600	3690	2435	4235	1890	890	890	930
	3500	3590	1884	4254	1220	890	890	930
	3700	3790	1949	4449	1290	850	850	900
	4000	4090	2049	4749	1390	800	800	850
	4300	4390	2149	5049	1490	750	750	800
	4500	4590	2199	5199	1590	700	700	750
	4700	4790	2299	5499	1590	650	650	700
	5000	5090	2394	5784	1700	600	600	650
	5200	5290	2449	5949	1790	550	550	600
	5500	5590	2549	6249	1890	450	450	500

## A Series High Range Stand-on Pallet Stacker With Initial Lift

		HANGCHA GROUP CO.,LTD.				
Characteristics	1.1	Manufacturer		CDD12-AZ3S-L	CDD14-AZ3S-L	CDD16-AZ3S-L
	1.2	Manufacturer's type designation		CDD12-AC1S-L	CDD14-AC1S-L	CDD16-AC1S-L
	1.3	Drive (Drive: electric (battery or mains), diesel, petrol, fuel gas)		electric	electric	electric
	1.4	Operator type (hand, pedestrian, standing, seated, order-picker)		standing	standing	standing
	1.5	Load capacity	Q (kg)	1200	1400	1600
	1.6	Load centre distance	C(mm)	600	600	600
	1.8	Load distance, centre of drive axle to fork	x(mm)	748	748	748
	1.9	Wheelbase	y(mm)	1507	1507	1507
	Weights	2.1	Service weight	kg	1295	1300
Wheels&Tyres	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		polyurethane	polyurethane	polyurethane
	3.2	Tyre size, front		Φ230×75	Φ230×75	Φ230×75
	3.3	Tyre size, rear		Φ85×70	Φ85×70	Φ85×70
	3.4	Additional wheels (dimensions)		Φ140×55	Φ140×55	Φ140×55
	3.5	Wheels, number front rear (x=driven wheels)		1x+1/4	1x+1/4	1x+1/4
	3.6	Tread, front	b <sub>10</sub> (mm)	520	520	520
	3.7	Tread, rear	b <sub>11</sub> (mm)	385	385	385
Dimensions	4.2	Height, mast lowered	h <sub>1</sub> (mm)	1932	1932	1932
	4.3	Free lift	h <sub>2</sub> (mm)	0	0	0
	4.4	Lift	h <sub>3</sub> (mm)	2700	2700	2700
	4.5	Height, mast extended	h <sub>4</sub> (mm)	3282	3282	3282
	4.6	Initial lift	h <sub>5</sub> (mm)	125	125	125
	4.15	Height, lowered	h <sub>13</sub> (mm)	90	90	90
	4.19	Overall length (pedal folded)	l <sub>1</sub> (mm)	2135	2135	2135
	4.20	Length to face of forks	l <sub>2</sub> (mm)	985	985	985
	4.21	Overall width	b <sub>1</sub> (mm)	800	800	800
	4.22	Fork dimensions DIN ISO 2331 Fork dimensions	s/e/l(mm)	65/185/1150	65/185/1150	65/185/1150
	4.25	Distance between fork-arms		570	570	570
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	25	25	25
	4.33	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	2600	2600	2600
	4.34	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	2550	2550	2550
	4.35	Turning radius	Wa(mm)	1745	1745	1745
Performance	5.1	Travel speed, unladen	km/h	7	7	7
	5.2	Lift speed, laden/unladen	m/s	0.135/0.210	0.165/0.325	0.135/0.250
	5.3	Lowering speed, lade/unladen	m/s	0.260/0.165	0.260/0.165	0.260/0.165
	5.7	Gradeability, laden/unladen	%	10/16	10/16	8/16
	5.10	Service brake		electric	electric	electric
Electric-engine	6.1	Drive motor rating S2 60 min	kW	2.2	2.2	2.2
	6.2	Lift motor rating at S3 15 %	kW	2.2	3.2	3.2
	6.3	Battery according to DIN 43531/35/36 A, B, C, no		4DB280	4DB280	4DB340
	6.4	Battery voltage/nominal capacity K5		24/280	24/280	24/340
Other	8.1	Type of drive unit		AC Control	AC Control	AC Control

### CAPACITY 1.6T





## A Series High Range Stand-on Pallet Staker With Reach Fork

with capacities of 1,200 to 1,600kg

The A series pallet staker with reach fork moves goods forward and backward with a scissor fork extension system. It acts as a counterbalanced staker when its fork is extended, which can handle non-standard pallets, enclosed pallets, and enclosed shelves easily; and acts as a straddle staker when its fork is retracted, which can operate flexibly in narrow passage.

### High Performance

- / EPS (Electric Power Steering) system offer easier and more flexible operation.
- / The AC driving motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The latest CURTIS AC / ZAPI AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS structure makes communication of the entire machine faster and more reliable.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Switches, plug connectors, meters, and other important parts are all imported from abroad, with excellent performance and reliable quality.
- / Fork tilting function, and load backrest realize safer loading and unloading of goods.
- / The hydraulic power unit features low noise, small vibration, and stable and reliable lifting and lowering.

### Safety

- / Traveling speed will be automatically reduced after fork lifting 500mm.
- / Turning speed is automatically reduced when steering.
- / The integrated stamping molded guardrail offers better protection for the operator.
- / Release braking, reverse braking and emergency braking can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The belly button on top of operating tiller can avoid the driver from injury effectively.
- / The soft landing system reduces lowering speed automatically when height from ground to fork is less than 100mm, which provides effective protection for goods.



Multi-function tiller



Forks move forward by the scissor structure



Back cover can be opened fully



Proportional controlled forks can be operated more accurately

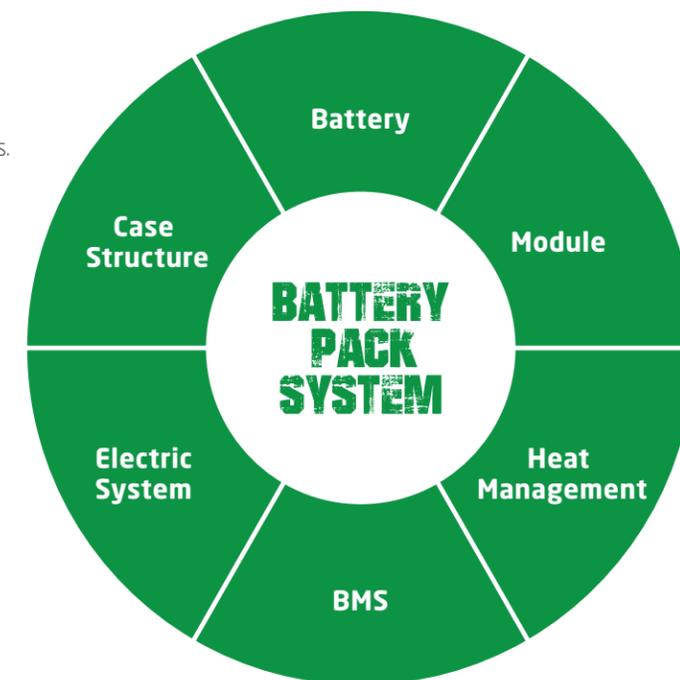
# LET THE LITHIUM POWER BE REVEALED



## INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion  
2 hours  
100%

Lead-acid batteries  
8-10 hours 100%

**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

### Li-Ion Battery Pack specification

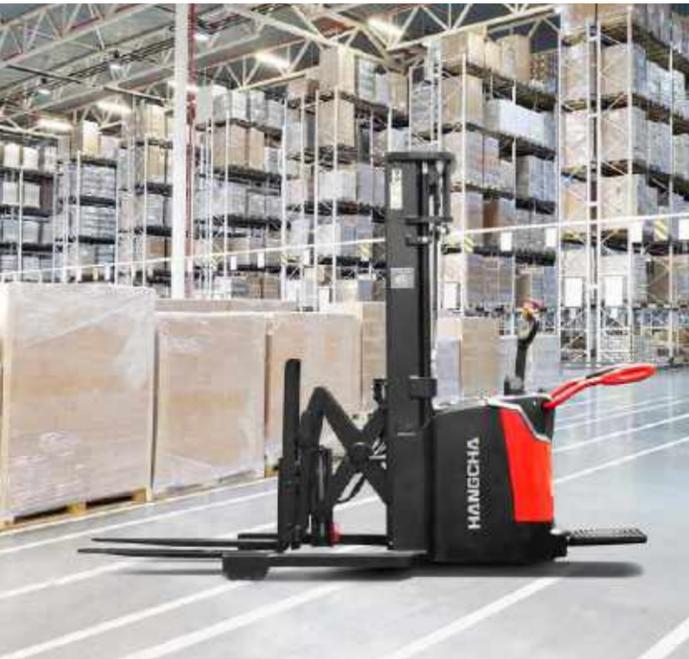
Type		CQDB12-AC1S-IJ	CQDB16-AC1S-IJ
Li-Ion battery	V/Ah	24/120	24/120
Li-Ion battery,Optional	V/Ah	24/202	24/202
Titans charger		SPC-24100	SPC-24100



HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.



**5 YEARS  
WARRANTY**



## Standard specification

- / AC driving motor
- / CURTIS / ZAPI controller for traction motor
- / Controller for pump motor
- / EPS(Electric Power Steering) system
- / Automatic deceleration at turns
- / Proportional speed regulation for all fork operations
- / Pedal and guardrail
- / Emergency power off switch
- / Multi-function battery condition meter
- / High-performance loading wheels
- / Fork length 1070mm
- / Traveling speed will be automatically reduced after fork lifting 500mm
- / Adjustable outer distance of forks within the range of 200-896mm
- / Battery capacity: 280Ah for 1.2t model, 340Ah for 1.6t model
- / Fork tilt forward / backward 3°/5°
- / Load backrest
- / 2.7m duplex mast with double lifting cylinders
- / Soft landing system
- / Multi-function tiller
- / Reach distance of fork:590mm

## Options

- / Mast height: 2500-4500mm for duplex mast, 3500-5500mm for triplex mast
- / Various fork lengths
- / Sideshift move LH/RH:60mm



## Comfort

- / The vibration-reduction design of the pedal reduces fatigue of long-duration operation.
- / New designed tiller has beautiful appearance, and function buttons for comfortable operation.
- / The standard configuration of tortoise speed driving function allows the truck to move at slow speed more easily.

## Reliability

- / All plug connectors are imported and waterproof, and all cables have reliable protection, which increases reliability of electrical system significantly.
- / Non-contact proximity switch features long service life and reliable operation.
- / Power plug is fastened to truck body, which can avoid damage of plug due to impact when battery is lifted for installation.
- / Flexible connections of the battery can avoid disconnection fault of battery because of lasting vibration.

## Maintenance

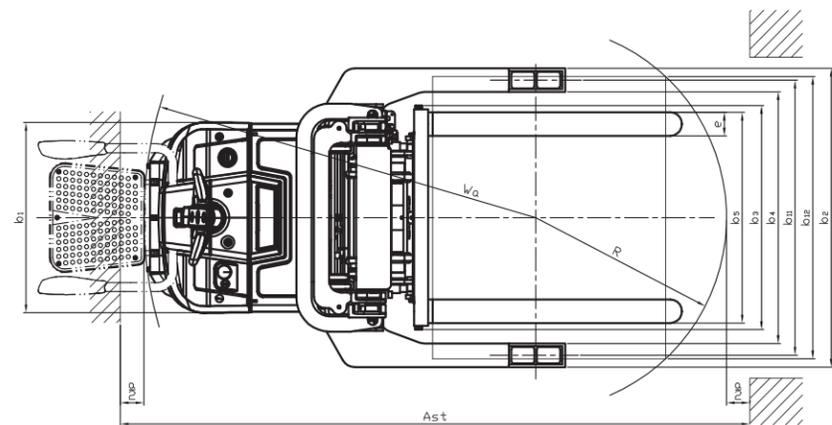
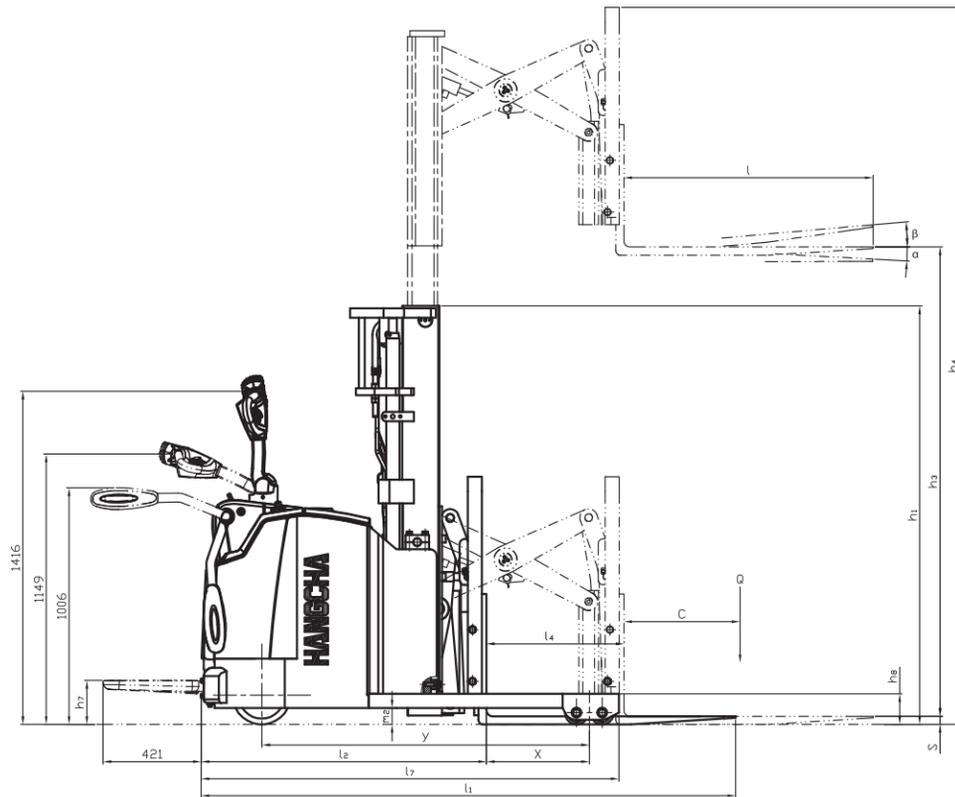
- / The brushless, maintenance-free AC driving motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / Back cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine.

## A Series High Range Stand-on Pallet Stacker With Reach Fork

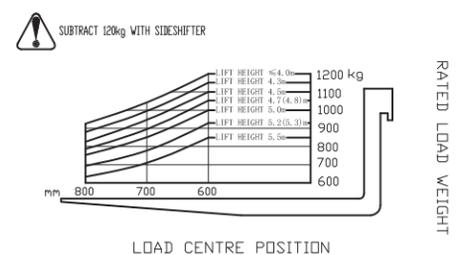
Distinguishing marks	Item No.	Description	HANGCHA GROUP CO.,LTD.		
			CQDB12-AC15-J CQDB12-AZ35-J	CQDB16-AC15-J CQDB16-AZ35-J	
1.1-1.9	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation	CQDB12-AC15-J CQDB12-AZ35-J	CQDB16-AC15-J CQDB16-AZ35-J	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Standing	
	1.5	Rated capacity/rated load	1200	1600	
	1.6	Load centre distance	c(mm) 600	600	
	1.8	Load distance, centre of drive axle to fork	x (mm) 442	442	
	1.9	Wheelbase	y (mm) 1384	1406	
	2.1	2.1	Service Weight	kg 1870	2000
3.1		Tyres: solid rubber, superelastic, pneumatic, polyurethane	Polyurethane	Polyurethane	
3.2-3.7	3.2	Tyre size, front	mm Φ230×75	Φ250×100	
	3.3	Tyre size, rear	mm Φ100×70	Φ100×70	
	3.5	Wheels, number front / rear (x = driven wheels)	1×/4	1×/4	
	3.6	Tread, front	b <sub>10</sub> (mm) 0	0	
	3.7	Tread, rear	b <sub>11</sub> (mm) 1170	1170	
	4.1	Tilt of fork carriage forward/backward	a/β(°) 3/5	3/5	
	4.2	Height, mast lowered	h <sub>1</sub> (mm) 2040	2040	
4.4-4.35	4.4	Lift	h <sub>3</sub> (mm) 2700	2700	
	4.5	Height, mast extended	h <sub>4</sub> (mm) 3752	3752	
	4.8	stand height	h <sub>7</sub> (mm) 185	185	
	4.10	Height of wheel arms	h <sub>8</sub> (mm) 130	130	
	4.19	Overall length	l <sub>1</sub> (mm) 2295	2295	
	4.20	Length to face of forks	l <sub>2</sub> (mm) 1225	1225	
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm) 800/1270	800/1270	
	4.22	Fork dimensions	s/e/l (mm) 35/100/1070	35/100/1070	
	4.24	Fork-carriage width	b <sub>3</sub> (mm) 920	920	
	4.25	Distance between fork-arms	b <sub>5</sub> (mm) 200-896	200-896	
	4.26	Distance between wheel arms	b <sub>4</sub> (mm) 1070	1070	
	4.28	Reach distance	l <sub>4</sub> (mm) 590	590	
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm) 70	70	
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm) 2701	2701	
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm) 2739	2739	
	4.35	Turning radius	Wa (mm) 1682	1682	
	5.1-5.10	4.37	Length across wheel arms	l <sub>7</sub> (mm) 1794	1794
		5.1	Travel speed, laden/unladen	km/h 5.5/6.0	5.5/6.0
		5.2	Lift speed, laden/unladen	m/s 0.100/0.130	0.090/0.120
5.3		Lowering speed, laden/unladen	m/s 0.180/0.165	0.165/0.150	
5.4		Reaching speed, laden/unladen	m/s 0.115/0.165	0.115/0.165	
5.8		Max.gradeability, laden/unladen	% 6/10	6/10	
6.1-6.5	5.10	Service brake	Electromagnetic braking	Electromagnetic braking	
	6.1	Drive motor rating S2 60 min	kW 1.5	3	
	6.2	Lift motor rating at S3 15%	kW 3	3	
	6.4	Battery voltage/nominal capacity K5	V/Ah 24/280	24/340	
	6.5	Battery weight	kg 250	280	
8.1-10.5	8.1	Type of drive control	AC CURTIS AC ZAPI	AC CURTIS AC ZAPI	
	10.5	Steering design	EPS	EPS	

## 1.2t/1.6t Mast specification

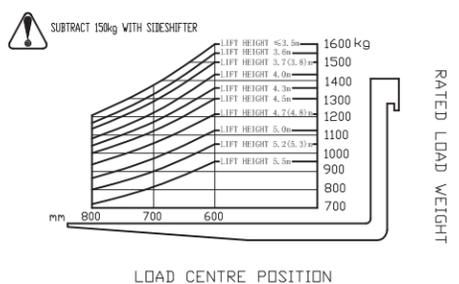
Type	Fork lift height h <sub>3</sub>	Mast lowered h <sub>1</sub>	Mast extended h <sub>4</sub>	Free lift height mm	Capacity	
					Load capacity at 600mm	
					1.2t kg	1.6t kg
Wide view mast	mm	mm	mm	mm	kg	kg
	2500	1940	3552	0	1200	1600
	2700	2040	3752	0	1200	1600
	3000	2190	4052	0	1200	1600
	3300	2340	4352	0	1200	1600
	3500	2440	4552	0	1200	1600
	3600	2490	4652	0	1200	1550
	3700	2540	4752	0	1200	1500
	3800	2590	4852	0	1200	1500
	4000	2790	5052	0	1200	1430
Wide view full free triplex mast	4300	2940	5352	0	1150	1360
	4500	3040	5552	0	1100	1300
	3500	1975	4552	923	1200	1600
	3700	2040	4752	988	1200	1500
	4000	2140	5052	1088	1200	1430
	4300	2240	5352	1188	1150	1360
	4500	2290	5552	1238	1100	1300
	4700	2390	5752	1338	1050	1220
	5000	2490	6062	1438	1000	1130
	5200	2540	6252	1488	930	1050
5500	2640	6552	1588	850	950	



RATED CAPACITIES AND LOAD CENTRES GRAPH



RATED CAPACITIES AND LOAD CENTRES GRAPH



## A Series High Range Stand-on Pallet Stacker With Mast Move

with capacities of 1,200 to 2,000kg

The truck combines benefits of regular stacker and counterbalanced stacker. It can be used for non-standard pallets, enclosed pallets, and enclosed shelves. The mast can be retracted into truck body, which reduces passage width required for operation significantly, and the stacker is an ideal vehicle for operation in narrow passage. Cutting-edge AC control technology applied for the truck offers excellent performance, comfortable operation, safety and reliability, and low maintenance cost.



## Standard Specification

- / AC driving motor
- / CURTIS AC / ZAPI AC controller
- / Controller for pump motor
- / EPS (Electric Power Steering) system
- / Automatic deceleration at turns
- / Proportional speed regulation for all fork operations
- / Pedal and guardrail
- / Emergency power off switch
- / Multi-function battery condition meter
- / High-performance loading wheels, additional wheels
- / Fork length 1070mm
- / Adjustable outer distance of forks within the range of 200-750mm
- / Fork tilt forward / backward: 3° / 5°
- / Load backrest
- / 2.7m duplex mast with double lifting cylinders
- / Soft landing system
- / Multi-function tiller
- / Traveling speed will be automatically reduced after fork lifting 500mm
- / Reach distance of fork: 590mm
- / Battery capacity: 280Ah for 1.2t model, 340Ah for 1.6t model

## Safety

- / Traveling speed will be automatically reduced after fork lifting 500mm.
- / Turning speed is automatically reduced when steering.
- / The integrated stamping molded guardrail offers better protection for the operator.
- / Release braking, reverse braking and emergency braking can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The belly button on top of operating handle can avoid the driver from injury effectively.
- / The soft landing system reduces lowering speed automatically when height from ground to fork is less than 100mm, which provides effective protection for goods.

## Comfort

- / The vibration-reduction design of the pedal reduces fatigue of long-duration operation.
- / Operating tiller has beautiful appearance, and function buttons for comfortable operation.
- / The standard configuration of tortoise speed driving function allows the truck to move at slow speed more easily.
- / Optimized mast structure design offers excellent field of view for operations, which is easy for access and exit pallet.

## Options

- / Mast height: 2000-4500mm for duplex mast, 3500-5500mm for triplex mast
- / Various fork lengths
- / Sideshift move LH/RH ±100mm



## High Performance

- / EPS(Electric Power Steering) is standard specification, which provides flexible operation.
- / Pump motor realize proportional control all operation of fork by the controller, thus more accurate fork operation.
- / The AC driving motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The latest CURTIS AC / ZAPI AC control system realizes accurate, stable, and efficient control.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Switches, plug connectors, meters, and other important parts are all imported from abroad, with excellent performance and reliable quality.
- / Standard featured fork tilting and load backrest realize safer loading and unloading of goods.
- / The hydraulic power unit features low noise, small vibration, and stable and reliable lifting and lowering.

## Reliability

- / Four-pivots and low-gravity-center design and the high-strength steel plate framed structure feature large residual load capacity, and long service life.
- / All plug connectors are imported and waterproof, and all cables have reliable protection, which increases reliability of electrical system significantly.
- / Non-contact proximity switch features long service life and reliable operation.
- / The mast is made of H-shaped steel channels, which offer better rigidity and stability in comparison with C-shaped channels.
- / Reach track of mast is made of high-strength steel channels, with longer service life.
- / Power plug is fastened to truck body, which can avoid damage of plug due to impact when battery is lifted for installation.
- / Flexible connections of the battery can avoid disconnection fault of battery because of lasting vibration.

## Maintenance

- / The brushless, maintenance-free AC driving motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / Back cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine.



Fork tilt F/R: 3° / 5°



EPS (Electric Power Steering) is standard specification



Cover can be opened fully



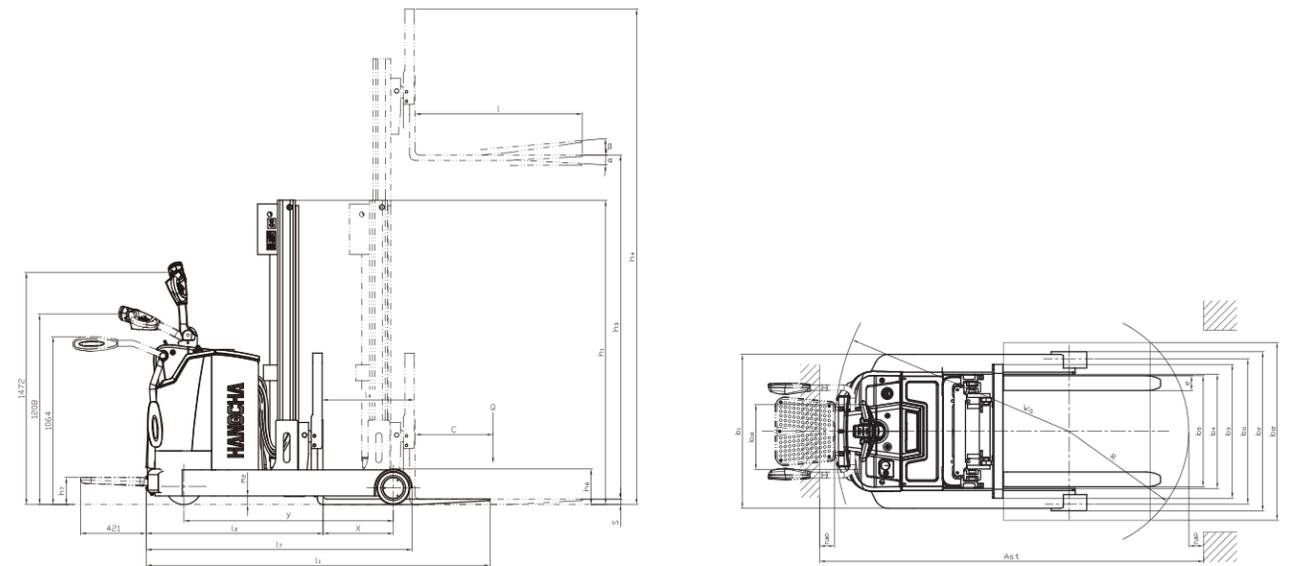
Multi-function tiller

## A Series High Range Stand-on Pallet Stacker With Mast Move

Distinguishing marks	HANGCHA GROUP CO.,LTD.					
	1.1	Manufacturer	CQDB12-AC15	CQDB16-AC15	CQDB20-AC15	
1.2	Manufacturer's type designation		CQDB12-AZ35	CQDB16-AZ35	CQDB20-AZ35	
1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	
1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Standing	Standing	Standing	
1.5	Rated capacity/rated load	Q(kg/lb)	1200/2646	1600/3527	2000/4409	
1.6	Load centre distance	c(mm/in)	500/20	500/20	500/20	
1.8	Load distance, centre of load axle to fork	x (mm/in)	450/18	450/18	450/18	
1.9	Wheelbase	y (mm/in)	1311/52	1311/52	1511/59	
Weight	2.1	Service weight	kg/lb	1800/3968	2000/4409	2200/4850
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane
3.2	Tyre size, front	mm/in	φ250×80/φ9.8×3.1	φ250×80/φ9.8×3.1	φ250×80/φ9.8×3.1	
3.3	Tyre size, rear	mm/in	φ210×85/φ8.3×3.3	φ210×85/φ8.3×3.3	φ210×85/φ8.3×3.3	
3.5	Wheels, number front/rear (*=driven wheels)		1*/2	1*/2	1*/2	
3.7	Tread, rear	b11 (mm/in)	981/39	981/39	981/39	
Dimensions	4.1	Tilt of fork carriage forward/backward/hpward	α/β(°)	3/5	3/5	3/5
	4.2	Height, mast lowered	h1 (mm/in)	1930/76	1930/76	2035/80
	4.4	Lift	h3 (mm/in)	2700/106	2700/106	2700/106
	4.5	Height, mast extended	h4 (mm/in)	3655/144	3655/144	3655/144
	4.8	Stand height	h7 (mm/in)	170/6.7	170/6.7	170/6.7
	4.10	Height of wheel arms	h8 (mm/in)	226/8.9	226/8.9	226/8.9
	4.19	Overall length	l1 (mm/in)	2202/86.7	2202/86.7	2412/95.0
	4.20	Length to face of forks	l2 (mm/in)	1132/44.6	1132/44.6	1342/52.8
	4.21	Overall width	b1/b2(mm)	1040/1074	1040/1074	1040/1074
			b1/b2(in)	40.9/42.3	40.9/42.3	40.9/42.3
	4.22	Fork dimensions	s/e/l (mm)	35/100/1070	35/100/1070	45/100/1070
			s/e/l (in)	1.4/3.9/42.1	1.4/3.9/42.1	1.8/3.9/42.1
	4.24	Fork-carriage width	b3 (mm/in)	902/35.5	902/35.5	902/35.5
	4.25	Distance between fork-arms	b5 (mm/in)	200-750/7.9-29.5	200-750/7.9-29.5	200-750/7.9-29.5
	4.26	Distance between wheel arms	b4 (mm/in)	772/30.4	772/30.4	772/30.4
	4.28	Reach distance	l4 (mm/in)	590/23.2	590/23.2	590/23.2
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	55/2.2	55/2.2	55/2.2
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm/in)	2617/103	2617/103	2817/111
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm/in)	2654/104	2654/104	2854/112
	4.35	Turning radius	Wa (mm/in)	1600/63.0	1600/63.0	1800/70.9
4.37	Length across wheel arms	l7 (mm/in)	1704/67.1	1704/67.1	1904/75.0	
Performance data	5.1	Travel speed, laden/unladen	kph	5.5/6.0	5.5/6.0	5.5/6.0
			mph	3.4/3.7	3.4/3.7	3.4/3.7
	5.2	Lift speed, laden/unladen	m/s	0.140/0.200	0.110/0.170	0.100/0.155
			ft/min	27.6/39.4	21.7/33.5	19.7/30.5
	5.3	Lowering speed, laden/unladen	m/s	0.190/0.155	0.175/0.130	0.175/0.130
			ft/min	37.4/30.5	34.4/25.6	34.4/25.6
5.4	Reaching speed, laden/unladen	m/s	0.100/0.100	0.100/0.100	0.100/0.100	
		ft/min	19.7/19.7	19.7/19.7	19.7/19.7	
5.8	Max.gradeability, laden/unladen	%	10/16	8/15	6/14	
5.10	Service brake		Electromagnetic braking	Electromagnetic braking	Electromagnetic braking	
Electric-engine	6.1	Drive motor rating S2 60 min	kW/hp	1.5/2.0	1.5/2.0	1.5/2.0
	6.2	Lift motor rating at S3 15%	kW/hp	3/4.0	3/4.0	3/4.0
	6.4	Battery voltage/nominal capacity K5	V/Ah	24/280	24/340	24/340
	6.5	Battery weight	kg/lb	250/551	280/617	280/617
Addition data	8.1	Type of drive control		AC CURTIS / AC ZAPI	AC CURTIS / AC ZAPI	AC CURTIS / AC ZAPI
	10.5	Steering design		EPS	EPS	EPS

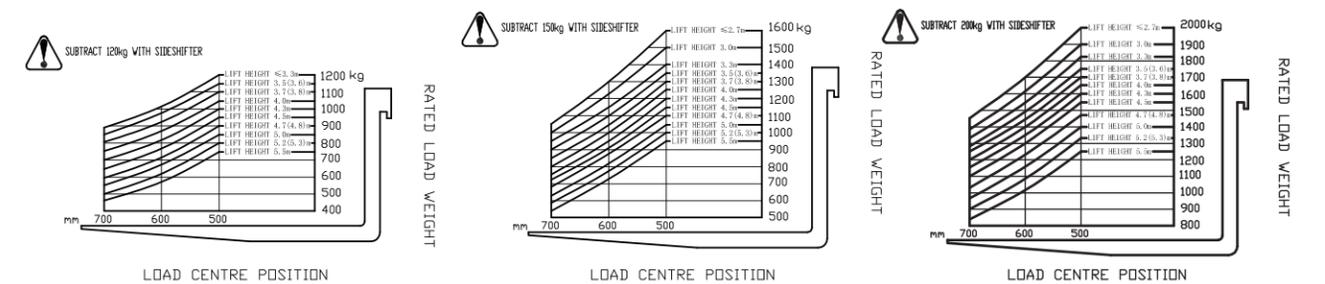
## 2.0t Mast specification

Type	Fork lift height h3	Mast lowered h1	Mast extended h4	Free lift height	Capacity	
					Load capacity at 500mm/19.7in	
	mm/in	mm/in	mm/in	mm/in	kg/lb	kg/lb
Wide view mast	2000/78.7	1685/66.3	2955/116.3	115/4.5	2000/4409	2000/4409
	2500/98.4	1935/76.2	3455/136.0	115/4.5	2000/4409	2000/4409
	2700/106.3	2035/80.1	3655/143.9	115/4.5	2000/4409	2000/4409
	3000/118.1	2185/86.0	3955/155.7	115/4.5	1900/4189	1900/4189
	3300/130.0	2335/91.9	4255/167.5	115/4.5	1820/4012	1820/4012
	3500/137.8	2435/95.9	4455/175.4	115/4.5	1750/3858	1750/3858
	3600/141.7	2485/97.8	4555/179.3	115/4.5	1750/3858	1750/3858
	3700/145.7	2535/99.8	4655/183.3	115/4.5	1700/3748	1700/3748
	3800/149.6	2585/101.8	4755/187.2	115/4.5	1700/3748	1700/3748
	4000/157.5	2785/109.6	4955/195.1	115/4.5	1650/3638	1650/3638
Wide view full free triplex mast	4300/169.3	2935/115.6	5255/206.9	115/4.5	1600/3527	1600/3527
	4500/177.2	3035/119.5	5455/214.8	115/4.5	1550/3417	1550/3417
	3500/137.8	1975/77.8	4455/175.4	1020/40.2	1750/3858	1750/3858
	3700/145.7	2040/80.3	4655/183.3	1085/42.7	1700/3748	1700/3748
	4000/157.5	2140/84.3	4955/195.1	1185/46.7	1650/3638	1650/3638
	4300/169.3	2240/88.2	5255/206.9	1285/50.6	1600/3527	1600/3527
	4500/177.2	2290/90.2	5455/214.8	1335/52.6	1550/3417	1550/3417
	4700/185.0	2390/94.1	5655/222.6	1435/56.5	1480/3263	1480/3263
	5000/196.9	2485/97.8	5965/234.8	1530/60.2	1400/3086	1400/3086
	5200/204.7	2540/100.0	6155/242.3	1585/62.4	1330/2932	1330/2932
	5500/216.5	2640/103.9	6455/254.1	1685/66.3	1250/2756	1250/2756



## 1.2t/1.6t Mast specification

Type	Fork lift height h3	Mast lowered h1	Mast extended h4	Free lift height	Capacity	
					Load capacity at 500mm/19.7in	
	mm/in	mm/in	mm/in	mm/in	1200kg/lb	1600kg/lb
Wide view mast	2000/78.7	1580/62.2	2955/116.3	105/4.1	1200/2646	1600/3527
	2500/98.4	1830/72.0	3455/136.0	105/4.1	1200/2646	1600/3527
	2700/106.3	1930/76.0	3655/143.9	105/4.1	1200/2646	1600/3527
	3000/118.1	2080/81.9	3955/155.7	105/4.1	1200/2646	1500/33.7
	3300/130.0	2230/87.8	4255/167.5	105/4.1	1200/2646	1400/3086
	3500/137.8	2330/91.7	4455/175.4	105/4.1	1150/2535	1350/2976
	3600/141.7	2380/93.7	4555/179.3	105/4.1	1150/2535	1350/2976
	3700/145.7	2430/95.7	4655/183.3	105/4.1	1100/2425	1300/2866
	3800/149.6	2480/97.6	4755/187.2	105/4.1	1100/2425	1300/2866
	4000/157.5	2680/105.5	4955/195.1	105/4.1	1050/2315	1250/2756
Wide view full free triplex mast	4300/169.3	2830/111.4	5255/206.9	105/4.1	1000/2205	1200/2646
	4500/177.2	2930/115.4	5455/214.8	105/4.1	950/2094	1150/2535
	3500/137.8	1875/73.8	4455/175.4	920/36.2	1150/2535	1350/2976
	3700/145.7	1940/76.4	4655/183.3	985/38.8	1100/2425	1300/2866
	4000/157.5	2040/80.3	4955/195.1	1085/42.7	1050/2315	1250/2756
	4300/169.3	2140/84.3	5255/206.9	1185/46.7	1000/2205	1200/2646
	4500/177.2	2190/86.2	5455/214.8	1235/48.6	950/2094	1150/2535
	4700/185.0	2290/90.2	5655/222.6	1335/52.6	900/1984	1100/2425
	5000/196.9	2390/94.1	5965/234.8	1435/56.5	850/1874	1050/2315
	5200/204.7	2440/96.1	6155/242.3	1485/58.5	800/1764	1000/2205
	5500/216.5	2540/100.0	6455/254.1	1585/62.4	750/1653	950/2094



# Walkie Stacker Series

The Walkie Reach, Straddle, or Counterbalance Stacker series can handle dock-to-stock and everything in between. The Hangcha Walkie Stacker product's advantageous head-length and multi-function, control handle with EPS (Electric Power Steering) system gives you incredible load handling control with excellent maneuverability. The standard creep speed feature can take your operator's materials handling capabilities to their full potential. The Walkie Stacker series can match your most demanding operational requirements.





## A Series Walkie Reach Stacker

with capacities of 3000lbs

The walkie reach stacker moves goods forward and backward with a scissor fork extension system.

It acts as a counterbalanced stacker when its fork is extended, which can handle non-standard pallets, enclosed pallets, and enclosed shelves easily; and acts as a straddle stacker when its fork is retracted, which can operate flexibly in narrow passage.

### High Performance

- / Standard configuration of EPS ( Electric Power Steering) offers easier and more flexible operation.
- / The AC travel motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The latest CURTIS AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS bus structure makes communication of the entire machine faster and more reliable.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Tiller, switches, plug connectors, meters, and other important parts are all of top brands in the world, with excellent performance and reliable quality.
- / Standard configuration of fork backward and forward tilt function, and load backrest realize safer loading and unloading of goods.

### Maintenance

- / The brushless, maintenance-free AC motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / Back cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine.



FREI multi-function tiller  
 1: Forks move forward / backward  
 2: Forks lifting / lowering  
 3: Forks tilt forward / backward



Travel speed is lowered automatically when fork is lifted to specified height



The structure of rotary load wheel offers the truck better passing ability



Mast tilting function is easy for entry in/out the pallet

## Reliability

- / Three-support-point and low-gravity-center design and the high-strength steel plate framed structure feature large residual load bearing capacity, and long service life.
- / All wires and cables have reliable protection, which increases reliability of electrical system significantly.
- / Non-contact proximity switch features long service life and reliable operation.
- / Power plug is fastened to truck body, which can avoid damage of plug due to impact when battery is lifted for installation.

## Safety

- / The function of lowering speed automatically as steering angle increases is a standard configuration.
- / Three types of braking function - release braking, reverse braking, and emergency braking - can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency reversing button at top of the tiller can avoid the driver from injury effectively in case of emergency during backward driving of the truck.
- / The function of intelligent declining buffer reduces lowering speed automatically when the fork is lowered to a height less than 3.9" from ground, which provides effective protection for goods.

## Comfort

- / All movements of the fork can be regulated with stepless speed, with more accurate operation and control, and more stable handling of goods.
- / Imported tiller has beautiful appearance, and function buttons for comfortable operation.
- / The standard configuration of creep speed driving function allows the truck to move at slow speed more conveniently, and can stack goods even in confined space.
- / Compact truck body and large rounded corner design make the truck suitable for operation in narrow space.
- / Battery side roll out can realize easy and fast replacement of battery (optional).

## Standard specification

- / AC drive motor
- / CURTIS AC drive motor controller + oil pump motor controller
- / EPS system
- / Automatic deceleration at turns
- / Proportional speed regulation for all fork operations
- / Multi-function battery condition meter
- / High-performance load wheels
- / Fork length 42"
- / Adjustable outer distance of forks within the range of 7.9-33.5"
- / Forward and backward tilt of the fork, by 3° and 5° respectively
- / Load backrest
- / 106.3" duplex mast with double lifting cylinders
- / Mast intelligent declining buffer
- / Multi-function tiller
- / Speed limit when fork is at elevated location
- / Horn
- / Key switch
- / Creep speed function
- / Emergency reverse
- / Forward extension distance of fork 23.2"

## Options

- / Mast of various heights (see mast parameter list for details)
- / Various fork lengths
- / Sideshifter
- / Battery side extraction
- / Freezer
- / Mast shield of PC plate



Model	CQDB14-AC1-JNA		
Voltage	V		24
Battery Compartment	"X" Max.	mm (in)	810(31.9)
	"Y" Max.	mm (in)	327(12.9)
	"Z" Max.	mm (in)	593(23.3)
Batt.Wt.	Maximum	Kg (lb)	500(1102)
	Minimum	Kg (lb)	400(882)

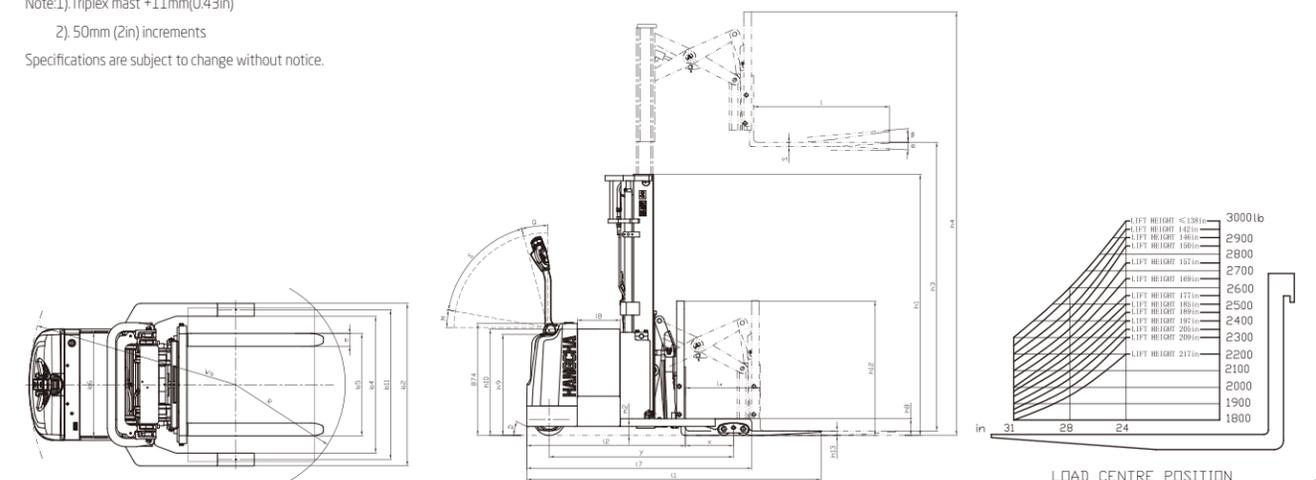
## A Series Walkie Reach Stacker Specification

		HANGCHA GROUP CO.,LTD.	
Distinguishing marks	1.1	Manufacturer	CQDB14-AC1-JNA
	1.2	Manufacturer's type designation	Battery
	1.3	Drive:electric(battery or mains),diesel,petrol,fuel gas	Walkie
	1.4	Operator type:hand,pedestrian,standing,seated,order-picker	1400/3000
	1.5	Rated capacity/rated load	600/24
	1.6	Load centre distance	379/15
	1.8	Load distance, centre of drive axle to fork	1451/57
	1.9	Wheelbase	
	Weights	2.1	Service Weight without battery
Wheels/ Chassis	3.1	Tyres:solid rubber,superelastic,pneumatic,polyurethane	PU
	3.2	Tyre size, front	Φ250×100 / Φ9.8×3.9
	3.3	Tyre size, rear	Φ100×70 / Φ3.9×2.8
	3.5	Wheels, number front / rear (x = driven wheels)	1×/4
	3.7	Tread, rear	b <sub>11</sub> (mm/in) 1170/46.1
Basic Dimensions	4.1	Tilt of mast forward/backward	α/β(°) 3/5
	4.2	Height,mast lowered	h <sub>1</sub> (mm/in) 2040/80.3
	4.4	Lift	h <sub>3</sub> (mm/in) 2700/106.3
	4.5	height, mast extended	h <sub>4</sub> (mm/in) 3752/147.7
	4.9	Height of tiller in drive position min./max.	h <sub>14</sub> (mm/in) 755/1475 (29.7/58.1)
	4.10	Height of wheel arms	h <sub>8</sub> (mm/in) 130/5.1
	4.15	Height, lowered	h <sub>13</sub> (mm/in) 35/1.4
	4.19	Overall length	l <sub>1</sub> (mm/in) 2323 <sup>1)</sup> /41.5 <sup>1)</sup>
	4.20	Length to face of forks	l <sub>2</sub> (mm/in) 1253 <sup>1)</sup> /49.3 <sup>1)</sup>
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm/in) 870/1270 (34.3/50)
	4.22	Fork dimensions	s/e/l (mm/in) 35/100/1070 (1.4/3.9/42.1)
	4.24	Fork-carriage width	b <sub>3</sub> (mm/in) 920/36.2
	4.25	Distance between fork-arms	b <sub>5</sub> (mm/in) 210~850 (8.3~33.5)
	4.26	Distance between wheel arms	b <sub>4</sub> (mm/in) 1070~1270 (42~50) <sup>2)</sup>
	4.28	Reach distance	l <sub>4</sub> (mm/in) 590/23.2
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in) 70/2.8
	4.35	Turning radius	W <sub>a</sub> (mm/in) 1632/64.3
	4.37	Length across wheel arms	l <sub>7</sub> (mm/in) 1777/69.96
		Battery compartment width	l <sub>8</sub> (mm/in) 340/13.4
		Battery compartment length	b <sub>6</sub> (mm/in) 817/32.2
		Battery floor Height w/optional rollers	mm/in 240/9.4
		Load backrest height	h <sub>12</sub> (mm/in) 1050/41.3
		Grade clearance	D(%) 46.57
	Top vertical braking Arc	Q(°) 15	
	Bottom braking Arc	M(°) 10	
	Handle Operating Arc	S(°) 65	
Performance Data	5.1	Travel speed, laden/unladen	kph(mph) 5.5/5.5 (3.4/3.4)
	5.2	Lift speed, laden/unladen	m/s(ft/min) 0.095/0.135 (18.66/26.58)
	5.3	Lowering speed, laden/unladen	m/s(ft/min) 0.190/0.150 (37.38/29.52)
	5.8	Max.gradeability, laden/unladen	% 8/13
	5.10	service brake	Electromagnetic braking
	Electric-motor	6.1	Drive motor rating S2 60 min.
6.2		Lift motor rating at S3 15%	kW/hp 3.0/4.0
6.4		Battery voltage/nominal capacity K5	V/Ah 24/525
		Minimum battery weight	kg/lb 400/882
		Maximum battery weight	kg/lb 500/1102
Others	8.1	Type of drive control	AC CURTIS
	10.5	Steering design	Electric power steering
	10.7	sound pressure level at the driver's seat	dB(A) 70

Note:1) Triplex mast +11mm(0.43in)

2) 50mm (2in) increments

Specifications are subject to change without notice.



Easy/  
Efficiency/  
Economy



### Mast Specification

Type	Fork lift height h <sub>3</sub>		Mast lowered h <sub>1</sub>		Mast extended h <sub>4</sub>		Free lift height		Capacity	
									Load capacity at 600mm/24in	
									CQDB14-AC1-JNA	
	mm	in	mm	in	mm	in	mm	in	kg	lb
Wide view mast	2500	98.4	1940	76.4	3552	139.8	95	3.7	1361	3000
	2700	106.3	2040	80.3	3752	147.7	95	3.7	1361	3000
	3000	118.1	2190	86.2	4052	159.5	95	3.7	1361	3000
	3300	129.9	2340	92.1	4352	171.3	95	3.7	1361	3000
	3500	137.8	2440	96.1	4552	179.2	95	3.7	1361	3000
	3600	141.7	2490	98.0	4652	183.1	95	3.7	1338	2950
	3700	145.7	2540	100.0	4752	187.1	95	3.7	1315	2900
	3800	149.6	2590	102.0	4852	191.0	95	3.7	1293	2850
	4000	157.5	2790	109.8	5052	198.9	95	3.7	1247	2750
	4300	169.3	2940	115.7	5352	210.7	95	3.7	1202	2650
Wide view full free triplex mast	4500	177.2	3040	119.7	5552	218.6	95	3.7	1157	2550
	3500	137.8	1975	77.8	4552	179.2	923	36.3	1361	3000
	3700	145.7	2040	80.3	4752	187.1	988	38.9	1315	2900
	4000	157.5	2140	84.3	5052	198.9	1088	42.8	1247	2750
	4300	169.3	2240	88.2	5352	210.7	1188	46.8	1202	2650
	4500	177.2	2290	90.2	5552	218.6	1238	48.7	1157	2550
	4700	185.0	2390	94.1	5752	226.5	1338	52.7	1134	2500
	5000	196.9	2490	98.0	6062	238.7	1438	56.6	1089	2400
	5200	204.7	2540	100.0	6252	246.1	1488	58.6	1066	2350
	5500	216.5	2640	103.9	6552	258.0	1588	62.5	998	2200

## A Series Walkie Straddle Stacker

with capacities of 2,500 to 4,000lbs

The walkie straddle stacker of American version is a new generation of products that are developed specially for North American market. This series consists of three models, which integrate features of existing products and stackers of American version of the company, with universal, optimal, and weight-based design, and can meet demands of North American market on functions. The state-of-the-art AC driving control technology is applied for the truck, which offers advanced performance, comfortable operation, safety and reliability, and low operation and maintenance cost. The stacker is an ideal tool for loading, unloading, and handling palletized goods in warehouse, supermarket, and workshop.



## Environment/ Efficiency/ Economy

### Appearance

- / Stacker of American Version is completed with specialized industrial design of appearance. The entire truck features smooth lines and affluent sense of movement, with full consideration to ergonomics, in accord with the latest appearance design trend.
- / It is manufactured with a number of steel plate stamping and injection molding technologies, solid and durable, in compliance with environmental requirements.



### High Performance

- / Standard configuration of EPS (Electric Power Steering) system of walkie straddle stacker offers easier and more flexible operation.
- / Stepless speed regulation for lifting and lowering is a standard configuration for full series of the stacker.
- / The AC travel motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The latest CURTIS AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS bus structure makes communication of the entire truck faster and more reliable.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Hydraulic power pack, switches, plug connectors, battery display, timer and other important parts are all of world-renowned brands.

### Comfort

- / The tiller is simple but beautiful, and function buttons are comfortable for operation.
- / Truck structure of optimized design guarantees terrific view for the operator, and easy entering and withdrawing from pallet.
- / Compact truck body and large rounded corner design make the truck suitable for operation in narrow space, and wedge-shaped design of chassis increases passing ability significantly.
- / Battery side roll out can realize easy and fast replacement of battery (optional).

### Reliability

- / Three-support-point and low-gravity-center design and the high-strength steel plate framed structure feature large residual load capacity, and long service life.
- / All wires and cables have reliable protection, which increases reliability of electrical system significantly.
- / Non-contact proximity switch features long service life and reliable operation.
- / The world-leading hydraulic power unit features low noise, small vibration, and stable and reliable rising and declining.
- / The mast is made of H-shaped steel channels, which offer better rigidity and stability in comparison with C-shaped steel channels.
- / Power plug is fastened to truck body, which can avoid damage of plug due to impact when battery is lifted for installation.
- / The structure of rotary load wheel offers the truck better passing ability.



The unique lighted creep speed driving function allows the truck to move at slow speed more conveniently



Outrigger between 38"-50"



Standard configuration of lifting and lowering stepless speed regulation realizes more accurate operation of the fork



The structure of rotary load wheel offers the truck better passing ability



## Standard specification

- / AC drive motor
- / CURTIS AC drive motor controller + oil pump motor controller
- / EPS system
- / Automatic deceleration at turns
- / Speed of lifting and lowering can all be regulated in proportion
- / Multi-function battery condition meter
- / Double high-performance load wheels
- / Fork length 42"
- / Adjustable outer distance of forks within the range of 8.3-31.1"
- / 106.3" duplex mast with double lifting cylinders
- / Mast intelligent declining buffer
- / Multi-function tiller
- / Speed limit when fork is at elevated location
- / Horn
- / Key switch
- / Creep speed function
- / Emergency reverse
- / Mast shield of wire mesh

## Safety

- / As a standard configuration, speed is lowered automatically when fork is lifted to specified height.
- / The function of lowering speed automatically as steering angle increases is a standard configuration.
- / Three types of braking function - release braking, reverse braking, and emergency braking - can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency reversing button at top of the tiller can avoid the driver from injury effectively in case of emergency during backward driving of the truck.
- / The function of intelligent declining buffer reduces lowering speed automatically when the fork is lowered to a height less than 3.9" from ground, which provides effective protection for goods.

## Maintenance

- / The brushless, maintenance-free AC motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / Design of open battery compartment allows easier replacement and maintenance of the battery.
- / Back cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire truck.

## Options

- / Various fork lengths
- / Load backrest (height 48")
- / Side battery extraction
- / Sideshifter
- / Freezer
- / Mast shield of PC plate
- / Mast of various heights



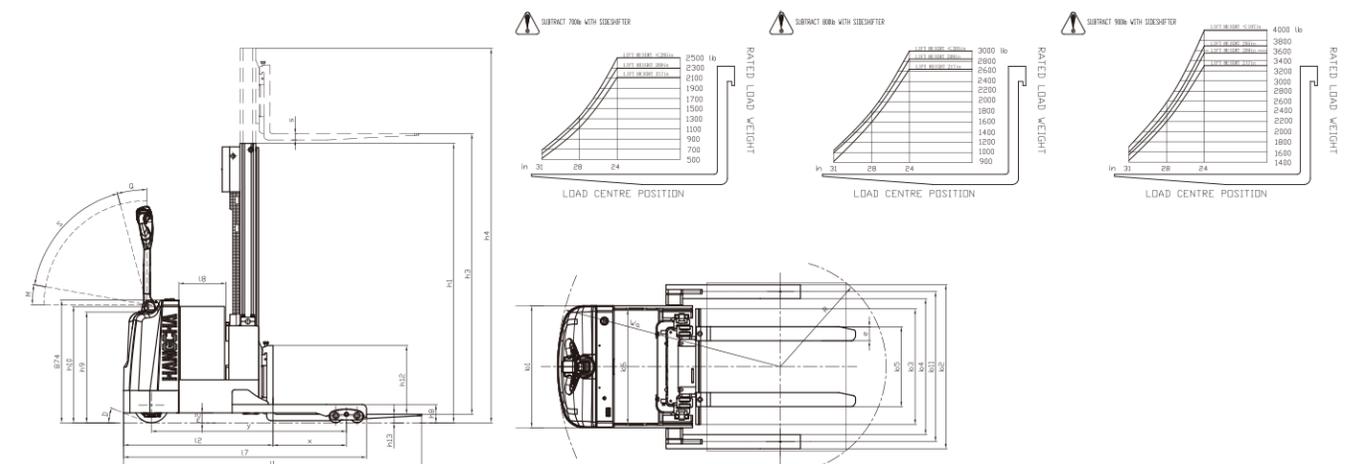
Model	CTD11-AC1-NA		CTD14/18-AC1-NA	
Voltage	V		24	
Battery Compartment	"X" Max.	mm (in)	806(31.7)	806(31.7)
	"Y" Max.	mm (in)	222(8.7)	330(13)
	"Z" Max.	mm (in)	593(23.3)	593(23.3)
Batt.Wt.	Maximum	Kg (lb)	300(660)	500(1102)
	Minimum	Kg (lb)	120(265)	150(330)

## A Series Walkie Straddle Stacker Specification

Distinguishing marks	HANGCHA GROUP CO.,LTD.					
	CTD11-AC1-NA	CTD14-AC1-NA	CTD18-AC1-NA			
1.1	Manufacturer					
1.2	Manufacturer's type designation					
1.3	Drive:electric(battery or mains),diesel,petrol,fuel gas					
1.4	Operator type:hand,pedestrian,standing,seated,order-picker					
1.5	Rated capacity/rated load	Q (kg/lb)	1100/2500	1400/3000	1800/4000	
1.6	Load centre distance	c(mm/in)	600/24	600/24	600/24	
1.8	Load distance, centre of drive axle to fork	x(mm/in)	567/22.3	546.5/21.5	546.5/21.5	
1.9	Wheelbase	y(mm/in)	1295/51.0	1405/55.3	1405/55.3	
2.1	Service Weight without battery	kg/lb	1080/2381	1118/2465	1143/2520	
Wheels/ Chassis	3.1	Tyres:solid rubber,superelastic,pneumatic,polyurethane				
	3.2	Tyre size, front	mm/in	Φ250×80	Φ250×80	Φ250×80
	3.3	Tyre size, rear	mm/in	Φ100×70	Φ100×70	Φ100×70
	3.5	Wheels, number front / rear (x = driven wheels)		1×/4	1×/4	1×/4
	3.6	Tread, front	b11 (mm/in)	1065/41.9	1065/41.9	1065/41.9
Basic Dimensions	4.2	Height,mast lowered	h1 (mm/in)	1887/74.3	1887/74.3	1992/78.4
	4.4	Lift	h3 (mm/in)	2700/106.3	2700/106.3	2700/106.3
	4.5	Height, mast extended	h4 (mm/in)	3207/126.3	3207/126.3	3312/130.4
	4.9	Height of tiller in drive position min./max.	h14 (mm/in)	790/1480 (31.1/58.3)	790/1480 (31.1/58.3)	790/1480 (31.1/58.3)
	4.10	Height of wheel arms	h8 (mm/in)	130/5.1	130/5.1	130/5.1
	4.15	Height, lowered	h13 (mm/in)	50/2.0	50/2.0	60/2.4
	4.19	Overall length	l1 (mm/in)	2016 <sup>1)</sup> /79.4 <sup>1)</sup>	2126 <sup>1)</sup> /83.7 <sup>1)</sup>	2146 <sup>1)</sup> /84.5 <sup>1)</sup>
	4.20	Length to face of forks	l2 (mm/in)	946 <sup>1)</sup> /37.2 <sup>1)</sup>	1056 <sup>1)</sup> /41.6 <sup>1)</sup>	1076 <sup>1)</sup> /42.4 <sup>1)</sup>
	4.21	Overall width	b1/b2 (mm/in)	870/1170 (34.3/46)	870/1170 (34.3/46)	870/1170 (34.3/46)
	4.22	Fork dimensions	s/e/l (mm/in)	35/100/1070(1.4/3.9/42.1)	35/100/1070(1.4/3.9/42.1)	45/100/1070(1.8/3.9/42.1)
	4.24	Fork-carriage width	b3(mm/in)	825/32.5	825/32.5	825/32.5
	4.25	Distance between fork-arms	b5 (mm/in)	210~790 (8.3~31.1)	210~790 (8.3~31.1)	210~790 (8.3~31.1)
	4.26	Distance between wheel arms	b4 (mm/in)	970~1270 (38~50) <sup>2)</sup>	970~1270 (38~50) <sup>2)</sup>	970~1270 (38~50) <sup>2)</sup>
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	70/2.8	70/2.8	70/2.8
	4.35	Turning radius	Wa (mm/in)	1495/58.9	1605/63.2	1605/63.2
	4.37	Length across wheel arms	l7 (mm/in)	1640/64.6	1750/68.9	1750/68.9
		Battery compartment width	l8 (mm/in)	230/9.0	340/13.4	340/13.4
		Battery compartment length	b6 (mm/in)	817/32.2	817/32.2	817/32.2
		Battery floor Height w/optional rollers	mm/in	240/9.4	240/9.4	240/9.4
		Grade clearance	D(%)	39.8	39.8	39.8
	Top vertical braking Arc	Q(°)	15	15	15	
	Bottom braking Arc	M(°)	10	10	10	
	Handle Operating Arc	S(°)	65	65	65	
Performance Data	5.1	Travel speed, laden/unladen	kph(mph)	5.5/5.5(3.4/3.4)	5.5/5.5(3.4/3.4)	5.5/5.5(3.4/3.4)
	5.2	Lift speed, laden/unladen	m/s(ft/min)	0.090/0.195(1.7/38.39)	0.133/0.243(26.18/47.83)	0.127/0.214(25/42.13)
	5.3	Lowering speed, laden/unladen	m/s(ft/min)	0.290/0.360(57.09/70.87)	0.295/0.350(58.07/68.90)	0.200/0.240(39.37/47.24)
	5.8	Max.gradeability, laden/unladen	%	8/16	7/14	6/14
	5.10	service brake		Electromagnetic braking	Electromagnetic braking	Electromagnetic braking
Electric-motor	6.1	Drive motor rating S2 60 min.	kw/hp	1.5/2.0	1.5/2.0	1.5/2.0
	6.2	Lift motor rating at S3 15%	kw/hp	2.2/2.95	3.2/4.29	3.2/4.29
	6.4	Battery voltage/nominal capacity K5	V/Ah	24/240	24/300	24/300
		Minimum battery weight	kg/lb	120/265	150/330	150/330
	Maximum battery weight	kg/lb	300/660	500/1102	500/1102	
Others	8.1	Type of drive control		AC CURTIS	AC CURTIS	AC CURTIS
	10.5	Steering design		Electric power steering	Electric power steering	Electric power steering
	10.7	sound pressure level at the driver's seat	dB(A)	70	70	70

Note:1) Triplex mast +21mm(0.83in)  
2) 50mm(2in) increments

Specifications are subject to change without notice.



## Mast Specification

Type	Fork lift height h <sub>3</sub>		Max. fork height (h <sub>3</sub> +h <sub>13</sub> )		Mast lowered h <sub>1</sub>		Mast extended h <sub>4</sub>		Free lift		Capacity Load capacity at 600mm/24in			
	mm	in	mm	in	mm	in	mm	in	mm	in	CTD11-AC1-NA		CTD14-AC1-NA	
											kg	lb	kg	lb
Wide view mast	2000	78.7	2050	80.7	1537	60.5	2507	98.7	110	4.3	1134	2500	1361	3000
	2500	98.4	2550	100.4	1787	70.4	3007	118.4	110	4.3	1134	2500	1361	3000
	2700	106.3	2750	108.3	1887	74.3	3207	126.3	110	4.3	1134	2500	1361	3000
	3000	118.1	3050	120.1	2037	80.2	3507	138.1	110	4.3	1134	2500	1361	3000
	3300	129.9	3350	131.9	2187	86.1	3807	149.9	110	4.3	1134	2500	1361	3000
	3500	137.8	3550	139.8	2237	88.1	4007	157.8	110	4.3	1134	2500	1361	3000
	3600	141.7	3650	143.7	2337	92.0	4107	161.7	110	4.3	1134	2500	1361	3000
	3700	145.7	3750	147.6	2387	94.0	4207	165.6	110	4.3	1134	2500	1361	3000
	3800	149.6	3850	151.6	2437	95.9	4307	169.6	110	4.3	1134	2500	1361	3000
	4000	157.5	4050	159.4	2637	103.8	4607	181.4	110	4.3	1134	2500	1361	3000
	4300	169.3	4350	171.3	2787	109.7	4907	193.2	110	4.3	1134	2500	1361	3000
4500	177.2	4550	179.1	2887	113.7	5107	201.1	110	4.3	1134	2500	1361	3000	
Wide view full free duplex mast	2000	78.7	2050	80.7	1595	62.8	2595	102.2	1050	41.3	1134	2500	1361	3000
	2500	98.4	2550	100.4	1845	72.6	3095	121.9	1300	51.2	1134	2500	1361	3000
	2700	106.3	2750	108.3	1945	76.6	3295	129.7	1400	55.1	1134	2500	1361	3000
	3000	118.1	3050	120.1	2095	82.5	3595	141.5	1550	61.0	1134	2500	1361	3000
	3300	129.9	3350	131.9	2245	88.4	3895	153.3	1700	66.9	1134	2500	1361	3000
	3500	137.8	3550	139.8	2345	92.3	4095	161.2	1800	70.9	1134	2500	1361	3000
Wide view full free triplex mast	3600	141.7	3650	143.7	2395	94.3	4195	165.2	1850	72.8	1134	2500	1361	3000
	3500	137.8	3550	139.8	1844	72.6	4214	165.9	1180	46.5	1134	2500	1361	3000
	3700	145.7	3750	147.6	1909	75.2	4409	173.6	1240	48.8	1134	2500	1361	3000
	4000	157.5	4050	159.4	2009	79.1	4709	185.4	1340	52.8	1134	2500	1361	3000
	4300	169.3	4350	171.3	2109	83.0	5009	197.2	1440	56.7	1134	2500	1361	3000
	4500	177.2	4550	179.1	2159	85.0	5159	203.1	1540	60.6	1134	2500	1361	3000
	4700	185.0	4750	187.0	2259	88.9	5459	214.9	1540	60.6	1134	2500	1361	3000
	5000	196.9	5050	198.8	2354	92.7	5744	226.1	1760	69.3	1134	2500	1361	3000
	5200	204.7	5250	206.7	2409	94.8	5909	232.6	1740	68.5	1134	2500	1361	3000
5500	216.5	5550	218.5	2509	98.8	6209	244.4	1850	72.8	962	2120	1202	2650	

## Mast Specification

Type	Fork lift height h <sub>3</sub>		Max. fork height (h <sub>3</sub> +h <sub>13</sub> )		Mast lowered h <sub>1</sub>		Mast extended h <sub>4</sub>		Free lift		Capacity Load capacity at 600mm/24in	
	mm	in	mm	in	mm	in	mm	in	mm	in	CTD18-AC1-NA	
											kg	lb
Wide view mast	2000	78.7	2060	81.1	1642	64.6	3612	142.2	120	4.7	1814	4000
	2500	98.4	2560	100.8	1892	74.5	3112	122.5	120	4.7	1814	4000
	2700	106.3	2760	108.7	1992	78.4	3312	130.4	120	4.7	1814	4000
	3000	118.1	3060	120.5	2142	84.3	3612	142.2	120	4.7	1814	4000
	3300	129.9	3360	132.3	2292	90.2	3912	154.0	120	4.7	1814	4000
	3500	137.8	3560	140.2	2392	94.2	4112	161.9	120	4.7	1814	4000
	3600	141.7	3660	144.1	2442	96.1	4212	165.8	120	4.7	1814	4000
	3700	145.7	3760	148.0	2492	98.1	4312	169.8	120	4.7	1814	4000
	3800	149.6	3860	152.0	2542	100.1	4412	173.7	120	4.7	1814	4000
	4000	157.5	4060	159.8	2742	108.0	4712	185.5	120	4.7	1814	4000
	4300	169.3	4360	171.7	2892	113.9	5012	197.3	120	4.7	1814	4000
4500	177.2	4560	179.5	2992	117.8	5212	205.2	120	4.7	1814	4000	
Wide view full free duplex mast	2000	78.7	2060	81.1	1700	66.9	2700	106.3	1060	41.7	1814	4000
	2500	98.4	2560	100.8	1950	76.8	3200	126.0	1310	51.6	1814	4000
	2700	106.3	2760	108.7	2050	80.7	3400	133.9	1410	55.5	1814	4000
	3000	118.1	3060	120.5	2200	86.6	3700	145.7	1560	61.4	1814	4000
	3300	129.9	3360	132.3	2350	92.5	4000	157.5	1710	67.3	1814	4000
	3500	137.8	3560	140.2	2450	96.5	4200	165.4	1810	71.3	1814	4000
Wide view full free triplex mast	3600	141.7	3660	144.1	2500	98.4	4300	169.3	1860	73.2	1814	4000
	3500	137.8	3560	140.2	1944	76.5	4314	169.8	1070	42.1	1814	4000
	3700	145.7	3760	148.0	2009	79.1	4509	177.5	1160	45.7	1814	4000
	4000	157.5	4060	159.8	2109	83.0	4809	189.3	1260	49.6	1814	4000
	4300	169.3	4360	171.7	2209	87.0	5109	201.1	1360	53.5	1814	4000
	4500	177.2	4560	179.5	2259	88.9	5259	207.0	1460	57.5	1814	4000
	4700	185.0	4760	187.4	2359	92.9	5559	218.9	1460	57.5	1814	4000
	5000	196.9	5060	199.2	2454	96.6	5844	230.1	1570	61.8	1814	4000
	5200	204.7	5260	207.1	2509	98.8	6009	236.6	1660	65.4	1678	3700
5500	216.5	5560	218.9	2609	102.7	6309	248.4	1760	69.3	1497	3300	



## A Series Walkie Counterbalanced Stacker

with capacities of 2,000 to 4,000lbs

The walkie counterbalanced stacker, in addition to all spaces where general stackers may be used, can also play its role in spaces where general stackers cannot be used because enclosed pallets are used, there has little clearance between ground and pallet, and/or has no clearance for leg extension under shelves. Cutting-edge AC driving control technology and electric power steering technology are applied for the truck, which offer excellent performance, comfortable operation, safety and reliability, and low operation and maintenance cost. The stacker is an ideal tool for loading, unloading, and handling palletized goods in warehouse, supermarket, and workshop.



## Environment/ Efficiency/ Economy

### Appearance

- / The stacker is completed with specialized industrial design of appearance. The entire truck features smooth lines and affluent sense of movement, with full consideration to ergonomics, in accord with the latest appearance design trend.
- / It is manufactured with a number of steel plate stamping and injection molding technologies, solid and durable, in compliance with environmental requirements.



### High Performance

- / Standard configuration of EPS (Electric Power Steering) offers easier and more flexible operation.
- / Stepless speed regulation for lifting, lowering, and tilting is a standard configuration.
- / The AC travel motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The cutting-edge CURTIS AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS bus structure makes communication of the entire machine faster and more reliable.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Standard configuration of forward and backward tilting function of gantry makes goods loading and unloading safer.

### Comfort

- / Standard configuration of lifting and lowering stepless speed regulation realizes more accurate operation of the fork, and smoother and steadier lifting and lowering of the load.
- / The operating tiller is simple but beautiful, and function buttons are comfortable for operation.
- / The unique lighted creep speed driving function allows the truck to move at slow speed more conveniently, and can stack goods even in confined space.
- / Truck structure of optimized design guarantees terrific view for the operator, and easy entering and withdrawing from pallet.
- / Compact truck body and large rounded corner design make the truck suitable for operation in narrow space. Side roll out battery can realize easy and fast replacement of battery (optional).

### Reliability

- / Three-support-point and low-gravity-center design and the high-strength steel plate framed structure feature large residual load bearing capacity, and long service life.
- / All wires and cables have reliable protection, which increases reliability of electrical system significantly.
- / Non-contact proximity switch features long service life and reliable operation.
- / The world-leading hydraulic power unit features low noise, small vibration, and stable and reliable rising and declining.
- / Power plug is fastened to truck body, which can avoid damage of plug due to impact when battery is lifted for installation.
- / The mast is made of H-shaped steel channels, which offer better rigidity and stability in comparison with C-shaped steel channels.



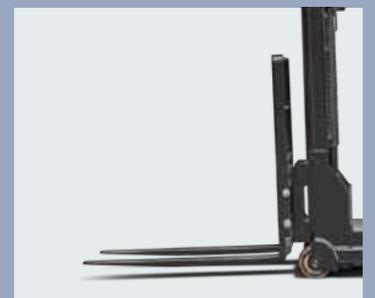
REMA tiller is simple but beautiful, and function buttons are comfortable for operation



Mast can offer better rigidity and stability in comparison with C-shaped steel channels



Mast tilting function is easy for entry in/out the pallet



Lowering speed will automatically reduced when the fork is lowered to a height less than 3.9" from ground



## Standard specification

- / AC drive motor
- / CURTIS AC drive motor controller + oil pump motor controller
- / EPS system
- / Automatic deceleration at turns
- / Speed of lifting, lowering, and tilting can all be regulated in proportion
- / Multi-function battery condition meter
- / High-performance load bearing wheels
- / Fork length 42"
- / Adjustable outer distance of forks within the range of 8.3-35.4"
- / Duplex 106.3" mast of double lifting cylinders
- / Mast intelligent declining buffer
- / Multi-function tiller
- / Speed limit when fork is at elevated location
- / Creep speed function
- / Emergency reverse
- / Horn
- / Forward and backward tilt of mast by 3° and 8° respectively
- / Load backrest
- / Mast shield of wire mesh

## Safety

- / As a standard configuration, speed is lowered automatically when fork is lifted to specified height.
- / The function of lowering speed automatically as steering angle increases is a standard configuration.
- / Three types of braking function - release braking, reverse braking, and emergency braking - can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency reversing button at top of the tiller can avoid the driver from injury effectively in case of emergency during backward driving of the truck.
- / The function of intelligent lowering buffer reduces lowering speed automatically when the fork is lowered to a height less than 3.9" from ground, which provides effective protection for goods.

## Maintenance

- / The brushless, maintenance-free AC motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / Back cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine.

## Options

- / Mast of various heights (see mast parameter list for details)
- / Various fork lengths
- / Mast shield of PC plate
- / Battery side extraction
- / Freezer
- / Side shift



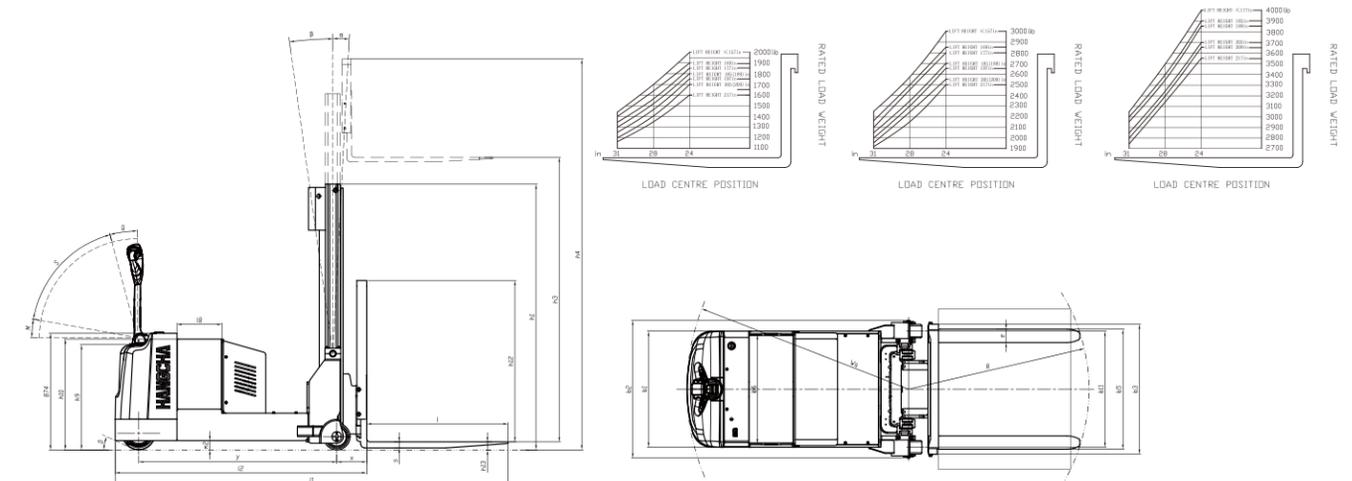
Model		CPDB09/14/18-AC1-NA	
Voltage		24	
Battery Compartment	"X" Max.	mm (in)	810(31.9)
	"Y" Max.	mm (in)	327(12.9)
	"Z" Max.	mm (in)	593(23.3)
Batt.Wt.	Maximum	Kg (lb)	500(1102)
	Minimum	Kg (lb)	400(882)

## A Series Walkie Counterbalanced Stacker Specification

Distinguishing marks	HANGCHA GROUP CO.,LTD.					
		CPDB09-AC1-NA	CPDB14-AC1-NA	CPDB18-AC1-NA		
1.1	Manufacturer	HANGCHA GROUP CO.,LTD.				
1.2	Manufacturer's type designation	CPDB09-AC1-NA	CPDB14-AC1-NA	CPDB18-AC1-NA		
1.3	Drive:electric(battery or mains),diesel,petrol,fuel gas	Battery				
1.4	Operator type:hand,pedestrian,standing,seated,order-picker	Walkie				
1.5	Rated capacity/rated load	Q (kg/lb)	900/2000	1400/3000	1800/4000	
1.6	Load centre distance	c (mm/in)	600/24	600/24	600/24	
1.8	Load distance, centre of drive axle to fork	x (mm/in)	216/8.5	216/8.5	226/8.9	
1.9	Wheelbase	y (mm/in)	1168	1330	1500	
Weights	2.1	Service Weight without battery	kg/lb	1750/3858	2140/4718	2460/5423
Wheels/Chassis	3.1	Tyres:solid rubber,superelastic,pneumatic,polyurethane	PU			
	3.2	Tyre size, front	mm/in	φ250×80 / φ9.5×3.1	φ250×100 / φ9.8×3.9	φ250×100 / φ9.8×3.9
	3.3	Tyre size, rear	mm/in	φ200×100 / φ7.9×3.9	φ200×100 / φ7.9×3.9	φ200×100 / φ7.9×3.9
	3.5	Wheels, number front / rear (x = driven wheels)		1×/2	1×/2	1×/2
	3.7	Tread, rear	b11 (mm/in)	870/34.3	870/34.3	870/34.3
Basic Dimensions	4.1	Tilt of mast forward/backward	α/β (°)	3/8	3/8	3/8
	4.2	Height,mast lowered	h1 (mm/in)	1887/74.3	1887/74.3	1992/78.4
	4.4	Lift	h3 (mm/in)	2700/106.3	2700/106.3	2700/106.3
	4.5	height, mast extended	h4 (mm/in)	3968/156.2	3968/156.2	3968/156.2
	4.9	Height of tiller in drive position min./max.	h14 (mm/in)	790/1480(31.1/58.3)	790/1480(31.1/58.3)	790/1480(31.1/58.3)
	4.15	Height, lowered	h13 (mm/in)	50/2.0	50/2.0	60/2.4
	4.19	Overall length	l1 (mm/in)	2654 <sup>1)</sup> /104.5 <sup>1)</sup>	2794 <sup>1)</sup> /110.1 <sup>1)</sup>	2974 <sup>1)</sup> /117.1 <sup>1)</sup>
	4.20	Length to face of forks	l2 (mm/in)	1584 <sup>1)</sup> /62.4 <sup>1)</sup>	1724 <sup>1)</sup> /67.9 <sup>1)</sup>	1904 <sup>1)</sup> /75.0 <sup>1)</sup>
	4.21	Overall width	b1/b2 (mm/in)	870/1030(34.3/40.6)	870/1030(34.3/40.6)	870/1030(34.3/40.6)
	4.22	Fork dimensions	s/e/l (mm/in)	35/100/1070(1.4/3.9/42.1)	35/100/1070(1.4/3.9/42.1)	45/100/1070(1.8/3.9/42.1)
	4.24	Fork-carriage width	b3 (mm/in)	974/38.3	974/38.3	974/38.3
	4.25	Distance between fork-arms	b5 (mm/in)	210~900(8.3~35.4)	210~900(8.3~35.4)	210~900(8.3~35.4)
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	70/2.8	70/2.8	70/2.8
	4.35	Turning radius	Wa (mm/in)	1368/53.9	1508/59.4	1678/66.1
		Battery compartment width	l6 (mm/in)	340/13.4	340/13.4	340/13.4
		Battery compartment length	b6 (mm/in)	818/32.2	818/32.2	818/32.2
		Battery floor Height w/optional rollers	mm/in	240/9.4	240/9.4	240/9.4
		Load backrest height	h12 (mm/in)	1233/48.5	1233/48.5	1233/48.5
		Grade clearance	D (%)	39.75	46.57	46.57
		Top vertical braking Arc	Q (°)	15	15	15
	Bottom braking Arc	M (°)	10	10	10	
	Handle Operating Arc	S (°)	65	65	65	
Performance Data	5.1	Travel speed, laden/unladen	kph (mph)	5.5/5.5(3.4/3.4)	5.5/5.5(3.4/3.4)	5.5/5.5(3.4/3.4)
	5.2	Lift speed, laden/unladen	m/s (ft/min)	0.150/0.240(29.53/47.24)	0.140/0.230(27.56/45.28)	0.125/0.216(24.61/42.52)
	5.3	Lowering speed, laden/unladen	m/s (ft/min)	0.220/0.250(43.31/49.21)	0.210/0.240(41.34/47.24)	0.210/0.240(41.34/47.24)
	5.8	Max.gradeability, laden/unladen	%	7/10	7/10	6/10
	5.10	service brake		Electromagnetic braking	Electromagnetic braking	Electromagnetic braking
Electric-motor	6.1	Drive motor rating S2 60 min.	kw/hp	1.5/2.0	3/4.0	3/4.0
	6.2	Lift motor rating at S3 15%	kw/hp	2.2/2.95	3.2/4.29	3.2/4.29
	6.4	Battery voltage/nominal capacity K5	V/Ah	24/525	24/525	24/525
		Minimum battery weight	kg/lb	400/882	400/882	400/882
	Maximum battery weight	kg/lb	500/1102	640/1411	500/1102	
Others	8.1	Type of drive control		AC CURTIS	AC CURTIS	AC CURTIS
	10.5	Steering design		Electric power steering	Electric power steering	Electric power steering
	10.7	sound pressure level at the driver's seat	dB(A)	70	70	70

Note:1),Triplex mast +21mm(0.83in)

Specifications are subject to change without notice.

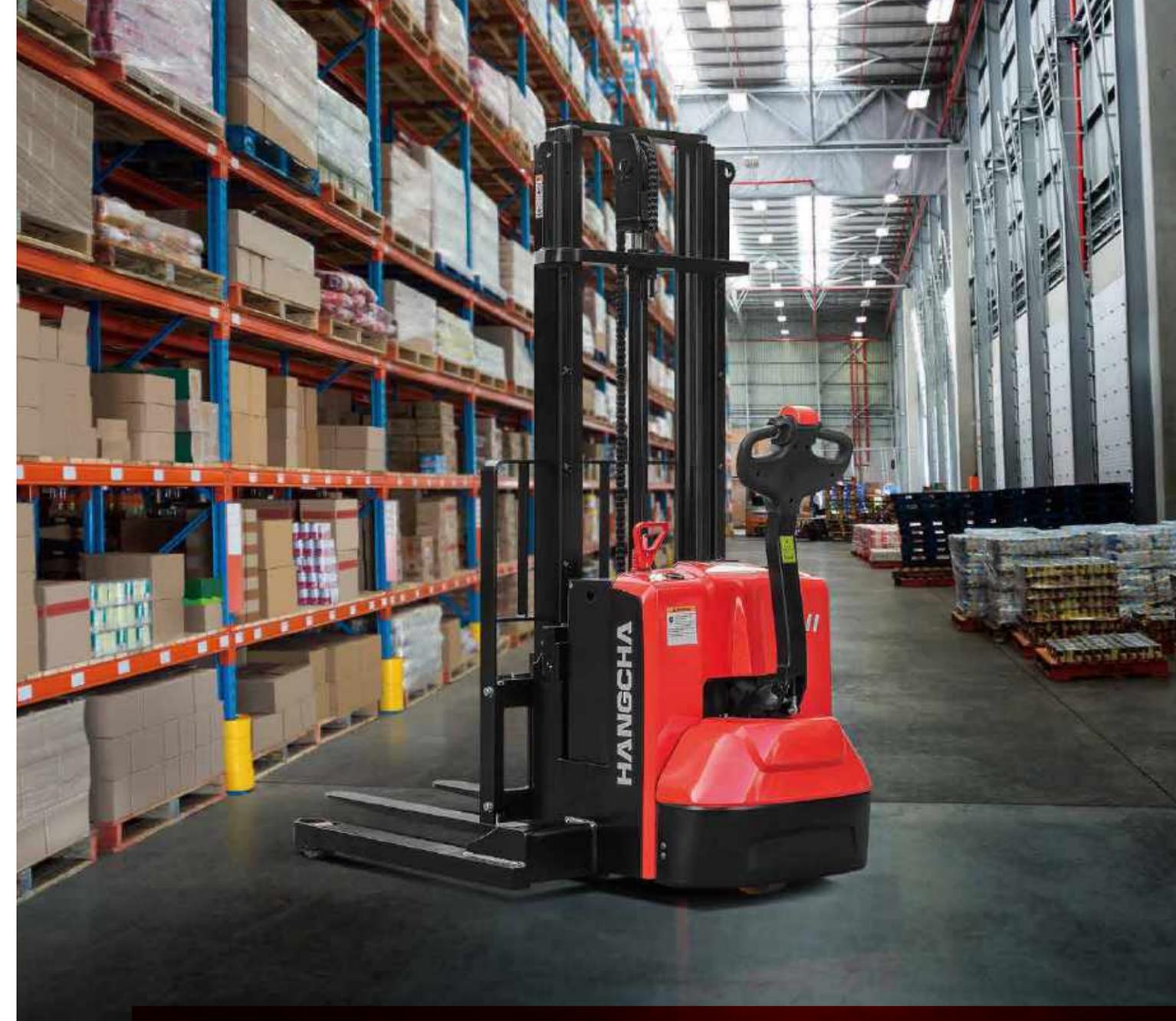


## Mast Specification

Type	Fork lift height h <sub>3</sub>		Max. fork height (h <sub>3</sub> +h <sub>13</sub> )		Mast lowered h <sub>1</sub>		Mast extended h <sub>4</sub>		Free lift		Capacity Load capacity at 600mm/24in			
	mm	in	mm	in	mm	in	mm	in	mm	in	CPDB09-AC1-NA		CPDB14-AC1-NA	
											kg	lb	kg	lb
Wide view mast	2000	78.7	2050	80.7	1537	60.5	3268	128.7	110	4.3	907	2000	1361	3000
	2500	98.4	2550	100.4	1787	70.4	3768	148.3	110	4.3	907	2000	1361	3000
	2700	106.3	2750	108.3	1887	74.3	3968	156.2	110	4.3	907	2000	1361	3000
	3000	118.1	3050	120.1	2037	80.2	4268	168.0	110	4.3	907	2000	1361	3000
	3300	129.9	3350	131.9	2187	86.1	4568	179.8	110	4.3	907	2000	1361	3000
	3500	137.8	3550	139.8	2287	90.0	4768	187.7	110	4.3	907	2000	1361	3000
	3600	141.7	3650	143.7	2337	92.0	4868	191.7	110	4.3	907	2000	1361	3000
	3700	145.7	3750	147.6	2387	94.0	4968	195.6	110	4.3	907	2000	1361	3000
	3800	149.6	3850	151.6	2437	95.9	5068	199.5	110	4.3	907	2000	1361	3000
	4000	157.5	4050	159.4	2637	103.8	5268	207.4	110	4.3	907	2000	1361	3000
Wide view full free duplex mast	2000	78.7	2050	80.7	1595	62.8	3268	128.7	1035	40.7	907	2000	1361	3000
	2500	98.4	2550	100.4	1845	72.6	3768	148.3	1285	50.6	907	2000	1361	3000
	2700	106.3	2750	108.3	1945	76.6	3968	156.2	1385	54.5	907	2000	1361	3000
	3000	118.1	3050	120.1	2095	82.5	4268	168.0	1535	60.4	907	2000	1361	3000
	3300	129.9	3350	131.9	2245	88.4	4568	179.8	1685	66.3	907	2000	1361	3000
	3500	137.8	3550	139.8	2345	92.3	4768	187.7	1785	70.3	907	2000	1361	3000
	3600	141.7	3650	143.7	2395	94.3	4868	191.7	1835	72.2	907	2000	1361	3000
	3500	137.8	3550	139.8	1844	72.6	4768	187.7	1165	45.9	907	2000	1361	3000
	3700	145.7	3750	147.6	1909	75.2	4968	195.6	1235	48.6	907	2000	1361	3000
	4000	157.5	4050	159.4	2009	79.1	5268	207.4	1335	52.6	907	2000	1361	3000
Wide view full free triplex mast	4300	169.3	4350	171.3	2109	83.0	5568	219.2	1435	56.5	862	1900	1293	2850
	4500	177.2	4550	179.1	2159	85.0	5768	227.1	1535	60.4	839	1850	1270	2800
	4700	185.0	4750	187.0	2259	88.9	5968	235.0	1590	62.6	816	1800	1225	2700
	5000	196.9	5050	198.8	2354	92.7	6268	246.8	1700	66.9	794	1750	1202	2650
	5200	204.7	5250	206.7	2409	94.8	6468	254.6	1790	70.5	771	1700	1157	2550
	5500	216.5	5550	218.5	2509	98.8	6768	266.5	1890	74.4	726	1600	1134	2500

## Mast Specification

Type	Fork lift height h <sub>3</sub>		Max. fork height (h <sub>3</sub> +h <sub>13</sub> )		Mast lowered h <sub>1</sub>		Mast extended h <sub>4</sub>		Free lift		Capacity Load capacity at 600mm/24in	
	mm	in	mm	in	mm	in	mm	in	mm	in	CPDB18-AC1-NA	
											kg	lb
Wide view mast	2000	78.7	2060	81.1	1642	64.6	3268	128.7	120	4.7	1814	4000
	2500	98.4	2560	100.8	1892	74.5	3768	148.3	120	4.7	1814	4000
	2700	106.3	2760	108.7	1992	78.4	3968	156.2	120	4.7	1814	4000
	3000	118.1	3060	120.5	2142	84.3	4268	168.0	120	4.7	1814	4000
	3300	129.9	3360	132.3	2292	90.2	4568	179.8	120	4.7	1814	4000
	3500	137.8	3560	140.2	2392	94.2	4768	187.7	120	4.7	1814	4000
	3600	141.7	3660	144.1	2442	96.1	4868	191.7	120	4.7	1814	4000
	3700	145.7	3760	148.0	2492	98.1	4968	195.6	120	4.7	1814	4000
	3800	149.6	3860	152.0	2542	100.1	5068	199.5	120	4.7	1814	4000
	4000	157.5	4060	159.8	2742	108.0	5268	207.4	120	4.7	1814	4000
Wide view full free duplex mast	4300	169.3	4360	171.7	2892	113.9	5568	219.2	120	4.7	1814	4000
	4500	177.2	4560	179.5	2992	117.8	5768	227.1	120	4.7	1814	4000
	2000	78.7	2060	81.1	1700	66.9	3268	128.7	1045	41.1	1814	4000
	2500	98.4	2560	100.8	1950	76.8	3768	148.3	1295	51.0	1814	4000
	2700	106.3	2760	108.7	2050	80.7	3968	156.2	1395	54.9	1814	4000
	3000	118.1	3060	120.5	2200	86.6	4268	168.0	1545	60.8	1814	4000
	3300	129.9	3360	132.3	2350	92.5	4568	179.8	1695	66.7	1814	4000
	3500	137.8	3560	140.2	2450	96.5	4768	187.7	1795	70.7	1814	4000
	3600	141.7	3660	144.1	2500	98.4	4868	191.7	1845	72.6	1814	4000
	3500	137.8	3560	140.2	1944	76.5	4768	187.7	1175	46.3	1814	4000
Wide view full free triplex mast	3700	145.7	3760	148.0	2009	79.1	4968	195.6	1290	50.8	1814	4000
	4000	157.5	4060	159.8	2109	83.0	5268	207.4	1390	54.7	1814	4000
	4300	169.3	4360	171.7	2209	87.0	5568	219.2	1490	58.7	1814	4000
	4500	177.2	4560	179.5	2259	88.9	5768	227.1	1590	62.6	1814	4000
	4700	185.0	4760	187.4	2359	92.9	5968	235.0	1600	63.0	1769	3900
	5000	196.9	5060	199.2	2454	96.6	6268	246.8	1610	63.4	1724	3800
	5200	204.7	5260	207.1	2509	98.8	6468	254.6	1700	66.9	1678	3700
	5500	216.5	5560	218.9	2609	102.7	6768	266.5	1800	70.9	1610	3550



## A Series Mini Walkie Straddle Pallet Stacker

with capacities of 2,500lbs

A series walkie straddle pallet stacker is newly developed logistics handling equipment developed by Hangcha for the North American market. The AC drive control technology provides advanced performance, comfortable operation, safe and reliable, low maintenance costs. It can be use for loading and unloading in warehouses, supermarkets and workshops.



## Appearance

- / A series walkie straddle pallet stacker applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes for front and back guard, which is robust, durable, and also environmental compliance.

## Performance

- / AC travelling motor applied to provide excellent acceleration, good gradeability, low heat, no carbon brush and maintenance free.
- / The latest CURTIS AC control system provides accurate and stable control to work more efficient.
- / The applied CAN-BUS structure can offer more reliable and faster command access.
- / Regenerative brake and slope anti-slide function are offered by this truck.

## Reliability

- / Water-proof plugs and connectors applied to provide a reliable protection to electric system.
- / Using non-contact proximity switch, it can provides long life and reliable operation.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch-formed forks to provide more strength and tip guide to provide higher efficient operation.
- / The power plug (Andersen) is fixed on the truck body to avoid damage from battery installment.

## Comfort

- / Simple and beautiful tiller designed to operate all functions easily even by one hand.
- / Displayed turtle speed function applied to move slowly and helps to stack goods in narrow spaces.
- / Turtle speed function can keep the slow move when the tiller is vertical direction, the truck can stack goods even in narrow space.
- / Optimized design structure to offer a good visibility and easy entrance of the pallet.



Built-in charger and maintenance free battery



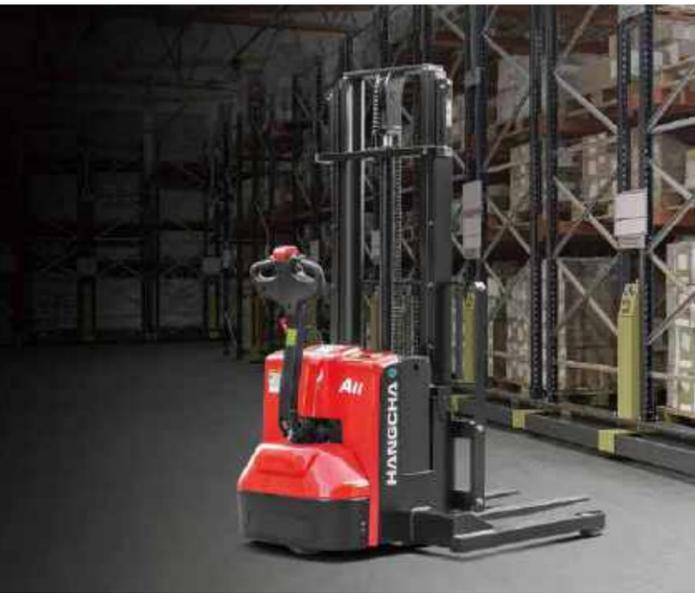
The compact body and big rounded design provide an ideal operation in limited space, and the wedge designed chassis greatly increases the passing ability



Pump motor controller offers proportional lowering, it can provide low noise, precise control and stable lower good



Fixed Straddle Baselegs ( Inside Dimension in 4" increments from 38" to 50"); Adjustable baseleg optional to fit a wide range of pallet sizes



## Standard features

- / 24 volt electrical system
- / CAN BUS communication
- / Curtis AC Controller
- / 7.8" Battery Compartment
- / PU drive tire
- / Maintenance-Free battery 150Ah
- / Built-in charger
- / SB-175 battery connector (red)
- / Battery disconnect handle
- / Key switch
- / Multi-function meter
- / Electric horn
- / Upright-tiller creep speed running
- / PU load wheel
- / Single load wheel
- / Load Backrest height 40"

## Safety

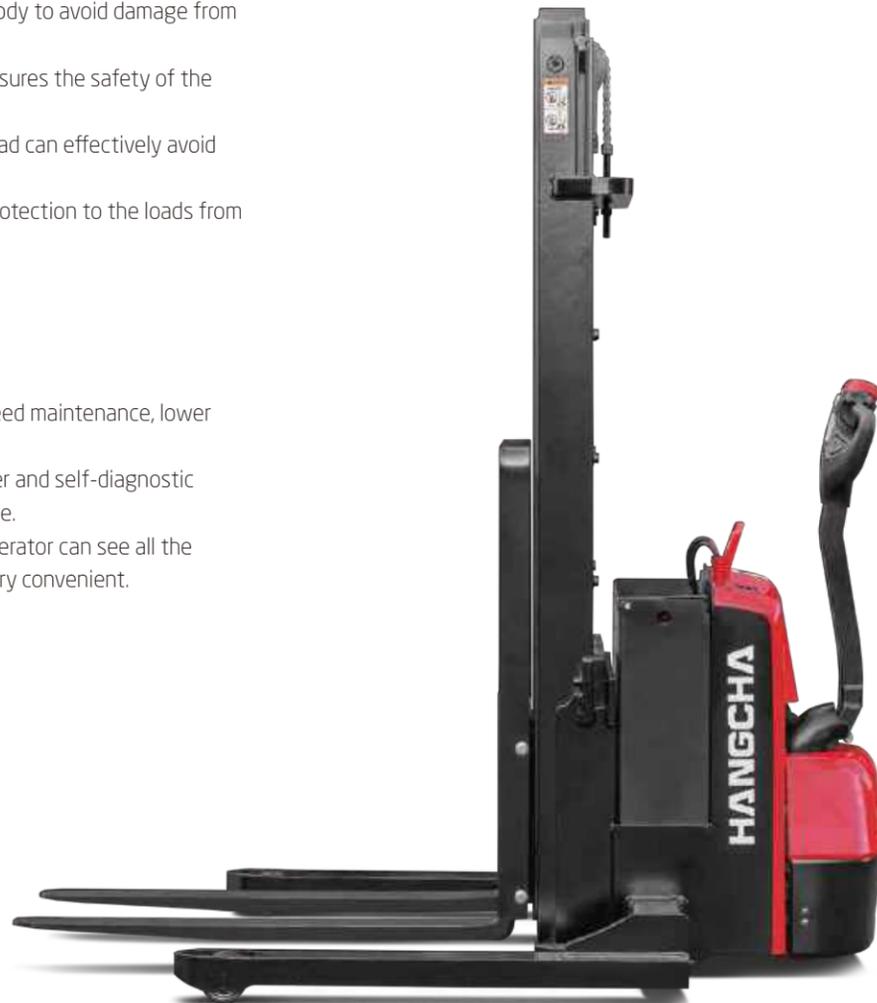
- / Travel speed will be automatically reduced after fork lifting 500mm.
- / The power plug is fixed on the truck body to avoid damage from battery installment.
- / The applied slope anti-slip function ensures the safety of the operation.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / Soft landing system applied to offer protection to the loads from damaging.

## Maintenance

- / AC motor with no cabin brush, don't need maintenance, lower cost.
- / Integrated battery indicator, hour meter and self-diagnostic instrument are all easy for maintenance.
- / Rear cover can be completely open, operator can see all the components, so the maintenance is very convenient.

## Optional equipment

- / Maintenance-Free battery 225Ah
- / Industrial battery 240Ah
- / Load Backrest
- / PIN code access
- / Adjustable-width base legs
- / 2-Stage Mast 78-141in(2-3.6m)
- / Mast shield of PC plate



## A Series Mini Walkie Straddle Pallet Stacker Specification

		HANGCHA GROUP CO.,LTD.	
Distinguishing mark	1.1	Manufacturer	HCFA Model
	1.2	Manufacturer's type designation	WSS11M
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	CTD11-AC1-2NA
	1.5	Rated capacity/rated load	Q (kg/lb)
	1.6	Load centre distance	c (mm/in)
	1.8	Load distance, centre of drive axle to fork	x (mm/in)
	1.9	Wheelbase	y (mm/in)
Weight	2.1	Service Weight Without Battery	kg/lb
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	PU
	3.2	Tyre size, front	mm/in
	3.3	Tyre size, rear	mm/in
	3.4	Additional wheel (dimensions)	mm/in
	3.5	Wheels, number front / rear (x = driven wheels)	
	3.6	Tread, front	b10 (mm/in)
	3.7	Tread, rear	b11 (mm/in)
Dimensions	4.2	Height,mast lowered	h1 (mm/in)
	4.4	Lift	h3 (mm/in)
	4.5	Height,mast extended	h4 (mm/in)
	4.10	Height of wheel arms	h8 (mm/in)
	4.15	Fork height,lowered	h13 (mm/in)
	4.19	Overall length	l1 (mm/in)
	4.20	Length to face of forks	l2 (mm/in)
	4.21	Overall width	b1/b2(mm/in)
	4.22	Fork dimensions	s/e/l (mm/in)
	4.25	Distance between fork-arms	b5 (mm/in)
	4.26	Distance between wheel arms	b4 (mm/in)
Performance data	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)
	4.35	Turning radius	Wa (mm/in)
	4.37	Length across wheel arms	l7 (mm/in)
	5.1	Travel speed,laden/unladen	kph(mph)
	5.2	Lift speed,laden/unladen	m/s(ft/min)
	5.3	Lowering speed,laden/unladen	m/s(ft/min)
	5.8	Max Gradeability,laden/unladen	%
Electric-engine	6.1	Drive motor rating S2 60 min	kw/hp
	6.2	Lift motor rating at S3 5%	kw/hp
	6.4	Battery voltage,rated capacity	V/Ah
8.1	Type of drive control		
9.1	Manufacturer		

## Mast

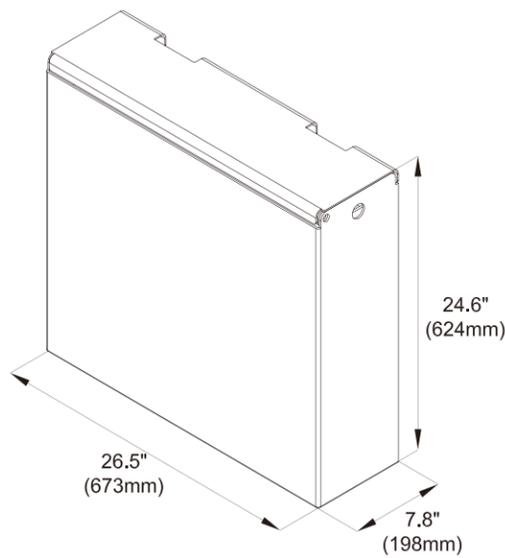
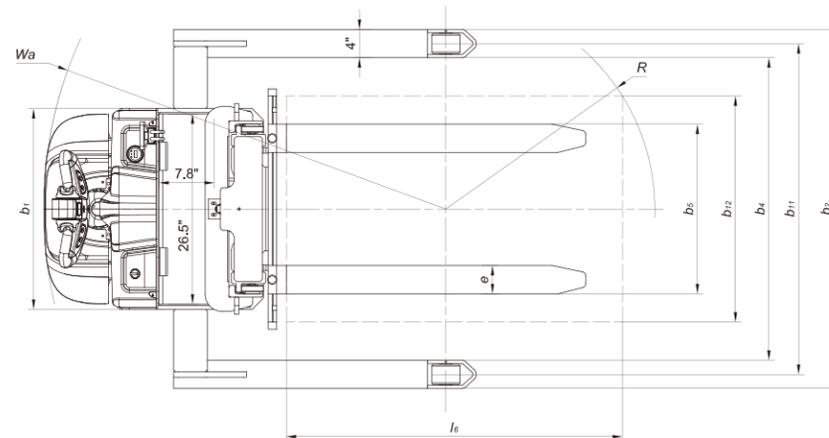
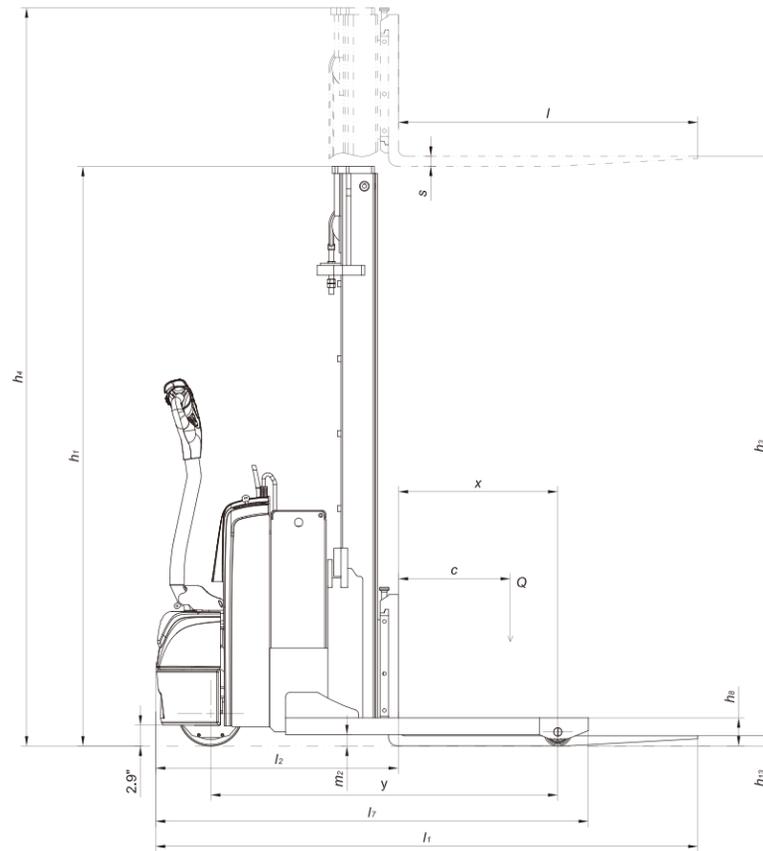
Mast type	Max. lifting height h3		Ground clearance,fork (h3+h13)		Lowered height h1		Extended height h4 without load backrest		Free lift		Load capacity at 600mm	
	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
Single cylinder Duplex mast	2000	78	2035	80	1550	61	2550	100	135	5.3	1135	2500
	2500	98	2535	100	1800	71	3050	120	135	5.3	1135	2500
	2700	106	2735	108	1900	75	3250	128	135	5.3	1135	2500
	3000	118	3035	119	2050	81	3550	140	135	5.3	1000	2200
	3300	130	3335	131	2200	87	3850	152	135	5.3	907	2000
	3500	137	3535	139	2385	94	4135	163	135	5.3	816	1800
Single cylinder Full-free mast	3600	141	3635	143	2435	96	4235	167	135	5.3	725	1600
	2500	98	2535	100	1800	71	3050	120	724	28.5	1135	2500
	2700	106	2735	108	1900	75	3250	128	824	32.4	1135	2500
	3000	118	3035	119	2050	81	3550	140	974	38.3	1000	2200
	3300	130	3335	131	2200	87	3850	152	1124	44.2	907	2000
Single-stage mast	3500	137	3535	139	2385	94	4135	163	1309	51.5	816	1800
	3600	141	3635	143	2435	96	4235	167	1359	53.5	725	1600
	1350	53	1385	54.5	1900	75	1915	75.4	825	32.5	1135	2500
	1500	59	1535	60.4	2050	81	2065	81.3	975	38.4	1135	2500
	1750	69	1785	70.2	2385	94	2400	94.5	1310	51.8	1135	2500

## Aisle Guide

### Aisle requirement-right angle stack<sup>①</sup>

Load width	Load length					
	in(mm)	36(914)	40(1016)	42(1067)	44(1117)	48(1219)
30(762)	in(mm)	79.7(2024)	79.7(2024)	81.2(2063)	82.8(2103)	86.2(2189)
32(813)	in(mm)	79.7(2024)	80.4(2041)	81.9(2080)	83.4(2119)	86.8(2204)
36(914)	in(mm)	79.7(2024)	81.7(2075)	83.1(2112)	84.6(2149)	87.8(2230)
40(1016)	in(mm)	81.7(2074)	83.1(2112)	84.5(2147)	85.9(2183)	89.0(2261)
42(1067)	in(mm)	81.7(2074)	83.9(2132)	85.3(2166)	86.6(2200)	89.6(2276)
44(1117)	in(mm)	83.6(2123)	84.7(2151)	86.0(2184)	87.3(2218)	90.3(2293)
48(1219)	in(mm)	85.6(2173)	86.3(2192)	87.5(2223)	88.8(2255)	91.6(2327)

①Add a minimum of 12in (300mm) for maneuverability.



## A Series Mini Range Pallet Stacker With Initial Lift

with capacities of 1,000 to 1,200kg

The A series mini range pallet stacker with initial lift is a new product developed by Hangcha for warehousing and logistics applications. It has a compact body, and can be operated easily and is suitable for operation in narrow aisles. It can carry out double pallet handling through leg lifting and is ideal for loading in warehouses, supermarkets, and workshops.

## Appearance

- / The A series mini range pallet stacker with initial lift adopts a professional industrial design of appearance.
- / Applied steel stamping and injection molding processes, which is robust, durable, and also environmental compliance.

## Performance

- / The stacker can meet most needs of customers with its high power.
- / Powered by traction motor not only has good acceleration and perfect performance, but also low heat.
- / Latest CURTIS control system, precise and smooth.
- / Regenerative braking for battery recovery during travel speed reduction, anti-slope on gradient.

## Maintenance

- / Built-in charger and maintenance free gel battery, you don't need to worry about them.
- / Maintenance-free AC motor can reduce the cost significantly.
- / Integrated battery indicator, hour meter and self-diagnostic instrument.
- / Full opened rear hood, easy accessibility of all components, is easy for service.
- / All shafts installed lubricated shaft sleeve and oil cup, provide convenient maintenance and long service life.

## Reliability

- / With a high-strength steel frame structure, the vehicle frame has a large residual load capacity and a long service life.
- / 4-pivot design provide longer working life.
- / Imported waterproof connectors, all wires and cables are protected, greatly improve the reliability of the electric system.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / The hydraulic unit and the vehicle frame are flexibly connected so that the vibration transmitted from the road surface to the hydraulic unit can be absorbed and the reliability of the hydraulic unit is improved.
- / Punch formed forks to provide more strength and tip guide to provide higher efficient operation.

## Safety

- / Three braking system of regenerative braking, reverse current braking, parking brake, insures the safe operation.
- / Anti-slope on gradient can keep the safety.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / The standard equipped electronic lifting limitation protect the pump motor from damaging dramatically and more energy saving.

## Comfort

- / Optimized designing structure to offer a good visibility and easy entrance of the pallet.
- / The compact body and semicircular design provide an ideal operation in limited space, and the ability of walking upright greatly increases the convenience in the container.

## Standard specification

- / AC traction motor
- / CURTIS controller
- / Hydraulic power unit
- / Multi-function battery indicator
- / Polyurethane tyre
- / 1150mm fork length
- / 560mm outside fork width
- / Horn
- / Maintenance-free battery
- / Built-in charger
- / Multi-function tiller
- / Emergency switch

## Options

- / Lift height: 2.0~3.6m
- / 680mm outside fork width
- / Cold storage
- / PC board



The pallet stacker with initial lift provides higher efficiency and better passing ability



Optimized designing structure to offer a good visibility and easy entrance to the pallet



Built-in charger and maintenance free gel battery adopted to provide convenient usage



Simple and beautiful tiller designed to improve the operator's driving comfort

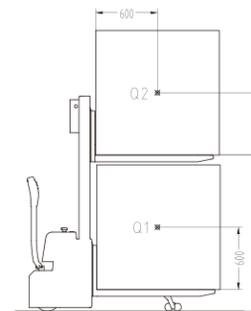
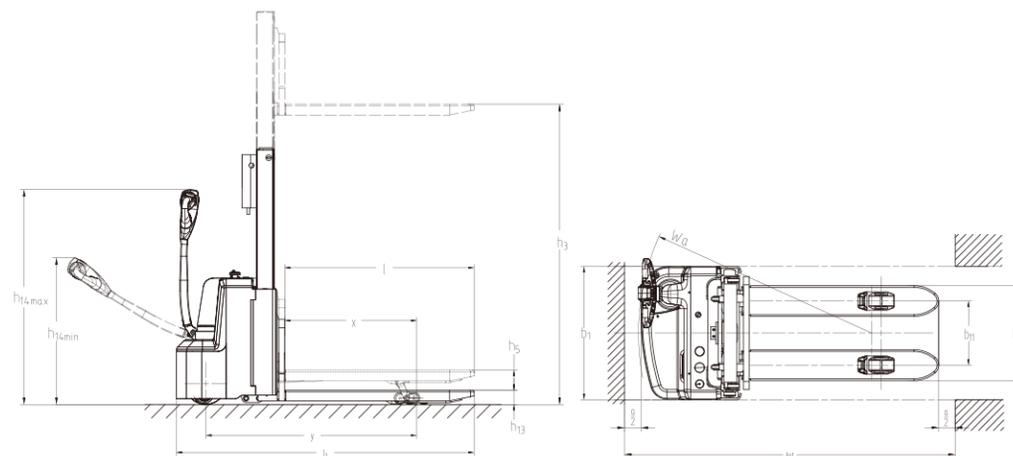
## A Series Mini Range Pallet Stacker With Initial Lift Specification

Distinguishing mark	HANGCHA GROUP CO.,LTD.			
	1.1	Manufacturer		
1.2	Manufacturer's type designation	CDD10-AMC1-L	CDD12-AMC1-L	
1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	Pedestrian	
1.5	Rated capacity/rated load	Q (kg)	1000	
1.6	Load centre distance	c (mm)	600	
1.9	Wheelbase	y (mm)	1281	
Weight	2.1	Service Weight(Including battery)	kg	760
		Battery Weight	kg	66
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	PU	PU
	3.2	Tyre size, front	Φ250x80	Φ250x80
	3.3	Tyre size, rear	Φ75x64	Φ75x64
	3.4	Additional wheel (dimensions)	Φ125x50	Φ125x50
	3.5	Wheels, number front / rear (x = driven wheels)	1x+1/4	1x+1/4
	3.6	Tread, front	b <sub>10</sub> (mm)	520
3.7	Tread, rear	b <sub>11</sub> (mm)	385	
Dimensions	4.4	Lift	h <sub>3</sub> (mm)	3000
	4.6	initial lift	h <sub>5</sub> (mm)	120
	4.9	Height drawbar in driving position min./max.	h <sub>14</sub> (mm)	720/1220
	4.15	Fork height,lowered	h <sub>13</sub> (mm)	86
	4.19	Overall length(folded pedal)	l <sub>1</sub> (mm)	1807
	4.21	Overall width	b <sub>1</sub> (mm)	800
	4.22	Fork dimensions	s/e/l (mm)	60/185/1150
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	570
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	21
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm)	2010 <sup>1) 3)</sup>
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm)	2060 <sup>2) 3)</sup>
4.35	Turning radius	W <sub>a</sub> (mm)	1415 <sup>3)</sup>	
Performance data	5.1	Travel speed,laden/unladen	km/h	6/6
	5.2	Lift speed,laden/unladen	m/s	0.115/0.150
	5.3	Lowering speed,laden/unladen	m/s	0.140/0.135
	5.8	Max Gradeability,laden/unladen	%	8/16
Electric engine	6.1	Drive motor rating S2 60 min	kW	1.1
	6.2	Lift motor rating at S3 15%	kW	2.2
	6.4	Battery voltage,rated capacity	V/Ah	2x12/106
	8.1	Type of drive control	AC	AC
	9.1	Manufacturer	Curtis	Curtis

Note: 1). VDI 2198: +260mm 2). VDI 2198: +165mm 3). Load section lowered: +60mm

## A Series Mini Range Pallet Stacker With Initial Lift Mast Specification:

Mast Type	Max Lifting Height h <sub>3</sub>	Max. fork height (h <sub>3</sub> +h <sub>13</sub> )	Lowered Height h <sub>1</sub>	Extended Height h <sub>4</sub>	Free lift	Load Capacity at 600mm	
						1.0t	1.2t
	mm	mm	mm	mm	mm	Kg	Kg
Single cylinder duplex mast	2000	2086	1576	2576	0	1000	1200
	2500	2586	1826	3076	0	1000	1000
	2700	2786	1926	3276	0	900	900
	3000	3086	2076	3576	0	800	800
	3300	3386	2226	3876	0	700	700
	3500	3586	2411	4161	0	550	550
	3600	3686	2461	4261	0	550	550



Q1(kg)		Q2(kg)	Q1+Q2(kg)
max	min	max	max
1200	0	0	1200
1100	100	100	1200
1000	200	200	
900	300	300	
800	400	400	
700	500	500	
600	600	600	



## Hand Pallet Stacker

with capacities of 1,000 to 2,000kg

# Introduction

## SDA (Single mast)

Reliable performance with easy maintenance

- / High quality mast steel ensures rigidity, durability.
- / Integral pump, which prevents loosening, leak-proof.
- / High efficiency pump, operating lighter, more comfortable.
- / Lifting speed keeps smooth regardless of loading weight, which is safe to use.



## SDA (Double mast)

- / The stacker can be lifted by handle or foot pedal.
- / Hand control valve precise control convenience.
- / Set the active safety valve to prevent overloading of use.
- / Maintenance-free design, ensures security, reduces service cost.



### 1.0-2.0t Hand Pallet Stacker

Model		SDA1016	SDA1516	SDA2016	SDA1025	SDA1030	SDA1525	SDA1530
Load capacity/rated load	Q(kg/lb)	1000/2205	1500/3307	2000/4409	1000/2205	1000/2205	1500/3307	1500/3307
Load centre distance	C(mm/in)	500/20	400/16	400/16	500/20	500/20	400/16	400/16
Service weight	Kg/lb	250/550	270/595	290/640	290/640	316/697	310/683	336/741
Lowered mast height	h <sub>1</sub> (mm/in)	2080/82	2080/82	2080/82	1830/72	2080/82	1830/72	2080/82
Lifting height	h <sub>3</sub> (mm/in)	1600/63	1600/63	1600/63	2500/98	3000/118	2500/98	3000/118
Overall height	h <sub>4</sub> (mm/in)	2080/82	2080/82	2080/82	3080/121	3080/121	3580/141	3580/141
Fork lowered height	h <sub>13</sub> (mm/in)	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5	90/3.5
Ground clearance	m <sub>1</sub> (mm/in)	25/1	25/1	25/1	25/1	25/1	25/1	25/1
Turning radius	W <sub>a</sub> (mm/in)	1200/47	1200/47	1200/47	1200/47	1200/47	1200/47	1200/47
Lifting speed with/without load	m/s (ft/min)	0.010/0.011 (2.0/2.2)	0.010/0.011 (2.0/2.2)	0.010/0.011 (2.0/2.2)	0.010/0.011 (2.0/2.2)	0.010/0.011 (2.0/2.2)	0.010/0.011 (2.0/2.2)	0.010/0.011 (2.0/2.2)



## A Series Reach Truck

with capacities of 1,200 to 2,000kg

The reach truck is suitable for working in narrow passageway and confined space, with high lifting and load capacity, and is the ideal tool for loading, unloading, handling, and stacking in warehouse, supermarket, and workshop.

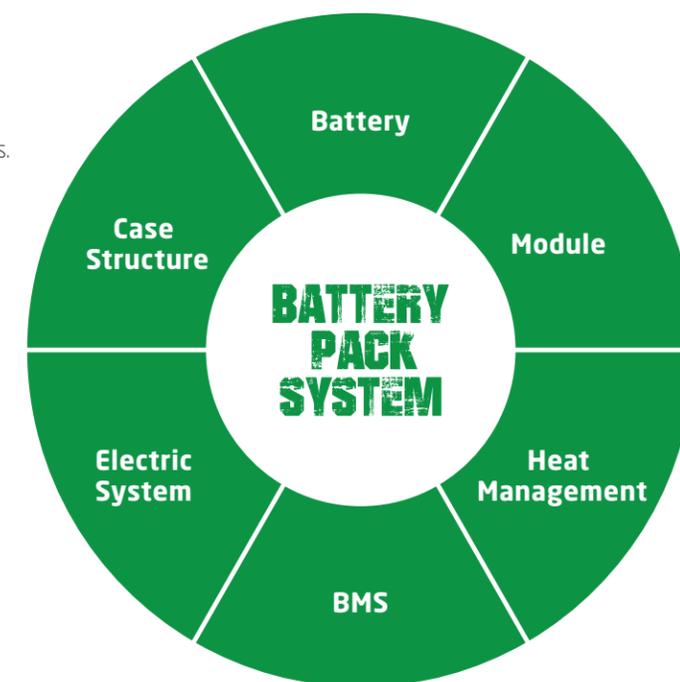
# LET THE LITHIUM POWER BE REVEALED



## INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion  
2 hours  
100%

Lead-acid batteries  
8-10 hours 100%

**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-Ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

### Li-Ion Battery Pack specification

Type		CQD16-AC4-I	CQD18-AC4-I	CQD20-AC4-I
Li-Ion battery	V/Ah	80/271	80/271	80/271
Titans charger		SLC-80100	SLC-80100	SLC-80100



HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.



**Environment/  
Efficiency/  
Economy**



## Appearance

/ The worldwide popular, great-circle, streamlined surface modeling is applied, with smooth, beautiful, and elegant appearance.

## Stability

/ The broad and solid chassis and steady reach mechanism, as well as the drive unit that is fixed at center, realize low gravity center, and guarantee sufficient stability of the truck.

## Flexibility

/ The driving system that is located at rear part of chassis uses EPS (Electric Power Steering) technology, features low-speed and large torque. The 180-degree steering mode of standard configuration, make the truck flexible and convenient, and allow it turn easily even in confined space.

## Comfort

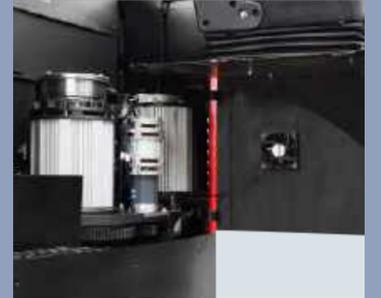
- / Operating levers of ergonomic design, integrated console, all important operating parts are within the reach of your hands.
- / The mast of optimized design with wide view avoids blocking the sight of the operator, and large size of the fork shelf offers wider view.
- / The seat can be adjusted forward and backward, also with the function of vibration reduction.
- / The truck body with increased width and height offers larger operating space for hands and legs of the operator.
- / The new designed overhead guard structure allows the operator to observe the movement of load more clearly.

## Maintenance

- / The fully-opened cover provides easy maintenance for motor, controller and transmission, braking, and hydraulic systems.
- / The battery compartment can be removed forward, so replacement or maintenance is very easy.



Wider view OHG



High-performance motor



Comfortable and convenient seat



Instrument can display the steering angle and direction Synchronously



The steering wheel is extensible, so the operator can choose the best driving position



## Reliability & Safety

- / Major electrical components such as controller, contactor, and power plug are all of foreign famous brands.
- / As a standard configuration, the emergency power off switch complies with European safety standards.
- / Electronic and hydraulic overload protection, power-failure lock up of fork(optional), and safe pedal.

## Benefits of the AC Power System

- / The AC power system has high efficiency, full protection functions, powerful acceleration performance, sensitive and fast steering.
- / The brushless, maintenance-free AC motor has longer service life, and lower maintenance cost.

## High-performance Mast

- / The operator has wider view in the load direction.
- / Built-in sidershifter and fork tilting are standard configuration.
- / The mast made with imported steel channels and compact structural design has a maximum lifting height: 12500mm.
- / Height monitoring and lifting height limitation system are optional.



## Advance

- / Three-phase AC technology is applied for driving and steering, AC technologies are available for lifting. Full AC power system has higher efficiency, and is free maintenance.
- / The MOSFET integrated controller guarantees smooth and accurate control on driving, steering and lifting, as well as superior speed regulation performance, with regenerative braking, reverse braking, anti-slipping on slope and other functions, resulting in more efficient, safer operations.
- / The LCD battery condition meter, timer, fault self-diagnosis meter, and display can not only display most important operating data, driving direction and location of driving wheels that are interactive with steering, but also realize accurate display in harsh environment.
- / The full AC truck is equipped with non-backlash, high pressure resistant, silent gear pump.
- / The full AC truck is equipped with stepless speed regulation for lifting operation, the mast lift top buffering, mast move forward/backward buffering, travelling speed and speed of mast move forward/backward will slow down automatically when the mast lifting high position, all of this can greatly improve the stability of the truck.
- / The CANBUS communication technology is applied to monitor motor speed, temperature, and other information in real time, realizing closed-loop control.
- / The truck has a triple braking mechanism, i.e. electronic braking (reverse regenerative braking), front wheel hydraulic braking, and electromagnetic parking braking.



Battery can be removed forward, easy for maintenance



Traction device



## Standard Specification

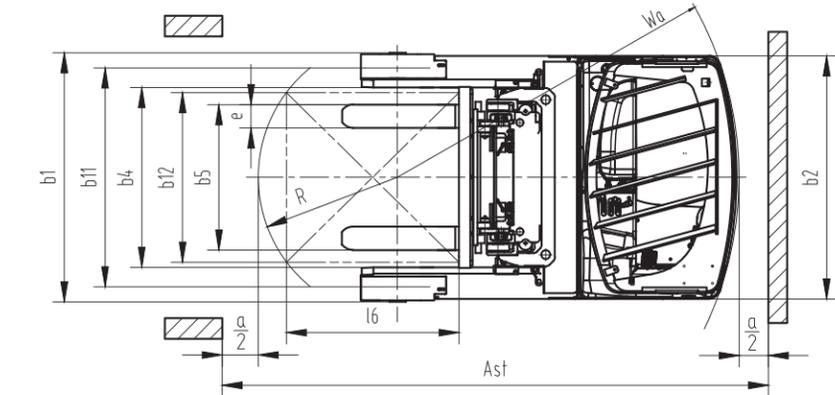
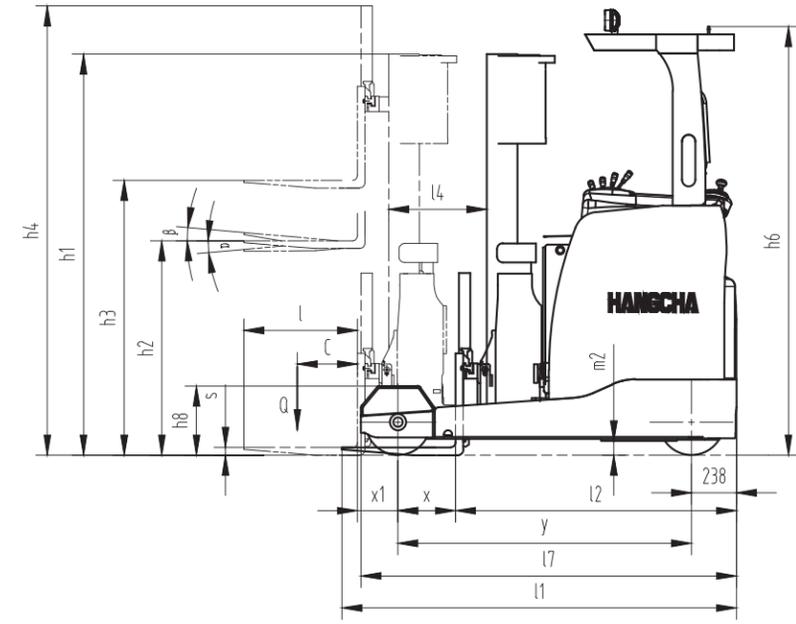
- / PU (polyurethane) driving wheel and load wheels
- / High-capacity battery
- / 4 spools control valves
- / Stepless speed regulation for lifting operation
- / Arm cushion, and impact-proof head cushion
- / 3m duplex mast
- / Adjustable steering wheel
- / Front wheel protection hood
- / Safety pedal
- / 180-degree steering mode
- / Sidershifter
- / Fork tilting (2°/4°)
- / Lift top buffering (Triplex mast)
- / Mast move forward/backward buffering
- / Full AC control
- / Automatic speed reduction when the mast lifting high position (Triplex mast)
- / EPS (Electric Power Steering)
- / Automatic speed reduction at the corner

## Options

- / 2.7-5.0m duplex mast, built-in sidershifter, fork tilting
- / 4.3-12.5m full-free triplex mast built-in side shifter, fork tilting
- / Various fork lengths
- / Imported high-performance battery
- / Optional large capacity battery 420Ah, 560Ah
- / Full automatic high-frequency charger
- / Other attachments
- / Height monitoring system
- / Alarm lamp, rear headlamp or other lamps

# A Series Reach Truck

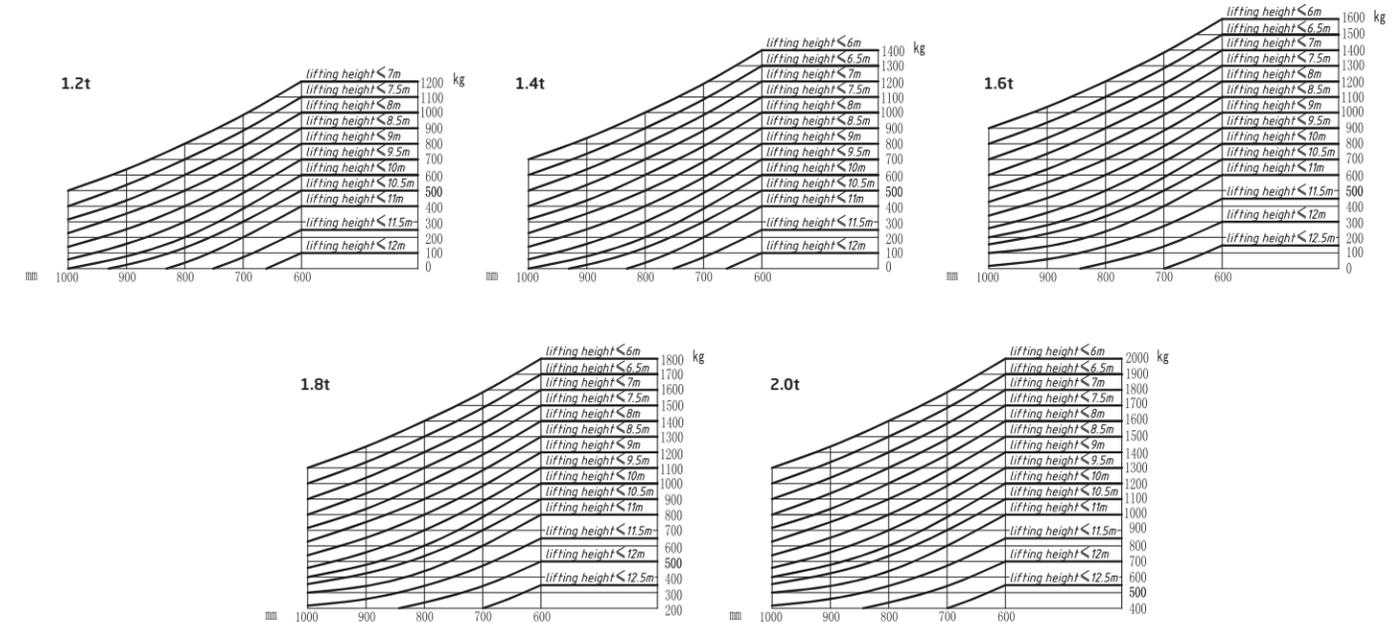
Distinguishing mark	HANGCHA GROUP CO.,LTD.							
	1.1	1.2	1.3	1.4	1.5	1.6	1.7	
1.1	Manufacturer							
1.2	Manufacturer's type designation		CQD12-AC4 CQD12-AD2	CQD14-AC4 CQD14-AD2	CQD16-AC4 CQD16-AD2	CQD18-AC4 CQD18-AD2	CQD20-AC4 CQD20-AD2	
1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		electric	electric	electric	electric	electric	
1.5	Rated capacity/rated load	Q (kg)	1200	1400	1600	1800	2000	
1.6	Load centre distance	c (mm)	600	600	600	600	600	
1.8	Load distance, centre of drive axle to fork	x (mm)	325	325	235	235	305	
1.8.1	Load distance, centre of drive axle to fork,most reached forward	x1 (mm)	183	183	183	213	213	
1.9	Wheelbase	y (mm)	1480	1480	1480	1480	1550	
Weight	2.1	Service weight (including battery)	Kg	3130	3130	3320	3330	3340
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		polyurethane	polyurethane	polyurethane	polyurethane	polyurethane
	3.2	Tyre size, front	mm	Ø343×114	Ø343×114	Ø343×114	Ø343×135	Ø343×135
	3.3	Tyre size, rear ×2	mm	Ø285×100	Ø285×100	Ø285×100	Ø343×108	Ø343×108
	3.5	Wheels,number front/rear(×=driven wheels)		1×/2	1×/2	1×/2	1×/2	1×/2
	3.7	Tread width,rear	b11(mm)	1136	1136	1136	1144	1144
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	2/4	2/4	2/4	2/4	2/4
	4.2	Height, mast lowered	h1 (mm)	2100	2100	2100	2100	2100
	4.4	Lift	h3 (mm)	3000	3000	3000	3000	3000
	4.7	Height of overhead guard	h6 (mm)	2240	2240	2240	2240	2240
	4.10	Height of support arms	h8(mm)	305	305	305	361	361
	4.19	Overall length	l1(mm)	2463	2463	2553	2553	2553
	4.20	Length to face of forks	l2 (mm)	1393	1393	1483	1483	1483
	4.21	Overall width	b1/b2(mm)	1270/1270	1270/1270	1270/1270	1286/1270	1286/1270
	4.22	Fork dimensions ISO	s/e/l (mm)	40×122×1070	40×122×1070	40×122×1070	40×122×1070	40×122×1070
	4.25	Distance between fork-arms	bs (mm)	244-882	244-882	244-882	244-882	244-882
	4.28	Reach distance	l4 (mm)	508	508	418	448	518
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	2838	2838	2907	2907	2922
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	2897	2897	2980	2980	2984
4.35	Turning radius	Wa (mm)	1735	1735	1735	1735	1804	
Performance data	5.1	Travel speed,laden/unladen	Km/h	10.2/10.2	10.2/10.2	10.2/10.2	10.2/10.2	10.2/10.2
	5.2	Lift speed,laden/unladen	m/s	0.400/0.530	0.390/0.530	0.370/0.530	0.340/0.530	0.310/0.530
	5.3	Lowering speed,laden/unladen	m/s	0.420/0.480	0.420/0.480	0.420/0.480	0.420/0.480	0.420/0.480
	5.8	Max. gradeability,laden/unladen	%	12/15	12/15	11/15	10/15	10/15
Electric-engine	6.1	Drive motor rating S2 60 min	kW	AC 6.5	AC 6.5	AC 6.5	AC 6.5	AC 6.5
	6.2	Lift motor rating at S3 15%	kW	AC 12.8	AC 12.8	AC 12.8	AC 12.8	AC 12.8
		Steering motor	kW	AC 0.67	AC 0.67	AC 0.67	AC 0.67	AC 0.67
	6.4	Battery voltage, nominal capacity K5	V/Ah	48/400	48/400	48/500	48/500	48/500
	6.5	Battery weight	kg	666	666	855	855	855
Addition data	8.1	Type of drive control		CURTIS Full AC / INMOTION Full AC				
	10.1	Operating pressure for attachments	bar	140	140	165	185	210
	10.7	Sound level at the driver's ear according to EN / DIN 12 053	dB (A)	<75	<75	<75	<75	<70



$$Ast = Wa + R + a = Wa + \sqrt{(l6 - x)^2 + (\frac{b12}{2})^2} + a$$

## 1.2t-2.0t Mast specification

Type	Model	Lifting height h3	Mast lowered h1	Mast extended h4		Free lifting height h2		Tilting range		Load center@600mm				
				Without backrest	With backrest	Without backrest	With backrest	Forward	Backward	1.2t	1.4t	1.6t	1.8t	2.0t
		mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg	kg	kg	kg
Wide view duplex mast	QA20B	2700	1950	3355	3665	340	340	2	4	1200	1400	1600	1800	2000
		3000	2100	3655	3965	340	340	2	4	1200	1400	1600	1800	2000
		3300	2250	3955	4265	340	340	2	4	1200	1400	1600	1800	2000
		3500	2350	4155	4465	340	340	2	4	1200	1400	1600	1800	2000
		3600	2400	4255	4565	340	340	2	4	1200	1400	1600	1800	2000
		4000	2650	4655	4965	340	340	2	4	1200	1400	1600	1800	2000
		4300	2790	4955	5265	340	340	2	4	1200	1400	1600	1800	2000
		4500	2900	5155	5465	340	340	2	4	1200	1400	1600	1800	2000
		4800	3095	5495	5765	340	340	2	4	1200	1400	1600	1800	2000
		5000	3195	5695	5965	340	340	2	4	1200	1400	1600	1800	2000
Full free triplex mast	QA20V (imported steel)	4300	2085	4987	5265	1376	1120	2	4	1200	1400	1600	1800	2000
		4500	2165	5170	5465	1495	1200	2	4	1200	1400	1600	1800	2000
		4800	2265	5470	5765	1595	1300	2	4	1200	1400	1600	1800	2000
		5000	2315	5670	5965	1596	1350	2	4	1200	1400	1600	1800	2000
		5500	2490	6170	6465	1796	1525	2	4	1200	1400	1600	1800	2000
		6000	2665	6670	6965	1995	1700	2	4	1200	1400	1600	1800	2000
		6500	2835	7170	7465	2136	1870	2	4	1200	1300	1500	1700	1900
		7000	3020	7670	7965	2350	2055	2	4	1200	1200	1400	1600	1800
		7500	3180	8170	8465	2510	2215	2	4	1100	1100	1300	1500	1700
		8000	3350	8670	8965	2680	2385	2	4	1000	1000	1200	1400	1600
		8500	3580	9170	9465	2910	2615	2	4	900	900	1100	1300	1500
		9000	3800	9670	9965	3130	2835	2	4	800	800	1000	1200	1400
		9500	3970	10170	10465	3300	3005	2	4	700	700	900	1100	1300
		10000	4100	10670	10965	3430	3135	2	4	600	600	800	1000	1200
		10500	4250	11170	11465	3580	3285	2	4	500	500	700	900	1100
11000	4450	11670	11965	3780	3485	2	4	400	400	600	800	1000		
11500	4700	12170	12465	4030	3735	2	4	250	250	450	650	850		
12000	4900	12670	12965	4230	3935	2	4	100	100	300	500	700		
12500	5150	13170	13465	4480	4185	2	4	\	\	150	350	550		





## REACH TRUCK ADVANTAGES



# 10 reasons choose A series reach truck

- ▶ **APPEARANCE-** Beautiful / Compact / Ergonomic
- ▶ **HIGH PERFORMANCE-** Transmission system / Motor
- ▶ **RENEWABLE ENERGY TECHNOLOGIES-** Hydraulic system
- ▶ **PERFECT RESIDUAL LOAD CAPACITY-** Mast system
- ▶ **FLEXIBILITY-** Steering system
- ▶ **EXCELLENT ERGONOMIC & COMFORT-** Fingertip system
- ▶ **ADVANCE-** INMOTION control system
- ▶ **VISIBILITY-** Overhead guard
- ▶ **RELIABILITY-** Plastic oil tank / Braking system
- ▶ **MAINTENANCE-** Battery side roll-out



## A Series Premium Version Reach Truck

with capacities of 1,200 to 2,000kg

After several years of design, development, and manufacturing, Hangcha launched a new product lately –the A Series Premium Version Reach Truck: CQD12/14/16/20-AD2H. This truck is mainly used in multi-level warehouse. CQD20-AD2H rated load capacity is 2 tons, maximum lifting height is 12.5m, and the load capacity can reach 1100kg at the maximum lifting height. Its technical parameters and configuration are close to that of similar products of international manufacturers including Crown, Linde, Jungheinrich, and Hyster. This product (A series premium version reach truck) together with standard reach truck constitute the entire family of A Series reach truck of Hangcha. These products supplement with each other in rated tonnage, cover different prices together, and can satisfy different demands in prices, functions, and configuration from various users.

## APPEARANCE

Top appearance design teams from Europe and China are engaged to carry out brand-new optimized design for this product. It features beautiful appearance and European design elements, excellent ergonomics and man-computer interaction functions, and inherits appearance elements of A Series electric trucks.



Overall Ergonomic Design

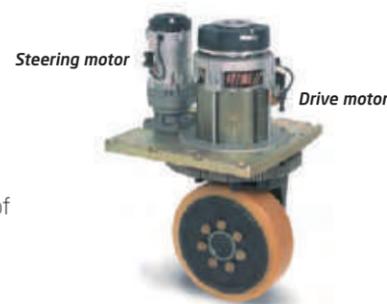


Overall Appearance Design

## HIGH PERFORMANCE

The drive system includes the ZF® gearbox imported from Germany with original packaging, the imported Schabmuller® AC drive motor, and the Schabmuller® electric steering motor, with excellent performance, as well as drive system, AC motor, EPS (Electric Power Steering) system, and electromagnetic braking system of same configuration as that of imported brands such as Jungheinrich, Hyster, and other leading manufacturers.

*All core parts are ZF products imported from Germany.*



## VISIBILITY

The overhead guard enables panoramic visibility. There are two pieces of tempered glass of 25mm thickness on top of the overhead guard, which is infilled with glue, offering excellent impact resistance. The visibility above the operator is incomparable and excellent, with reduced psychological burden for the operator.



*Optional: Overhead guard with panoramic glass offers excellent visibility for elevated location.*



## RELIABILITY

The LLD PE plastic oil tank, which increases quality and cleanness of oil effectively, together with hydraulic filter element from German HYDAC, providing much higher cleanness of entire hydraulic system. The oil tank features large volume, fast heat exchange, together with electronic fan within the housing, achieving thermal equilibrium quickly of hydraulic oil at most suitable working temperature.

The reach truck is equipped with electromagnetic braking system, including three separate brakes, two sets of MARTIX electronic drive brake imported from UK, and one set of INTORQ Electric Parking Brake system from Germany. Braking force is proportional to depth of electronic pedal, the braking performance is gentle and reliable.

## MAINTENANCE

DIN standard battery is a standard configuration with capacity up to 48V/ 600Ah, and the maximum capacity available as an option is 775Ah, with powerful endurance. Battery side roll-out is a standard feature, which is convenient for maintenance.

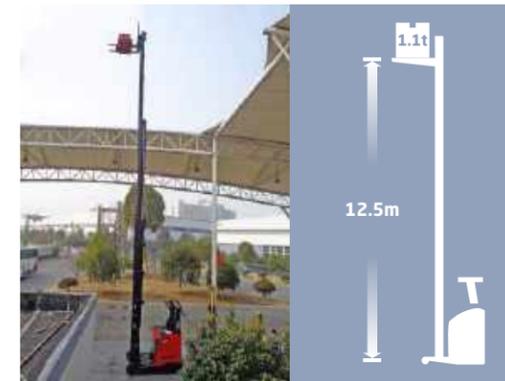


*Standard configuration: Battery side roll-out + trolley(optional)*



## PERFECT RESIDUAL LOAD CAPACITY

The mast system is made of imported steel channels, and new optimized design is applied for the carriage system, which thoroughly eliminates the problem of shaking and large gap that are detected in previous home-made masts, effectively improves residual load capacity, and increases load capacity reducing height. Maximum lifting height is 12.5m, and load capacity can reach 1100kg at the maximum height.



Maximum 12.5m, lifting 1.1t

Automatic select height level function is also optional for the mast system, which can pre-select height automatically according to height of the user's shelf, and the forks lifting will slow down and stop when required height is reached. It is very convenient for stacking work, and can reduce labor intensity and psychological burden of the operator significantly.

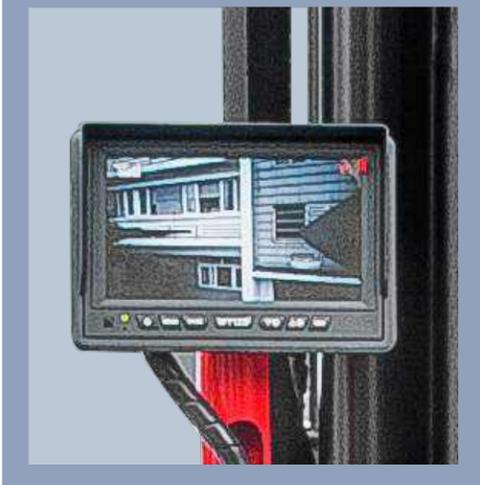


Optional: Preset level selection function



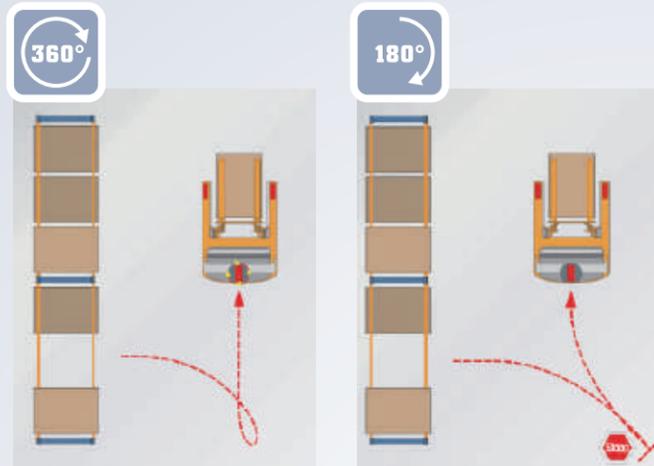
### Optional: Camera system

The user can choose camera system and height indicator to facilitate operations at elevated location.



## FLEXIBILITY

Electric Power Steering(EPS) system is a standard configuration, which can be switched between 360-degree and 180-degree operations according to habit of the user. The upgraded EPS system effectively avoids the impact of hydraulic control, can reduce fatigue of the operator, and its minimum steering force can reach 3N (that of regular forklift is about 10N).



In the mode of 360-degree steering, when steering exceeds 270 degree, the reverse is switched to forward director, no reversing is required, and the truck is switched to advance automatically, no parking is required, with higher efficiency.

In the mode of 180-degree steering, the truck must be reversed until it stops completely, and the direction must be switched before the truck can travel forward, with lower efficiency.



Whichever of above two modes the operator wants to select, there has a button for switching operation to activate the mode required, which can be selected freely by the operator according to his/her habit. The electric steering wheel is small and light. The operator can adjust it by moving backward or forward to find a suitable position. The steering wheel have built-in damper, with reliable signal transmission of stepping motor.



- ▶ **Drive wheel automatic centering function**
- ▶ **Automatic limit on speed and accelerated speed when steering**



## EXCELLENT ERGONOMIC & COMFORT

Fingertip system is a standard feature for the truck (with imported SAUER-DANFOSS hydraulic valve), with four finger control functions of lifting/lowering, mast forward and backward movement, tilt, and sideshift, and seven major functions including direction switching, emergency power off and horn. It offers comfortable operation for operator, with soft armrest. The fingertip system communicate by CAN Bus system, which is reliable and fast. The armrest can be adjusted forward and backward, fingertip system enables more accurate control than mechanical valve.



Fingertip system integrated control system, with good man-machine function



Cutting-edge SAUER-DANFOSS electromagnetic multi-way valve imported from Germany. With potential energy recovery switching function(optional)

## ADVANCE

The truck is equipped with 4 INMOTION controllers, drive controller, oil pump controller, steering controller and valve controller, all controllers communicate by CAN Bus system. Controllers have advanced program and outstanding control strategy (same as that of imported trucks). All core parts are imported or of joint-venture brands, with reliable quality. The entire truck is equipped with waterproof connectors.



Fully-open pedal structure, electrical parts are fully exposed, which is convenient for maintenance



## Options

- / 5.0~12.5M full free triplex mast is made of imported steel channels
- / Camera system
- / Height level selection/ Fork height display
- / OPS system
- / Panoramic glazed overhead guard
- / Big capacity battery according DIN STD
- / Various length forks
- / Drive in rack overhead guard
- / GRAMMER MSG531 seat

## Standard specification

- / SCHABMULLER AC traction motor
- / SCHABMULLER AC steering motor
- / HEPU AC pump motor
- / Electric Parking Brake (EPB) system
- / Load wheel adopts electromagnetic proportional braking technology
- / INMOTION control system
- / Real-time shifting between 360°steering mode and 180°steering mode
- / Electric Power Steering (EPS) system
- / GRAMMER Fingertip system
- / PU tyre
- / LED headlamp
- / Alarm lamp
- / 4 modes power selection
- / 5M full free triplex mast
- / SAUER-DANFOSS 4 spools control valve

- / Load backrest
- / PE LLD material oil tank
- / Imported lower noise gear pump
- / Energy regenerating during deceleration
- / Battery side roll-out
- / Buffering on lifting limit
- / Soft landing system
- / Blue spot
- / Automatic limit on speed and accelerated speed when steering
- / Lift top buffering (Triplex mast)
- / Mast move forward/backward buffering
- / Automatic speed reduction when the mast lifting high position (Triplex mast)

## BATTERY OPTION

	460Ah	500Ah	560Ah	600Ah	620Ah	750Ah	775Ah
1.2/1.4/1.6t	●	○	○	○	○	x	x
2.0t	x	x	x	●	○	○	○

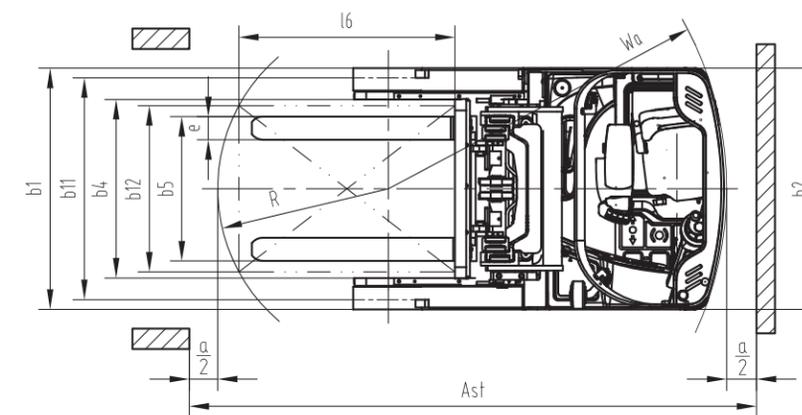
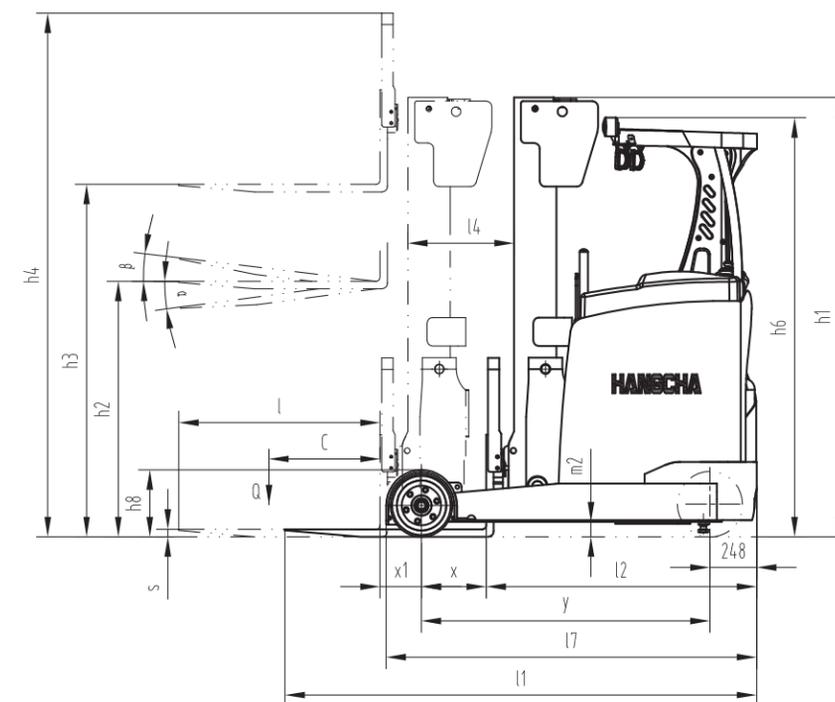
Note: ● Standard ○ Optional X Can not choose



## A SERIES PREMIUM VERSION REACH TRUCK

Distinguishing mark	HANGCHA GROUP CO.,LTD.						
	1.1	1.2	1.3	1.4	1.5		
1.1	Manufacturer						
1.2	Manufacturer's type designation	CQD12-AD2H	CQD14-AD2H	CQD16-AD2H	CQD20-AD2H		
1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	Electric	Electric		
1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Seated	Seated	Seated	Seated		
1.5	Rated capacity/rated load	Q (kg)	1200	1400	1600	2000	
1.6	Load centre distance	c (mm)	600	600	600	600	
1.8	Load distance, centre of drive axle to fork	x (mm)	269	269	269	344 <sup>1)</sup>	
1.8.1	Load distance, centre of drive axle to fork, mast reached forward	x <sub>1</sub> (mm)	221	221	221	221	
1.9	Wheelbase	y (mm)	1460	1460	1460	1535	
Weight	2.1	Service weight (including battery)	kg	3845 <sup>1)</sup>	3845 <sup>1)</sup>	3845 <sup>1)</sup>	4020 <sup>1)</sup>
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane	Polyurethane
	3.2	Tyre size, front		Ø343×140	Ø343×140	Ø343×140	Ø343×140
	3.3	Tyre size, rear ×2		Ø330×100	Ø330×100	Ø330×100	Ø330×100
	3.5	Wheels, number front / rear (x = driven wheels)		1×/2	1×/2	1×/2	1×/2
	3.7	Tread width, rear	b <sub>11</sub> (mm)	1168	1168	1168	1168
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	2/4	2/4	2/4	2/4
	4.2	Height, mast lowered	h <sub>1</sub> (mm)	2315	2315	2315	2315
	4.3	Free lift	h <sub>2</sub> (mm)	1350	1350	1350	1350
	4.4	Lift	h <sub>3</sub> (mm)	5000	5000	5000	5000
	4.5	Height, mast extended	h <sub>4</sub> (mm)	5965	5965	5965	5965
	4.7	Height of overhead guard	h <sub>6</sub> (mm)	2200	2200	2200	2200
	4.8	Seat height/stand height	h <sub>7</sub> (mm)	1045	1045	1045	1045
	4.19	Overall length	l <sub>1</sub> (mm)	2509	2509	2509	2509 <sup>1)</sup>
	4.20	Length to face of forks	l <sub>2</sub> (mm)	1439	1439	1439	1439 <sup>1)</sup>
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	1270	1270	1270	1270
	4.22	Fork dimensions	s/e/l (mm)	40/122/1070	40/122/1070	40/122/1070	40/122/1070
	4.23	Fork carriage ISO 2328, class/type A,B		ISO2328 2A	ISO2328 2A	ISO2328 2A	ISO2328 2A
	4.24	Fork-carriage width	b <sub>3</sub> (mm)	942	942	942	942
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	244-882	244-882	244-882	244-882
	4.26	Distance between wheel-arms	b <sub>4</sub> (mm)	940	940	940	940
	4.28	Reach distance	l <sub>4</sub> (mm)	490	490	490	565 <sup>1)</sup>
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	78.5	78.5	78.5	78.5
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>st</sub> (mm)	2871	2871	2871	2889 <sup>1)</sup>
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm)	2938	2938	2938	2945 <sup>1)</sup>
4.35	Turning radius	W <sub>a</sub> (mm)	1725	1725	1725	1800	
4.37	Length across wheel arms	l <sub>7</sub> (mm)	1895	1895	1895	1970	
Performance data	5.1	Travel speed, laden/unladen	km/h	14/14	14/14	14/14	14/14
	5.2	Lift speed, laden/unladen	m/s	0.450/0.480	0.410/0.480	0.360/0.480	0.330/0.480
	5.3	Lowering speed, laden/unladen	m/s	0.510/0.330	0.510/0.330	0.510/0.330	0.510/0.330
	5.8	Max. gradeability, laden/unladen	%	12/15	12/15	11/15	10/15
	5.9	Acceleration time, laden/unladen (0-10m)	s	5.3/5	5.3/5	5.3/5	5.3/5
	5.10	Service brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic
Electric	6.1	Drive motor rating S2 60 min	kW	6.4 AC	6.4 AC	6.4 AC	6.4 AC
	6.2	Lift motor rating at S3 15%	kW	12.8 AC	12.8 AC	12.8 AC	12.8 AC
	6.3	Battery acc. to DIN 43531/35/36 A,B,C, no		DIN 43531 C	DIN 43531 C	DIN 43531 C	DIN 43531 C
	6.4	Battery voltage, nominal capacity K5	V/Ah	48V /460Ah	48V /460Ah	48V /460Ah	48V /600Ah
	6.5	Battery weight	kg	939	939	939	1119 <sup>1)</sup>
Addition data	8.1	Battery dimensions	l/b/h(mm)	1223×355×784	1223×355×784	1223×355×784	1223×355×784 <sup>1)</sup>
	10.1	Type of drive control		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
	10.1	Manufacturer/Type		INMOTION	INMOTION	INMOTION	INMOTION
	10.2	Operating pressure for attachments	bar	150	150	150	150
10.2	Oil volume for attachments (max)	l/min	65	65	65	65	
10.7	Sound level at the driver's ear according to EN / DIN 12 053	dB (A)	72	72	72	72	

1) different battery sizes change these values

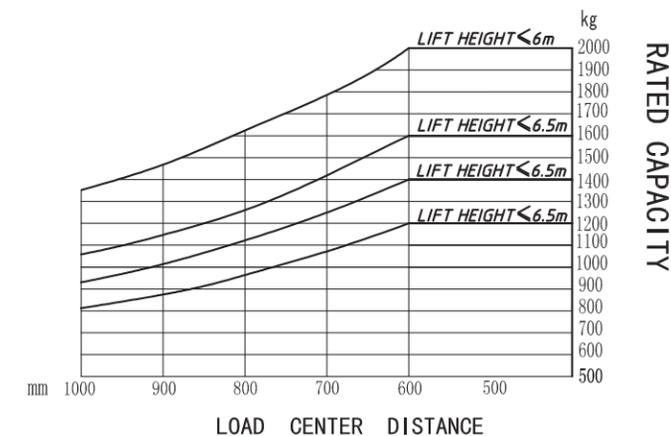


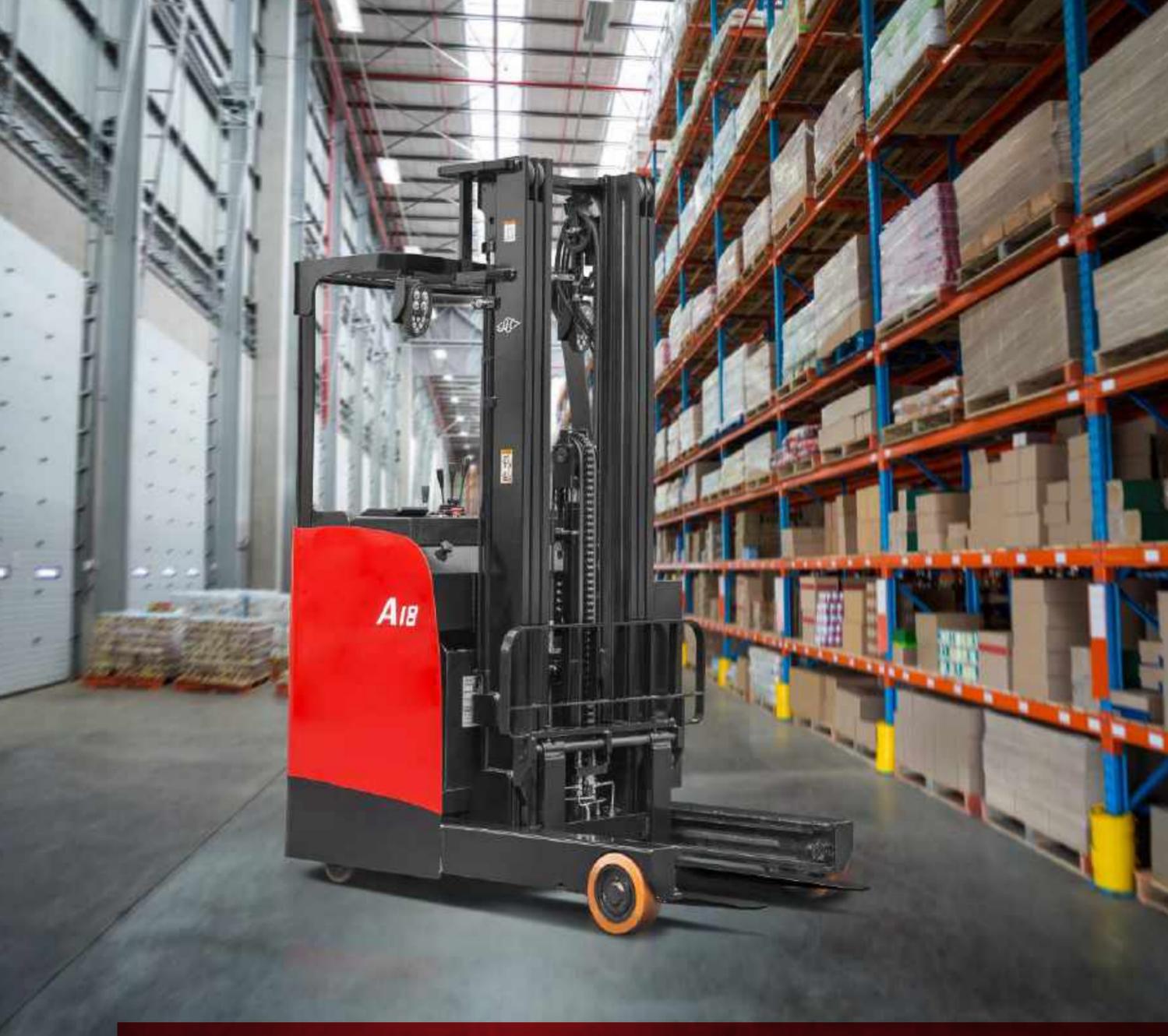
$$A_{st} = W_a + R + a = W_a + \sqrt{(l_6 - x)^2 + \left(\frac{b_{12}}{2}\right)^2} + a$$

## A SERIES PREMIUM VERSION REACH FORKLIFT MAST SPECIFICATION

Type	Model	Lifting height h <sub>3</sub>	Mast lowered h <sub>1</sub>	Mast extended		Free lifting height		Tilting range		Load capacity @600mm				
				Without backrest	With backrest	Without backrest	With backrest	Forward	Backward					
				mm	mm	mm	mm	(°)	(°)	1.2t	1.4t	1.6t	2.0t	
Full free triplex mast	QA20V (imported steel)	5000	2315	5670	5965	1596	1350	2	4	1200	1400	1600	2000	2000 <sup>1)</sup>
		5500	2490	6170	6465	1796	1525	2	4	1200	1400	1600	2000	2000 <sup>1)</sup>
		6000	2665	6670	6965	1995	1700	2	4	1200	1400	1600	2000	2000 <sup>1)</sup>
		6500	2835	7170	7465	2136	1870	2	4	1200	1400	1600	1900	2000 <sup>1)</sup>
		7000	3020	7670	7965	2350	2055	2	4	1000	1200	1400	1700	1800 <sup>1)</sup>
		7500	3180	8170	8465	2510	2215	2	4	900	1100	1300	1600	1700 <sup>1)</sup>
		8000	3350	8670	8965	2680	2385	2	4	850	1050	1250	1550	1650 <sup>1)</sup>
		8500	3580	9170	9465	2910	2615	2	4	800	1000	1200	1500	1600 <sup>1)</sup>
		9000	3800	9670	9965	3130	2835	2	4	750	950	1150	1450	1550 <sup>1)</sup>
		9500	3970	10170	10465	3300	3005	2	4	700	900	1100	1400	1500 <sup>1)</sup>
		10000	4100	10670	10965	3430	3135	2	4	650	850	1050	1350	1450 <sup>1)</sup>
		10500	4250	11170	11465	3580	3285	2	4	600	800	1000	1300	1400 <sup>1)</sup>
		11000	4450	11670	11965	3780	3485	2	4	550	750	950	1250	1350 <sup>1)</sup>
		11500	4700	12170	12465	4030	3735	2	4	500	700	900	1200	1300 <sup>1)</sup>
		12000	4900	12670	12965	4230	3935	2	4	450	650	850	1150	1250 <sup>1)</sup>
12500	5150	13170	13465	4480	4185	2	4	400	600	800	1100	1200 <sup>1)</sup>		

1) Battery capacity:750Ah





## A Series Stand-on Reach Truck

with capacities of 1,500 to 1,800kg

The A series stand-on reach truck is a new-generation product developed by our company in response to different market needs. The truck has comfortable ergonomics, wide operating vision and a stable control system.

### Comfort

- / Optimal ergonomic design. the steering wheel, operating lever and accelerator are positioned at the best distance to the driver, making the operation lighter more comfortable.
- / The newly designed large-area back support is soft and comfortable, reducing operator fatigue.
- / Use Shimadzu multi-way valves with low start force. And the comfort is increased by 30%.

### Safety

- / An optimal four-link suspension mechanism forces the drive wheel and the auxiliary wheels, thereby reducing slipping of the drive wheel.
- / A disc mechanical brake and regenerative braking system make the truck safer and more reliable.
- / Turn speed is controlled to the turning radius, providing stable turning matched to the state of operation.
- / If the operator is not in the normal operating position, travel power is interrupted and load-handling (except lowering) operations are stopped.
- / The right leg of the OHG moves backwards to protect the driver's back in case of a collision.

### Reliability

- / The Curtis controller and CAN-bus communication provide safe and reliable.
- / The Shimadzu multi-way valve and gear pump provide higher efficiency and faster lifting speed.
- / EPS system with brushless technology making steering and operation easier and clearer.

### Stability

- / Suspension control system effectively reduces the shake when turning, lifting and moving forward and backward.
- / The pump motor assembling on the rear side of the body makes the center of gravity moving backwards and improving stability.
- / Automatic speed control: Travel speed is controlled according to the lift height, providing stability and safety.



Safe pedal: when the pedal is released, traveling is stopped, and only hydraulic operation is enabled



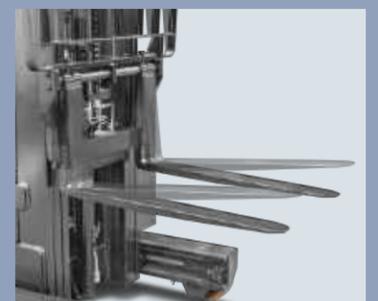
Charging plug inside operator's compartment, this eliminates the need to disconnect the plug from battery, enhancing ease of operation (Std)



New designed mast and the large open steel roof provide super visibility and safety



Operator's compartment



Forks can tilt forward/backward for easy loading

# COMFORTABLE DESIGN

It's convenient for getting on/off.



Floor height: 280mm.

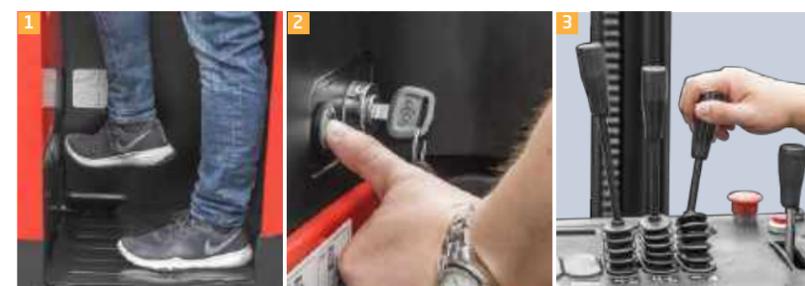
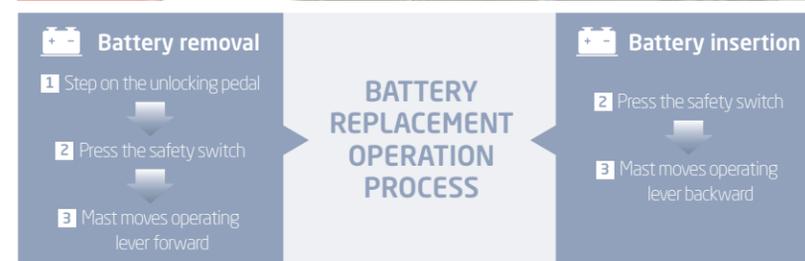
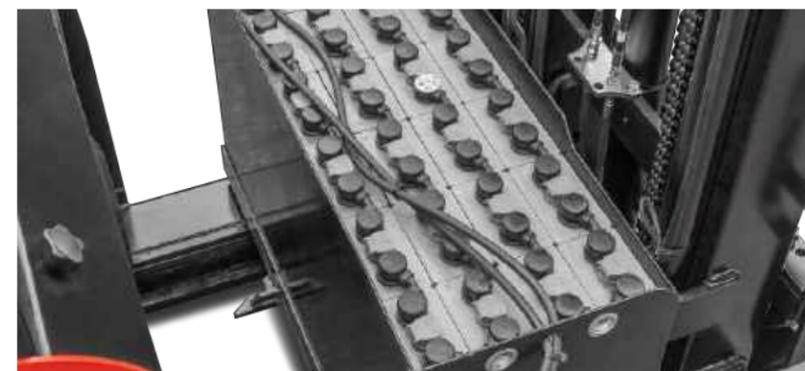
## Optimal lifting system

- / New optimal manufacturing process ensures the roller gap of the mast, making the mast sways smaller and the vehicle safer.
- / Add 2 safety functions: the mast moves backward to enable hydraulic buffer protection and reduce the speed in this position. It helps reduce the mast swaying when in a high position and makes the vehicle safer.
- / The optimized mast piping with an upper and lower layout mast improves vision of the mast (Triplex mast).
- / The forklift's sleeve structure boasts a simple structure, small mast thickness and light weight.

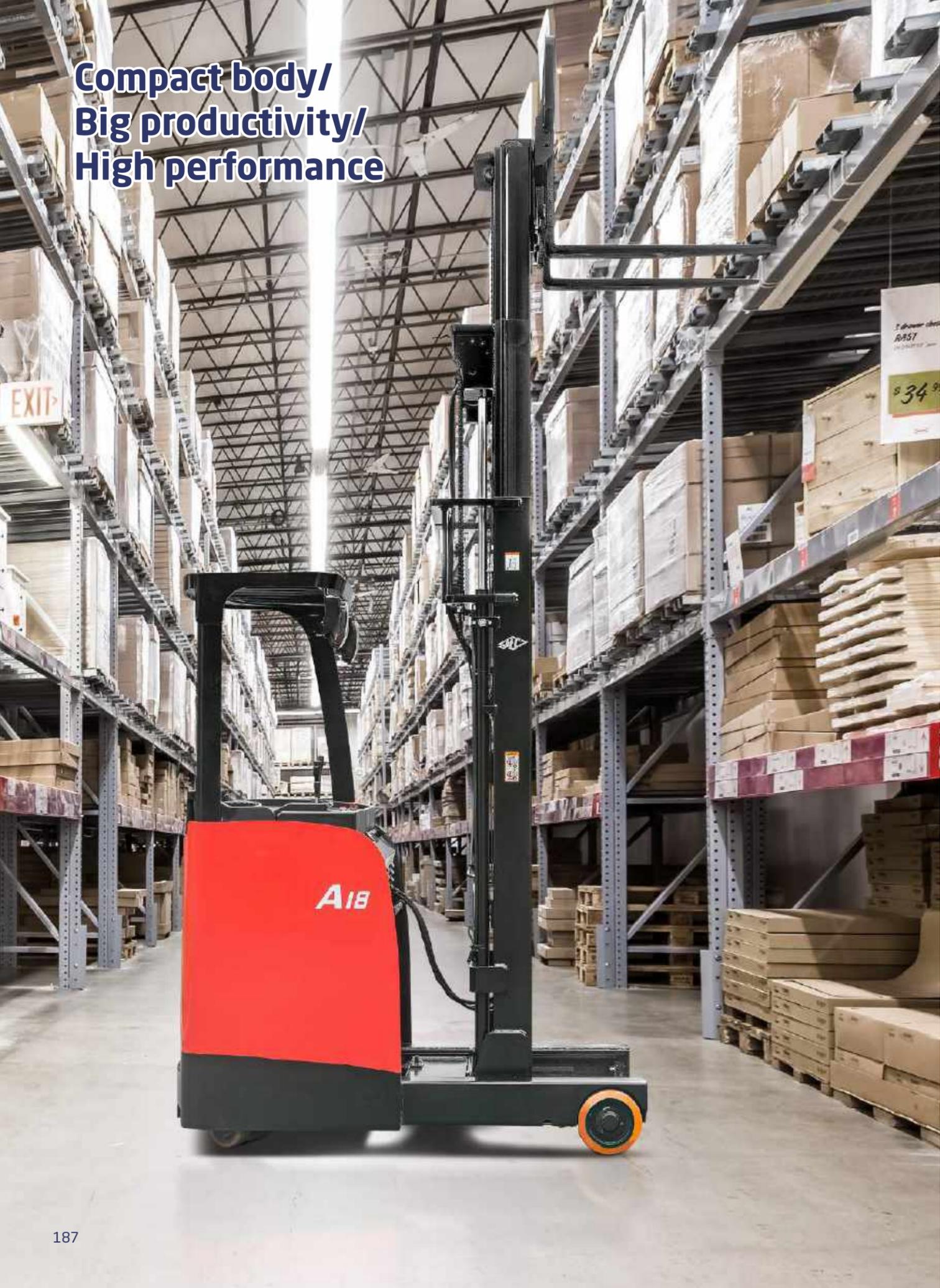


## BATTERY REACH OUT SYSTEM

The battery can be reached out easily. It enables smooth battery maintenance, inspection and replacement.



**Compact body/  
Big productivity/  
High performance**



### Maintenance

- / Traction and lifting system are all adopt maintenance-free AC motor.
- / The door can be fully opened for easy maintenance.
- / Battery reach out system is easy to change the battery.
- / The controller and multi-way valve are located on the front side of the body, and it's only necessary to open the front sealing plate during maintenance.



### Energy saving and efficient

- / Hangcha's advanced technology providing long working time, cost-effective by reducing truck weight by 16%.
- / The hydraulic system has been optimized to improve the lifting performance. The lifting speed was increased by 23% without load, and the lifting speed was increased by 22% with full load.
- / The traction system adopts large speed ratio gearbox, which makes the motor speed higher and the torque less.
- / The excellent climbing performance increases the climbing performance by 48% without load and climbing performance by 15% with full load.

### Standard specification

- / Headlights (LED) + turn signals (LED)
- / Shimadzu triple valves
- / AC driving (4kw) + AC lifting (9kw)
- / EPS (Electric Power Steering) system
- / Soft landing
- / Suspension control system
- / Speed control at corner
- / Mechanical brakes
- / Regenerative braking (reverse, neutral, brake)
- / Battery standard: 48V/280Ah
- / USB charge port

### Options

- / Warning lights, blue lights
- / Quadruple and quintuplet
- / Anti-rollback system
- / Fork camera
- / Altimeter
- / Password lock
- / Mirror
- / Fire extinguisher
- / Maximum capacity of the battery: 370Ah
- / Lift top buffering
- / Height level selection
- / Lowering lock valve

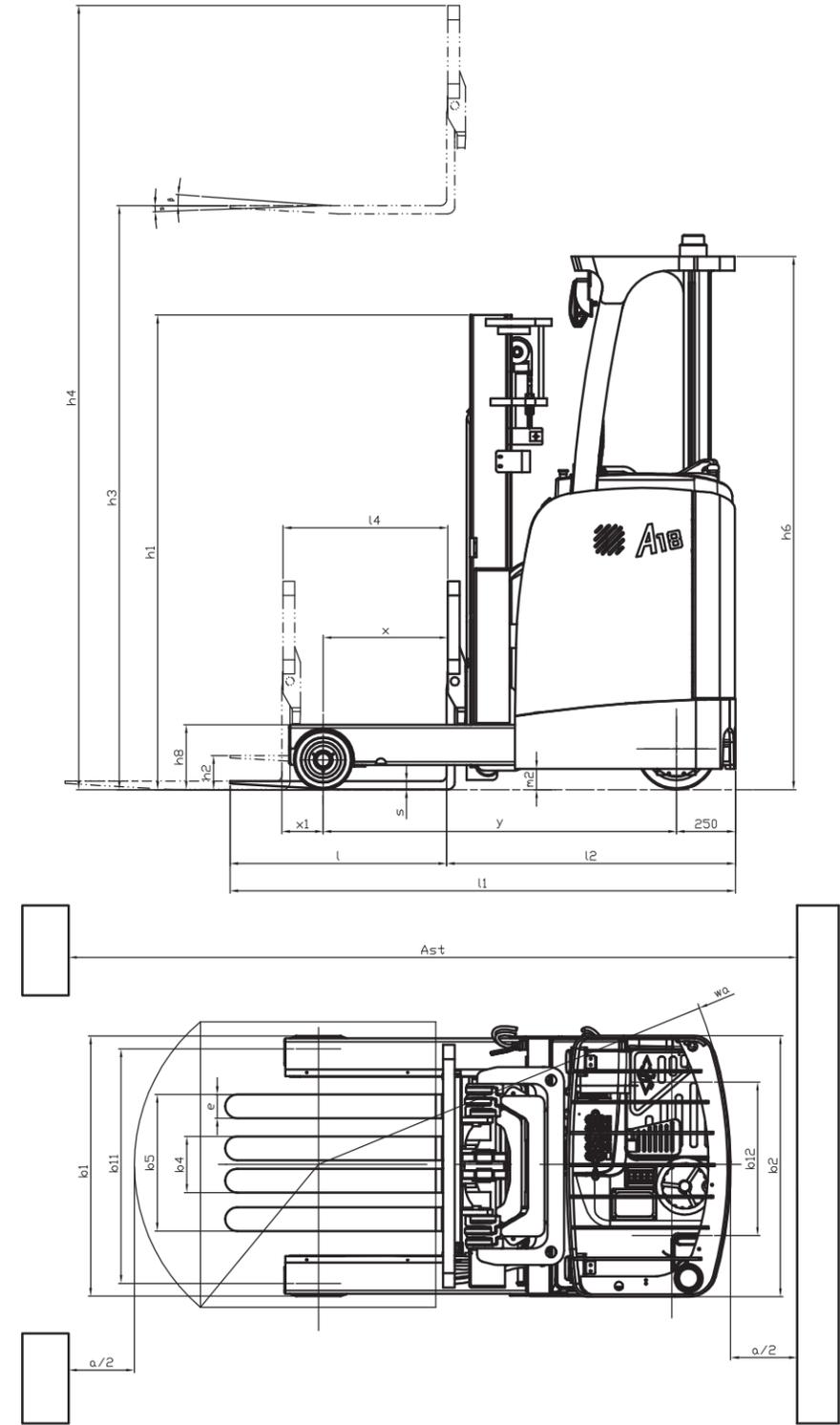


CQD15/18-AC2S				
	Tianneng	Zibo	Xunqi	Hawker
280 Ah	●	○	○	
290 Ah			○	
300 Ah	○	○		○
313 Ah			○	
325 Ah	○	○	○	○
350 Ah	○	○	○	
375 Ah	○	○		○

● Std. ○ Opt.

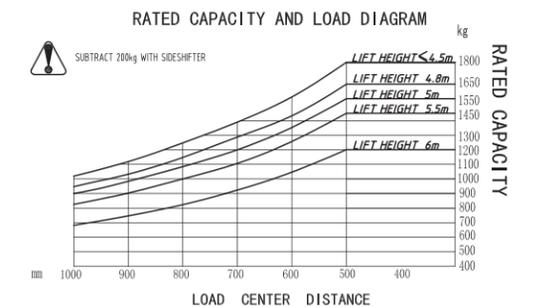
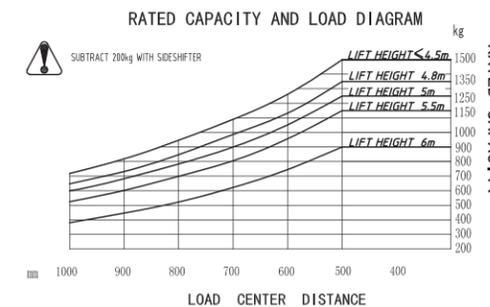
## A Series 1.5~1.8t Stand-on Reach Truck Specification

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation	CQD15-AC2S	CQD18-AC2S	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	
	1.4	Operator Position	Stand On	Stand On	
	1.5	Rated capacity/rated load	Q (kg)	1500	1800
	1.6	Load centre distance	c (mm)	500	500
	1.7	Load distance, centre of drive axle to fork	x (mm)	375	525
	1.8	Load distance, centre of drive axle to fork,mast reached forward	x <sub>1</sub> (mm)	175	175
	1.9	Wheelbase	y (mm)	1350	1500
Weight	2.1	Service weight (including battery)	Kg	2430	2460
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane
	3.2	Tyre size, rear	mm	Ø343×135	Ø343×135
	3.3	Tyre size, front ×2	mm	Ø250×105	Ø250×105
	3.4	Tyre size,Caster ×2	mm	Ø150×85	Ø150×85
	3.5	Wheels,number front/rear(x=driven wheels)		2/1×+2	2/1×+2
	3.6	Tread width,front	b <sub>11</sub> (mm)	986	986
	3.7	Tread width,rear	b <sub>12</sub> (mm)	645	645
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	3/5	3/5
	4.2	Height, mast lowered	h <sub>1</sub> (mm)	1995	1995
	4.3	Lift	h <sub>3</sub> (mm)	3000	3000
	4.4	Mast Extended height	h <sub>4</sub> (mm)	3886	3886
	4.5	Free lift	h <sub>2</sub> (mm)	100	100
	4.6	Height of overhead guard	h <sub>6</sub> (mm)	2240	2240
	4.7	Ground clearance,below mast	m <sub>2</sub> (mm)	80	80
	4.8	Height of support arms	h <sub>8</sub> (mm)	275	275
	4.9	Overall length	l <sub>1</sub> (mm)	2146	2146
	4.10	Length to face of forks	l <sub>2</sub> (mm)	1226	1226
	4.11	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	1094/1090	1094/1090
	4.12	Fork dimensions ISO	s/e/l (mm)	35×100×920	35×100×920
	4.13	Distance between fork-arms	b <sub>4</sub> /b <sub>5</sub> (mm)	230-720	230-720
	4.14	Reach distance	l <sub>4</sub> (mm)	550	700
	4.15	Aisle width for pallets 1100 x 1100 , clearance 200	A <sub>st</sub> (mm)	2710	2745
	4.16	Aisle width for pallets 1000 x 1200 crossways,clearance 200	A <sub>st</sub> (mm)	2666	2715
	4.17	Turning radius	W <sub>a</sub> (mm)	1600	1750
Performance Data	5.1	Travel speed,laden/unladen	Km/h	9.5/10.5	9.5/10.5
	5.2	Lift speed,laden/unladen	m/s	0.320/0.550	0.300/0.530
	5.3	Lowering speed,laden/unladen	m/s	0.440/0.400	0.440/0.400
	5.4	Reach speed,laden/unladen	m/s	0.110/0.110	0.110/0.110
	5.5	Max. gradeability,laden/unladen	%	15/20	15/20
Electric- engine	6.1	Drive motor rating S2 60 min	kW	AC 4	AC 4
	6.2	Lift motor rating at S3 15%	kW	AC 9	AC 9
	6.3	Steering motor	kW	DC 0.45	DC 0.45
	6.4	Battery voltage, nominal capacity K5	V/Ah	48/280	48/280
	6.5	Battery weight	kg	485	485
Addition data	7.1	Type of drive control		CURTIS Full AC	CURTIS Full AC
	7.2	Operating pressure for attachments	bar	140	140
	7.3	Sound level at the driver's ear according to EN / DIN 12 053	dB (A)	< 75	< 75



## 1.5~1.8t Mast Specification

Type	Model	Lifting height h <sub>3</sub>	Mast lowered h <sub>1</sub>	Mast extended h <sub>4</sub>		Free lifting height h <sub>2</sub>		Tilting range		Load capacity at 500mm	
				With backrest		With backrest		Forward	Backward		
				mm	mm	mm	mm	(°)	(°)	1.5t	1.8t
Wide view duplex mast	QAZ18M	2500	1745	3386	100	3	5	1500	1800		
		2700	1845	3586	100	3	5	1500	1800		
		3000	1995	3886	100	3	5	1500	1800		
		3500	2245	4386	100	3	5	1500	1800		
		4000	2595	4886	100	3	5	1500	1800		
		4500	2845	5386	100	3	5	1500	1800		
Full free triplex mast	QAZ18N	5000	3095	5886	100	3	5	1250	1550		
		4500	2165	5376	1179	3	5	1500	1800		
		5000	2315	5876	1339	3	5	1250	1550		
		5500	2490	6376	1519	3	5	1150	1450		
		6000	2655	6876	1689	3	5	900	1200		





## A Series Stand-on Reach Truck

with capacities of 2,000 to 2,500kg

The new A series 2.0-2.5t standing driving forward-moving type is a new product developed by the company for different market needs.

The ergonomically-designed comfortable vehicle has wide operating vision and a stable control system, and is further optimized and improved in terms of configuration, parameter, performance, safety, cost, etc., making this product comparable to foreign brands and have obvious advantages when compared with other similar domestic products.

### Comfort

- / Optimized ergonomic design shows the steering wheel, joystick and accelerator to the driver at the best distance, making the driving operations easier and more comfortable.
- / The newly-designed molded broad backrest is soft and comfortable, reducing operator fatigue.
- / Shimadzu's low-power multiway valve reduces operating force and improves comfort by 30%.
- / A new layout provides a larger operation space. The low pedals enable the operator to get on and off the vehicle more easily.
- / The imported LORD sensor enables high safety and makes operations to be adapted to road conditions.

### Energy saving and high efficient

- / With equipment rationally arranged on the premise that the strength meets the requirements, the vehicle has less weight and cost and less energy consumption.
- / The hydraulic system is optimized to improve the lifting performance. The no-load lifting performance is increased by 23%, and the full-load lifting performance is increased by 22%.
- / The drive system uses a high speed ratio gearbox to make the motor require higher speed and less torque.
- / The combined LED lights (headlights + turn signal lights) have high brightness and low energy consumption.

### Stability

- / Suspension control system effectively reduces the shake when turning, lifting and moving forward and backward.
- / The pump motor assembling on the rear side of the body makes the center of gravity moving backwards and improving stability.
- / Automatic speed control: Travel speed is controlled according to the lift height, providing stability and safety.

### Maintenance

- / AC drive and lifting systems with maintenance-free motors are used.
- / AC steering with a maintenance-free motor is provided.
- / The fully open door enables easy repair and maintenance.
- / The controller and multiway valve are provided on the front side of the vehicle body. Only the front sealing plate needs to be opened for maintenance.



Operator's compartment



Safe pedal: when the pedal is released, traveling is stopped, and only hydraulic operation is enabled



Charging plug inside operator's compartment, this eliminates the need to disconnect the plug from battery, enhancing ease of operation (Std.)



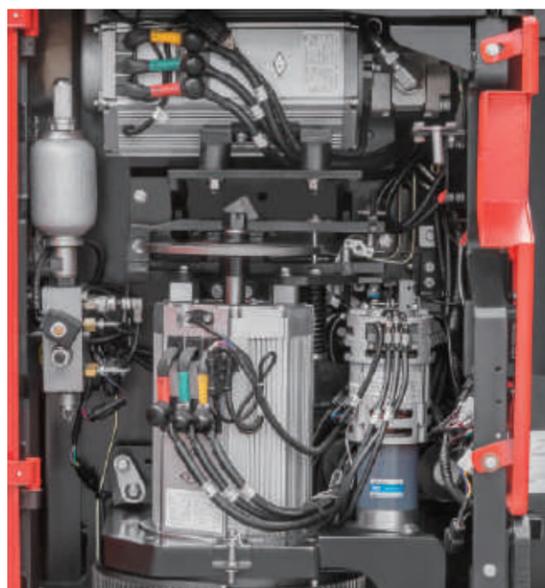
New designed mast and the large open steel roof provide super visibility and safety



Forks can tilt forward/backward for easy loading

## Safety

- / An optimal four-link suspension mechanism forces the drive wheel and the auxiliary wheels, thereby reducing slipping of the drive wheel.
- / A disc mechanical brake and regenerative braking system make the truck safer and more reliable.
- / Turn speed is controlled to the turning radius, providing stable turning matched to the state of operation.
- / If the operator is not in the normal operating position, travel power is interrupted and load-handling (except lowering) operations are stopped.
- / The right leg of the OHG moves backwards to protect the driver's back in case of a collision.



The loading wheels with hydraulic braking make the braking distance shorter and safer



## Standard configuration

- / Headlights (LED) + turn signal lights (LED) + alarm lights (LED)
- / Shimadzu's standard triple valve
- / AC driving (5kw) + AC lifting (11kw)
- / Electric steering system (AC 670W motor)
- / Fork descending buffering (cylinder buffering)
- / Suspension control system
- / Automatic turning deceleration
- / Side charge
- / Mechanical brake
- / Regenerative braking (reversing, neutral, braking)
- / Interlock switch
- / In-place switch
- / Standard battery configuration: 48/325Ah
- / USB charging port
- / Hydraulic braking (loading wheels)

## Options configuration

- / Blue lights, straight projection lights
- / Optional quadruple and quintuple (Shimadzu)
- / Skid control system
- / Fork camera
- / Altimeter
- / Code lock
- / Retroreflector
- / Fire extinguisher
- / Maximum battery capacity: 450Ah
- / Ascending buffering
- / Height selection
- / Descending locking valve
- / Side shift
- / Cigarette lighter
- / Smart module
- / Drive-in overhead guard

CQD20/25-AC2S					
	Tianneng	Zibo	Xunqi	Hawker	FAAM
325 Ah	●	○	○	○	○
375 Ah	○	○		○	○
450 Ah	○				

● Std. ○ Opt.



# COMFORTABLE DESIGN

It's convenient for getting on/off.



Floor height: 285mm.

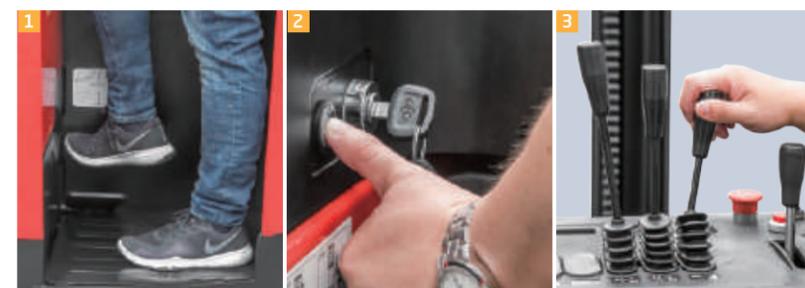
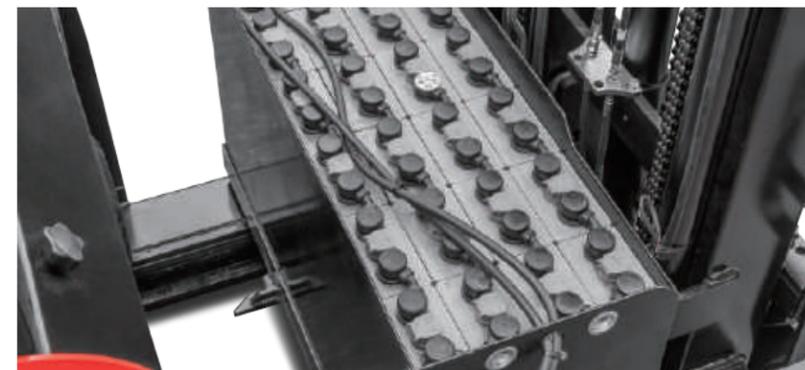
## Optimal lifting system

- / New optimal manufacturing process ensures the roller gap of the mast, making the mast sways smaller and the vehicle safer.
- / Add 2 safety functions: the mast moves backward to enable hydraulic buffer protection and reduce the speed in this position. It helps reduce the mast swaying when in a high position and makes the vehicle safer.
- / The optimized mast piping with an upper and lower layout mast improves vision of the mast (Triplex mast).
- / The forklift's sleeve structure boasts a simple structure, small mast thickness and light weight.



## BATTERY REACH OUT SYSTEM

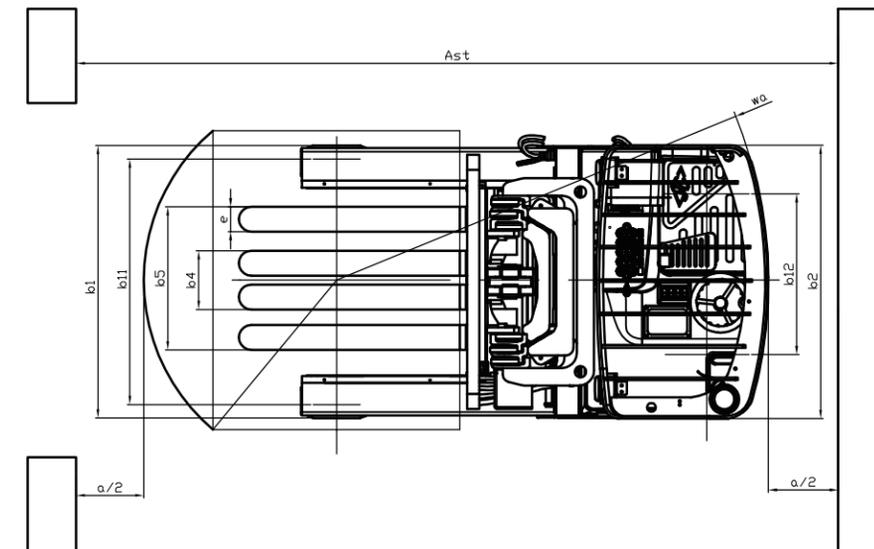
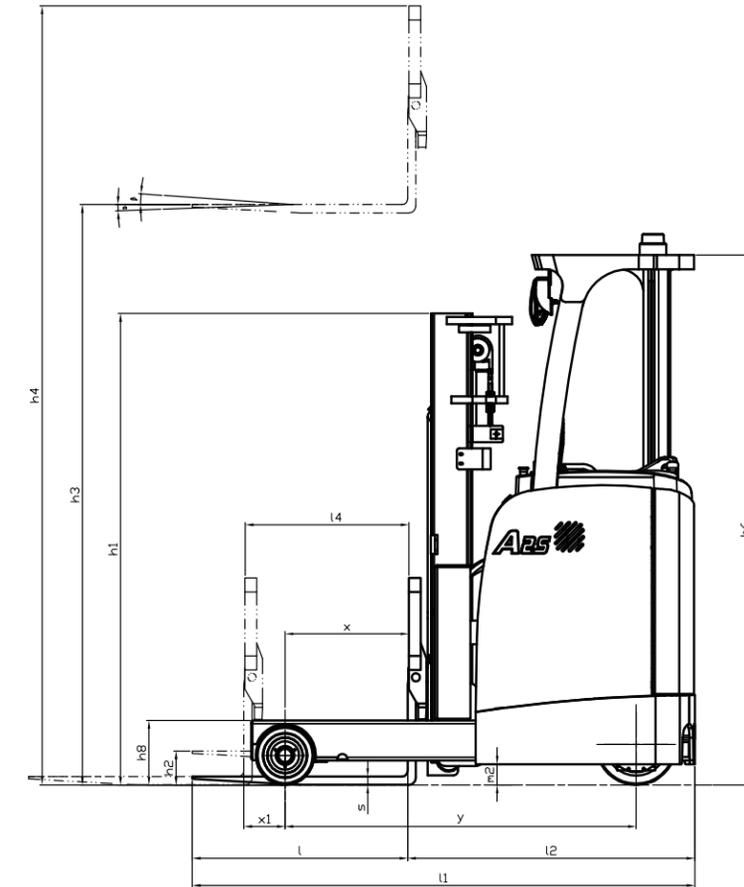
The battery can be reached out easily. It enables smooth battery maintenance, inspection and replacement.





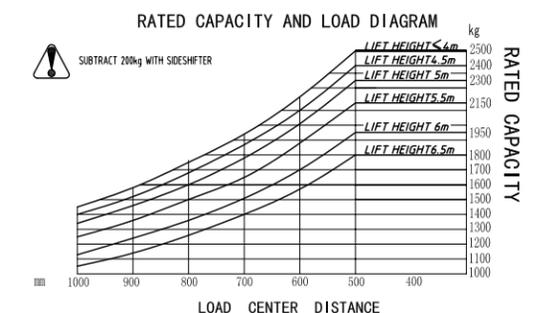
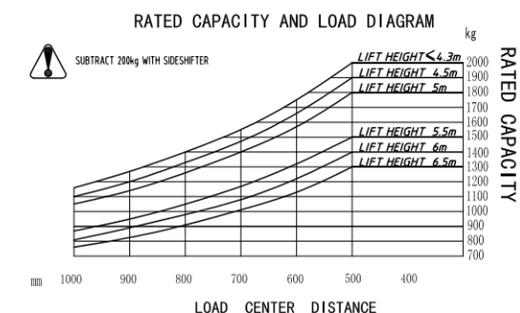
## A series stand on reach truck 2.0-2.5t specification

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation	CQD20-AC2S	CQD25-AC2S	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	
	1.4	Operator Position	Stand On	Stand On	
	1.5	Rated capacity/rated load	Q (kg)	2000	2500
	1.6	Load centre distance	c (mm)	500	500
	1.7	Load distance, centre of drive axle to fork	x (mm)	495	620
	1.8	Load distance, centre of drive axle to fork,mast reached forward	x <sub>1</sub> (mm)	180	180
	1.9	Wheelbase	y (mm)	1500	1700
Weight	2.1	Service weight (including battery)	Kg	2725	2760
	Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane
3.2		Tyre size, rear	mm	Ø343×135	Ø343×135
3.3		Tyre size, front ×2	mm	Ø250×120	Ø250×120
3.4		Tyre size,Caster ×2	mm	Ø150×85	Ø150×85
3.5		Wheels,number front/rear(x=driven wheels)		2/1×+2	2/1×+2
3.6		Tread width,front	b <sub>11</sub> (mm)	1074	1074
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	3/5	3/5
	4.2	Height, mast lowered	h <sub>1</sub> (mm)	2045	2045
	4.3	Lift	h <sub>3</sub> (mm)	3000	3000
	4.4	Mast Extended height	h <sub>4</sub> (mm)	3876	3876
	4.5	Free lift	h <sub>2</sub> (mm)	105	105
	4.6	Height of overhead guard	h <sub>6</sub> (mm)	2245	2245
	4.7	Ground clearance,below mast	m <sub>2</sub> (mm)	80	80
	4.8	Height of support arms	h <sub>8</sub> (mm)	275	275
	4.9	Overall length	l <sub>1</sub> (mm)	2245	2245
	4.10	Length to face of forks	l <sub>2</sub> (mm)	1260	1335
	4.11	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	1194/1190	1194/1190
	4.12	Fork dimensions ISO	s/e/l (mm)	40×122×920	40×122×920
	4.13	Distance between fork-arms	b <sub>4</sub> /b <sub>5</sub> (mm)	278-784	278-784
	4.14	Reach distance	l <sub>4</sub> (mm)	665	790
	4.15	Aisle width for pallets 1100 x 1100 , clearance 200	A <sub>st</sub> (mm)	2775	2880
	4.16	Aisle width for pallets 1000 x 1200 crossways,clearance 200	A <sub>st</sub> (mm)	2740	2860
	4.17	Turning radius	W <sub>a</sub> (mm)	1755	1950
Performance Data	5.1	Travel speed,laden/unladen	Km/h	10.5/10.5	10.5/10.5
	5.2	Lift speed,laden/unladen	m/s	0.320/0.530	0.280/0.510
	5.3	Lowering speed,laden/unladen	m/s	0.450/0.400	0.450/0.400
	5.4	Reach speed,laden/unladen	m/s	0.110/0.110	0.110/0.110
	5.5	Max. gradeability,laden/unladen	%	10/15	10/15
Electric-engine	6.1	Drive motor rating S2 60 min	kW	AC 5	AC 5
	6.2	Lift motor rating at S3 15%	kW	AC 11	AC 11
	6.3	Steering motor	kW	AC 0.67	AC 0.67
	6.4	Battery voltage, nominal capacity K5	V/Ah	48/325	48/325
	6.5	Battery weight	kg	500	500
Addition data	7.1	Type of drive control		CURTIS Full AC	CURTIS Full AC
	7.2	Operating pressure for attachments	bar	140	140
	7.3	Sound level at the driver's ear according to EN / DIN 12 053	dB (A)	<75	<75



## 2.0~2.5t Mast Specification

Type	Model	Lifting height h <sub>3</sub>	Mast lowered h <sub>1</sub>	Mast extended h <sub>4</sub>		Free lifting height h <sub>2</sub>		Tilting range		Load capacity center at 500mm	
				With backrest	With backrest	With backrest	With backrest	Forward	Backward	2.0t	2.5t
		mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg
Wide view duplex mast	QA225M	2500	1795	3376	105	2000	3	5	2000	2500	
		2700	1895	3576	105	2000	3	5	2000	2500	
		3000	2045	3876	105	2000	3	5	2000	2500	
		3500	2295	4376	105	2000	3	5	2000	2500	
		4000	2645	4876	105	2000	3	5	2000	2500	
		4300	2795	5176	105	2000	3	5	2000	2400	
		4500	2895	5376	105	1900	3	5	1900	2400	
		5000	3145	5876	105	1850	3	5	1850	2300	
		4300	2040	5176	1164	3	5	2000	2500		
		4500	2105	5376	1229	3	5	1900	2400		
Full free triplex mast	QA225N	5000	2265	5876	1389	3	5	1800	2300		
		5500	2445	6376	1569	3	5	1500	2150		
		6000	2615	6876	1739	3	5	1450	1950		
		6500	2850	7376	1974	3	5	1300	1800		
		7000	3070	7876	2194	3	5	700	1000		





## X Series Narrow Aisle Reach Truck

with capacities of 3,000 to 4,500lbs

The 3,000-4,500 lbs electric forklift with a pantograph is suitable for operations in narrow aisles and limited spaces.

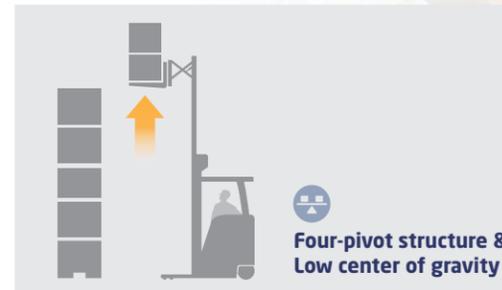
Featuring a high lift, big load capacity and small turning radius, as well as advanced performance, easy operations, high safety and reliability, etc., it is an ideal tool for materials handling in warehouses, supermarkets or workshops.

## Reliability and Safety

- The four-pivot structure, low center of gravity and high strength of the main force-bearing components of the frame are appropriate to heavy load conditions.
- The main electrical components such as the controller, contactor, power plug and emergency cut-off switch are all products of well-known brands.
- ZF transmission\ SCHABMULLER drive motor and the efficient AC power system can greatly improved reliability and service life.
- The interlocked control of the steering angle, lifting height and travelling speed enables safer operations.



The multifunction control handle's unique shape and angle design helps minimize hand movements and muscle fatigue.



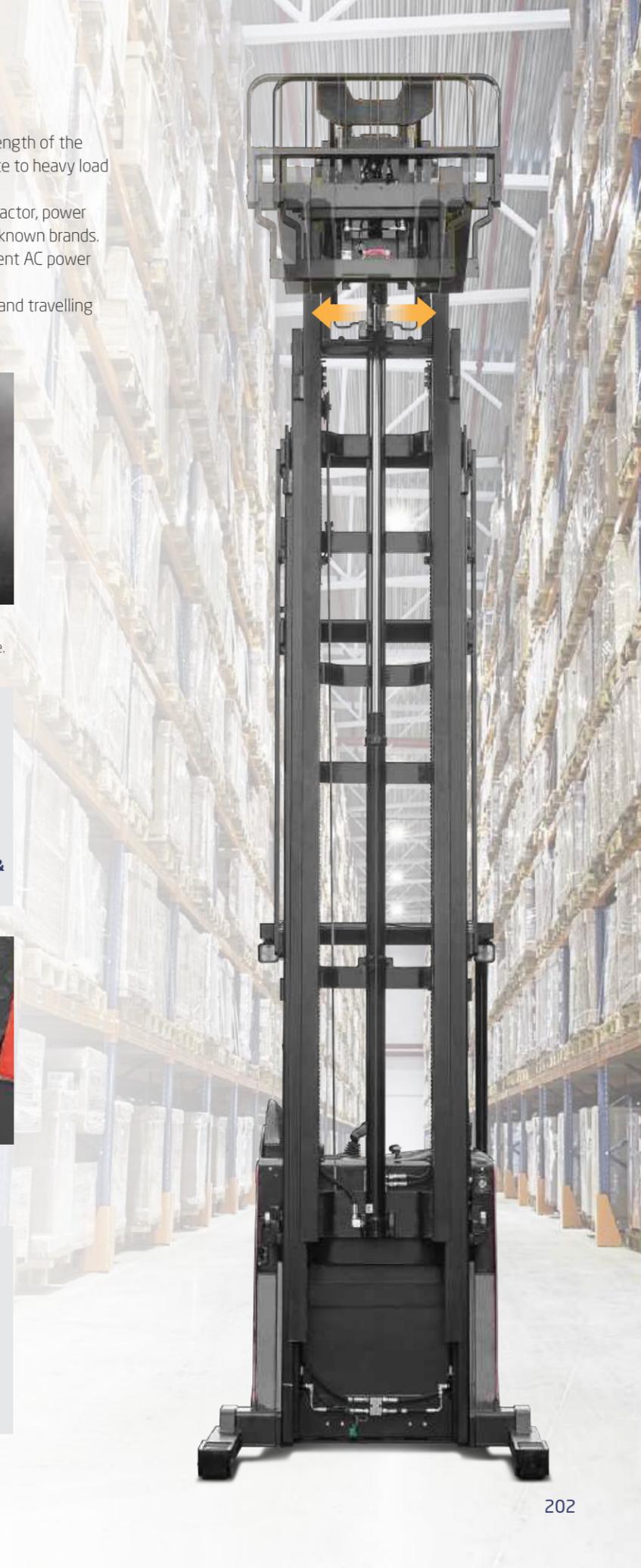
Four-pivot structure & Low center of gravity



The safety pedal can effectively reduce the risk from the maloperation.



The optimized design of the wide-view mast enables the operator to get a better view, and improves the operation safety.



# EFFICIENT TRUCKS

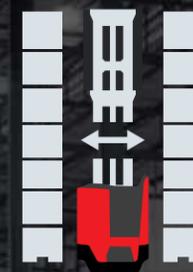


3000  
4500  
lbs

Load capacities

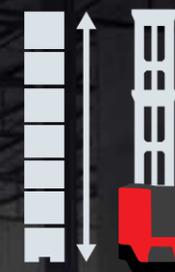


Reliability & safety



103.2"

Aisle width



421"

Max. Lift height

## Appearance

Streamlined surface modelling, a smooth profile of the beautiful and generous truck.

## Stability

- With the battery placed at the bottom of the chassis, the truck has good stability.
- With four-pivot structure, the truck has good stability when performing a high lift.



## High Efficiency

- Thanks to the small turning radius, the truck can operate in narrow aisles.
- A high-power pump motor is used. The silent gear pump (CONCENTRIC) improve the lifting and lowering speed, as well as its operating efficiency.
- With several power modes, the truck is adapted to different operating conditions.
- The brake energy regeneration system provides long working time.



## Comfort

The hanging pedal greatly improves the ride comfort and alleviates the operator's fatigue due to long-time driving.



The control handle and backrest can be adjusted according to the operator's habits.



The low pedal enable the operator to get on and off the truck more conveniently and comfortably.



The ergonomically arranged handle, backrest, instruments and switches make operations more comfortable and flexible.



A new optimized lifting system enables the operator's wider view through the mast and excellent line of sight.



The lateral removal of the battery provides easier maintenance and is applicable to continuous operating conditions.

## Maintenance

- The brushless AC motor is maintenance-free and significantly reduces the maintenance cost.
- The fully open door enables easy repair, maintenance and tuning.
- The battery removed from side of the truck enables easy repair and maintenance.
- The controller and electrical components are placed together and highly integrated.



## Advancement

- Instead of a traditional handbrake, EPB (Electric Parking Brake) is used to realize the intelligent braking.
- The high lifting and lowering speeds provides high efficiency.
- The suspension system and hanging pedals improve operating comfort.
- The integrated mechanical, electrical and hydraulic control realizes the step less speed regulation of the truck travelling and the fork movement, more precisely and stably.
- With efficient and precise adjustment performance, the newly equipped AC control system supports longer working time.

High Efficiency



The large-screen LCD display with fault self-diagnosis functions can accurately display information in harsh environments.



## Standard specification

- / AC motor and controller
- / Multi-function instrument
- / EPS ( Electric Power Steering) system
- / 198" (5.03m) wide-view triplex mast
- / Fork tilting
- / Load backrest
- / Overhead guard
- / Soft landing system
- / Safe operating system
- / Automatic decelerate speed at the corner
- / Speed automatic limit when mast high lifting
- / Damper pedal
- / Adjustable backrest and armrest
- / Battery side roll out
- / Multi-task control handle
- / Electro-hydraulic proportional valve system
- / Polyurethane tire
- / Headlights
- / Folder
- / Emergency cut-off switch
- / Electric horn
- / Static strap
- / EPB ( Electric Parking Brake)

## Options

- / Charger
- / Big capacity battery
- / Other length forks
- / Shield of mast
- / Widened or heightened load backrest
- / Sideshifter
- / Strobe light
- / Blue light
- / Rear working light
- / Cabin ceiling light
- / Overhead fan
- / Camera system
- / 12V power plug
- / Freezer
- / Fire extinguisher

## Mast Specification

	Lift	Height, mast lowered	Height, mast extended		Free lift	Load capacity @610mm/24inch			
			With backrest	Without backrest		CQD14	CQD16	CQD18	CQD20
			in(mm)	in(mm)		in(mm)	in(mm)	lb/kg	lb/kg
Triplex full free mast	198(5030)	95(2415)	239(6063)	239(6063)	53(1342)	3000(1360)	3500(1588)	4000(1814)	4500(2041)
	210(5330)	99(2515)	251(6363)	251(6363)	57(1442)	3000(1360)	3500(1588)	4000(1814)	4500(2041)
	240(6100)	107(2718)	281(7133)	281(7133)	65(1645)	3000(1360)	3500(1588)	4000(1814)	4000(1814)
	270(6860)	119(3025)	311(7893)	311(7893)	77(1952)	3000(1360)	3500(1588)	3500(1588)	3500(1588)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	3000(1360)	3000(1360)	3000(1360)	3000(1360)

With integral sideshifter minus 220lb(100kg).

## Mast Specification (HEAVY DUTY)

	Lift	Height, mast lowered	Height, mast extended		Free lift	Load capacity @610mm/24inch			
			With backrest	Without backrest		CQD14	CQD16	CQD18	CQD20
			in(mm)	in(mm)		in(mm)	in(mm)	in(mm)	lb/kg
Triplex full free mast	270(6860)	119(3025)	311(7893)	311(7893)	77(1952)	3000(1361)	3500(1588)	4000(1814)	4500(2041)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	3000(1361)	3500(1588)	3835(1750)	4000(1814)
	321(8150)	140(3560)	362(9183)	362(9183)	98(2487)	3000(1361)	3500(1588)	3748(1700)	3835(1750)
	341(8660)	149(3785)	382(9693)	382(9693)	107(2712)	3000(1361)	3500(1588)	3527(1600)	3638(1650)
	366(9300)	160(4060)	407(10333)	407(10333)	118(2987)	3000(1361)	3307(1500)	3307(1500)	3417(1550)
	400(10160)	172(4365)	441(11193)	441(11193)	130(3292)	3000(1361)	3086(1400)	3086(1400)	3197(1450)
	421(10700)	179(4545)	462(11733)	462(11733)	137(3472)	2866(1300)	2866(1300)	2866(1300)	2976(1350)

With integral sideshifter minus 220lb(100kg).

## X Series Narrow Aisle Single Reach Truck

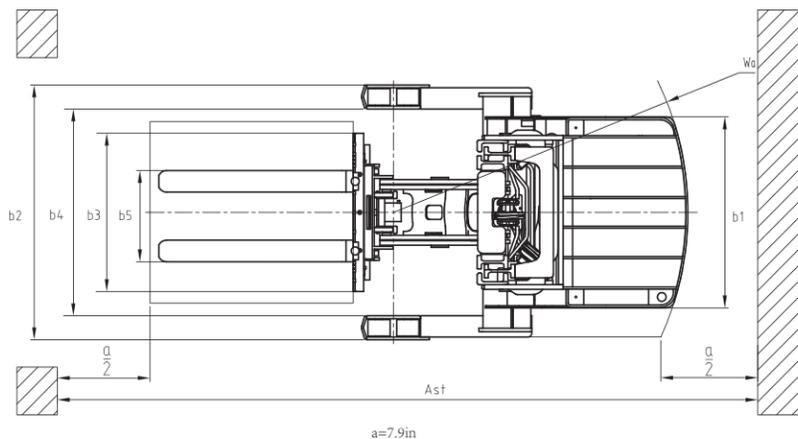
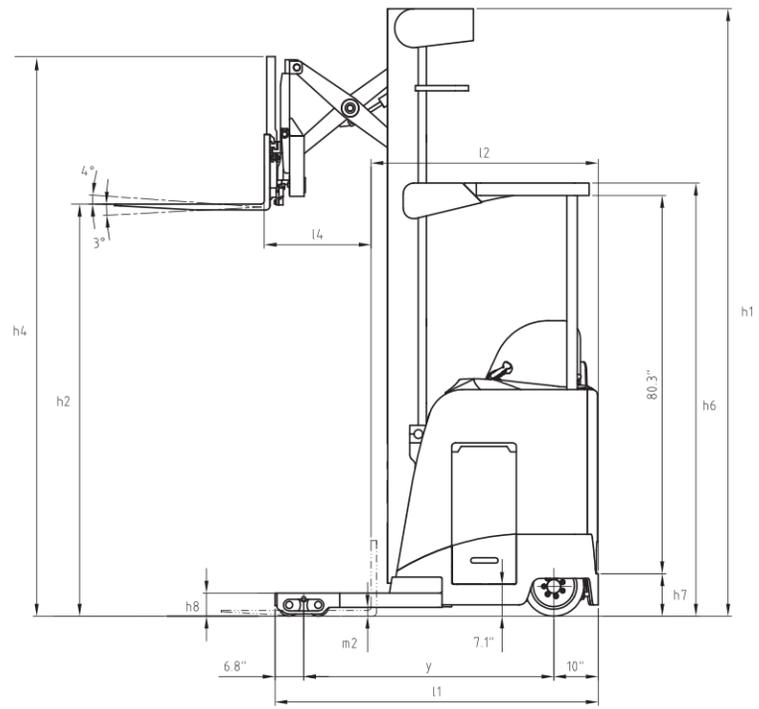
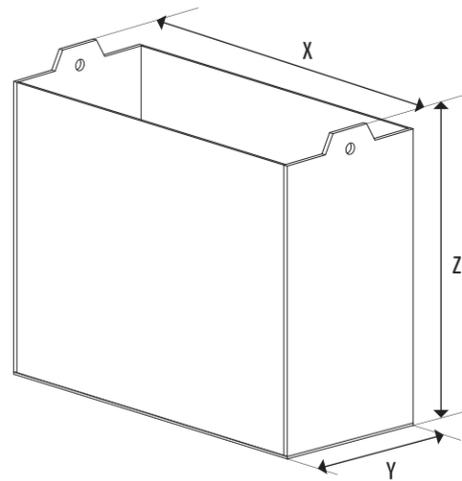
		HANGCHA GROUP CO.,LTD.					
		SR14	SR16	SR18	SR20		
Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.				
		HCFA Model	SR14	SR16	SR18	SR20	
	1.2	Manufacturer's type designation	CQD14-XD2-J	CQD16-XD2-J	CQD18-XD2-J	CQD20-XD2-J	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric				
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Stand up				
	1.5	Rated capacity/rated load	Q (lb/kg)	3000 (1361)	3500 (1588)	4000 (1814)	4500 (2041)
	1.6	Load centre distance	c (in\mm)	24 (610)			
	1.8	Load distance, centre of drive axle to fork	x (in\mm)	10.8 (274)			
	1.9	Wheelbase	y (in\mm)	See table 1			
Weight	2.1	Service Weight, without Battery	lb (kg)	5677 (2575)			6140 (2785)
	2.2	Axle loading, laden front/rear with assemble retracted	lb (kg)	6848(3106)/3646(1654) ①	7134(3236)/3801(1724) ①	7423(3367)/3953(1793) ①	8170(3706)/4352(1974) ①
	2.3	Axle loading, unladen front/rear with assemble retracted	lb (kg)	2899(1315)/4508(2045)①			3175(1440)/4938(2240)①
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	Polyurethane				
	3.2	Wheels size, load	in(mm)	5×3.9(φ127×99)			
	3.3	Wheels size, drive	in(mm)	13.5×5.5(φ343×135)			
	3.4	Wheels size, caster	in(mm)	7.9×2.2(φ200×56)			
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α / β (°)	3/4			
	4.2	Height, mast lowered	h1 (in\mm)	95(2415)			
	4.3	Free lift	h2 (in\mm)	53(1342)			
	4.4	Lift	h3 (in\mm)	198(5030)			
	4.5	Height, mast extended	h4 (in\mm)	239(6063)			
	4.7	Height of overhead guard	h6 (in\mm)	92.5(2350)			
	4.8	Stand height	h7 (in\mm)	9.5(240)			
	4.10	Height of wheel arms	h8 (in\mm)	5.1(130)			
	4.19	Overall length	l1 (in\mm)	See table 1			
	4.20	Length to face of forks	l2 (in\mm)	See table 1			
	4.21	Overall width	b1 (in\mm)	42.5(1080)			
	4.22	Fork dimensions, Std.	s/e/l (in\mm)	1.6/4.8/42(40/122/1070)			
		Fork dimensions, Opt.	s/e/l (in\mm)	1.8/4.8/L(45/122/L)L>1500			
	4.24	Fork-carriage width	b3 (in\mm)	37(942)			
	4.25	Distance between fork-arms	b5 (in\mm)	7.9-29.9(200-760)			
4.26	Distance between wheel arms/loading surfaces	b4 (in\mm)	34-50(864-1270) (1" increments)				
4.28	Reach distance	l4 (in\mm)	24(610)				
4.31	Ground clearance, laden, below mast	m1 (in\mm)	2(50)				
4.32	Ground clearance, centre of wheelbase	m2 (in\mm)	2(50)				
4.34	Aisle width for pallets(clearance 7.9")	Ast (in\mm)	See table 1				
4.35	Turning radius	Wa (in\mm)	See table 1				
Performance Data	5.1	Travel speed, laden/unladen	mph	6.5/7.5			
			km/h	10.5/12			
	5.2	Lift speed, laden/unladen	fpm	78/105	72/105	68/105	65/105
			mm/s	395/535	365/535	345/535	330/535
	5.3	Lowering speed, laden/unladen	fpm	105/105			
			mm/s	533/533			
	5.4	Reach speed,laden/unladen	fpm	31/35			
		mm/s	160/180				
5.7	Gradeability, laden/unladen	%	10/12				
	Parking brake		Electromagnetic				
Electric-engine	6.1	Drive motor rating S2 60 min	hp/kw	8.6(6.4)			
	6.2	Lift motor rating at S3 15%	hp/kw	17.4(13)			
	6.4	Battery voltage, nominal capacity 14.5"	V/Ah	36/660			/
		Battery voltage, nominal capacity 16.5"	V/Ah	36/770			36/770
		Battery voltage, nominal capacity 18.5"	V/Ah	/			36/880
		Battery voltage, nominal capacity 21.5"	V/Ah	/			36/1100
6.5	Max. battery weight	lb (kg)	See table 1				
	Min. battery weight	lb (kg)	See table 1				
	Battery Compartment Size, l/b/h	in(mm)	See table 1				
10.7	Sound pressure level at the driver's seat	dB (A)	62				

Note: ① With min. battery

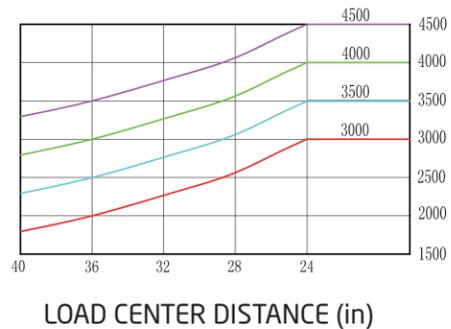
**Table 1**

Battery and compartment size			14.5"	16.5"	18.5"	21.5"
6.4	Battery Voltage	V	36	36	36	36
	Battery capacity maximum 5 Hr Rate	Ah	660	770	880	1100
Battery Compartment	"X" Max.	in(mm)	38.8(985)	38.8(985)	38.8(985)	38.8(985)
	"Y" Max.	in(mm)	14.25(362)	16.25(413)	18.25(464)	21.25(540)
	"Z" Max.	in(mm)	30.7(780)	30.7(780)	30.7(780)	30.7(780)
6.5	Minimum Batt.Wt.	lb(kg)	1687(765)	1909(855)	2116(960)	2546(1155)
	Maximum Batt.Wt.	lb(kg)	1797(815)	2083(935)	2304(1045)	2789(1265)
1.9	Wheelbase	y (in\mm)	55.79(1417)	57.79(1469)	59.79(1519)	62.79(1595)
4.19	Overall length	l1 (in\mm)	72.7(1846)	74.7(1898)	76.7(1948)	79.7(2024)
4.20	Length to face of forks	l2 (in\mm)	55(1398)②	57(1450)②	59(1500)②	62(1576)②
4.35	Turning Radius	Wa (in\mm)	65.7(1670)	67.7(1722)	69.7(1772)	72.7(1848)
4.34	Ast 40"L(1026mm)×48"W(1220mm) clearance 7.9"	Ast in(mm)	103.23(2622)②	105.24(2673)②	107.24(2724)②	109.25(2775)②
	Ast 48"L(1220mm)×40"W(1026mm) clearance 7.9"	Ast in(mm)	110.87(2816)②	112.87(2867)②	114.88(2918)②	116.88(2969)②
	Ast 48"L(1220mm)×32"W(813mm) clearance 7.9"	Ast in(mm)	110.87(2816)②	112.87(2867)②	114.88(2918)②	116.88(2969)②

Note: ②Add 1" (50mm) with sideshift



**RATED CAPACITY AND LOAD DIAGRAM**



RATED CAPACITY (lb)

LOAD CENTER DISTANCE (in)

**X Series Narrow Aisle Double Reach Truck**

		HANGCHA GROUP CO.,LTD.			
Distinguishing mark	1.1	Manufacturer	DR14	DR16	
		HCFA Model	CQD14-XD2-JD	CQD16-XD2-JD	
	1.2	Manufacturer's type designation	Electric		
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Stand up		
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	3000 (1361)		3500 (1588)
	1.5	Rated capacity/rated load	24 (610)		
	1.6	Load centre distance	10.8 (274)		
	1.8	Load distance, centre of drive axle to fork	See table 2		
	1.9	Wheelbase	5952(2700)		6062(2750)
Weight	2.1	Service Weight, without Battery	6702(3040)/4068(1845) ①		7121(3230)/3891(1765) ①
	2.2	Axle loading, laden front/rear with assemble retracted	3009(1365)/4674(2120)①		3120(1415)/4806(2180)①
	2.3	Axle loading, unladen front/rear with assemble retracted			
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	Polyurethane		
	3.2	Wheels size, load	5×3.9(φ127×99)		
	3.3	Wheels size, drive	13.5×5.5(φ343×135)		
	3.4	Wheels size, caster	7.9×2.2(φ200×56)		
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α / β (°)		3/4
	4.2	Height, mast lowered	h1 (in\mm)	95(2415)	
	4.3	Free lift	h2 (in\mm)	53(1342)	
	4.4	Lift	h3 (in\mm)	198(5030)	
	4.5	Height, mast extended	h4 (in\mm)	239(6063)	
	4.7	Height of overhead guard	h6 (in\mm)	92.5(2350)	
	4.8	Stand height	h7 (in\mm)	9.5(240)	
	4.10	Height of wheel arms	h8 (in\mm)	5.1(130)	
	4.19	Overall length	l1 (in\mm)	See table 2	
	4.20	Length to face of forks	l2 (in\mm)	See table 2	
	4.21	Overall width	b1 (in\mm)	42.5(1080)	
	4.22	Fork dimensions, Std.	s/e/l (in\mm)	1.6×4.8×42(40×122×1070)	
		Fork dimensions, Opt.	s/e/l (in\mm)	1.8×4.8×L(45×122×L),L>2000	
	4.24	Fork-carriage width	b3 (in\mm)	37(942)	
	4.25	Distance between fork-arms	b5 (in\mm)	7.9-29.9(200-760)	
	4.26	Distance between wheel arms/loading surfaces	b4 (in\mm)	34-50(864-1270)(1" increments)	
	4.28	Reach distance	l4 (in\mm)	42(1067)	
4.31	Ground clearance, laden, below mast	m1 (in\mm)	2(50)		
4.32	Ground clearance, centre of wheelbase	m2 (in\mm)	2(50)		
4.34	Aisle width for pallets(clearance 7.9")	Ast (in\mm)	See table 2		
4.35	Turning radius	Wa (in\mm)	See table 2		
Performance Data	5.1	Travel speed, laden/unladen	mph	6.5/7.5	
			km/h	10.5/12	
	5.2	Lift speed, laden/unladen	fpm	78/105	
			mm/s	395/535	
	5.3	Lowering speed, laden/unladen	fpm	105/105	
			mm/s	535/535	
	5.4	Reach speed,laden/unladen	fpm	31/35	
mm/s			160/180		
5.7	Gradeability, laden/unladen	%	10/12		
	Parking brake		Electromagnetic		
Electric-engine	6.1	Drive motor rating S2 60 min	hp/kW	8.6(6.4)	
	6.2	Lift motor rating at S3 15%	hp/kW	17.4(13)	
	6.4	Battery voltage, nominal capacity 14.5"	V/Ah	36/660	
		Battery voltage, nominal capacity 16.5"	V/Ah	36/770	
		Battery voltage, nominal capacity 18.5"	V/Ah	/	
		Battery voltage, nominal capacity 21.5"	V/Ah	/	
6.5	Max. battery weight	lb (kg)	See table 2		
	Min. battery weight	lb (kg)	See table 2		
	Battery Compartment Size, l/b/h	in(mm)	See table 2		
10.7	Sound pressure level at the driver's seat	dB (A)	62		

Note: ① With min. battery

## Mast Specification

Triplex full free mast	Lift	Height, mast lowered	Height, mast extended		Free lift	Load capacity @1067mm/42inch	
			With backrest	Without backrest		CQD14	CQD16
	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	lb/kg	lb/kg
	198(5030)	95(2415)	239(6063)	239(6063)	53(1342)	3000(1361)	3500(1588)
	210(5330)	99(2515)	251(6363)	251(6363)	57(1442)	3000(1361)	3330(1510)
	240(6100)	107(2718)	281(7133)	281(7133)	65(1645)	2888(1310)	3000(1360)
	270(6860)	119(3025)	311(7893)	311(7893)	77(1952)	2490(1130)	2600(1180)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	2116(960)	2227(1010)

With integral sideshifter minus 220lb(100kg).

## Mast Specification (HEAVY DUTY)

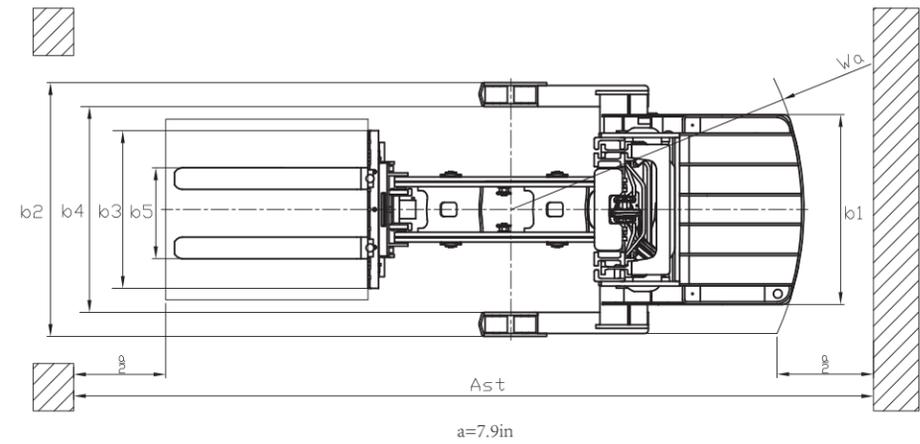
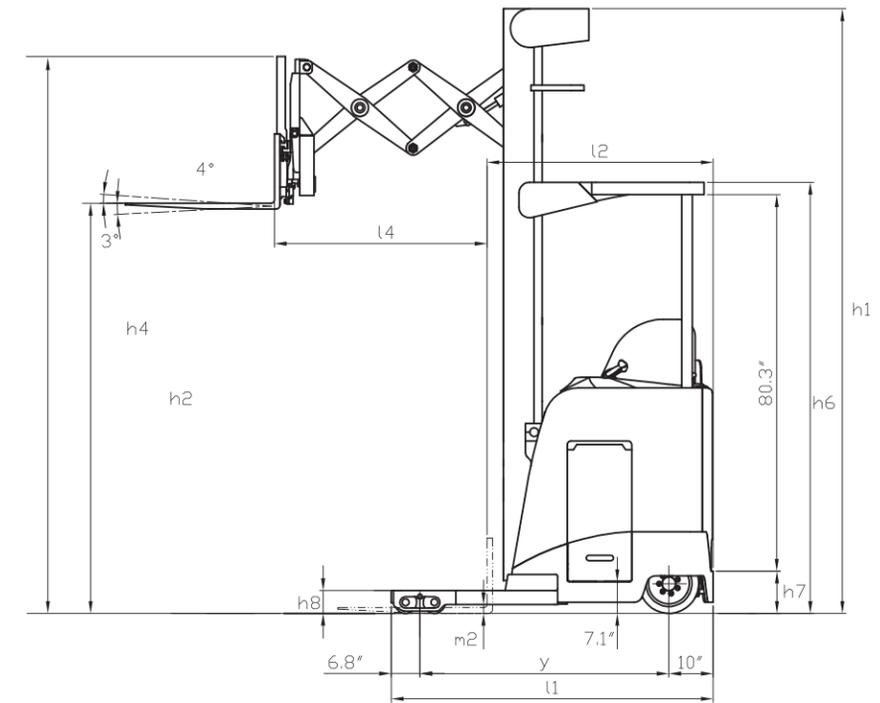
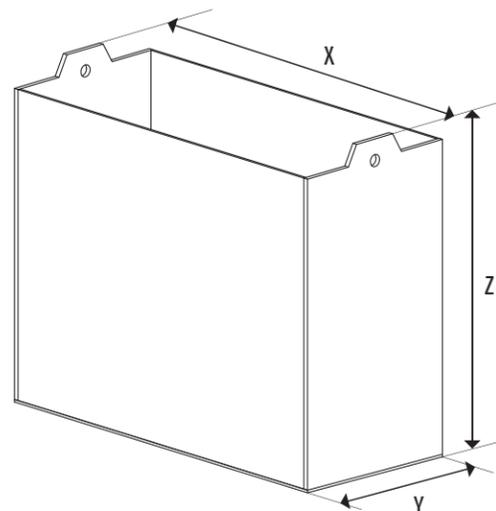
Triplex full free mast	Lift	Height, mast lowered	Height, mast extended		Free lift	Load capacity @1067mm/42inch	
			With backrest	Without backrest		CQD14	CQD16
	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	lb/kg	lb/kg
	270(6860)	119(3025)	311(7893)	311(7893)	77(1952)	3000(1361)	3500(1588)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	3000(1361)	3417(1550)
	321(8150)	140(3560)	362(9183)	362(9183)	98(2487)	3000(1361)	3307(1500)
	341(8660)	149(3785)	382(9693)	382(9693)	107(2712)	3000(1361)	3197(1450)
	366(9300)	160(4060)	407(10333)	407(10333)	118(2987)	2866(1300)	2976(1350)
	400(10160)	172(4365)	441(11193)	441(11193)	130(3292)	2646(1200)	2756(1250)
	421(10700)	179(4545)	462(11733)	462(11733)	137(3472)	2315(1050)	2425(1100)

With integral sideshifter minus 220lb(100kg).

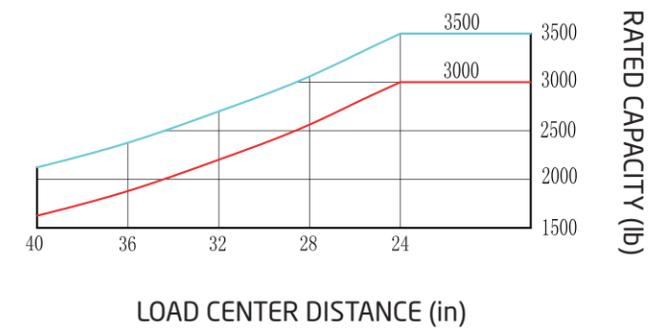
## Table 2

Battery and compartment size			14.5"	16.5"	18.5"	21.5"
6.4	Battery Voltage	V	36	36	36	36
	Battery capacity maximum 5 Hr Rate	Ah	660	770	880	1100
Battery Compartment	"X" Max.	in(mm)	38.8(985)	38.8(985)	38.8(985)	38.8(985)
	"Y" Max.	in(mm)	14.25(362)	16.25(413)	18.25(464)	21.25(540)
	"Z" Max.	in(mm)	30.7(780)	30.7(780)	30.7(780)	30.7(780)
6.5	Minimum Batt.Wt.	lb(kg)	1687(765)	1909(855)	2116(960)	2546(1155)
	Maximum Batt.Wt.	lb(kg)	1797(815)	2083(935)	2304(1045)	2789(1265)
1.9	Wheelbase	y (in\mm)	60.79(1544)	62.79(1596)	64.79(1646)	67.79(1722)
4.19	Overall length	l <sub>1</sub> (in\mm)	75.7(1973)	77.7(2025)	79.7(2075)	82.7(2101)
4.20	Length to face of forks	l <sub>2</sub> (in\mm)	62.6(1589)②	64.6(1641)②	67.6(1691)②	67.6(1717)②
4.35	Turning Radius	Wa (in\mm)	70.7(1797)	72.7(1849)	74.7(1899)	77.7(2025)
4.34	Ast 40"L(1026mm)×48"W(1220mm) clearance 7.9"	Ast in(mm)	104.8(2662)②	106.81(2713)②	108.82(2764)②	110.83(2815)②
	Ast 48"L(1220mm)×40"W(1026mm) clearance 7.9"	Ast in(mm)	112.44(2856)②	114.45(2907)②	116.46(2958)②	118.46(3009)②
	Ast 48"L(1220mm)×32"W(813mm) clearance 7.9"	Ast in(mm)	112.44(2856)②	114.45(2907)②	116.46(2958)②	118.46(3009)②

Note: ②Add 1" (50mm) with sideshift



## RATED CAPACITY AND LOAD DIAGRAM





## A Series Man-down Turret Truck with capacities of 1,200kg

A series Man-down Turret Truck is applicable for use in warehouses that need to be upgraded or have limited storage space. The attachment can rotate 180 degrees and can stack goods left and right from the aisle. This greatly improves the space utilization rate. The ergonomically-designed comfortable vehicle has a wide operating vision and a stable control system and is further optimized and improved in terms of configuration, parameter, performance, safety, cost, etc.

### Comfort

- / With its optimized ergonomic design and the imported Grammer fingertip system, proportional adjustments can improve the comfort and reliability greatly.
- / The soft and comfortable mechanical shock-absorbing seat can reduce the operator's fatigue.
- / The LOARD sensor with an adjustable damping mechanism enables a good hand feel and a limiting function.
- / Spacious cab, suspension seat and intuitive layout of all controls all provide comfortable compartment. Low step in height is easy for access.

### Safety

- / With mature technology, the ZF transmission assembly is highly reliable.
- / The regenerative braking system provides safer and more reliable driving.
- / Speed reductions functions makes the driving smoother and safer.
- / Synchronous swivel with stop at 90 degrees.
- / The smart of HANGCHA control system continuously monitors the truck's technical potential in order to deliver optimum simultaneous travel speeds relative to lift height.
- / All round visibility with the ergonomically designed structure improve the safety greatly.

### Stability

- / The center of gravity of the vehicle is moved backwards and the reduced load distance provides great longitudinal stability.
- / Proportional acceleration and proportional braking enable less impact during acceleration and braking.

### Maintainability

- / AC drive motor and lifting motor are all maintenance-free.
- / AC steering motor is maintenance-free also.



A perfect interface between operator and truck has been achieved with the HANGCHA ergonomic design concept



Camera systems for driving and pallet handling



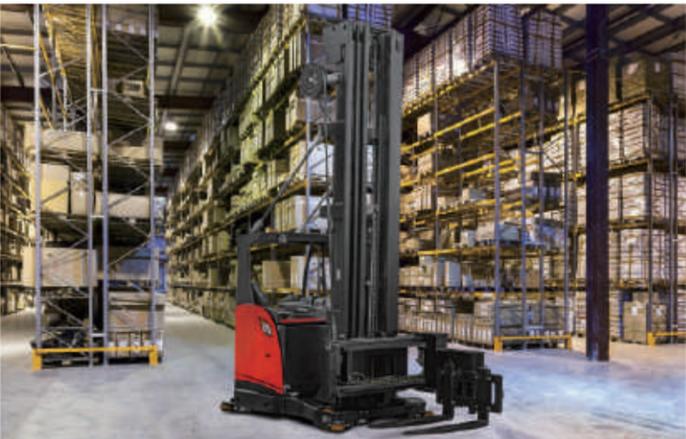
Rail or wire guidance



Fully open door enables easy repair and maintenance



Battery side roll out



## Productivity

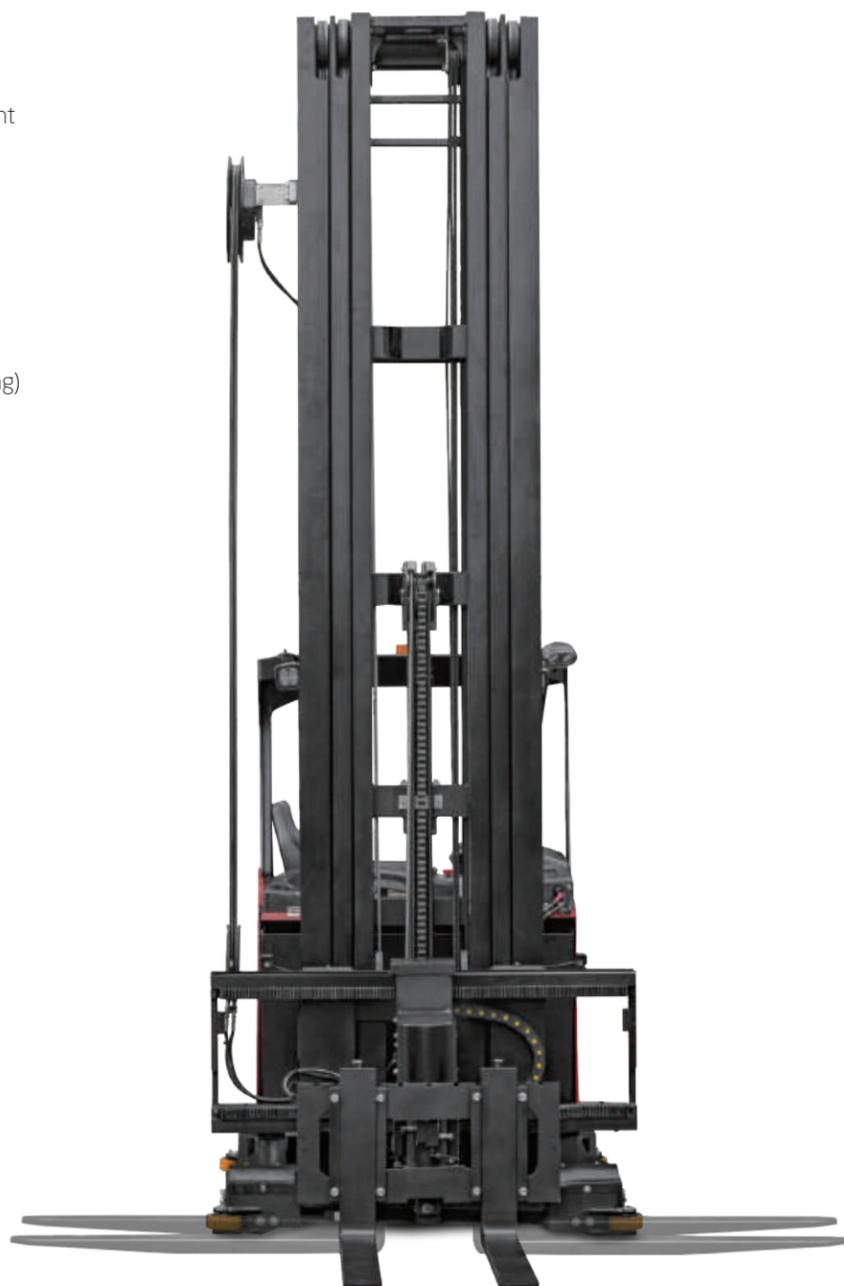
- / The unique modular design ensures that an individual truck specification can match the application precisely in order to maximise productivity at all times.
- / The drive system adopts a gearbox with a large speed ratio, so that the motor requires a higher speed and a smaller torque.
- / The LED headlights and alarm lights provided high brightness and low energy consumption.

## Standard configuration

- / Headlights (LED) + alarm lights (LED) + blue light
- / Sauer Danfoss quadruple valve
- / AC driving (6.5kw) + AC lifting (12.8kw)
- / EPS system
- / Fingertip system
- / Inmotion AC control system
- / Battery side roll out
- / LORD sensor
- / Regenerative braking (reversing, neutral, braking)
- / Camera systems for driving and pallet handling
- / Standard battery: 48V/525Ah
- / Duplex 5m mast
- / Lowering locking
- / Reversing buzzer

## Options configuration

- / Altimeter
- / Pin code access
- / Retroreflector
- / Fire extinguisher
- / Maximum battery capacity: 775Ah
- / Lifting buffering
- / Lift height preselection
- / Fire extinguisher
- / Magnetic stripe guidance
- / Triplex mast
- / Soft landing



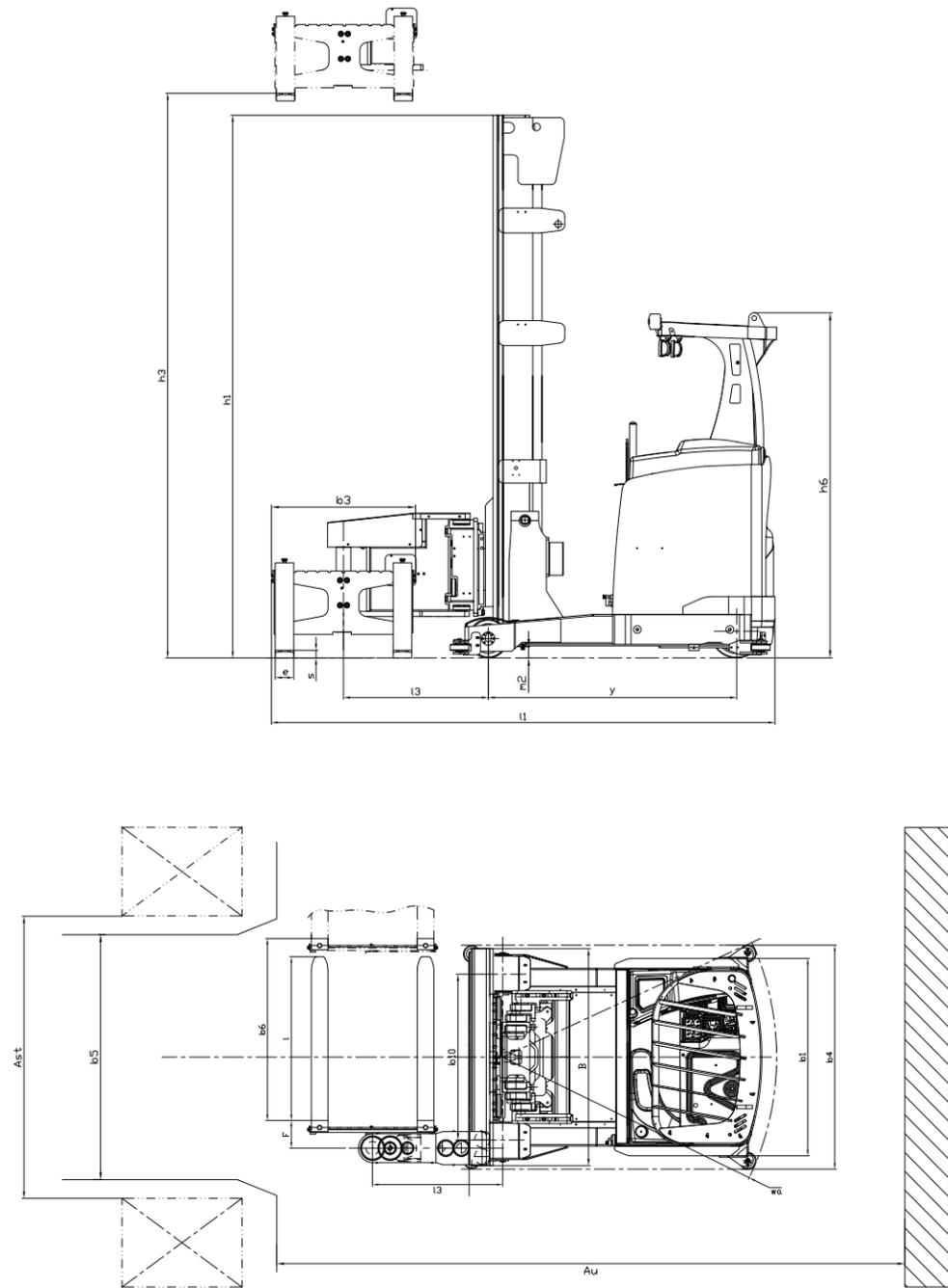


## A Series 1.2t Man-down Turret Truck Specification

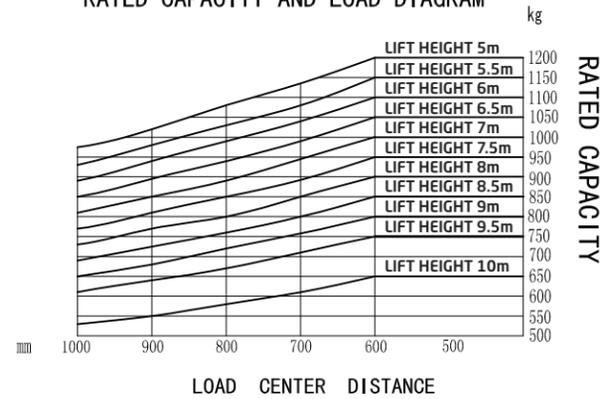
		HANGCHA GROUP CO.,LTD.		
Characteristics	1.1	Manufacturer		
	1.2	Manufacturer's model designation	CSD12-AED2	
	1.3	Power unit	Electric	
	1.4	Operation	Seated	
	1.5	Load carrying capacity	Q(kg)	1200
	1.6	Load centre	c(mm)	600
Weight	1.9	Wheelbase	y(mm)	1610
	2.1	Weight(incl.battery)	Kg	5065
Wheels	3.1	Tyres		Polyurethane
	3.2	Tyre size,front	mm	Ø343×140
	3.3	Tyre size,rear	mm	Ø250×105
	3.5	Wheels,number front/rear(x=drive wheel)		4/1×
	3.6	Track width,rear	b10(mm)	1184
Basic Dimensions	4.2	Height of mast,lowered	h1(mm)	3500
	4.4	Lift height	h3(mm)	5000
	4.5	Height,mast raised	h4(mm)	6000
	4.7	Height to top of overhead guard	h6(mm)	2216
	4.19	Over length(incl.forks)	l1(mm)	3264
	4.21	Over width	b1/b2(mm)	1410/1500
	4.22	Fork dimensions	s/e/l(mm)	50×122×1220
	4.24	Width of fork carriage	b3(mm)	900
	4.27	Width over side guide rollers	b4(mm)	1600
	4.29	Lateral reach travel	b6(mm)	1300
	4.32	Ground clearance at centre of wheelbase	m2(mm)	65
	4.34	Aisle width	Ast (mm)	1750
	4.35	Turning radius	Wa(mm)	1975
	4.38	Centre of axle to fork pivot	l3(mm)	938
4.40	Width of reach carriage	B(mm)	1550	
4.41	Head width	F(mm)	155	
4.42	Transfer aisle width(min.)	Au(mm)	3800	
Performance	5.1	Travel speed,with/without load	Km/h	6/8
	5.2	Lift speed,with/without load	m/s	0.300/0.400
	5.3	Lowering speed,with/without load	m/s	0.400/0.300
	5.4	Reach speed,with/without load	m/s	0.100/0.100
	5.10	Brakes		Regenerative
E-motors	6.1	Drive motor,power S2 60 min	kW	AC 6.5
	6.2	Lift motor,Power at S3 15%	kW	AC 12.8
	6.3	Battery		DIN-C
	6.4	Battery type,voltage,capacity(5h)	V/Ah	48/525
	6.5	Battery weight(±5%)	kg	1119
Misc	8.1	Type of drive control		INMOTION
	8.4	Noise level at operator's ear	dB(A)	<75

## Mast Specification

Type	Model	Lifting height h1	Mast lowered h1	Mast extended h4	Free lifting height h2	Load capacity center at 600mm	
						1.2t	kg
Wide view duplex mast	ASE12M	5000	3500	6000	/	1200	
		5500	3700	6500	/	1150	
		6000	4000	7000	/	1100	
		6500	4250	7500	/	1050	
		7000	4500	8000	/	1000	
		7500	4750	8500	/	950	
		8000	5000	9000	/	900	
		8500	5250	9500	/	850	
		9000	5500	10000	/	800	
		10000	5800	10500	/	750	
Full free triplex mast	ASE12N	5000	2800	6100	1700	1200	
		5500	2970	6620	1850	1150	
		6000	3140	7140	2000	1100	
		6500	3310	7610	2200	1050	
		7000	3480	8130	2350	1000	
		7500	3650	8650	2500	950	
		8000	3810	9110	2700	900	
		8500	3980	9630	2850	850	
		9000	4140	10140	3000	800	
		9500	4300	10600	3200	750	
10000	4500	11150	3350	700			



RATED CAPACITY AND LOAD DIAGRAM





## A Series Electric Tow Tractor

with capacities of 3,000 to 5,000kg

HANGCHA A series 3.0-5.0t electric tow tractor is mainly applied in short-distance transportation among the production lines. Low operator platform for frequent and effortless entry and exit. Thanks to the standing design, it can greatly improve the efficiency of operations. Furthermore, for indoor application, the electric drive system is environmental friendly within the workshop. Therefore, this product is a good partner of automobile manufacturing, logistics companies, warehouses and other places, fields which has broad application prospects.

### Appearance

- / A series 3.0-5.0t electric tow tractor applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes for front and back guard, which is robust, durable, and also environmental compliance.

### High Performance

- / Electric power steering is standard specification, which provides flexible operation.
- / Powered by AC traction motor not only has good acceleration and climbing performance, but also low heat, brushless, maintenance-free.
- / Latest AC control system, precise and smooth.
- / CAN-BUS connection enables all truck data can be read out for inspection, and also improves the data transition more quick and reliable.
- / Regenerative braking for battery recovery during travel speed reduction, anti-slope on gradient.
- / All key parts such as switches, connectors, battery indicator and hour meter all adopt the famous brand.

### Reliability

- / 3-pivot and side support bar system design ensure the safe and reliability.
- / Imported waterproof connectors, all wires and cables are protected, greatly improve the reliability of the electric system.
- / Safety switch of pedal using non-contact proximity switch, improves safety and reliability.
- / Though sideway battery change is standard specification, fixed in safe and reliable way.

### Comfort

- / The pedal applies shock absorption design, greatly improve the operator's comfort, reduce the fatigue.
- / Backrest height can be adjusted within a certain range, and the backrest with hip support can greatly improve the comfort of the operator.
- / Sideway change battery is the standard specification. The inching switches installed at the LH/RH side, greatly improve the ease of operation.
- / The easy to reached storage space is convenient for the operator.
- / Compact size, light weight and flexible, extremely easy to operate, can easily go through even in a compact space.

### Safety

- / Automatic deceleration during turning.
- / Pedal has a safety switch, which can effectively prevent mis-operation.
- / Three braking system of regenerative braking, reverse current braking, parking brake, insures the safe operation.
- / Steel front shield assures excellent safety for the operation.

### Maintenance

- / AC motor without carbon brushes, maintenance-free, cost saving.
- / Integrated battery indicator, hour meter and self-diagnostic instrument.
- / Full opened hood, easy accessibility of all components, is easy for service.
- / All shafts are equipped with shaft sleeve and oil cup, easy maintenance, prolong service life.

### Standard Specification

- / AC drive motor
- / Electric steering system
- / Inching switch(LH/RH)
- / Emergency cut off switch
- / Stand-on pedal with shock absorber
- / Adjustable supportive backrest
- / Sideway change battery
- / Battery indicator
- / PU wheel
- / Multi-function handlebar
- / Horn
- / Tool box
- / Standard lead-acid battery

### Options

- / Rubber wheel
- / Warning light
- / Working light
- / Handrail
- / Big capacity battery
- / Anti-collision bumper
- / Different height of towing coupling
- / Review Mirror



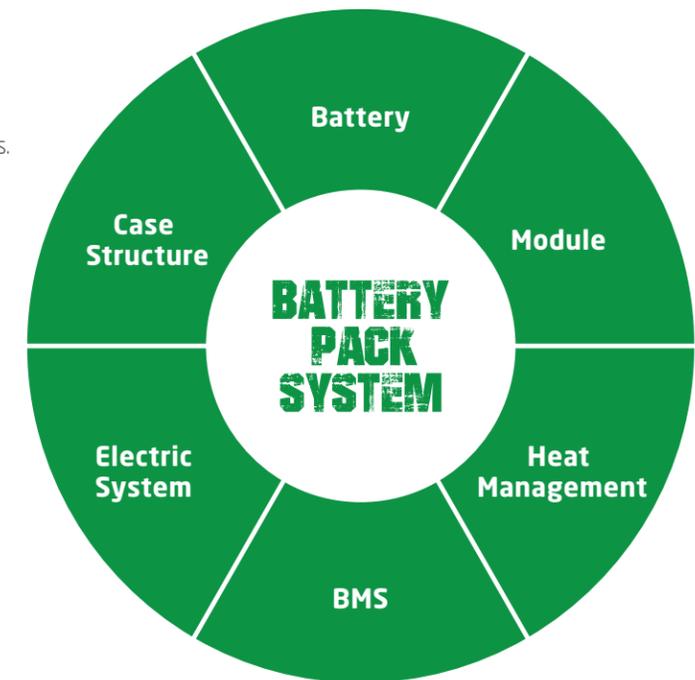
# LET THE LITHIUM POWER BE REEL



## INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion  
**2 hours**  
**100%**

Lead-acid batteries  
**8-10 hours** 100%

**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-Ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

### Li-Ion Battery Pack specification

Type		QDD3-ASC1-1	QDD5-ASC1-1
Li-Ion battery	V/Ah	24/120	24/202
Li-Ion battery, Optional	V/Ah	24/202	/
Titans charger		SPC-24100	SPC-24100



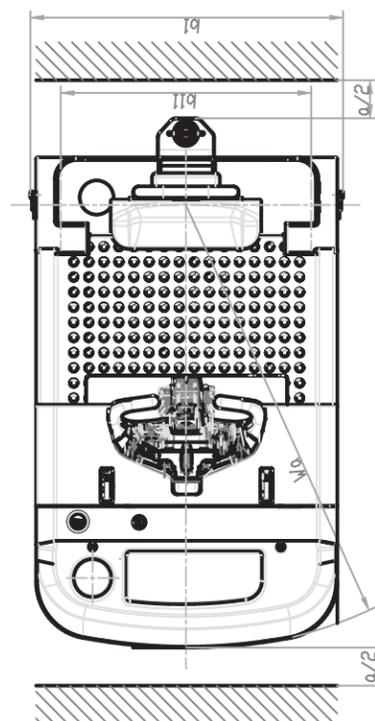
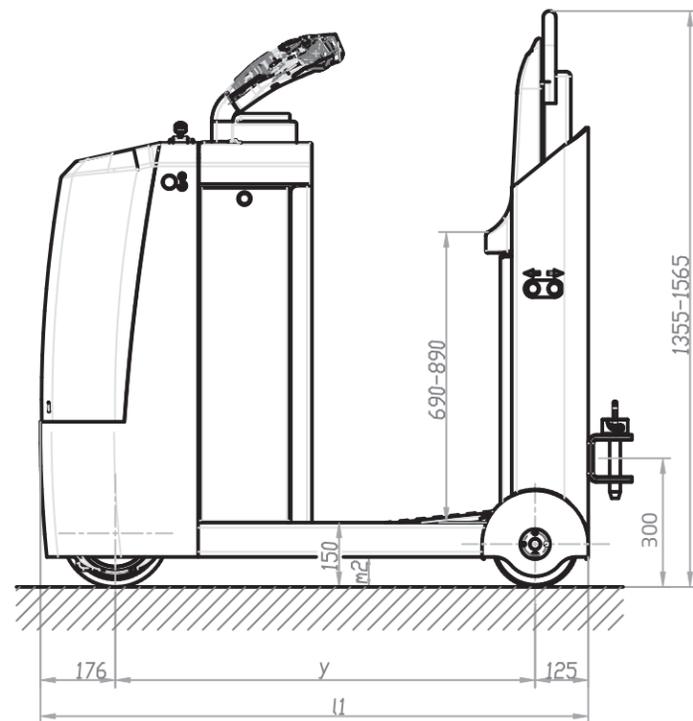
HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.



## A Series Electric Tow Tractor

		HANGCHA GROUP CO.,LTD.			
Distinguishing marks	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation	QDD3-ASC1 QDD3-ASZ3	QDD5-ASC1 QDD5-ASZ3	
	1.3	Drive	Electric	Electric	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Standing	
	1.5	Load capacity/rated load	Q (kg/lb)	3000/6614	5000/11023
Weights	1.7	Rated drawbar pull	F (N/lbf)	600/135	1000/225
	1.9	Wheelbase	y (mm/in)	957/37.7	978/38.5
	2.1	Service Weight	kg/lb	900/1984.2	1000/2204.6
Wheels/Chassis	2.3	Axle loading, front/rear	kg/(lb)	610/290 (1345/639)	700/300 (1543/661)
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU
	3.2	Tyre size, front	mm/in	φ230×75 / φ9.1×3.0	φ250×100 / φ9.8×3.9
	3.3	Tyre size, rear	mm/in	φ200×100 / φ7.9×3.9	φ200×100 / φ7.9×3.9
	3.5	Wheels, number front /rear (x=drive wheels)		1×/2	1×/2
Dimensions	3.7	Track width, rear	b <sub>11</sub> (mm/in)	665/26.2	665/26.2
	4.8	Seat height/stand height	h <sub>7</sub> (mm/in)	150/5.9	150/5.9
	4.19	Overall length(without traction pin)	l <sub>1</sub> (mm/in)	1289/50.7	1289/50.7
	4.21	Overall width	b <sub>1</sub> (mm/in)	830/32.7	830/32.7
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	70/2.8	70/2.8
Performance Data	4.35	Turning radius	w <sub>a</sub> (mm/in)	1172/46.1	1172/46.1
	5.1	Travel speed, laden/unladen	km/h (mph)	7.0/10.0 (4.4/6.2)	7.0/10.0 (4.4/6.2)
	5.5	Drawbar pull at 60 minute rating	N/lbf	600/135	1000/225
	5.6	Max. Drawbar pull at 5 minute rating	N/lbf	2400/540	3200/719
	5.7	Gradeability, laden	%	4	4
E-Motor	5.10	Service brake		Electromagnetic	Electromagnetic
	6.1	Drive motor rating S2 60 min.	kW/hp	2.2/2.95	3/4.02
	6.4	Battery voltage,rated capacity(STD.)	V/Ah	24/270	24/360
Others		Battery voltage,rated capacity(OPT.)	V/Ah	24/360	24/450
	8.1	Type of drive control		CURTIS ZAPI	CURTIS ZAPI

Specifications are subject to change without notice.



a=200mm Safety clearance



## A series Electric Tow Tractor

with capacities of 2,000 to 6,000kg

As for A series of tractors, the advanced AC drive control technology is adopted for the complete tractor.

The tractor has excellent performance, can be operated comfortably, is safe and reliable, has low maintenance cost and is the high-efficiency tool for resolving material transport among different zones for the workshops, flow lines and large factories.

# LET THE LITHIUM POWER FREED



HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.

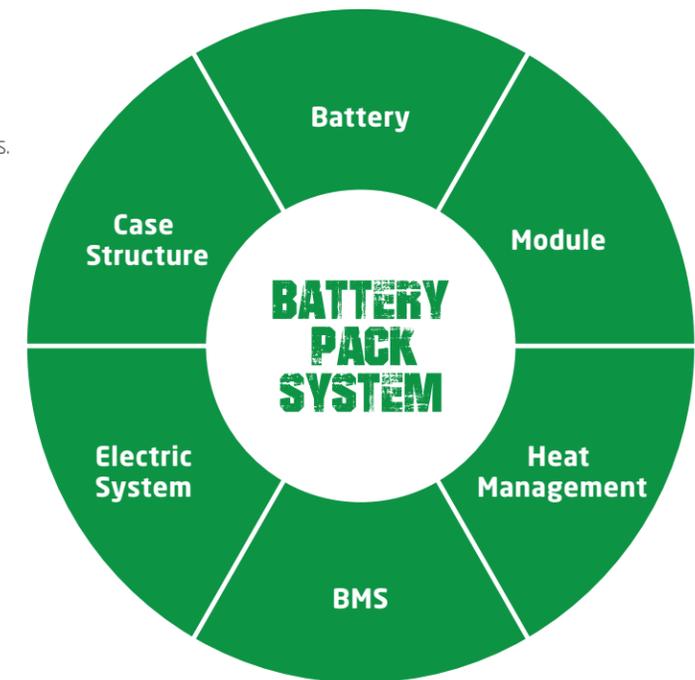


**5 YEARS  
WARRANTY**

# INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion  
**2 hours  
100%**

Lead-acid batteries  
**8-10 hours 100%**

**Rapid charging and opportunity charging ensure continuous availability of vehicles.**

Li-Ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

## Li-Ion Battery Pack specification

Type		QDD40-AC1-I	QDD40-AC1S-I	QDD60-AC1-I	QDD60-AC1S-I
Li-Ion battery	V/Ah	48/202	48/202	48/202	48/202
Titans charger		SLC-48100	SLC-48100	SLC-48100	SLC-48100

Simple/  
Solid/  
Smart



## Appearance

- / The professional appearance industrial design is adopted. The complete tractor has smooth lines, presents the dynamics. The ergonomics is fully considered to meet the latest appearance design fashion.
- / The steel plate stamping and injection moulding technology is used extensively, the tractor is firm and durable and can meet the environmental protection requirements.

## High performance

- / For the stand-up driving tractor, the electronic power steering is taken as the standard configuration to achieve easier and more flexible operation and control.
- / The AC traction motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The advanced AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS bus structure makes communication of the entire machine faster and more reliable.

## Comfortability

- / LED headlight is taken as the standard configuration; the headlight has good appearance and offers bright light.
- / Multifunctional instrument is taken as the standard configuration, has such many functions as speed selection and so on, and can clearly display different information of the tractor.
- / The suspension structure is adopted for the front axle and rear axle to greatly enhance the operator's comfortability during tractor traveling.
- / USB charging port and mobile phone placement slot are taken as the standard configuration for conveniently charging the mobile phone and providing convenience for the operator.
- / The advancing and retreating buttons are provided at the tail of the tractor body, so that the tractor can be operated to move forward and backward while manipulating the traction device and it does not need to frequently go aboard and get off during operation.



Reliable LED lighting



Battery side roll out is taken as the standard configuration in order to easily and fast replace the battery



Modern outline design with LCD instrument and USB charging port



Electrical Park Brake (EPB) system



The locking device of the battery is provided with the safety protection function. Only if the locking device is rotated in place, the tractor can travel



## Reliability

- / The three-support-point and low-gravity-center design is adopted. The high-strength steel plate framed structure is adopted for the chassis. The tractor has long service life.
- / All of wires and cables are provided with reliable protection, and the electrical system reliability is greatly improved.
- / Such important components as switches, connector clips, instruments and so on are imported from foreign countries, and have excellent performance and reliable quality.

## Maintenance

- / The brushless, maintenance-free AC motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / The front bottom plate and rear cover plate can be easily dismantled, and such parts and components as braking pump, electric control device, motor and so on can be conveniently maintained.

## Safety

- / Turning slow down function is taken as the standard configuration to guarantee stable and safe turning of the tractor.
- / The Electrical Park Brake (EPB) is taken as standard configuration to achieve greater convenience and safety.
- / The safety pedal is taken as standard configuration. The other operations can be made only if the pedal is trampled. In this way, safety is enhanced.

## Options

- / Fully-enclosed driver's cabin
- / Semi-closed cabin
- / Suspension seat (for seating driving type tractor)
- / Reflecting mirror
- / Alarm lamp
- / Solid tyre
- / Big capacity battery

## Standard specification

- / AC traction motor
- / Automatic deceleration at turns
- / Key switch
- / USB charging port
- / LED headlight
- / LED tail light
- / Battery side roll out
- / Creep speed function
- / Safety pedal (for seating driving type tractor)
- / Emergency power-off switch
- / Electrical Park Brake (EPB) system
- / Traction device
- / Electrostatic conductive belt
- / Horn
- / Toolbox
- / Inching switch

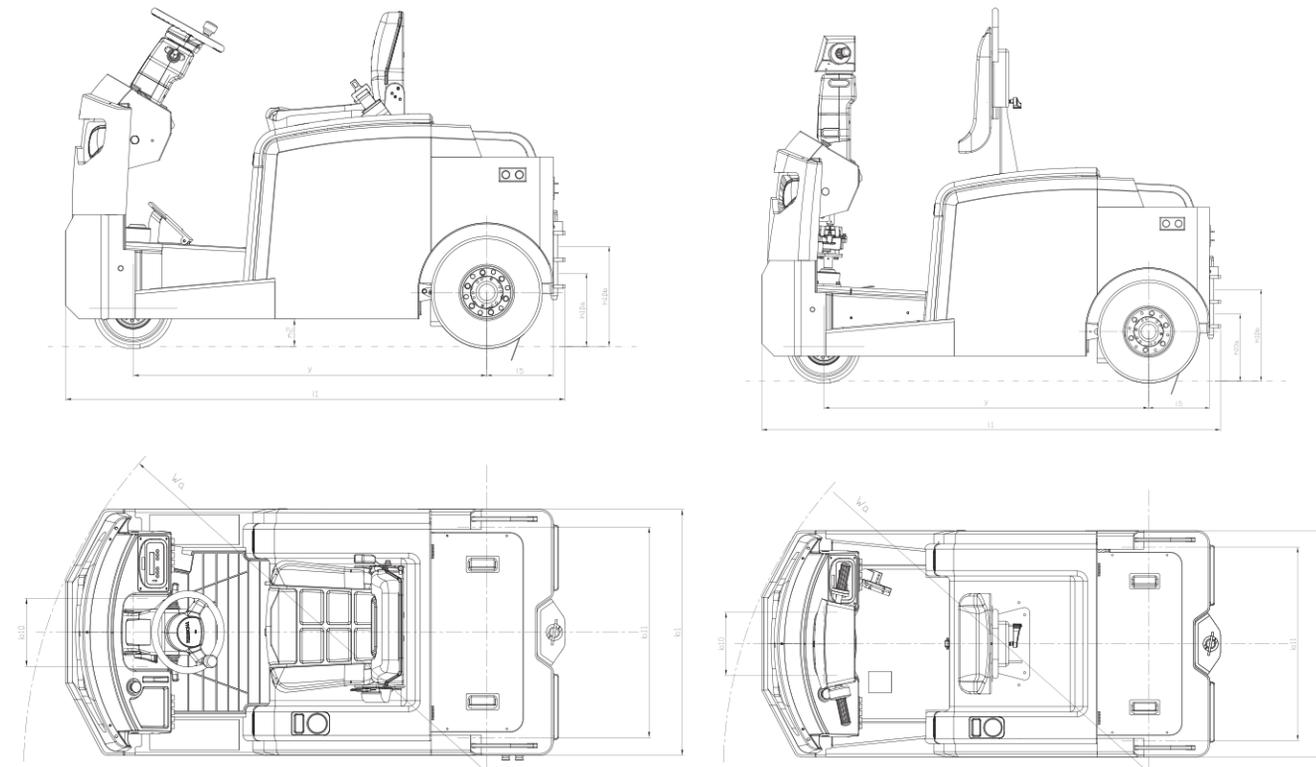


Electronic power steering system (for stand-up driving type tractor)



## A series Electric Tow Tractor specification

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.						
		1.2	Manufacturer's type designation	QDD20-AC1 QDD20-AD2	QDD20-AC1S QDD20-AD2S	QDD40-AC1 QDD40-AD2	QDD40-AC1S QDD40-AD2S	QDD60-AC1 QDD60-AD2	QDD60-AC1S QDD60-AD2S
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	Electric	Electric	Electric	Electric	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Seated	Standing	Seated	Standing	Seated	Standing	
	1.5	Rated capacity/rated load	Q(t)	2	2	4	4	6	
	1.7	Rated drawbar pull	F(N)	500	500	1000	1000	1500	
	1.9	Wheelbase	y(mm)	1145	1145	1305	1305	1305	
Weights	2.1	Service Weight (Including battery)	kg	880	880	1080	1080	1150	
Wheels, Tyres	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		3.50-5-6PR	3.50-5-6PR	3.50-5-6PR	3.50-5-6PR	3.50-5-6PR	3.50-5-6PR
	3.3	Tyre size, rear		4.00-8-6PR	4.00-8-6PR	4.00-8-6PR	4.00-8-6PR	4.00-8-6PR	4.00-8-6PR
	3.5	Wheels, number front / rear (x = driven wheels)		1/2x	1/2x	2/2x	2/2x	2/2x	2/2x
	3.6	Tread, front	b <sub>10</sub> (mm)	0	0	250	250	250	250
	3.7	Tread, rear	b <sub>11</sub> (mm)	770	770	770	770	770	770
	4.12	Coupling height	h <sub>10</sub> (mm)	365/267	365/267	365/267	365/267	365/267	365/267
Dimensions	4.17	Overhang	l <sub>5</sub> (mm)	245	245	245	245	245	
	4.19	Overall length	l <sub>1</sub> (mm)	1684	1684	1844	1844	1844	
	4.21	Overall width	b <sub>1</sub> (mm)	900	900	900	900	900	
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	100	100	100	100	100	
	4.35	Turning radius	W <sub>a</sub> (mm)	1600	1600	1763	1763	1763	
Performance	5.1	Travel speed, laden/unladen	km/h	6/13	6/13	6/13	6/13	6/13	
	5.6	Max. Drawbar pull	N	2000	2000	4000	4000	4500	
	5.7	Gradeability, laden/unladen	%	5/25	5/25	5/25	5/25	5/25	
Electric engine	6.1	Drive motor rating S2 60 min	kw	1.95	1.95	4.28	4.28	4.28	
	6.4	Battery voltage, nominal capacity K5, Standard	V/Ah	48/165	48/165	48/210	48/210	48/275	
		Battery voltage, nominal capacity K5, Optional	V/Ah	48/180~210	48/180~210	48/220~350	48/220~350	48/280~350	
		Controller		CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	



## X series Electric Tow Tractor

with capacities of 6,000 to 10,000kg

## Appearance

- / Large arc-shaped, streamlined surface modeling is adopted, with beautiful and elegant appearance.

## Comfort

- / Fully flexible suspension system is adopted for both front and rear axles, featuring small vibration and comfortable operation.
- / The battery of standard configuration is removed from truck side, so that maintenance and replacement of the battery is more convenient and rapid, which is suitable for continuous operation.
- / The optional fully-enclosed cab is suitable for operation in all kinds of weather conditions.

## Stability

- / The battery is sunk to bottom of carriage, so the truck has good stability.

## Advancement

- / Electromagnetic brake is adopted as parking brake, instead of traditional hand brake, so as to realize intelligent parking braking.
- / Fully flexible suspension system is adopted for both front and rear axles to ensure comfortable driving of the operator.
- / Large-screen LCD display and failure self-diagnosis instrument are applied to enable accurate display even in harsh environment.
- / The newly configured AC control system offers efficient, accurate adjustment performance, and extends working hours for single charge.
- / All lights of the truck are of LED, and the latest streamer technology is applied for front turn signal lamps.
- / The entire truck features high speed and high efficiency, with maximum travel speed up to 18km/h.

## Reliability and Safety

- / Motor controller, contactors, power socket, emergency power off switch and other main electric elements are all of famous brands from abroad.
- / Carriage, drive axle, steering axle and other main load-bearing parts are designed as high-strength parts, so as to meet heavy-load working conditions.
- / As standard configuration, emergency power off switch meets European safety standard.
- / AC power system features high efficiency, complete protection functions, and substantially higher reliability and service life.
- / Both front and rear wheels are equipped with brake to realize flexible and reliable braking.

## Easy Maintenance

- / The brushless, maintenance-free AC motor reduces operation cost significantly.
- / The easily-removable rear deck cover is convenient for debugging and maintenance of electronic control system.
- / Electronic control and electric elements are placed together with high degree of integration.

## Options

- / Simple canopy (with no windshield and windshield wipers)
- / Simple canopy (with windshield and windshield wipers)
- / Fully-enclosed cab
- / Fan (together with canopy or cab)
- / Alarm light
- / Specification of traction system (see Table 1)
- / Right and left rear-view mirrors (standard configuration for canopy, cab)
- / On-seat operation of traction pin
- / Fire extinguisher
- / Blue-light Lamp
- / Audible and visual alarm
- / LED rear working lamp
- / OPS system
- / Voice back-up beeper
- / Optional special seat
- / Optional imported brand battery
- / Super-elastic solid tires
- / Charger

## Standard specification

- / LED headlamp (high beam, low beam), direction indication lamp, LED rear three-color combination lamp
- / DIN Battery
- / Horn, back-up beeper
- / Emergency power off switch
- / Large LCD display
- / Battery side roll out
- / Seat with safety belt



Cup holder, tool box

# X Series Electric Tow Tractor



The battery can be removed from truck side, so it is very convenient for battery maintenance



Loading platform, easy to load and unload goods



Various operating pedals, instruments, steering wheel, and switches are configured based on ergonomic requirements, and are comfortable and flexible for operation



Upon special design, the traction device can prevent the towing pin coming off during traveling



Low-level widely open foot board is very convenient for the operator to get on / off the truck

# X series 6.0-10t Electric Tow Tractor Specification

		HANGCHA GROUP CO.,LTD.									
Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.								
	1.2	Model	QDD60-XD2	QDD70-XD2	QDD70-XD2-L	QDD80-XD2	QDD80-XD2-L	QDD90-XD2	QDD90-XD2-L	QDD100-XD2	
	1.3	Drive	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric	
	1.4	Manual, pedestrian, stand-on, seated, order picker operation	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	
	1.5	Load capacity/rated load	Q (kg)	6000	7000	7000	8000	8000	9000	9000	10000
Weight	1.7	Rated tractive power	F (N)	1500	1750	1750	2000	2000	2250	2250	2500
	1.9	Wheelbase	y (mm)	1035	1035	1250	1035	1250	1035	1250	1250
Weight	2.1.1	Net weight incl. battery (see row 6.5)	kg	1220	1270	1450	1330	1450	1380	1500	1550
	2.3	Axle load without load front/rear	kg	540/680	590/680	700/750	590/740	700/750	590/790	700/800	700/850
Tyres chassis	3.1	Tyres, front/rear		Pneumatic/Pneumatic	Pneumatic/Pneumatic	SE/Pneumatic	Pneumatic/Pneumatic	SE/Pneumatic	SE/Pneumatic	SE/Pneumatic	SE/Pneumatic
	3.2	Tyre size, front	mm	4.00-8	4.00-8	16×6-8	4.00-8	16×6-8	16×6-8	16×6-8	16×6-8
	3.3	Tyre size, rear	mm	4.00-8	4.00-8	4.00-8	4.00-8	4.00-8	4.00-8	4.00-8	4.00-8
	3.5	Wheels, number front/rear (* = driven wheels)		1/2x	1/2x	1/2x	1/2x	1/2x	1/2x	1/2x	1/2x
	3.6	Tread width, front	b11 (mm)	0	0	0	0	0	0	0	0
	3.7	Tread width, rear	h10 (mm)	870	870	870	870	870	870	870	870
	3.8	Height of overhead guard	h6 (mm)	2140	2140	2140	2140	2140	2140	2140	2140
Dimensions	4.8	Seat height/stand height	h7 (mm)	1020	1020	1020	1020	1020	1020	1020	1020
	4.1.2	Coupling height	h10 (mm)	274	274	274	274	274	274	274	274
	4.1.2.1	2nd coupling height	mm	330	330	330	330	330	330	330	330
	4.1.2.2	3. Coupling height	mm	386	386	386	386	386	386	386	386
	4.1.3	loading height without load	h11 (mm)	686	686	686	686	686	686	686	686
	4.1.6	loading area length	l3 (mm)	395	395	395	395	395	395	395	395
	4.1.7	Overhang length	l5 (mm)	350	350	350	350	350	350	350	350
	4.1.8	Loading area width	b9 (mm)	908	908	908	908	908	908	908	908
	4.1.9	Overall length	l1 (mm)	1830	1830	2045	1830	2045	1830	2045	2045
	4.2.1	Overall width	b1 (mm)	996	996	996	996	996	996	996	996
	4.3.2	Ground clearance, centre of wheelbase	m2 (mm)	135	135	135	135	135	135	135	135
	4.3.5	Turning radius	Wa (mm)	1650	1650	1865	1650	1865	1650	1865	1865
	4.3.6	Smallest pivot point distance	b13 (mm)	600	600	600	600	600	600	600	600
Performance data	5.1	Travel speed, laden/unladen	km/h	11.2/18	10.5/18	10.5/18	9.4/18	9.4/18	9.0/18	9.0/18	8.5/18
	5.5	Drawbar pull w. / w.o. load	N	1500	1750	1750	2000	2000	2250	2250	2500
	5.6	Max. drawbar pull, laden/unladen	N	4500	5250	5250	6000	6000	6750	6750	7500
	5.7	Gradeability laden/unladen	%	5/25	5/25	5/25	5/25	5/25	5/25	5/25	5/25
	5.10	Service brake		hydraulic	hydraulic	hydraulic	hydraulic	hydraulic	hydraulic	hydraulic	hydraulic
Misc. Electrics	6.1	Drive motor, output S2 60 min.	Kw	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	6.3	Battery as per DIN 43531 /35/36 A, B, C, no		A 43531	A 43531	A 43531	A 43531	A 43531	A 43531	A 43531	A 43531
	6.4	Battery voltage/nominal capacity K5	V/Ah	48/300	48/300	48/420	48/360	48/420	48/360	48/420	48/420
	6.5	Battery weight	kg	502	502	685	560	685	560	685	685
	8.1	Type of drive control		AC	AC	AC	AC	AC	AC	AC	AC
8.4	Sound pressure level at operator's ear as per EN 12053		60	60	60	60	60	60	60	60	

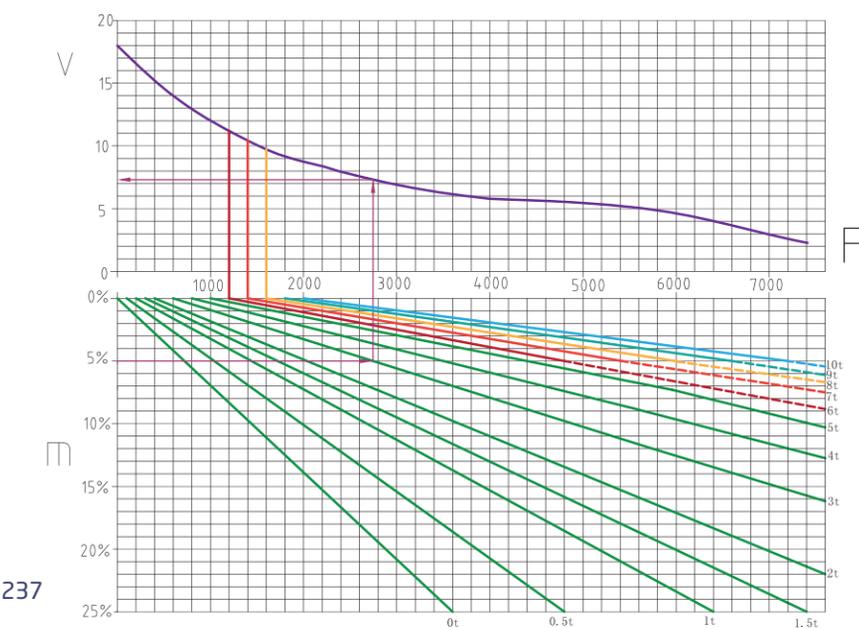
## Battery specification

Battery voltage(V)	Capacity (Ah)	6t	7t	8t	9t	10t	7L	8L	9L
48	300	●	●	—	—	—	—	—	—
	360	○	○	●	●	—	—	—	—
	420	—	—	—	—	●	●	●	●
	500	—	—	—	—	○	○	○	○
	600	—	—	—	—	○	○	○	○

●Battery Std. ○Battery Opt. 7L means 7t long wheelbase;8L means 8t long wheelbase;9L means 9t long wheelbase

## Traction device specification

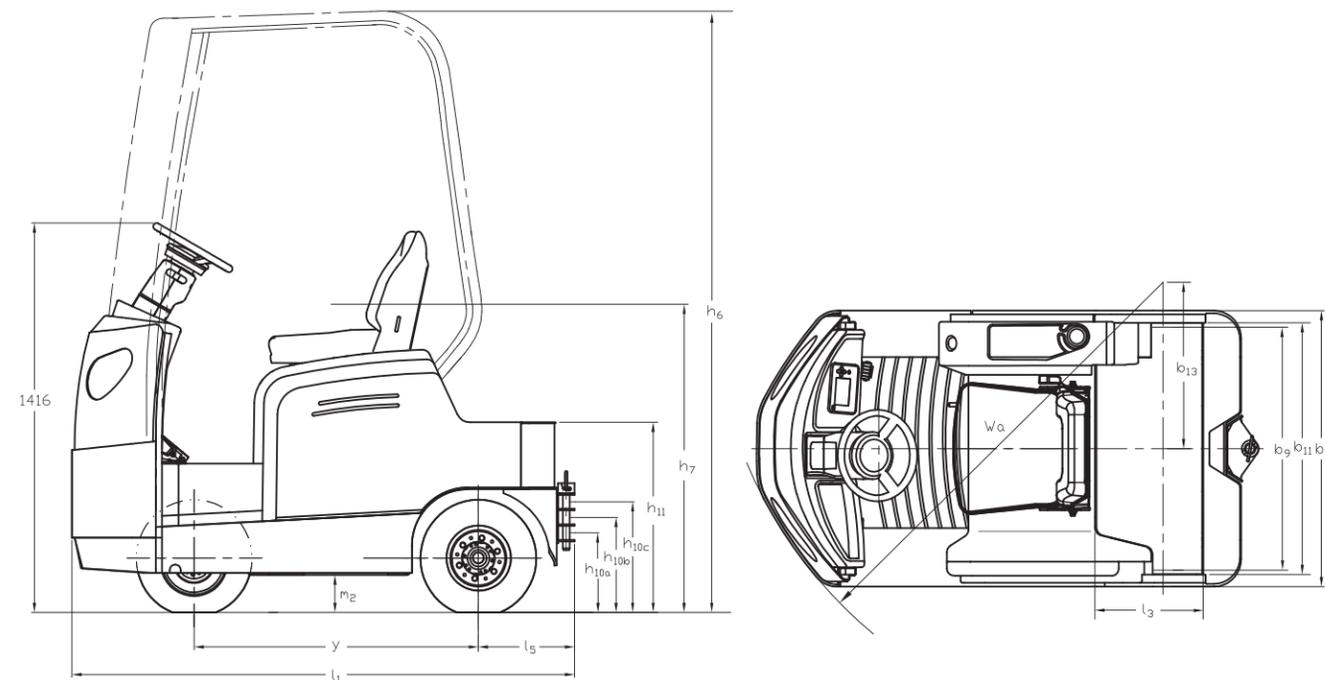
	Coupling height h10a/b/c(mm)	h10b-h10a, h10c-h10b (mm)
Std.	274/330/386	50
Opt 1	218/274/330	50
Opt 2	330/386/442	50



v= speed (km/h), m=incline (%), F=drawbar pull (N)

**Using method:** It requires about 2750N traction for towing when the QDD60-XD2 tow tractor travels on 5% upward slope by towing 3t load, and in such case the travel speed is 7.3Km/h approximately.

**Warning:** Better apply tow tractor with brake when gradient of downward slope is over 4%.





## 10-15t Electric Tow Tractor

with capacities of 10,000 to 15,000kg

### Appearance

/ Body choosing modern large circular arc streamline surface modeling, is in accordance with international design trend.

### Reliability

/ The battery is dropped down to the lowest part of frame, this gives the tractor excellent stability because low center of gravity.

### Comfort

- / Low noise, low shake, energy efficient, environmental protection.
- / Low step and capacious room will be much appreciated by operator who have to get on and off.
- / Ergonomically design switch instrument and pedal. Adjustable steering wheel and seat ensure driver maximum comfortable and minimum fatigue.
- / Full hydraulic steering system, the steering is easy.
- / Large-capacity of the container making the operation more flexible and convenient.

### Advance

- / New AC system provide more power, more precise performance of speed control, more safety and reliability, regenerative system.
- / High effective AC system prolong the working time.
- / Adopt the international first-class brand of LCD, with the battery indication, fault self-diagnosis table and accurately display in the harsh environment function.
- / Rich visual sense improve the productivity.
- / Exchange battery is easy because the design of side-exchange battery.

### Advantage of AC System

- / Multiple benefits of the AC Power System include: fast response to operating commands, precise power control, regenerative system.
- / Economy of operation, resulting from minimized maintenance costs, e.g.
- / A high number of work cycles can be obtained from each battery charge due to the efficiency of the system of energy control.
- / System is fully adjustable to suit the load, working area and operator. Inbuilt diagnostics record intermittent faults and service requirements reducing expensive service time.

### Easy Maintenance

- / You can open and close the battery cover hood for daily checkup the battery, motor and controller. It's easy to access inner of battery cover for maintenance.

### Standard Specification

- |                               |                     |
|-------------------------------|---------------------|
| / Head lamp                   | / Inching function  |
| / Turning lamp                | / AC Power System   |
| / Rear combined LED           | / Standard battery  |
| / Horn                        | / Large LCD display |
| / Emergency disconnect switch | / Pneumatic tyre    |

### Options

- |                                |                         |
|--------------------------------|-------------------------|
| / Super elastic solid tyre     | / Mirror                |
| / High capacity import battery | / Warning lamp          |
| / Simple cabin                 | / Charger               |
| / Closed cabin                 | / Customer painting     |
| / Suspension seat              | / Height of tractor pin |



Forward/Reverse inching switch and emergency switch are mounted on the left rear, them make the hook easy and safe



The large internal space is easy for maintenance



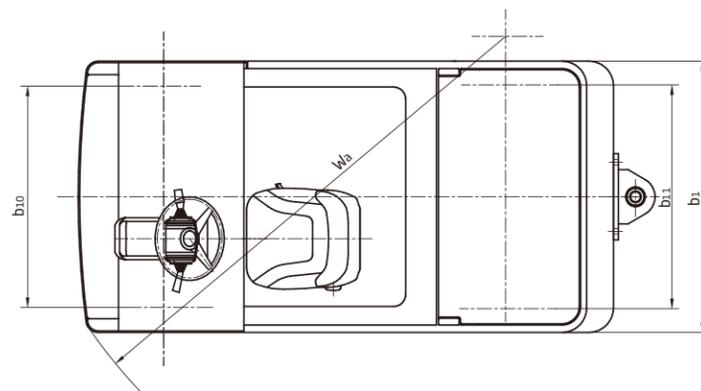
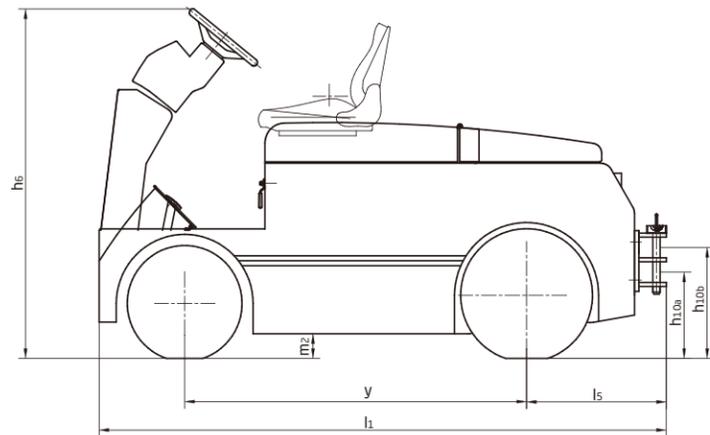
Side change battery design is convenient for changing battery



The battery cover can be fully opened, the design is easy for maintenance

## 10-15t Electric Tow Tractor

		HANGCHA GROUP CO.,LTD.					
Distinguishing marks	1.1	Manufacturer					
	1.2	Manufacturer's type designation	QSD10-C1		QSD15-C1		
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Seated		Seated		
	1.5	Rated capacity/rated load	Q (kg/lb)	10000/22046	15000/33069		
	1.7	Rated drawbar pull	F (N/lbf)	2500/562	3750/843		
1.9	Wheelbase	y (mm/in)	1200/47.2	1400/55.1			
Weight	2.1	Service Weight	kg/lb	2200/4850	2450/5400		
Tyres, chassis	3.2	Tyre size, front	5.0-8				
	3.3	Tyre size, rear	6.0-9				
	3.5	Wheels, number front / rear (x = driven wheels)	2/2				
	3.6	Tread, front	b <sub>10</sub> (mm/in)	897.5/35.3	897.5/35.3		
3.7	Tread, rear	b <sub>11</sub> (mm/in)	908/35.7	908/35.7			
Dimensions	4.7	Height of overhead guard (cabin)	h <sub>6</sub> (mm/in)	1440/56.7	2112/83.1	1440/56.7	2112/83.1
	4.1.2	Coupling height	h <sub>10</sub> (mm/in)	350/450	13.8/17.7	350/450	13.8/17.7
	4.1.9	Overall length	l <sub>1</sub> (mm/in)	2122/83.5		2322/91.4	
	4.2.1	Overall width	b <sub>1</sub> (mm/in)	1100/43.3		1100/43.3	
	4.3.2	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	100/4		100/4	
4.3.5	Turning radius	W <sub>a</sub> (mm/in)	1985/78.1		2170/85.4		
Performance Data	5.1	Travel speed, laden/unladen	kph / mph	10/18	6.2/11.2	10/18	6.2/11.2
	5.5	Drawbar pull at 60 minute rating	N/lbf	2500/562		3750/843	
	5.6	Max. Drawbar pull at 5 minute rating	N/lbf	8000/1798		11000/2473	
	5.7	Gradeability, laden/unladen	%	- / 25		- / 25	
Electric engine	6.1	Drive motor rating S2 60 min	kW/hp	6.8/9.1		11.75/15.8	
	6.4	Battery voltage, nominal capacity K5	V/Ah	48/420		80/450	



## 20-25t Electric Tow Tractor

with capacities of 20,000 to 25,000kg

## Appearance

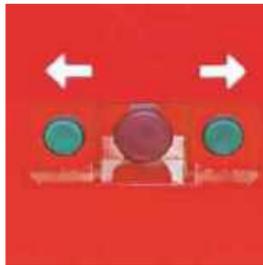
- / Body choosing modern large circular arc streamline surface model, is in accordance with international design trend. It's suitable for tractor\pulling\pushing and handling operations.

## Reliability

- / The battery is dropped down to the lowest part of frame, this gives the tractor excellent stability because low center of gravity.

## Safety

- / High frequency MOSFET controller provides accurate control of travelling, lifting, and better adjustable performance and better match with the motor. Secure stopping on ramp function is also provide.Thanks to MOSFET controller. Motor brake is for regenerative braking during deceleration, direction, changing, and downward slope. The regenerative braking is more energy saving and effectively.
- / X-type arrangement of dual piping, distribute the pressure by front and rear, the braking system is safe, stable and reliable. The design of vacuum drum ensure the braking system working as usual.
- / The electrical switch can cut off the power.



Advanced full-AC power system, full closed, compulsory air-cooled, reliable and safe



## Advance

- / New AC system provide more power, more precise performance of speed control , more safety and reliability, regenerative system.
- / High effective AC system prolong the working time.
- / Adopt the international first-class brand of LCD, with the battery indication, self diagnosis function, it's no need handset unit. The display can make changes to the electronic control parameters, you can read the fault code clearly from it.
- / There are switch in the rear: Including Forward/ Reverse inching switch and emergency disconnect switch.
- / There are two methods to exchange battery: Lifting-exchange and side-exchange battery, it's convenient for user.
- / The controller is enclosed to avoid dust and water, it can provide forced cooling, heat dissipation and control the direction of the wind.
- / The size of platform of the rear : 1300mm× 1638mm,it can be used as loading platform, maximum load weight is 500Kg.

## Environmental Protection

- / Low noise, low shake, energy efficient, environmental protection.
- / Vehicle use non-asbestos material.

## Comfort

- / Adopt the new digital dashboard and rocker switch, the status of vehicle be clear at a glance, simple, reliable and intuitive.
- / Adopt horizontal cylinder steering axle and full hydraulic steering gear, the steering force is less than 10N. Optional synchronous steering system provides good stability, especially suitable for long-distance road in the airport and so on.
- / The advanced floating suspension system and long wheelbase design, ensure the comfort of the vehicle.
- / The advanced floating suspension system and long wheelbase design, ensure the comfort of the vehicle.
- / Optimized design structure to offer a good visibility and easier operation, provides good sealing, sound insulation, heat insulation, vibration isolation. Low step and capacious room will be much appreciated by operator who have to get on and off.
- / Adjustable steering wheel and 150mm adjustable distance of seat ensure driver maximum comfortable and minimum fatigue.

## Standard Specification

- / Emergency disconnect switch
- / Head lamp
- / Turning lamp
- / Rear combined LED
- / Sun shield
- / Front wiper
- / Front wiper washer fluid
- / Adjustable device for steering wheel
- / Horn
- / Buzzer
- / Retroreflector
- / Rear view mirror
- / Dome light
- / Fan
- / Large rubber pedal pad
- / AC drive system
- / Full hydraulic steering
- / Hand grip
- / Full closed cab
- / Vacuum assistant braking system
- / Standard seat
- / Standard battery
- / Side-exchange battery
- / Toolbox
- / Inching switch
- / Traction pin

## Easy Maintenance

- / Electric parts adopt international famous brand are to ensure the reliability of the performance.
- / Maintenance free driving motor is no need to replace the carbon brush, low service cost.
- / You can open and close the battery cover hood for daily checkup the battery, motor and controller. It's easy to access inner of battery cover for maintenance.

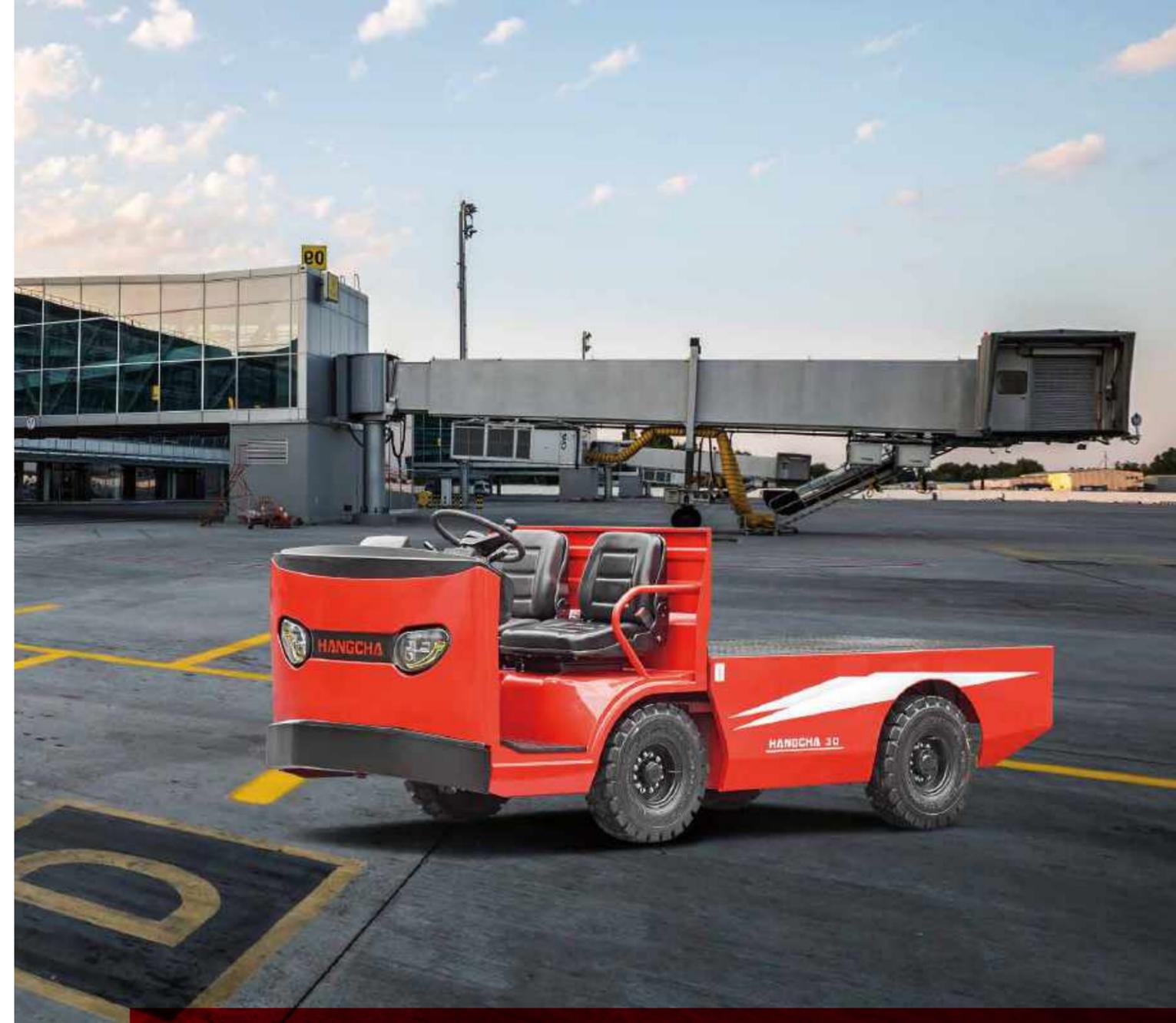
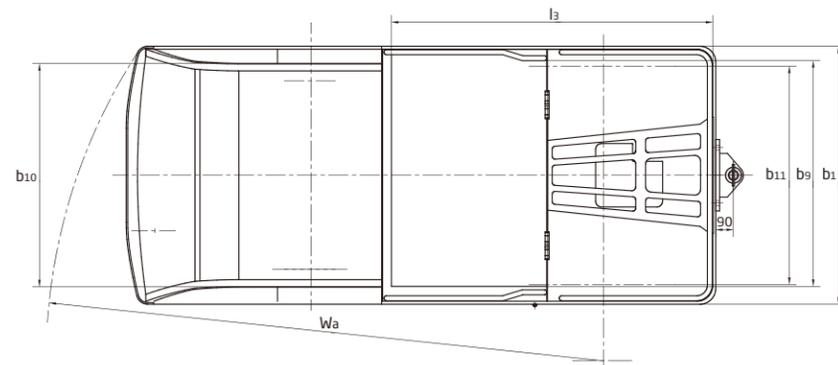
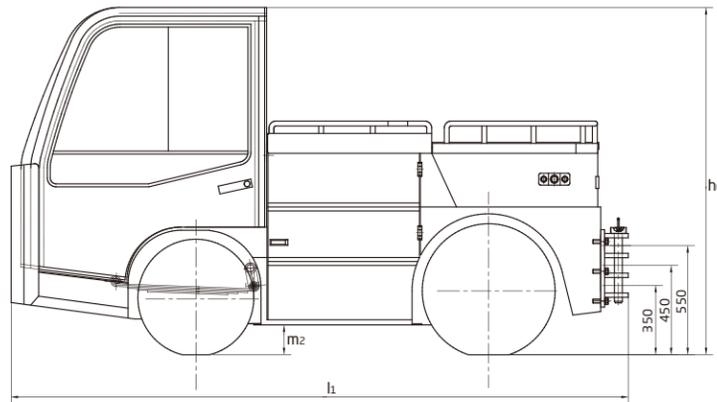
## Options

- / Warning lamp
- / High capacity national battery
- / Excellent performance import battery
- / Battery charger
- / Rear working lamp
- / Speed limit alarm
- / Different height of traction pin
- / Semi-closed cab
- / Steam air heater
- / Synchronous steering system
- / Hydraulic assistant brake system
- / Front bumpers
- / Front pothook
- / Extinguisher
- / Solid tyre
- / Suspension seat
- / Speed limit
- / Rear wiper
- / Rear wiper washer fluid
- / Long-distance control system
- / Full hydraulic brake
- / Tractor pin operation device



## 20-25t Electric Tow Tractor

		HANGCHA GROUP CO.,LTD.					
Distinguishing marks	1.1	Manufacturer					
	1.2	Manufacturer's type designation	QSD20-D3/QSD20-C3	QSD25-D3/QSD25-C3			
	1.5	Rated capacity/rated load	Q (kg/lb)	20000/44092	25000/55116		
	1.7	Rated drawbar pull	F(N/lbf)	5000/1124	6300/1416		
Weight	1.9	Wheelbase	y (mm/in)	1490/58.7	1490/58.7		
	2.1	Service Weight	kg/lb	3550/7826	3750/8267		
Weight	2.2	Axle loading, front/rear	kg/lb	1640/1910	3616/4211	1600/2150	3527/4740
	Tyres, chassis	3.2	Tyre size, front	6.50-10-10PR			
3.3		Tyre size, rear	7.00-12-12PR				
3.5		Wheels, number front / rear (x = driven wheels)	2/2				
3.6		Tread, front	b <sub>10</sub> (mm/in)	1124.5/44.3	1124.5/44.3		
3.7		Tread, rear	b <sub>11</sub> (mm/in)	1100/43.3	1100/43.3		
Dimensions	4.7	Height of overhead guard (cabin)	h <sub>6</sub> (mm/in)	1760/69.3	1760/69.3		
	4.12	Coupling height	h <sub>10</sub> (mm/in)	550/450/350	21.7/17.7/13.8	550/450/350	21.7/17.7/13.8
	4.16	Length of loading surface	l <sub>3</sub> (mm/in)	1630/64.2	1630/64.2		
	4.18	Width of loading surface	b <sub>9</sub> (mm/in)	1135/44.7	1135/44.7		
	4.19	Overall length	l <sub>1</sub> (mm/in)	3140/123.6	3140/123.6		
	4.21	Overall width	b <sub>1</sub> (mm/in)	1300/51.2	1300/51.2		
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm/in)	140/5.5	140/5.5		
Performance Data	4.35	Turning radius	W <sub>a</sub> (mm/in)	2825/111.2	2825/111.2		
	5.1	Travel speed, laden/unladen	kph/mpg	- / 25	- / 15.5	- / 25	- / 15.5
	5.5	Drawbar pull at 60 minute rating	N/lbf	5000/1124	6300/1416		
	5.6	Max. Drawbar pull at 5 minute rating	N/lbf	16000/3597	20000/4496		
	5.7	Gradeability, laden/unladen	%	- / 30	- / 30		
Electric engine	5.10	Service brake	Hydraulic				
	6.1	Drive motor rating S2 60 min	kw/hp	23/30.8	23/30.8		
	6.4	Battery voltage, nominal capacity K5	V/Ah	80/500	80/500		
	6.5	Battery weight	kg/lb	1350/2976	1350/2976		



## X Series Electric Platform Truck

with capacities of 1,500 to 3,000kg

**Easy/  
Efficiency/  
Economy**



## Options

- / EPS (Electric Power Steering) system
- / Large-diameter steering wheel
- / Full-suspension seat
- / Guardrail of platform
- / Rain cover with/without wind screen and windscreen wiper
- / Fully-enclosed cab
- / Fan
- / Reflecting mirror
- / Alarm light
- / Blue light lamp
- / Rear working light
- / Voice-type reversing buzzer
- / OPS system
- / Large-capacity battery
- / High-performance battery
- / Battery side roll out
- / Terminal power supply
- / Solid tyre
- / Charger
- / Fire extinguisher
- / EPB (Electric Parking Brake)

## Standard specification

- / LED light system
- / Large-screen LCD display
- / Emergency power-off switch
- / Horn
- / Reversing buzzer
- / File box
- / Cup holder
- / Traction pin
- / Full-suspension platform
- / Two operators on board
- / Seat belt



## Appearance

- / Streamline and large curved surface appearance, combined with eagle eye type LED integrated head light, entirely-new appearance and vision, more novel and fashionable.

## Advancement

- / Digital dashboard with battery charge indicator, fault detection, speedometer and hour meter.
- / The whole truck has high speed and efficiency, and the traveling speed can reach 20km/h.
- / Permanent magnet brushless traction motor+electric control+aluminum alloy high-efficiency gear box, high efficiency, fast start-up, energy-saving and noise-reduced.

## Comfort

- / The front and rear axles are fully elastic suspension system with low vibration and good comfort.
- / Low step-on platform for comfortable access.
- / Different operating pedals, instruments, steering wheels and switches are configured according to the ergonomics requirements, operation is comfortable and flexible.
- / EPS (electric power steering) is optional, the force is 8-12N, it is easy for operator.
- / The fully-enclosed driver's cab is optional, and can meet all-weather works.

## Maintenance

- / The AC traction motor is free maintenance, and the cost is greatly reduced.
- / The electric control cover plate can be easily dismantled, and it is convenient for commissioning and maintenance of the electric control system.
- / Controller and electrical components are placed together for high integration.

## Reliability and Safety

- / Such main electric parts as motor controller, contactor, power plug, emergency power-off switch and so on are famous brand products.
- / The chassis, driving axle, steering axle and so on are designed based on high strength, and can meet the heavy-load operating conditions.
- / The frame and girder type structure, has light weight and great bearing capacity.
- / The emergency power-off switch is the standard configuration, and can meet the European safety standard.
- / The power system has high efficiency and complete protection functions, the reliability and service life are greatly improved.
- / Thanks for the brake system and anti-slip function, it provides safety and reliability.



Large screen display, the instrument panel adopts injection molding design, sturdy and durable



Full suspension operating platform, vibration is reduced, noise is isolated



LED headlight has the head light and dipped light functions. The front turn light utilizes the latest stream light technology



Repair, maintenance and replacement of the battery are convenient and fast, and it is suitable to continuous work



2 operators on board, optimised driving position for maximum comfort and efficiency

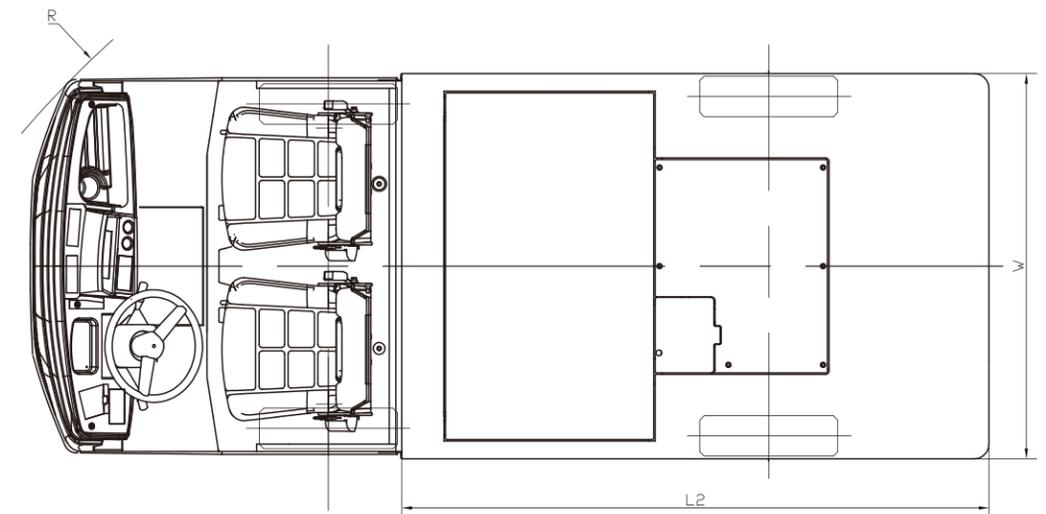
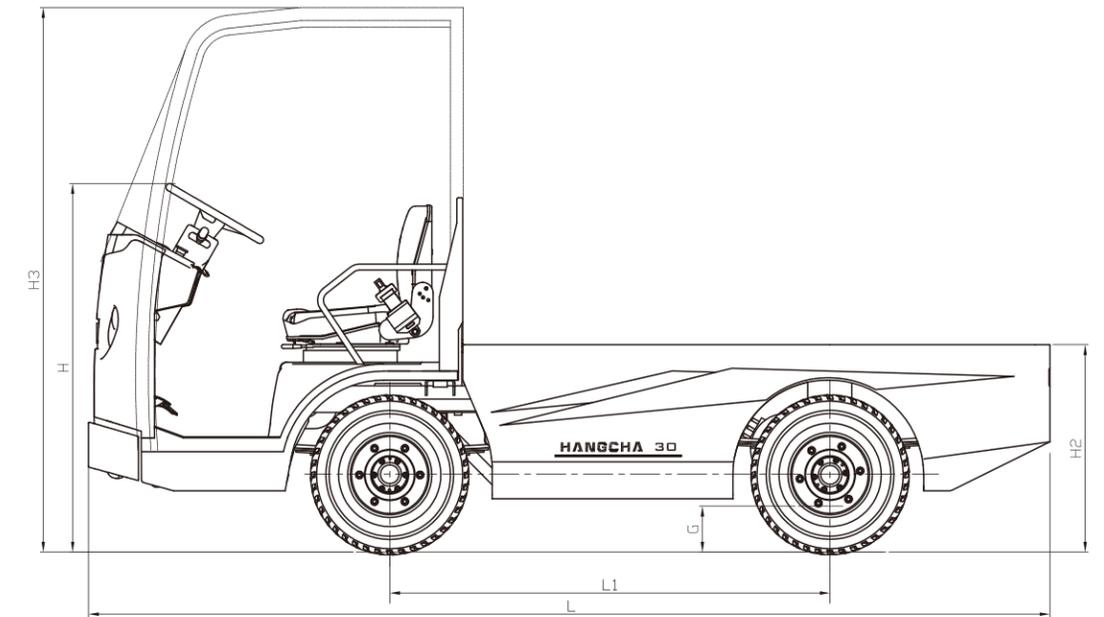
## X Series Electric Platform Truck Specification

Distinguishing mark	HANGCHA GROUP CO.,LTD.						
	1.1	1.2	1.3	1.4	1.5		
1.1	Manufacturer						
1.2	Manufacturer's type designation		BD15-XD1	BD20-XD1	BD30-XD1		
1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric		
1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated		
1.5	Rated capacity/rated load	Q lb(kg)	3310(1500)	4410(2000)	6610(3000)		
1.9	Wheelbase	y in(mm)	48.6(1235)	59(1500)	59(1500)		
Weight	2.1	Service Weight	lb(kg)	2250(1020)	2710(1230)	2845(1290)	
	2.3	Axle loading, unladen front/rear	lb(kg)	1157(525)/1090(495)	1390(630)/1320(600)	1500(680)/1345(610)	
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	
	3.2	Tyre size, front		5.00-8-10PR	5.00-8-10PR	6.00-9-10PR	
	3.3	Tyre size, rear		5.00-8-10PR	5.00-8-10PR	6.00-9-10PR	
	3.5	Wheels, number front / rear (x = driven wheels)		4(x=2)	4(x=2)	4(x=2)	
	3.6	Tread, front	b <sub>10</sub> in(mm)	43.1(1095)	43.1(1095)	43.1(1095)	
	3.7	Tread, rear	b <sub>11</sub> in(mm)	44.5(1130)	44.5(1130)	45(1145)	
	4.7	Height of overhead guard (cabin)	h <sub>6</sub> in(mm)	73.4(1865)	73.4(1865)	74.8(1900)	
Dimensions	4.12	Coupling height	h <sub>10</sub> in(mm)	13.8(350)	13.8(350)	15.7(400)	
	4.16	Length of loading surface	l <sub>3</sub> in(mm)	63(1600)	78.7(2000)	78.7(2000)	
	4.18	Width of loading surface	b <sub>9</sub> in(mm)	51.2(1300)	51.2(1300)	51.2(1300)	
	4.19	Overall length	l <sub>1</sub> in(mm)	113.2(2875)	129(3275)	129(3275)	
	4.21	Overall width	b <sub>1</sub> in(mm)	51.2(1300)	51.2(1300)	51.2(1300)	
		Overall Height	in(mm)	47.6(1210)	47.6(1210)	49(1244)	
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> in(mm)	4.7(120)	4.7(120)	6.1(155)	
	4.35	Turning radius	W <sub>a</sub> in(mm)	112.2(2850)	130(3300)	130(3300)	
	Performance data	5.1	Travel speed, laden/unladen	mph (km/h)	8.4 (13.5)/11.2 (18)	8.7 (14)/11.2 (18)	8.1 (13)/12.4 (20)
		5.6	Max. Drawbar pull	lbf(N)	1170(5200)	1170(5200)	1460(6500)
5.8		Max. gradeability, laden	%	10%	10%	10%	
5.10		Service brake		Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	
		Parking brake		Mechanical	Mechanical	Mechanical	
Electric engine	6.1	Drive motor rating S2 60 min	kW	5	5	5	
	6.4	Battery voltage, nominal capacity K5	V/Ah	72/120	72/180	72/180	
	6.5	Battery weight	lb(kg)	590(268)	920(418)	920(418)	
10.7	Sound pressure level at the driver's seat	dB (A)	<65	<65	<65		

## Specifications of Platforms

Width (in/mm)	Length (in/mm)	63.0/1600	78.7/2000	88.2/2240	94.5/2400	98.4/2500	110.2/2800	118.1/3000	141.7/3600	157.5/4000
		51.2/1300	■ Standard configuration	●●	●●	●●				
55.1/1400			●●	●□	●□	●□				
59.1/1500				○□	○□	●□	○□	○□		
63.0/1600						○□			○□	
70.9/1800										○□

Note: ● Preferably select ○ optional Guardrail height: ■ 220(8.7); □ 320mm(12.6inch)



## Table of the battery (72v)

A.h	Model	BD15	BD20	BD30
115		▼		
120		☆		
135		◆		
165		◆▼		
170			▼	▼
180		★		
180			☆	☆
210			◆	◆
220			▼	▼
240			★	★
252			◆▼	◆▼
300			★◆▼	★◆▼
330			★◆▼	★◆▼
360			★	★

### Note:

Standard battery: ZIBO(☆)

Optional battery: ZIBO(★), FAAM(◆), HOPPECKE(▼)



## A Series Low-level Order Picker

with capacities of 2,500kg

A series low-level order picker is mainly applied in long-distance transportation among the production lines. Low operator platform for frequent and effortless entry and exit. Thanks to the standing design, it can greatly improve the efficiency of operations. Furthermore, for indoor application, the electric drive system is environmental friendly within the workshop. Therefore, this product is a good partner of automobile manufacturing, logistics companies, warehouses and other places, fields which has broad application prospects.

### Appearance

- / A series low level order picker applied professional industrial design, stream lines, and compact, and fully ergonomic consideration, in line with the latest design trends.
- / Applied steel stamping and injection molding processes for front and back guard, which is robust, durable, and also environmental compliance.

### Reliability

- / 5-pivot and low center of gravity design ensure the safe and reliability.
- / Imported waterproof connectors, all wires and cables are protected, greatly improve the reliability of the electric system.
- / Safety switch of pedal using non-contact proximity switch, improves safety and reliability.
- / The lift button with non-contact proximity switch for safe and reliable operation.
- / Top quality hydraulic power unit applied to provide low noise, low vibration, smooth lifting and landing reliable operation.
- / Punch-formed forks provide more strength performance.
- / The charging plug is fixed on the chassis for avoid damage from battery installment.

### Maintenance

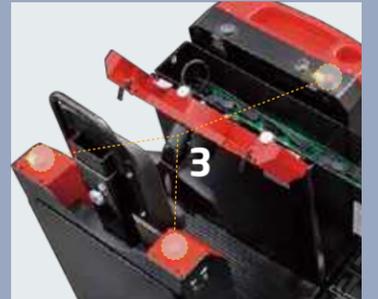
- / AC motor without carbon brushes, maintenance-free, cost saving.
- / Integrated battery indicator, hour meter and self-diagnostic instrument.

### High Performance

- / Electric Power Steering(EPS) is standard specification, which provides flexible operation.
- / Double tray placed side by side design, more suitable for a large picking and transshipment.
- / The inching switches installed at the LH/RH side, greatly improve the ease of operation.
- / Powered by AC traction motor not only has good acceleration and climbing performance, but also low heat, brushless, maintenance-free.
- / Latest AC CURTIS control system, precise and smooth.
- / CAN-BUS connection enables all truck data can be read out for inspection, and also improves the data transition more quick and reliable.
- / All key parts such as hydraulic unit/ switches/ connector/ battery indicator and hour meter all adopt the famous brand.



Side battery changes is standard feature



There are three emergency switches, you can quickly cut off the power with any switch to prevent the hurt



Backrest height can be adjusted within a certain range, and the backrest with hip support can greatly improve the comfort of the operator



Fully opened hood, easy accessibility of all components, is easy for service



## Comfort

- / The pedal applies shock absorption design, greatly improve the operator's comfort, reduce the fatigue.
- / New designed tiller is simple and beautiful, all the function can be operated by one hand.
- / Optimized designing structure to offer a good visibility and easy entrance of the pallet.
- / Small body with large arc design, more suitable for the truck in the centralized shelves. Chassis adopt wedge design, greatly increasing the passing ability.

## Safety

- / Electronic speed control with automatic deceleration when steering angle increase.
- / Three braking system of regenerative braking, reverse current braking, parking brake, insures the safe operation.
- / Regenerative braking for battery recovery during travel speed reduction, anti-slope on gradient.

## Options

- / Imported battery
- / Fork length --1150/1220/2150mm
- / Outside fork width --600/680mm
- / Charger
- / Load backrest
- / Guide roller

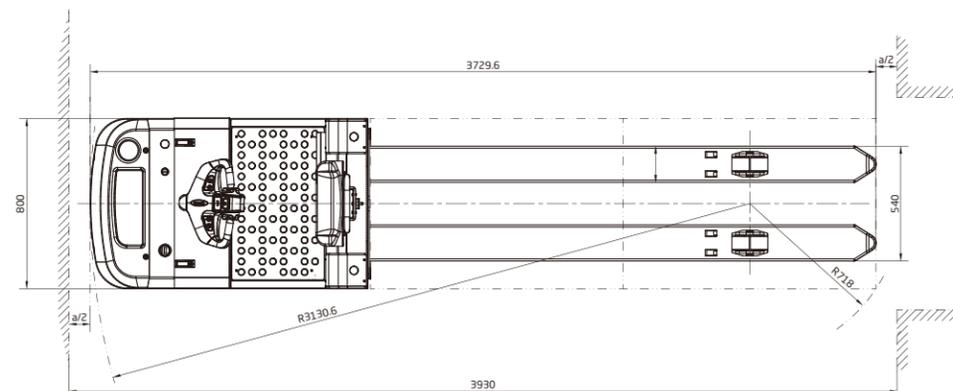
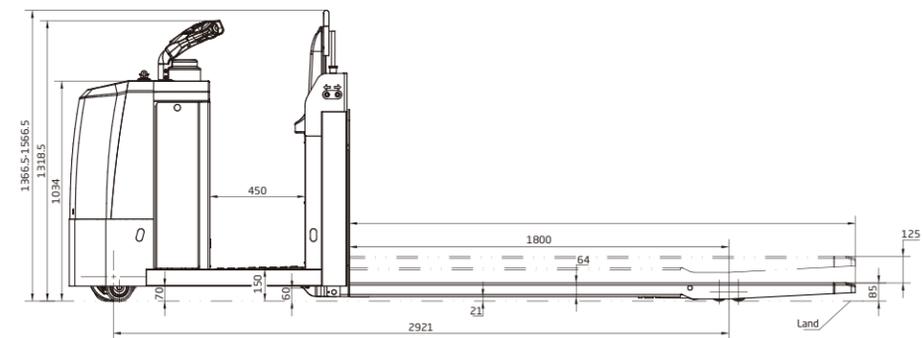


## Standard Specification

- / AC traction motor
- / CURTIS AC controller
- / Imported hydraulic unit
- / Safety pedal & Rubber backrest
- / Side battery change
- / 3 emergency switches
- / 2 inch switches
- / Multi-function indicator
- / Tandem load wheels
- / Fork length --2400 mm
- / Outside fork width --540 mm
- / Electronic lifting limitation
- / Multi-function tiller with CAN-Bus system
- / Horn
- / EPS (Electric Power Steering)

## A Series Low-level Order Picker

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
	1.2	Manufacturer's type designation		CJD25-AC1-L
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Order-picker
	1.5	Rated capacity/rated load	Q (kg/lb)	2500/5500
	1.6	Load centre distance	c (mm/in)	1200/47.2
	1.9	Wheelbase	y (mm/in)	2921/115.0
Weight	2.1	Service Weight	kg/lb	1130/2491
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU
	3.2	Tyre size, front	mm/in	Φ230×75 / Φ9.1×3.0
	3.3	Tyre size, rear	mm/in	Φ85×70 / Φ3.3×2.8
	3.4	Additional wheel (dimensions)	mm/in	Φ125×50 / Φ4.9×2.0
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4
	3.6	Tread, front	b <sub>10</sub> (mm/in)	546/21.5
	3.7	Tread, rear	b <sub>11</sub> (mm/in)	370/14.6
Dimensions	4.4	Lift	h <sub>3</sub> (mm/in)	125/4.9
	4.15	Fork height, lowered	h <sub>13</sub> (mm/in)	85/3.3
	4.19	Overall length	l <sub>1</sub> (mm/in)	3730/146.9
	4.21	Overall width	b <sub>1</sub> (mm/in)	800/31.5
	4.22	Fork dimensions	s/e/l mm (in)	64/170/2400 (2.5/6.7/94.5)
	4.25	Distance between fork-arms	b <sub>5</sub> (mm/in)	540/21.3
	4.32	Ground clearance, center of wheelbase	m <sub>2</sub> (mm/in)	21/0.8
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>st</sub> (mm/in)	3930/154.7
Performance Data	4.35	Turning radius	W <sub>a</sub> (mm/in)	3130/123.2
	5.1	Travel speed, laden/unladen	kph (mph)	7.0/10 (4.3/6.2)
	5.2	Lift speed, laden/unladen	m/s (ft/min)	0.032/0.069 (6.3/13.6)
	5.3	Lowering speed, laden/unladen	m/s (ft/min)	0.042/0.033 (8.3/6.5)
Electric Engine	5.8	Max. Gradeability, laden/unladen	%	6/16
	6.1	Drive motor rating S2 60 min	kW/hp	2.2/2.95
	6.2	Lift motor rating at S3 15%	kW/hp	2.2/2.95
	6.4	Battery voltage, rated capacity	V/Ah	24/360
		Battery voltage, rated capacity, Optional	V/Ah	24/420
8.1	Type of drive control			AC
9.1	Manufacturer			CURTIS





## A series Medium Level Order Picker

with capacities of 1,000kg

The A series medium level order picker is a type of high-end truck of warehouse equipment. The truck features complete safety protection system, excellent ergonomic design, and cutting-edge control system. With reliability, stability, comfort, safety, and excellent performance, it is suitable for order picking operations for low and medium-level automatic storage & retrieval system with height below 5m.

### High Performance

- / Maximum full-load travel speed can reach 9km/h, which increases efficiency substantially.
- / The AC driving motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The cutting-edge CURTIS AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS structure makes communication of the entire truck faster and more reliable.

### Safety

- / The tilt angle detection system, as standard configuration, makes the truck stop operation when it tilts forward / backward or left / right to certain angle, and the operation may not be resumed until the cab is lowered to the level below certain height.
- / Side barriers with detecting switch are provided at both left and right sides, and the truck works only when such side barriers are lowered to positions.
- / Mast chain of 10 times of safety factor is provided, including chain safety switch.
- / Travel speed and lifting speed are interlinked, with lower travel speed as lifting height increases, also with lower acceleration.
- / The proportional deceleration function at turns, as standard configuration, guarantees stability and safety when the truck turns.
- / The safety pedal of standard configuration must be treaded down to enable other operations, so as to increase safety.
- / The hydraulic system has an emergency manual lowering valve, which can be operated at rear of the truck to lower the cab.

### Reliability

- / The high-strength steel plate framed structure of chassis features a long service life.
- / All wires and cables have reliable protection, which increases reliability of electrical system significantly.
- / Switches, plug connectors, meters, and other important parts are all imported from abroad, with excellent performance and reliable quality.



### Comfort

- / Buffering and deceleration functions of the mast when it rises / descends to the top / bottom can avoid impact and thus increase comfort.
- / Rising / descending speed of both the cab and fork can be regulated in proportion to control accuracy.
- / LED cab top lamp and side lamp, as standard configuration, feature attractive appearance and bright illumination, and are helpful for order picking operations in space with poor lighting.
- / The CURTIS multi-functional instrument, as standard configuration, has multiple functions including speed selection and wheel position display, and can clearly display various types of information about the truck.
- / With a sub-operation system, rising / descending of the cab and fork can be manipulated to facilitate order picking operations.

### Maintenance

- / The brushless, maintenance-free AC driving motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.



### Standard Specification

- / AC driving motor
- / CURTIS controller
- / Free accelerator lever (with sensor switch)
- / Automatic deceleration at turns
- / CURTIS instrument
- / Chain switch
- / Side barriers switch
- / Rear-view mirror
- / LED lamp
- / Emergency power off switch
- / Alarm light
- / Horn
- / Safety pedal
- / Tilt angle detection system
- / Side barriers
- / File folder
- / Back cushion
- / Cup holder
- / Electrostatic belt
- / Electromagnetic brake
- / Battery side roll out



Order picker works only when the side barriers are all lowered



The FREE accelerator lever with sensor switch, as standard configuration, can prevent mis-operation during the work



The rear hood can be removed easily to facilitate maintenance work on parts such as hydraulic unit, electronic control system and the motor



LED top lamp can provide bright operating environment



Battery side roll out

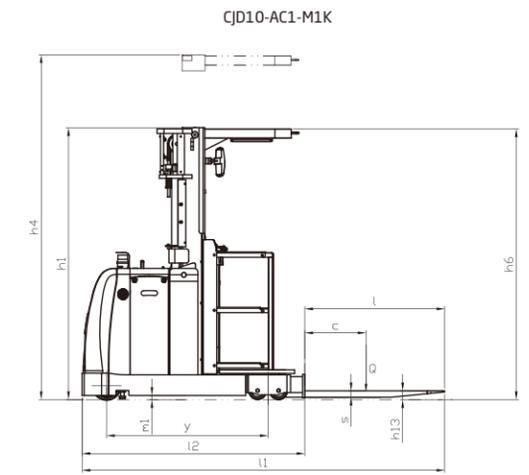
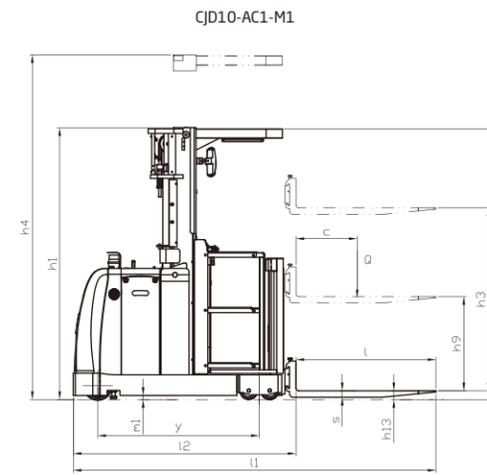


Better vision for operation

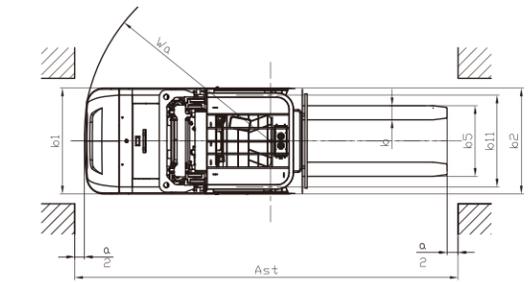
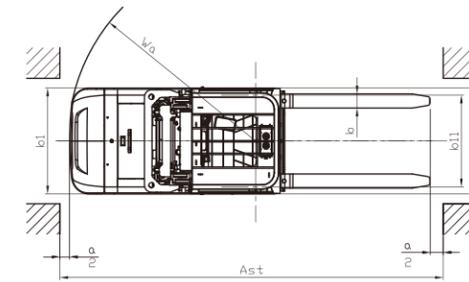
## A Series Medium Level Order Picker

Distinguishing mark	HANGCHA GROUP CO.,LTD.						
	1.1	1.2	1.3	1.4	1.5	1.6	
1.1	Manufacturer						
1.2	Manufacturer's type designation	CJD10-AC1-M1	CJD10-AC1-M1K*	CJD10-AC2-M2	CJD10-AC2-M2K*		
1.3	Drive:electric (battery or mains),diesel,petrol,fuel gas	Electric	Electric	Electric	Electric		
1.4	Operator type:hand,pedestrian,standing,seated,order-picker	Order-picker	Order-picker	Order-picker	Order-picker		
1.5	Rated capacity/rated load	Q(t)	1	1	1	1	
1.6	Load centre distance	c(mm)	600	600	600	600	
1.8	Load distance, centre of drive axle to fork	x(mm)	225	225	225	225	
1.9	Wheelbase	y(mm)	1385	1385	1385	1385	
Weight	2.1	Service weight	kg	2516	2516	2805	2805
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU
	3.2	Tyre size, front		Ø250×100	Ø250×100	Ø250×100	Ø250×100
	3.3	Tyre size, rear		Ø152.4×76.2	Ø152.4×76.2	Ø152.4×76.2	Ø152.4×76.2
	3.5	Wheels, number front/rear (x = driven wheels)		1x/4	1x/4	1x/4	1x/4
3.7	Tread,rear	b <sub>11</sub> (mm)	780	780	880	880	
Dimensions	4.2	Height,mast lowered	h <sub>1</sub> (mm)	2310	2310	3060	3060
	4.4	Lift	h <sub>3</sub> (mm)	3000	3000	4500	4500
	4.5	Height, mast extended	h <sub>4</sub> (mm)	5310	5310	7560	7560
	4.7	Height of overhead guard (cabin)	h <sub>6</sub> (mm)	2300	2300	2300	2300
	4.11	Additional lift	h <sub>9</sub> (mm)	800	/	800	/
	4.15	Height,lowered	h <sub>13</sub> (mm)	75	75	75	75
	4.19	Overall length	l <sub>1</sub> (mm)	3110	3110	3110	3110
	4.20	Length to face of forks	l <sub>2</sub> (mm)	1910	1910	1910	1910
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	900/900	900/900	900/1000	900/1000
	4.22	Fork dimensions DIN ISO 2331	s/e/l(mm)	55/120/1200	55/120/1200	55/120/1200	55/120/1200
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	240~800	540	240~800	540
	4.31	Ground clearance,laden,below mast	m <sub>1</sub> (mm)	35	35	35	35
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>31</sub> (mm)	3235	3235	3235	3235
	4.34.2	Aisle width for pallets 800 × 1200 lengthways	A <sub>32</sub> (mm)	3357	3357	3357	3357
4.35	Turning radius	W <sub>0</sub> (mm)	1610	1610	1610	1610	
Performance Data	5.1	Travel speed,laden/unladen	km/h	9/9	9/9	9/9	9/9
	5.2	Lift speed,laden/unladen	m/s	0.115/0.150	0.115/0.150	0.200/0.260	0.200/0.260
	5.3	Lowering speed,lade/unladen	m/s	0.230/0.225	0.230/0.225	0.320/0.300	0.320/0.300
	5.7	Gradeability,laden/unladen	%	5/10	5/10	5/10	5/10
	5.10	Service brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic
Electric-engine	6.1	Drive motor rating S2 60 min	kW	3	3	3	3
	6.2	Lift motor rating at S3 15 %	kW	3.2	3.2	6.4	6.4
	6.4	Battery voltage/nominal capacity K5	V/Ah	24/625	24/625	24/700	24/700
	6.5	Battery weight	kg	466	466	557	557
Addition data	10.7	Sound pressure level at the driver's seat	dB(A)	69	69	69	69

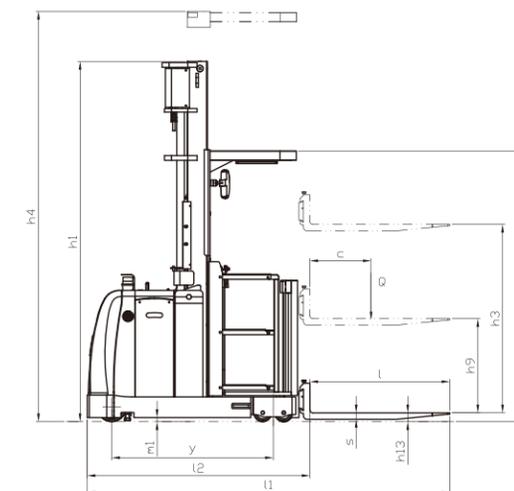
Note : \* without auxiliary lift



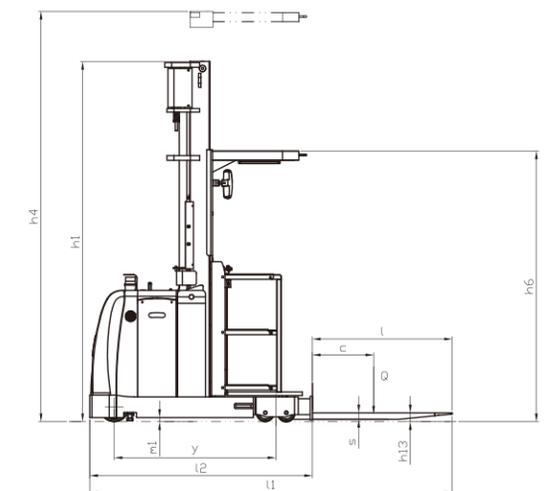
Without auxiliary lift



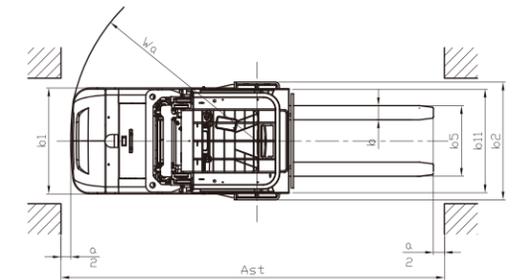
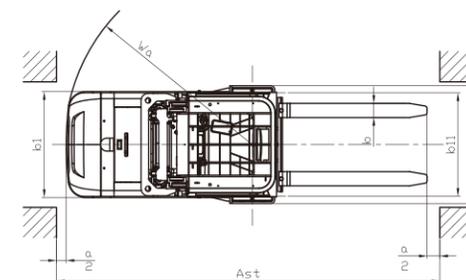
CJD10-AC2-M2



CJD10-AC2-M2K



Without auxiliary lift





## A Series Electric Stock Picker

with capacities of 1,100lbs

The truck has a comprehensive safety protection system, excellent ergonomics and advanced control system. Reliable and stable, comfortable and safe, with excellent performance, it supports productive and safe work in busy, confined spaces where workers move short and long distance. It's also proven in environments where small loads are handled in receiving, shipping and put-away, such as retail and manufacturing application.

### Comfort

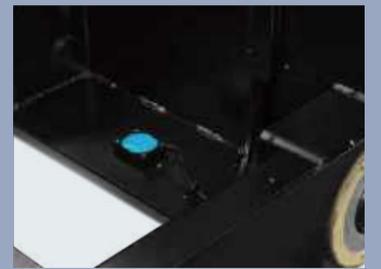
- / The truck is designed for smooth elevation and stable reach when lifting and placing loads, reducing operator fatigue.
- / The soft landing and lift top buffering can improve comfort dramatically.
- / The CURTIS multi-function instrument is equipped as standard, which has many functions such as speed selection, wheel display, etc., and can clearly display various information.

### Maintenance

- / The AC motor has no carbon brush and is maintenance-free, which greatly saves the cost.
- / The intuitive display offers remaining power, advanced diagnostics and timing for safe, reliable performance.
- / The rear hood can be easily disassembled for easy maintenance of hydraulic unit, electronic control, motor and other parts.

### Reliability

- / The frame is made of high-strength steel plate and has a long service life.
- / All wires and cables are reliably protected, greatly improving the reliability of the electrical system.
- / Can provide components such as switches, connectors, instruments, etc. are imported from abroad, with excellent performance and reliable quality.



The tilt sensor prevents the vehicle from tipping due to excessive slope and ensures operator safety



The rear load tray can be folded for working in confined space



Battery side roll out and built-in charger are equipped as standard, which are convenient for battery replacement and charging operation



The front and rear large-size trays can greatly improve the efficiency



The guardrails are equipped with detection switches. The order picker cannot work until the guardrails are put down



## Standard Specification

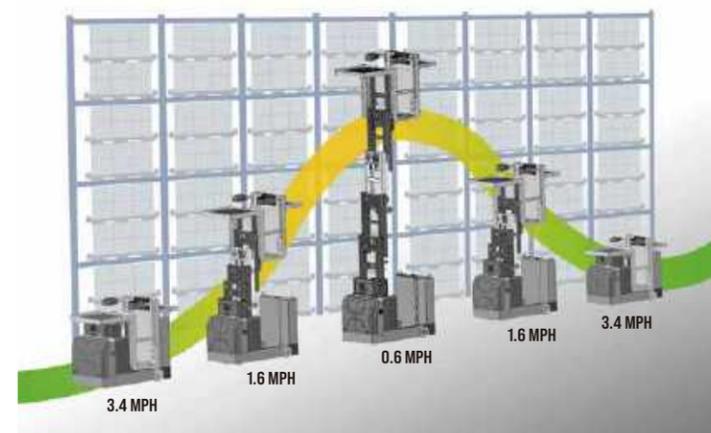
- / AC traction motor
- / CURTIS controller
- / Front load tray
- / Rear load tray (foldable)
- / Automatic speed reduction in corners
- / CURTIS multi-function instrument
- / Maintenance-free battery
- / Battery locking unit
- / Built-in charger
- / Emergency power off switch
- / Safety pedal
- / Tilt switch
- / Left and right guardrail
- / Back cushion
- / Electromagnetic brake

## Performance

- / With AC traction motor, it has excellent acceleration performance, good climbing performance, low heat generation, no carbon brush and is maintenance-free.
- / CURTIS system provides precise, smooth and efficient control.
- / The CANBUS structure makes the whole truck communication faster and more reliable.

## Safety

- / The low mast provides the operator perfect visibility for safety.
- / Speed control at corner ensures smooth and safe operation.
- / The safety pedals include sensor to ensure the operator has feet properly positioned on the platform. It automatically stops travel and lift/lower functions if foot is removed.
- / The hydraulic system has an emergency manual lowering valve that can be operated at the rear of the vehicle to lower the platform.



### Simultaneous Travel and Lift

With productivity in mind, Hangcha designed the truck to travel and lift simultaneously, so operators can move around a facility while raising or lowering to the appropriate heights in one smooth, seamless operation. The truck reaches a maximum speed of 3.4 mph and adjusts speed based on lift height.



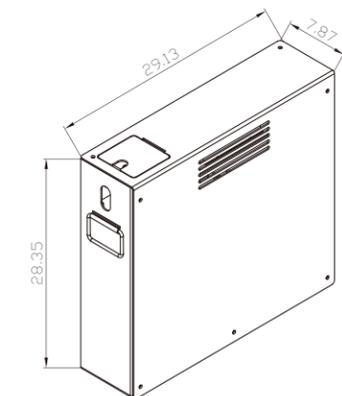
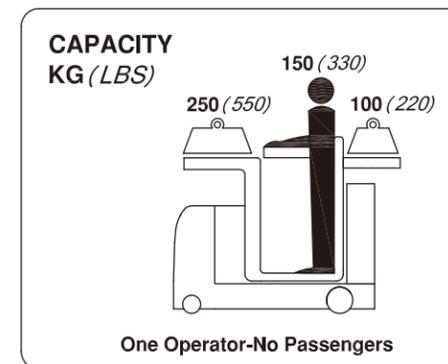
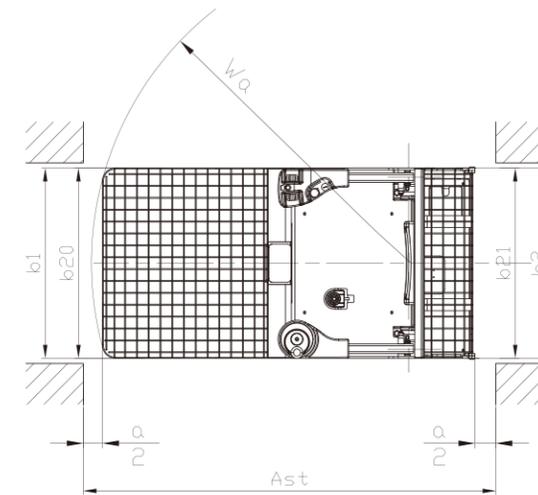
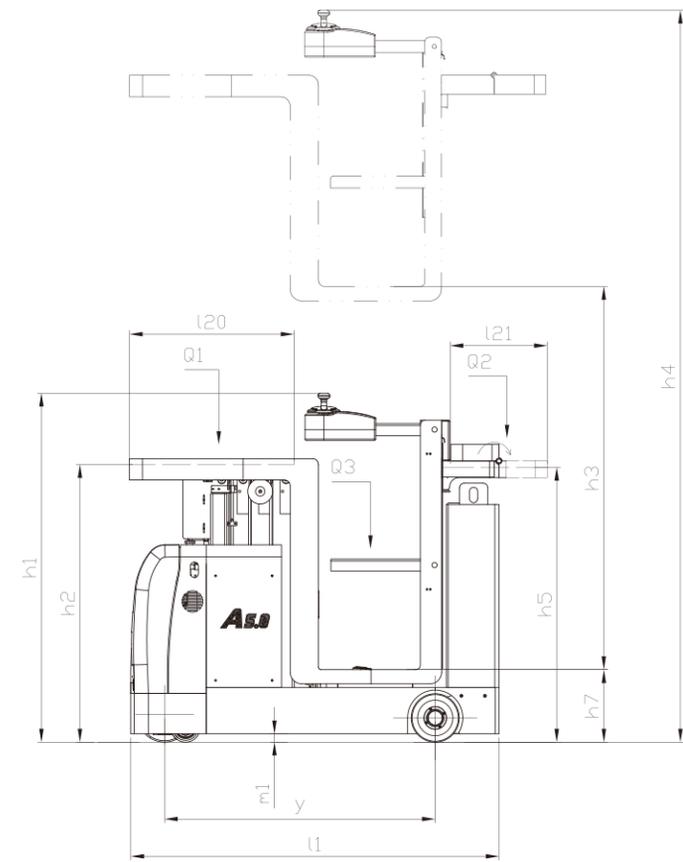
**Innovative/  
Safe/  
Efficient**

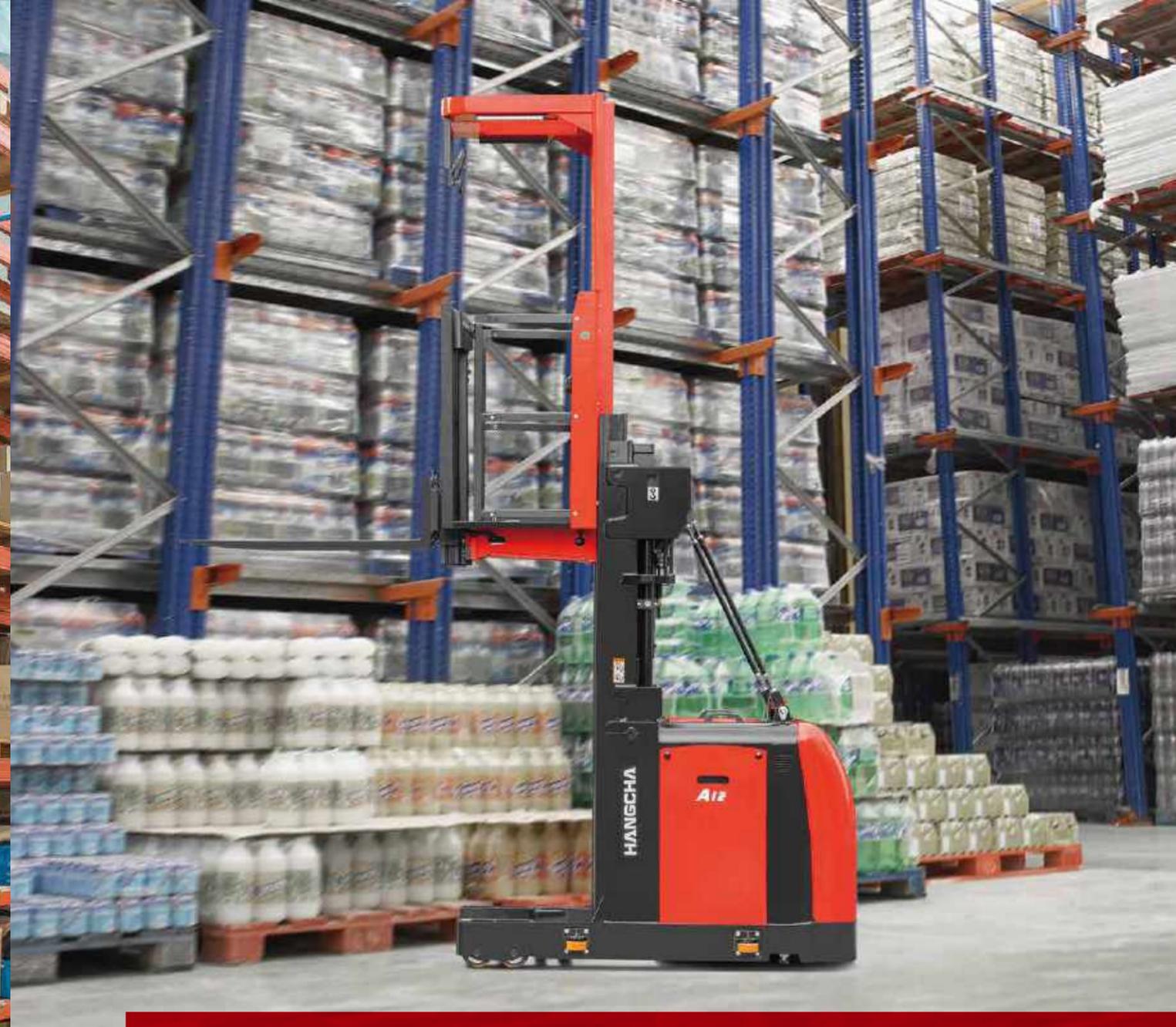


# A Series Electric Stock Picker Specification

Distinguishing mark	1.1	Manufacturer		<b>HANGCHA GROUP CO.,LTD.</b>	
	1.2	Model		CJD05-AC1-MNA	
	1.3	Drive:electric (battery or mains),diesel,petrol,fuel gas		Electrics	
	1.4	Operator type:hand,pedestrian,standing,seated,order-picker		Order picker	
	1.5	Rated capacity on front tray	Q <sub>1</sub> (lb/kg)		550/250
		Rated capacity on behind tray	Q <sub>2</sub> (lb/kg)		220/100
Rated capacity on standing tray		Q <sub>3</sub> (lb/kg)		330/150	
1.9	Wheelbase	y(in/mm)		45.3/1150	
Weight	2.1	Service weight	lb/kg	3216/1460	
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane/rubber	
	3.2	Tyre size, driving wheels	in/mm	Ø9×3/Ø230×75	
	3.3	Tyre size, loading wheels	in/mm	Ø8×3/Ø204×76	
		Tyre size, caster wheels	in/mm	Ø5×2/Ø125×50	
	3.5	Wheels, number driving, caster/loading (x=drive wheels)		1x,2/2	
Dimensions	4.2	Height,mast lowered	h <sub>1</sub> (in/mm)	57.8/1468	
	4.4	Lift	h <sub>3</sub> (in/mm)	145.7/3700	
	4.5	Height, mast extended	h <sub>4</sub> (in/mm)	203.5/5168	
	4.8	Seat height/standing height	h <sub>7</sub> (in/mm)	11.8/300	
	4.19	Overall length	l <sub>1</sub> (in/mm)	61.6/1564	
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (in/mm)	31.5/31.5,800/800	
	4.31	Ground clearance,laden,below mast	m <sub>1</sub> (in/mm)	1.4/35	
		Initial height of front tray	h <sub>2</sub> (in/mm)	46/1168	
		Initial height of behind tray	h <sub>5</sub> (in/mm)	45.5/1156	
		Front tray size	l <sub>20</sub> ×b <sub>20</sub> (in/mm)	27.6×31.5,700×800	
		Behind tray size	l <sub>21</sub> ×b <sub>21</sub> (in/mm)	16×31.5,407×800	
		The channel width	A <sub>st</sub> (in/mm)	79.7/2025	
	4.35	Turning radius	W <sub>a</sub> (in/mm)	52.9/1343	
Performance Data	5.1	Travel speed,laden/unladen	mph km/h	3.4/3.4 5.5/5.5	
	5.2	Lift speed,laden/unladen	fpm mm/s	31.5/41.4 160/210	
	5.3	Lowering speed,lade/unladen	fpm mm/s	45.3/42.4 230/215	
	5.7	Gradeability,laden	%	5	
	5.10	Service brake		Electromagnetic	
Electric-engine	6.1	Drive motor rating S2 60 min	hp/kw	2/1.5	
	6.2	Lift motor rating at S3 15 %	hp/kw	3/2.2	
	6.4	Battery voltage/nominal capacity K3	V/Ah	24/200	
	6.5	Battery weight	lb/kg	430/195	
Addition data	10.7	Sound pressure level at the driver's seat	dB(A)	69	
Others	11.1	Type of drive control		Curtis AC	

Optional:  
 1- lift h<sub>3</sub>=116.5in/2960mm  
 2- battery capacity 24V/300Ah,lead-acid





## A Series High-lift Order Picker

with capacities of 1,200kg

The A Series high-lift order picker, a high-end warehouse equipment, provides a comprehensive safety protection system, excellent ergonomics design and advanced control system. Being reliable and stable, comfortable and safe, and along with excellent performance, it is a perfect option for cargo picking in stereoscopic warehouse that is 5m to 10m high.



## Comfort

- / Standard equipped with height sensors, and buffer function in mast switching, lifting and lowering, it provides more comfort to the operators.
- / The standard LORD steering gear with torque feedback system improves operation safety and comfort.
- / The lifting and lowering speed of the operating platform and fork can be adjusted steplessly, to achieve accurate control.
- / The standard equipped CURTIS multi-function instrument has many functions such as mode selection, wheel position display, etc., and can clearly show various information of the vehicle.

## Reliability

- / The mast is made of high-strength steel plate, which is sturdy and reliable.
- / All wires and cables are reliably protected, greatly improving the reliability of the electrical system.
- / Important components adopted such as switches, connectors, instruments, etc. are foreign high-quality products, with excellent performance and reliable quality.

## Safety

- / The FREE acceleration lever with an inductive switch is equipped as standard to prevent accidental contacts during operation.
- / Equipped with a tilt switch sensor as standard, operation and control safety is improved.
- / The left and right guard rails are equipped with safety detection switches.
- / With 10 times safety factor, the mast chain is also equipped with a chain safety switch.
- / The driving speed is related to the lifting height. The higher the lifting height, the lower the driving speed and the smaller the acceleration.
- / The function of proportional speed reduction in corners is equipped as standard to ensure smooth and safe turning of the vehicle.
- / With emergency lowering function, it can be operated separately on the operating platform and the rear of the vehicle.

## Maintenance

- / The AC motor has no carbon brush and is maintenance-free, which greatly saves the cost of use.
- / The integrated power display, timing and fault self-diagnosis meter is convenient for maintenance.
- / The rear hood can be easily disassembled for easy maintenance of hydraulic unit, electronic control, motor and other parts.



Supplementary lift on operator platform. Pallet can be raised to most convenient working level for picking



Rail guidance rollers (Opt.) can be fitted to the truck for VNA working



Control and display panel integrated are perfectly in the drivers field of view



Standard LCD display informs the driver about all necessary informations



Simultaneous driving/lifting/lowering, simple and ergonomic controls allow precise operation reducing driver fatigue and increasing throughput



## Standard Specification

- / ZF drive unit assembly
- / LORD steering gear
- / CURTIS AC motor controller
- / Free acceleration lever (with inductive switch)
- / Automatic speed reduction in corners
- / CURTIS multi-function instrument
- / Chain switch
- / Guard rail switch
- / Reflective mirror
- / LED top light
- / LED sidelight
- / Emergency power off switch
- / Police light
- / Height sensor
- / Safety pedal
- / Tilt switch
- / Left and right guard rail
- / Folder
- / Back cushion
- / Cup holder
- / Electrostatic belt
- / Electromagnetic brake
- / Supplementary lift (only for CJD12-AC1-H)
- / Full-length safety belt + single-hook shock cord (only for CJD12-AC1-HK)
- / Mounted fork (only for CJD12-AC1-H)
- / Welded fork (only for CJD12-AC1-HK)

## High Performance

- / The maximum driving speed at full load is up to 10km/h, which greatly improves the work efficiency.
- / The Germany ZF reduction gearbox, Schabmueller AC drive and steering motor, contribute to a better performance and greater stability.
- / AC hydraulic lifting system offers high efficiency and free maintenance.
- / The advanced CURTIS AC control system provides precise, smooth and efficient control.
- / The CANBUS structure engages faster and more reliable communication.

## Maintenance

- / The AC motor has no carbon brush and is maintenancefree, which greatly saves the cost of use.
- / The integrated power display, timing and fault selfdiagnosis meter is convenient for maintenance.
- / The rear hood can be easily disassembled for easy maintenance of hydraulic unit, electronic control, motor and other parts.

## Options

- / Side roller
- / Blue light
- / Head Lamp
- / Masts available in various heights
- / Battery trolley

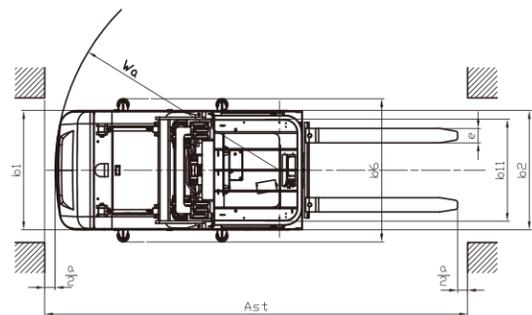
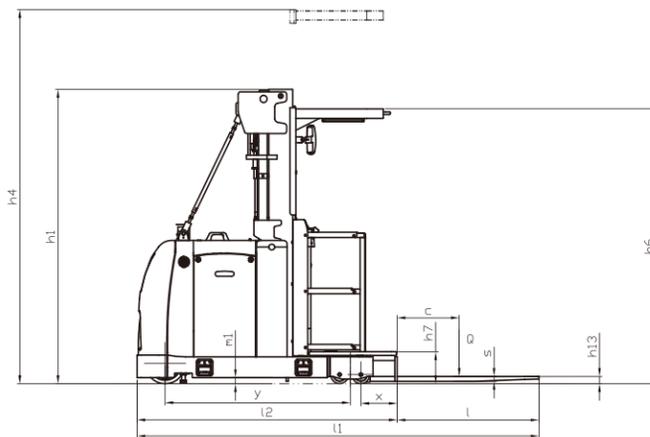
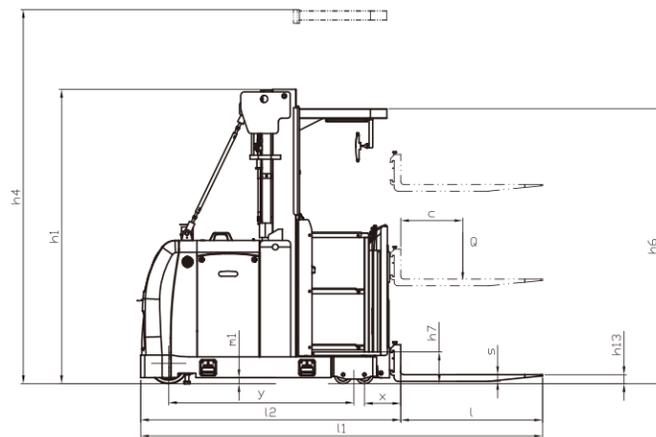


## A Series High-lift Order Picker Specification

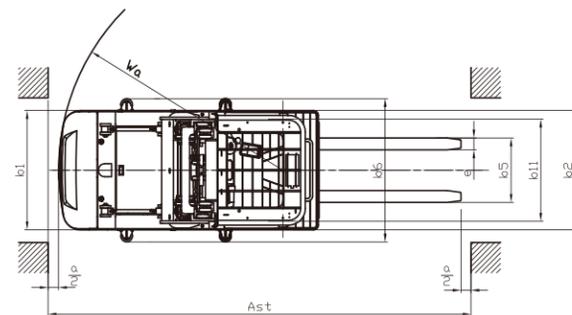
			HANGCHA GROUP CO.,LTD.		
			CJD12-AC1-H	CJD12-AC1-HK	
Distinguishing mark	1.1	Manufacturer			
	1.2	Model	CJD12-AC1-H	CJD12-AC1-HK	
	1.3	Drive:electric (battery or mains),diesel,petrol,fuel gas	Electric	Electric	
	1.4	Operator type:hand,pedestrian,standing,seated,order-picker	Order picker	Order picker	
	1.5	Rated capacity/rated load	Q(t)	1.2	1.2
	1.6	Load centre distance	c(mm)	400	400
	1.8	Load distance, centre of drive axle to fork	x(mm)	307	307
	1.9	Wheelbase	y(mm)	1566	1566
	Weight	2.1	Service weight	kg	3960
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU
	3.2	Tyre size, front		Ø343×140	Ø343×140
	3.3	Tyre size, rear		Ø150×100	Ø150×100
	3.5	Wheels, number front/rear (* = driven wheels)		1x/4	1x/4
	3.7	Tread,rear	b <sub>11</sub> (mm)	856	856
Dimensions	4.2	Height,mast lowered	h <sub>1</sub> (mm)	2465	2465
	4.4	Lift	h <sub>2</sub> (mm)	5000	5000
	4.5	Height, mast extended	h <sub>4</sub> (mm)	7465	7465
	4.7	Height of overhead guard (cabin)	h <sub>6</sub> (mm)	2300	2300
	4.8	Standing height	h <sub>7</sub> (mm)	266	266
	4.11	Supplementary lift	h <sub>9</sub> (mm)	800	/
	4.15	Height,lowered	h <sub>13</sub> (mm)	75	75
	4.19	Overall length	l <sub>1</sub> (mm)	3400	3400
	4.20	Length to face of forks	l <sub>2</sub> (mm)	2200	2200
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	1000/1000	1000/1000
	4.22	Fork dimensions DIN ISO 2331	s/e/l(mm)	55/122/1200	55/100/1200
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	/	540
	4.27	Width over guide rollers	b <sub>6</sub> (mm)	1200	1200
	4.31	Ground clearance,laden,below mast	m <sub>1</sub> (mm)	50	50
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast(mm)	3535	3535
4.34.2	Aisle width for pallets 800 × 1200 lengthways	Ast(mm)	3656	3656	
4.35	Turning radius	W <sub>a</sub> (mm)	1812	1812	
Performance Data	5.1	Travel speed,laden/unladen	km/h	10/10	10/10
	5.2	Lift speed,laden/unladen	m/s	371/411	371/411
	5.3	Lowering speed,lade/unladen	m/s	486/448	486/448
	5.7	Gradeability,laden/unladen	%	10/10	10/10
	5.10	Service brake		Electromagnetic	Electromagnetic
Electric engine	6.1	Drive motor rating S2 60 min	kw	6.4	6.4
	6.2	Lift motor rating at S3 15 %	kw	12.8	12.8
	6.4	Battery voltage/nominal capacity K5	V/Ah	48/620	48/620
	6.5	Battery weight	kg	950	950
Additional data	10.7	Sound pressure level at the driver's seat	dB(A)	69	69

## Mast Specification

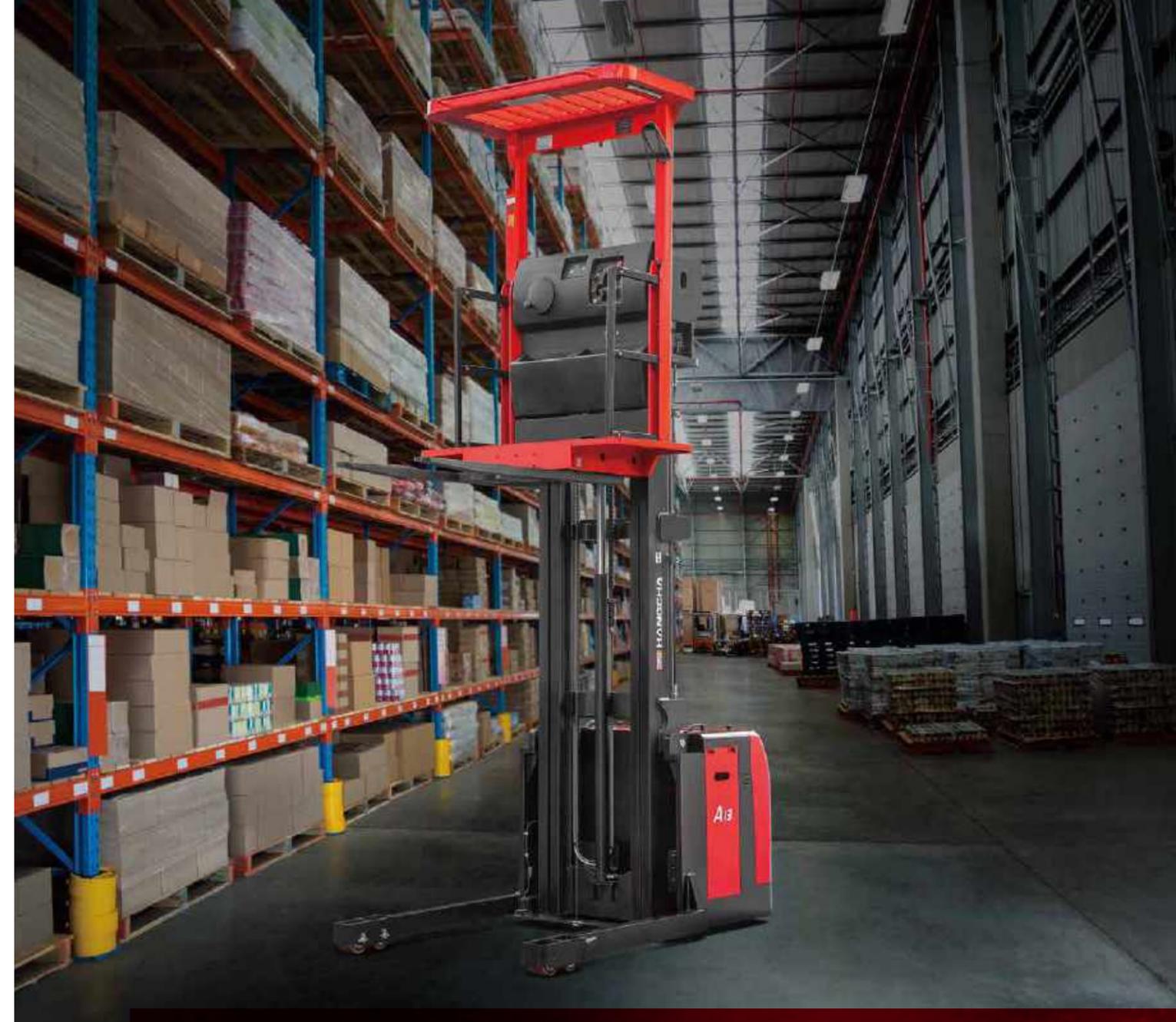
Type	Model	Lift $h_3$ (mm)	Lowered overall height $h_1$ (mm)	Free lift $h_2$ (mm)	Extended mast height $h_4$ (mm)	Overall lift height $h_3+h_2$ (mm)	Order picking height $h_{15}$ (mm)
Triplex DZ	N4500	4500	2315	15	6800	5300	6360
	N4750	4750	2385	85	7050	5500	6610
	N5000	5000	2465	165	7300	5800	6860
	N5500	5500	2630	330	7800	6300	7360
	N6000	6000	2800	500	8300	6800	7860
	N6500	6500	2965	665	8800	7300	8360
	N7000	7000	3130	830	9300	7800	8860
	N7500	7500	3345	1045	9800	8300	9360
	N8000	8000	3515	1215	10300	8800	9860
	N8300	8300	3615	1315	10600	9100	10160
	N8500	8500	3730	1430	10800	9300	10360
	N9000	9000	3955	1655	11300	9800	10860
N9250	9250	4040	1740	11550	10050	11110	
N9500	9500	4125	1825	11800	10300	11360	



CJD12-AC1-H



CJD12-AC1-HK



## A Series Four-Wheel High Level Order Picker with capacities of 3,000lbs

The A Series Four-Wheel High Level Order Picker is high-end models of storage equipment. The vehicle has a comprehensive safety protection system, excellent ergonomics and advanced control system. Being reliable, stable, comfortable and safe and with excellent performance, it is applicable for stock picking in a stereoscopic warehouse of 197in-366in in height.



## High performance

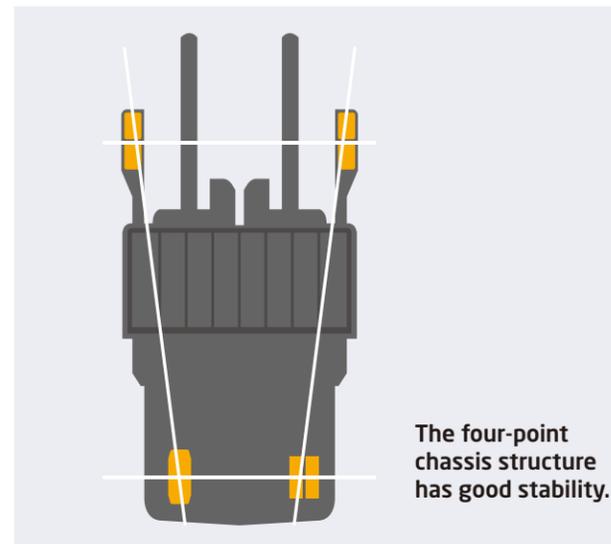
- / The maximum full-load travel speed can reach 6.8mph, which enables work efficiency to be greatly improved.
- / With excellent performance, German ZF gearbox and German Schabmueller AC drive and steering motors are stable and reliable.
- / The AC hydraulic lifting system is highly efficient and maintenance-free.
- / The advanced CURTIS control system provides precise, smooth and efficient control.
- / CANBUS structure makes the whole vehicle communication faster and more reliable.

## Comfort

- / For the standard configuration, a height sensor is provided and shifting and lifting or lowering of the mast are buffered to enable more comfort.
- / CURTIS multi-function instruments have multiple functions such as mode selection, wheel position display, etc., and can clearly display various information.

## Reliability

- / With a high-strength steel frame structure, the vehicle frame is robust and reliable.
- / All wires and cables are reliably protected, greatly improving the reliability of the electrical system.
- / Switches, connectors, instruments and other key parts are all high-quality products with excellent performance and reliable quality.



The A series lift truck provides operators the most unobstructed view, contributes to operator confidence at height



Fully variable lift/lower speeds can provide precise control



LORD steering gear with a torque feedback system is provided to enable higher operating safety and more comfort



The mast chain with a safety factor of 10 times is equipped with a chain safety switch



Manual-locking pallet clamp work on a wide range of pallets and accommodate pallet stringers ranging from 1" to 2" so operators can handle any pallet



## Maintenance

- / The AC motor has no carbon brush and is maintenance-free, which greatly saves the cost of use.
- / The integrated power display, timing and fault self-diagnosis meter is convenient for maintenance.
- / The rear hood can be easily removed without tools. This is convenient for maintenance of the hydraulic unit, electric control, motor and other parts.

## Standard features

- / 36V electrical system
- / ZF drive unit
- / INTORQ electromagnetic brake
- / LORD steering gear
- / CURTIS AC motor controller
- / CURTIS multi-function instrument
- / Chain switch
- / Guard rail switch
- / Reflective mirror
- / LED ceiling light
- / LED side light
- / Emergency power off switch
- / Alarm light
- / Height sensor
- / Safety pedal
- / Tilt switch
- / Left and right guard rail
- / Electrostatic belt
- / Electromagnetic brake
- / Full body harness and energy-absorbing tether
- / Pallet clamp
- / Fully variable lift/lower controls
- / Manual emergency lowering
- / Work material storage compartments
- / Cushioned mast stops
- / Cushioned mast staging
- / Automatic return to center drive wheel upon start-Up
- / Electronic Power Steering
- / Battery compartment rollers

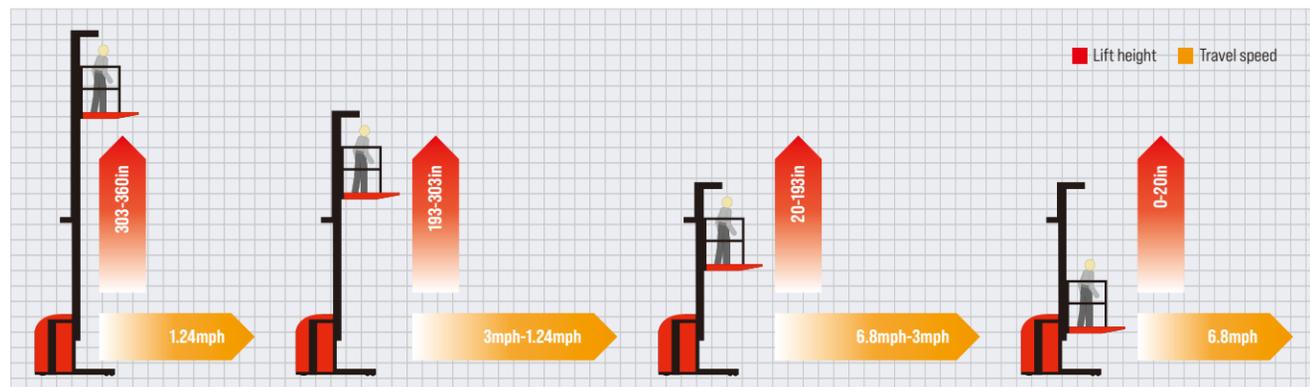
## Safety

- / Full body harness provides great protection for the operator.
- / A tilt switch sensor is provided to improve the operation safety.
- / The left and right guardrails are equipped with safety switches.
- / The function of proportional speed reduction in corners is equipped as standard to ensure smooth and safe turning.
- / An emergency lowering functions provided. Operations can be carried out via the control platform and from the rear of the vehicle, respectively.

## Optional equipment

- / Side roller
- / Blue light
- / Head Lamp
- / Wire mesh screen

## Optimal speed control



A series order picker is available with advanced intellispeed system, which smoothly coordinates travel speeds and load height. Compared to conventional speed control, intellispeed maximizes truck speed as the platform rises, capitalizing on an area of opportunity for providing faster travel between picks.



## A Series Four-Wheel High Level Order Picker Specification

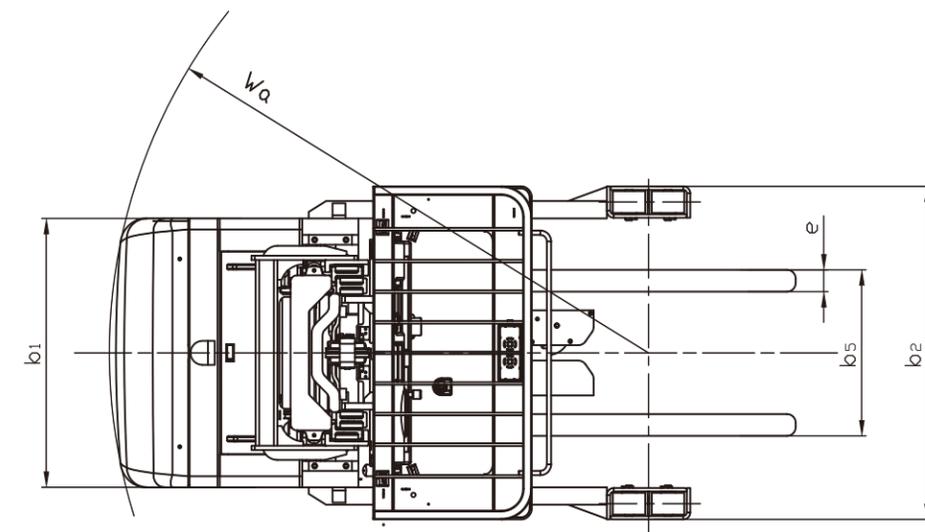
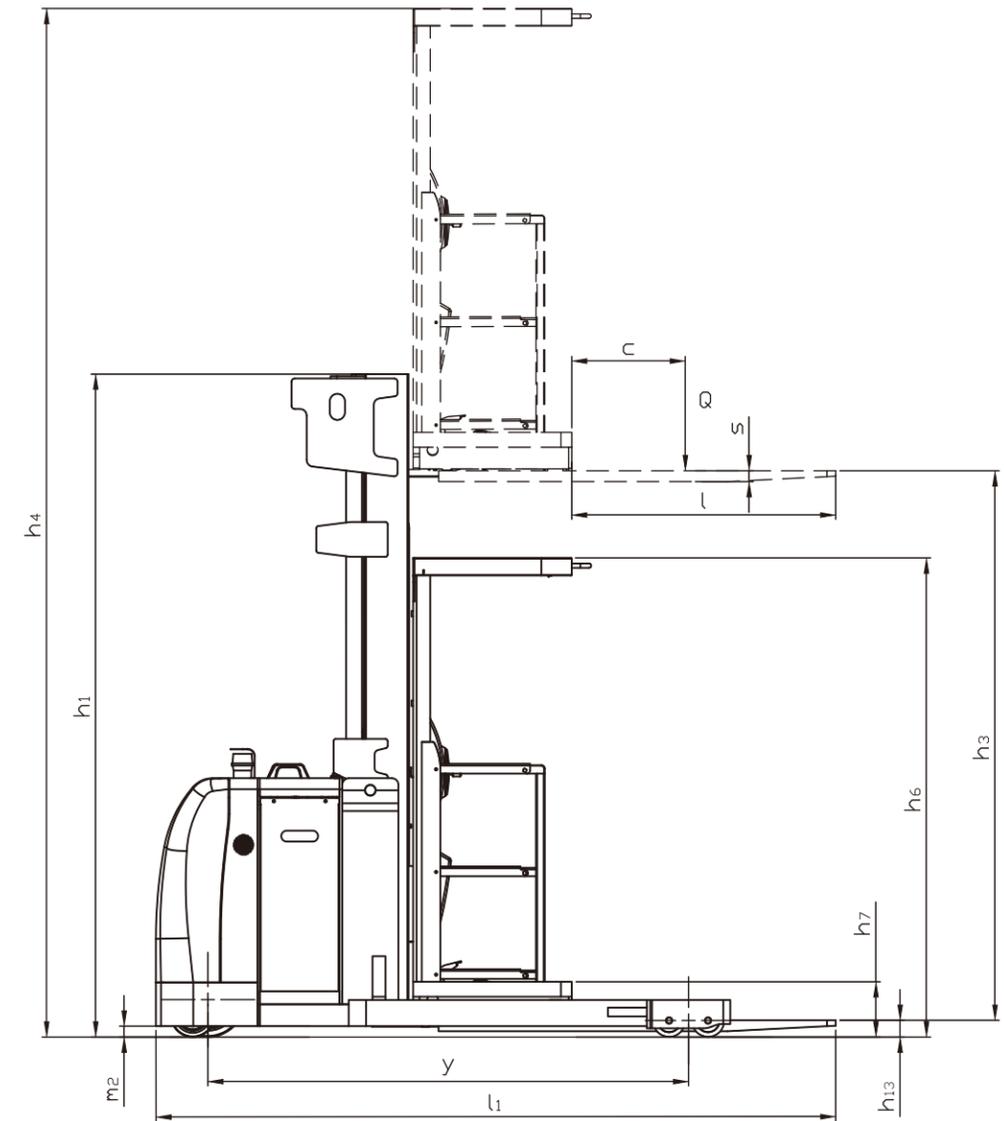
Distinguishing mark	Manufacturer	HANGCHA GROUP CO.,LTD.		
	HCFA Model	OPH13		
	Model	CJD13-AC2S-HNA		
	Drive:electric (battery or mains),diesel,petrol,fuel gas	Electric		
	Operator type:hand,pedestrian,standing,seated,order-picker	Order Picker		
	Rated capacity/rated load	Q(lb/kg)	3000/1360	
	Load centre distance	c(in/mm)	24/600	
	Wheelbase	y(in/mm)	87.5/2222	
Weight	Service weight(without battery)	See table 1		
Tyres, chassis	Tyres: solid rubber, superelastic, pneumatic, polyurethane	Polyurethane		
	Tyre size, front	in/mm	Ø13.5×5.5 Ø343×140	
	Tyre size, rear	in/mm	Ø6×4 Ø150×100	
	Wheels, number front/rear (* = driven wheels)	1x,1/4		
Dimensions	Height,mast lowered	See table 1		
	Lift	See table 1		
	Height, mast extended	See table 1		
	Height of overhead guard (cabin)	h <sub>6</sub> (in/mm)	92.3/2345	
	Standing height	h <sub>7</sub> (in/mm)	10/253	
	Height,lowered	h <sub>13</sub> (in/mm)	3/75	
	Overall length	l <sub>1</sub> (in/mm)	123.7/3142	
	Overall width	See table 1		
	Fork dimensions DIN ISO 2331	s/e/l(in/mm)	2/4/48 50/100/1220	
	Width across forks	b <sub>5</sub> (in/mm)	24~30/610~760	
Performance data	Ground clearance,centre of wheelbase	m <sub>2</sub> (in/mm)	2/50	
	Turning radius	W <sub>a</sub> (in/mm)	98.5/2500	
	Travel speed,laden/unladen	See table 2		
	Lift speed,laden/unladen	fpm mm/s	67/74.9 340/380	
	Lowering speed,laden/unladen	fpm mm/s	86.7/80.8 440/410	
	Gradeability,laden/unladen	%	5/10	
	Service brake	Electromagnetic		
Electric-engine	Drive motor rating S2 60 min	hp/kw	8.6/6.4	
	Lift motor rating at S3 15 %	hp/kw	17.2/12.8	
	Battery voltage/nominal capacity K5	V/Ah	36/600	
	Battery size	in/mm	38.44×14.25×31 976×362×787	
	Battery weight	lb/kg	1730/785	
Addition data	Sound pressure level at the driver's seat	dB(A)	69	

**Table 1**

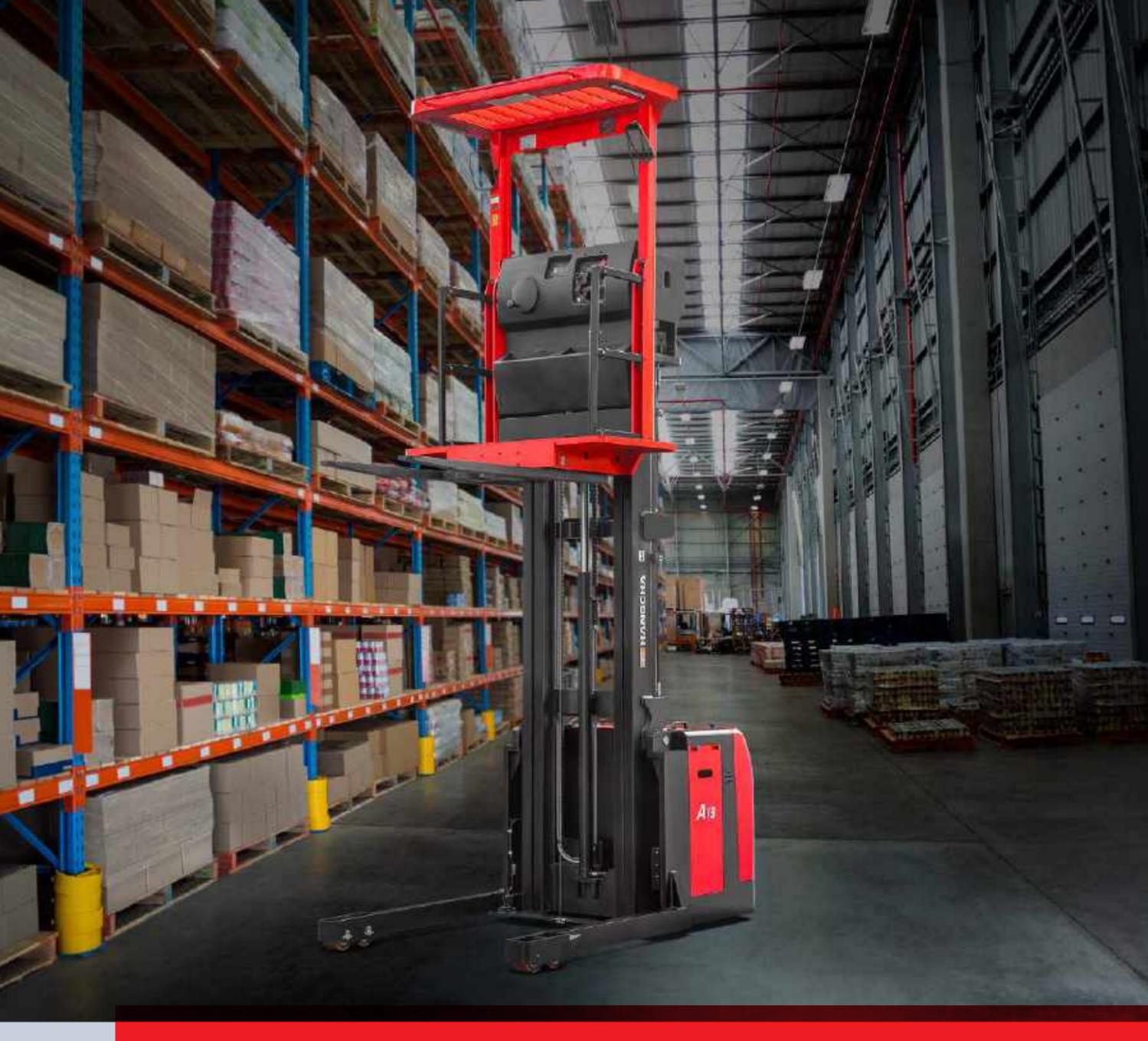
	lift	Height,mast lowered	Height,mast extended	Stand height,elevated	Service weight(without battery)	Overall width
	h <sub>3</sub> (in/mm)	h <sub>1</sub> (in/mm)	h <sub>4</sub> (in/mm)	h <sub>12</sub> (in/mm)	lb/kg	b <sub>1</sub> /b <sub>2</sub> (in/mm)
N5000	197/5000	100/2540	289/7345	206.7/5250	6938/3150	48.4/49.2 1230/1250
N6100	240/6100	114.4/2905	332.5/8445	250/6350	7191.6/3265	48.4/60 1230/1525
N7000	275.5/7000	126.2/3205	368/9345	285.4/7250	7412/3365	48.4/60 1230/1525
N8000	315/8000	139.4/3540	407.3/10345	324.8/8250	7643.2/3470	48.4/68 1230/1800
N9300	366/9300	156.3/3970	458.5/11645	376/9550	7940.5/3605	48.4/68 1230/1800

**Table 2**

Lift Height h <sub>3</sub> in(mm)	Travel speed mph(km/h)
0-20(0-500)	6.8(11)
20-193(500-4900)	6.8-3(11-4.8)
193-303(4900-7700)	3-1.24(4.8-2)
303-366(7700-9300)	1.24(2)



CJD13-AC2S-HNA



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### High performance

- / The maximum full-load travel speed can reach 7.5mph, which enables work efficiency to be greatly improved.
- / With excellent performance, German ZF gearbox and German Schabmueller AC drive and steering motors are stable and reliable.
- / The AC hydraulic lifting system is highly efficient and maintenance-free.
- / The advanced CURTIS control system provides precise, smooth and efficient control.
- / CANBUS structure makes the whole vehicle communication faster and more reliable.

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- / Work material storage compartments
- / Cushioned mast stops
- / Cushioned mast staging
- / Automatic return to center drive wheel upon start-Up
- / Electronic Power Steering
- / Battery compartment rollers

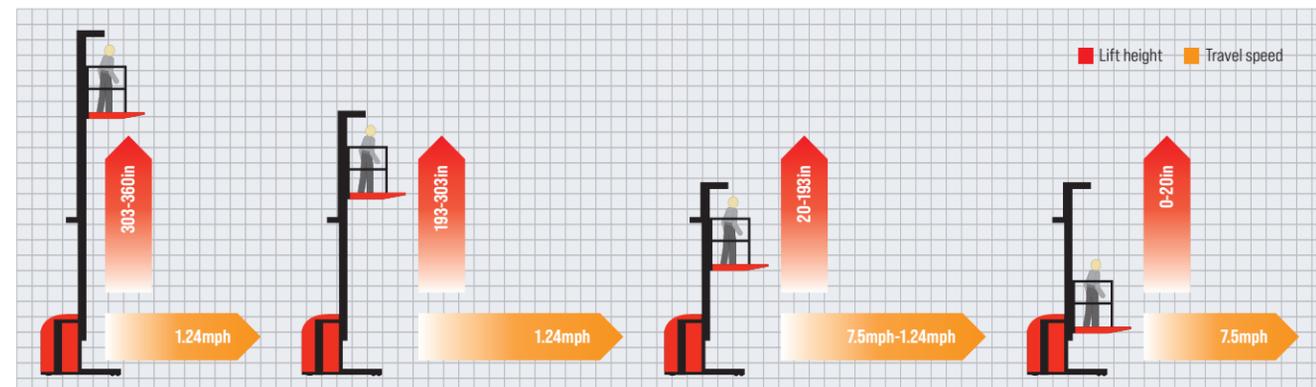
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## A Series Three-Wheel High Level Order Picker Specification

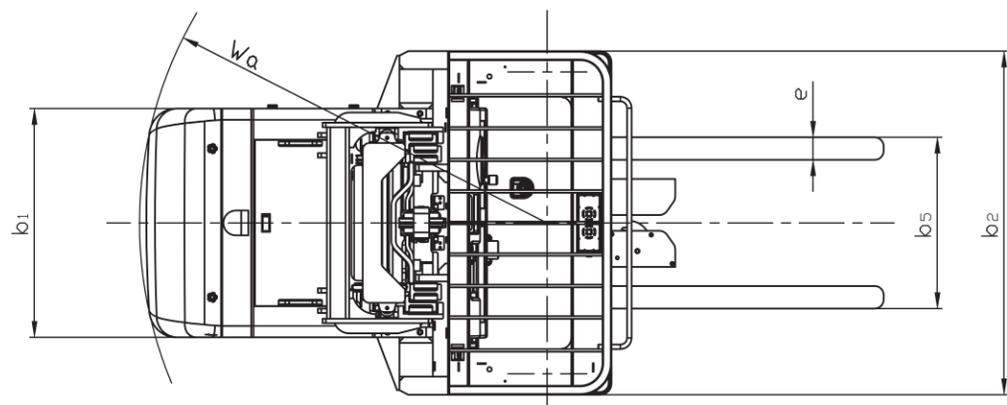
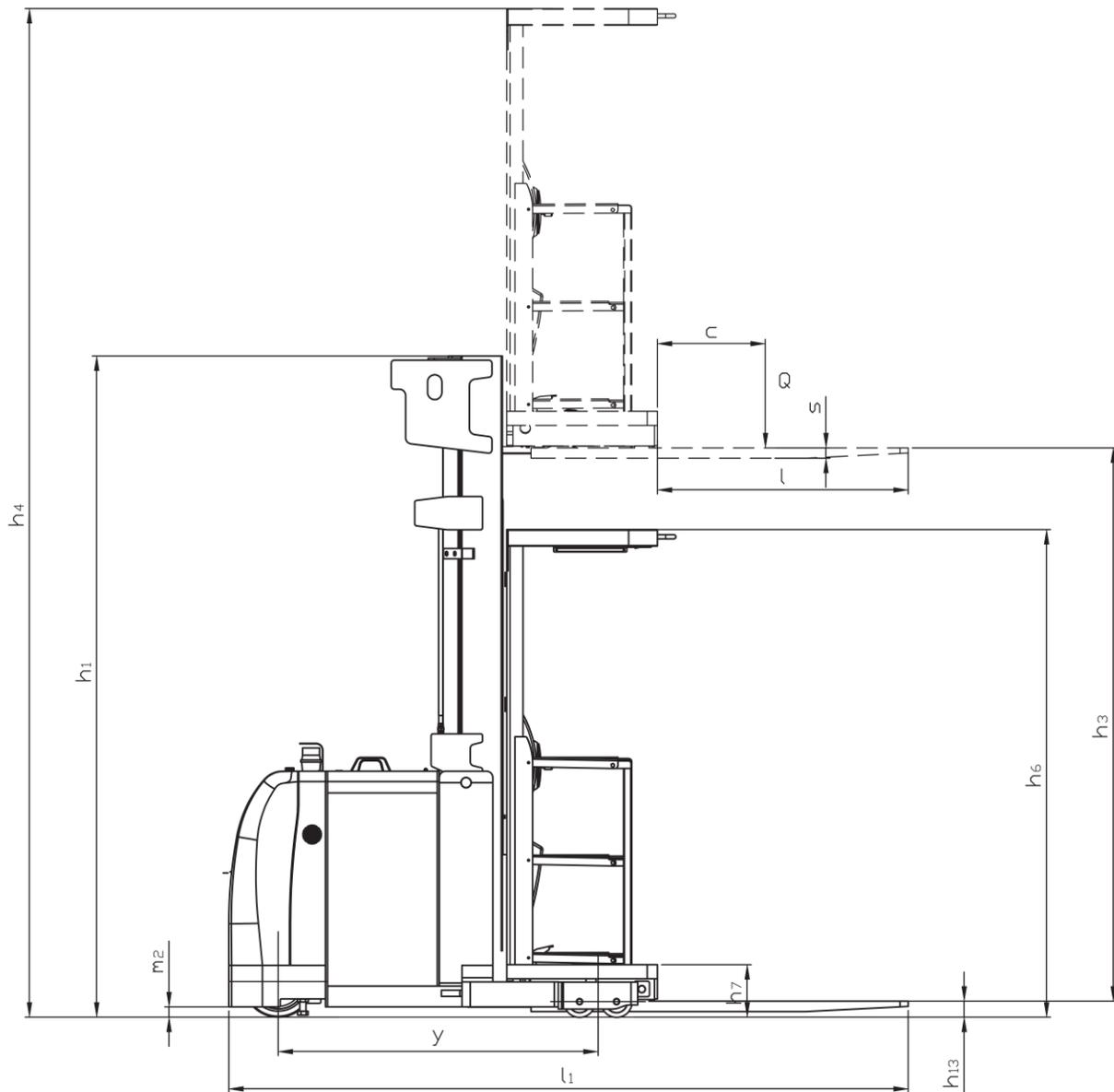
		HANGCHA GROUP CO.,LTD.		
Distinguishing mark	Manufacturer		HANGCHA GROUP CO.,LTD.	
	HCFA Model		OPHT13	
	Model		CJD13-AC2-HNA	
	Drive:electric (battery or mains),diesel,petrol,fuel gas		Electric	
	Operator type:hand,pedestrian,standing,seated,order-picker		Order Picker	
	Rated capacity/rated load	Q(lb/kg)	3000/1360	
	Load centre distance	c(in/mm)	24/600	
Wheelbase	y(in/mm)	61.3/1556		
Weight	Service weight(without battery)		See table 1	
Tyres, chassis	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	
	Tyre size, front	in/mm	Ø13.5×5.5 Ø343×140	
	Tyre size, rear	in/mm	Ø6×4 Ø150×100	
	Wheels, number front/rear (* = driven wheels)		1x,4	
Dimensions	Height,mast lowered		See table 1	
	Lift		See table 1	
	Height, mast extended		See table 1	
	Height of overhead guard (cabin)	h <sub>6</sub> (in/mm)	92.3/2345	
	Standing height	h <sub>7</sub> (in/mm)	10/253	
	Height,lowered	h <sub>13</sub> (in/mm)	3/75	
	Overall length	l <sub>1</sub> (in/mm)	130.1/3305	
	Overall width		See table 1	
	Fork dimensions DIN ISO 2331	s/e/(in/mm)	2/4/48 50/100/1220	
	Width across forks	bs(in/mm)	24~30/610~760	
Performance data	Ground clearance,centre of wheelbase	m <sub>2</sub> (in/mm)	2/50	
	Turning radius	Wa(in/mm)	71.3/1810	
	Travel speed,laden/unladen		See table 2	
	Lift speed,laden/unladen	fpm mm/s	69/94.6 350/480	
	Lowering speed,laden/unladen	fpm mm/s	78.8/78.8 400/400	
	Gradeability,laden/unladen	%	5/10	
	Service brake		Electromagnetic	
	Electric-engine	Drive motor rating S2 60 min	hp/kw	8.6/6.4
		Lift motor rating at S3 15 %	hp/kw	17.2/12.8
		Battery voltage/nominal capacity K5	V/Ah	36/900
Battery size		in/mm	38.7×20.7×31 983×527×787	
Battery weight		lb/kg	2101/954	
Addition data	Sound pressure level at the driver's seat	dB(A)	69	

**Table 1**

	lift	Height,mast lowered	Height,mast extended	Stand height,elevated	Service weight(without battery)	Overall width
	h <sub>3</sub> (in/mm)	h <sub>1</sub> (in/mm)	h <sub>4</sub> (in/mm)	h <sub>12</sub> (in/mm)	lb/kg	b <sub>1</sub> /b <sub>2</sub> (in/mm)
N5000	197/5000	100/2540	289/7345	206.7/5250	6730.7/3053	40/42 1015/1220
N6100	240/6100	114.4/2905	332.5/8445	250/6350	6984/3168	40/42 1015/1220
N7000	275.5/7000	126.2/3205	368/9345	285.4/7250	7204.7/3268	40/54 1015/1370
N8000	315/8000	139.4/3540	407.3/10345	324.8/8250	7436/3373	40/54 1015/1370
N9300	366/9300	156.3/3970	458.5/11645	376/9550	7733.8/3508	40/60 1015/1525

**Table 2**

Lift Height h <sub>3</sub> in(mm)	Travel speed mph(km/h)
0-20(0-500)	7.5(12)
20-193(500-4900)	7.5-1.24(12-2)
193-303(4900-7700)	1.24(2)
303-366(7700-9300)	1.24(2)



CJD13-AC2-HNA



## Self-propelled Electric Scissor Lifts

### Aerial work platform

HANGCHA self-propelled electric scissor lifts are the high efficient, safe and ideal solution for modern industry. Ideal for maneuvering in tight Spaces, they're excellent for indoor and outdoor application, all the functions, lifting, lowering, steering, forward and backward are under operator's control. Easy maintenance and service after opening the battery cover, all key parts are easy access. With low noise level, and high reliability, HANGCHA self-propelled electric scissor lifts are always your best partner.

## Characteristics

- / The proportional control system: Control the speed of traveling and lifting as you need.
- / Control box: This box is including the function of traveling and lifting, when you use the joystick, you can Operate the machine With only one hand.
- / Self-leveling sensor. When the degree is more than 1.5° (width direction) /3°(lengthwise direction), it will alarm.
- / LED display: Easy for maintenance.
- / Steering system. The turning radius is small, it can work In the narrow space.
- / Extension deck: You can reach the working place by the Extended platform.
- / Reasonable arrangement: All the parts of hydraulic system and electric system are located In the side doors, convenient to repair.
- / Safety: Alloy steel axis, to make sure the safety, reliable and efficient.
- / Internal charger: You can charge the battery directly, do not need to remove it from machine.
- / Hydrostatic transmission: Using hydrostatic transmission system technology.

## Application

- / Stations, dock, airport, powerstation, gym, big company ect.

## Standard Equipment

- / The lifting system
- / The proportional control
- / Anti-overturning system
- / Control box
- / Internal Charger
- / Hour meter
- / Local battery

## Options

- / Working lights(two lights)
- / 220v socket
- / Beeper
- / Alarm light
- / Anti-overload system(Required by CE)
- / Pneumatic pipe



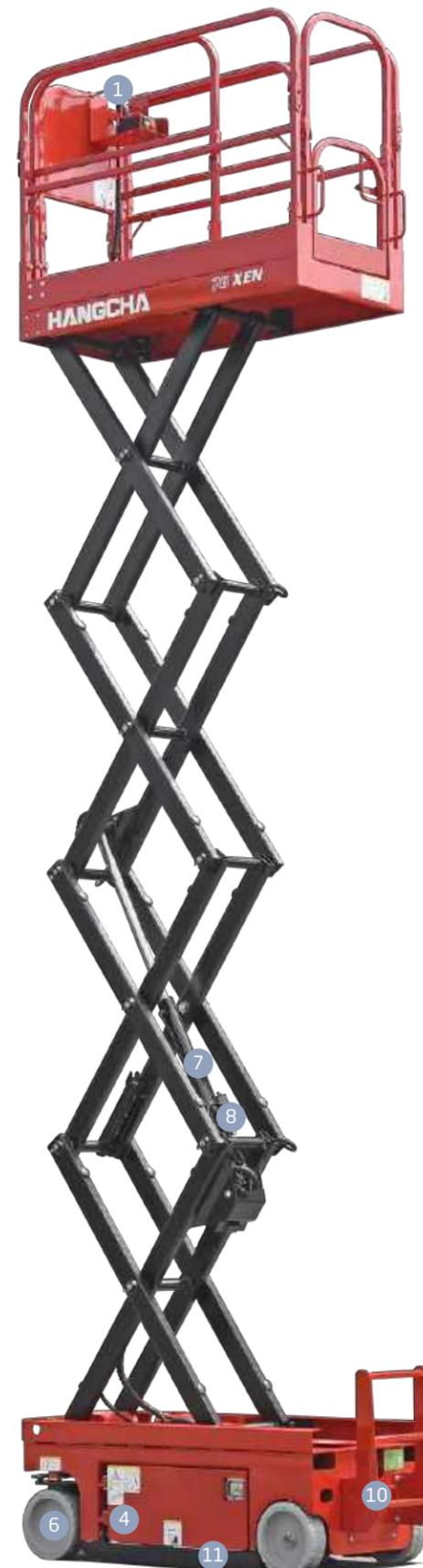
100XEN



120XEN



140XEN



Joystick



Extension platform



Hydraulic and electric system



Battery



Brake



Traction motor



Supporting arms: To protect the operator when he is doing repair or maintenance job



Explosion proof valve: To prevent the machine falling when the oil pipe is leaking



Manual lowering valve: When the operation system failed or the battery power is too low to let the platform decline, we can use this valve to lower the machine



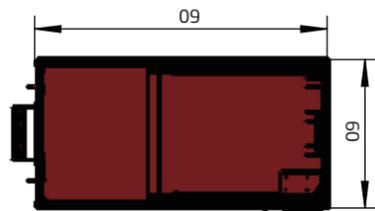
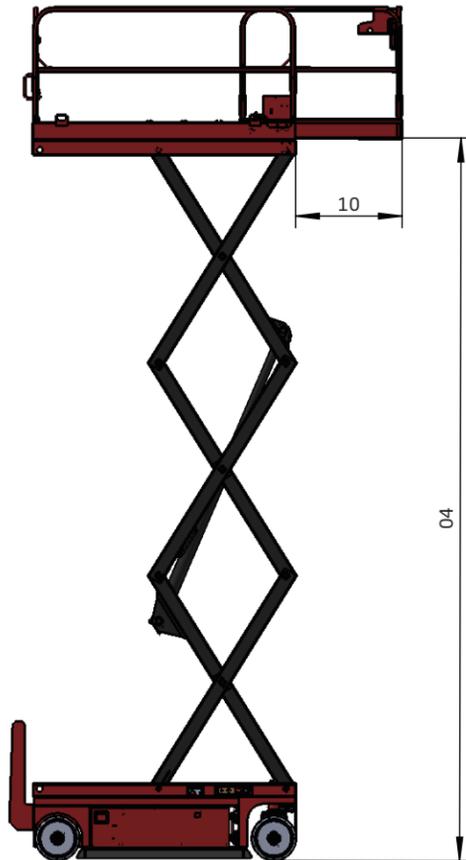
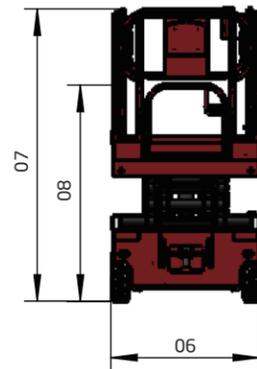
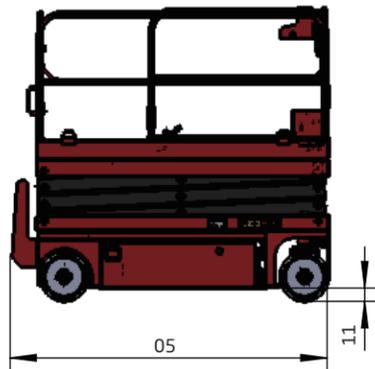
Manual release valve: When the machine can not move, you can push the machine after pressing this valve



Anti-overturning system: When the machine raises to more than 2m, this system will work automatically, to protect the machine from overturning while walking at un-leveling ground

## Self-propelled Electric Scissor Lifts

01	HANGCHA GROUP CO.,LTD.									
02 Model	65XEN	78XEN	80XENS	100XENS	80XEN	100XEN	120XEN	140XEN	160XEN	
03 Working height (m/in)	6.5/255.9	7.8/307.1	8/315.0	10/393.7	8/315.0	10/393.7	12/472.4	13.8/534.3	15.6/614.2	
04 Platform height (m/in)	4.50/177.2	5.8/228.3	6/236.2	8/315.0	6/236.2	8/315.0	10/393.7	11.8/464.6	13.6/535.4	
05 Overall length (m/in)	1.89/74.4	1.89/74.4	2.48/97.6	2.48/97.6	2.48/97.6	2.48/97.6	2.48/97.6	2.48/97.6	2.845/112.0	
06 Overall width (m/in)	0.81/31.9	0.81/31.9	0.82/31.9	0.82/31.9	1.15/45.3	1.15/45.3	1.15/45.3	1.15/45.3	1.4/55.1	
07 Overall height (m/in)	2.07/81.5	2.19/86.2	2.23/86.6	2.32/91.7	2.23/86.6	2.32/91.3	2.50/96.5	2.65/102.0	2.635/103.7	
08 Height with rails folded (m/in)	1.73/68.1	1.84/72.4	1.87/73.6	2.00/78.7	1.66/65.4	1.77/70.1	1.91/75.2	2.05/80.7	2.03/79.9	
09 Platform size (m/in)	1.68x0.77/66.1x30.3	1.68x0.77/66.1x30.3	2.27x0.82/89.4x31.9	2.27x0.82/89.4x31.9	2.27x1.14/89.4x44.1	2.27x1.14/89.4x44.1	2.27x1.14/89.4x44.1	2.27x1.14/89.4x44.1	2.64x1.14/103.9x44.1	
10 Platform extension size (m/in)	0.9/35.4	0.9/35.4	0.9/35.4	0.9/35.4	0.9/35.4	0.9/35.4	0.9/35.4	0.9/35.4	0.9/35.4	
11 Ground clearance (m/in)	0.083/3.3	0.083/3.3	0.1/3.9	0.1/3.9	0.1/3.9	0.1/3.9	0.1/3.9	0.1/3.9	0.1/3.9	
12 Turning radius inside (m/in)	0.016/0.63	0.016/0.63	0.02/0.8	0.02/0.8	0.02/0.8	0.02/0.8	0.02/0.8	0.02/0.8	0.016/0.63	
13 Turning radius outside (m/in)	1.64/64.6	1.64/64.6	2.1/82.7	2.1/82.7	2.20/86.6	2.20/86.6	2.20/86.6	2.20/86.6	2.70/106.3	
14 Rated load (kg/lb)	320/705	230/507	380/838	230/507	450/992	450/992	320/705	320/705	230/507	
15 Load on extension (kg/lb)	113/249	113/249	113/249	113/249	113/249	113/249	113/249	113/249	113/249	
16 Batteries (VAH)	24,225	24,225	24,225	24,225	24,300	24,300	24,300	24,300	24,300	
17 Weight ±30 (kg/lb)	1315/2899	1435/3163	2085/4597	2180/4806	2230/5434	2370/5434	2810/5896	3040/6072	3240/7143	
18 Travel speed km/h (mph)	0-3.5(0-2.17)	0-3.5(0-2.17)	0-3.5(0-2.17)	0-3.5(0-2.17)	0-3.5(0-2.17)	0-3.5(0-2.17)	0-3.5(0-2.17)	0-3.5(0-2.17)	0-2.7(0-1.68)	
19 Lift time (s)	14±2	16±2	25±2	30±2	25±2	30±3	45±3	60±5	70±5	
20 Lowered time (s)	20±4	23±4	35±4	40±4	35±5	50±5	40±5	50±7	50±7	
21 Tyre	Non-mark Tyres	Non-mark Tyres	Non-mark Tyres	Non-mark Tyres	Non-mark Tyres	Non-mark Tyres	Non-mark Tyres	Non-mark Tyres	Non-mark Tyres	
22 Maximum slope	1.5°/3°	1.5°/3°	1.5°/3°	1.5°/3°	1.5°/3°	1.5°/3°	1.5°/3°	1.5°/3°	1.5°/3°	
23 Gradeability	25%	25%	25%	25%	25%	25%	25%	25%	25%	
24 Working area	inside/outside <45km/h (28mph)wind		inside 0km/h(0mph) wind		inside/outside <45km/h (28mph)wind			inside 0km/h(0mph) wind		inside 0km/h(0mph) wind



## Articulating Booms

GTHZ120 / GTHZ170 / GTHZ170C

This machine has articulation boom which can work across the obstacle. It can carry two people and some tools in the basket. The machine allows you to operate it in limited place with narrow design and small radius turning system. You can operate the machine from basket or base control, so when you want to move it, you do not need to go down the machine. Multi-motion control allows you to operate several actions simultaneously. With this machine, you can do work more efficient and comfortable.



## Standard specification

- / Electrical battery traction
- / Negative brakes
- / Lifting brakes
- / Hour meter
- / Warning buzzer in the basket
- / 220V predisposal
- / Voltage indicator
- / Safety manual pump
- / Bus CAN technology
- / Diagnostic help integrated
- / Dual electrical motors
- / No marking tires
- / Anti-roll system
- / Integrated charger

## Options

- / Working lights
- / Flashing light(all motion alarm)
- / Buzzer
- / Air predisposal
- / Electrical plug 220V
- / Over-load sensor system



Basket: can be rotated left and right at an Angle of 140°



Base control box: the control box can be used to control each action of the device, easy to understand



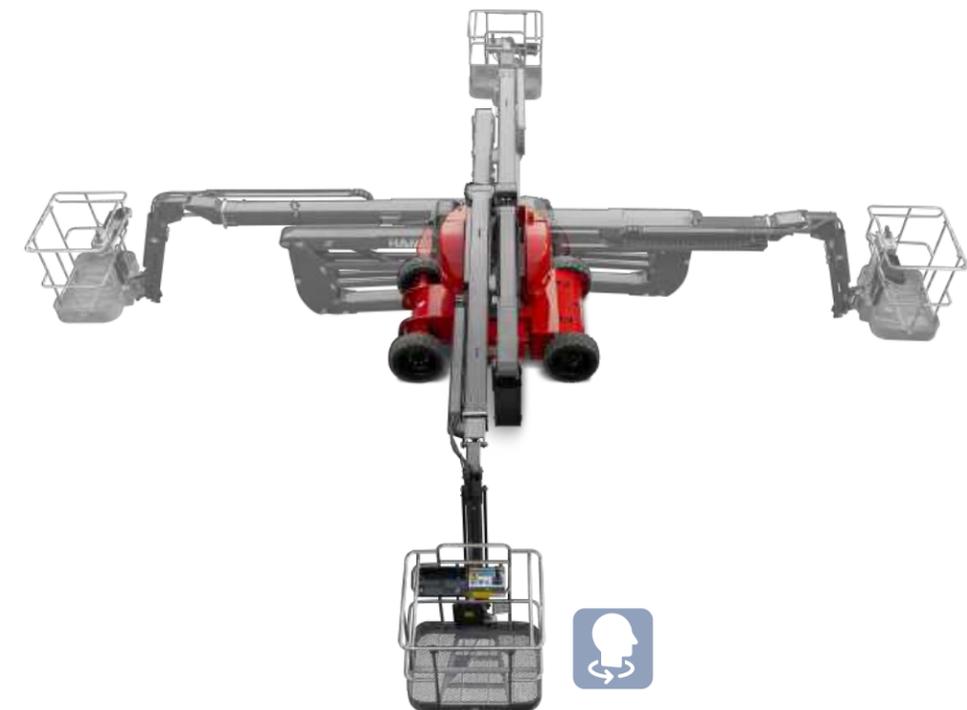
Tires: foam-filled tires with good off-road performance



Basket control box: each action of the device can be controlled through the control box to quickly reach the working area, and the control is simple and easy to understand



Standard tracking battery: Reduce 40% of the charge time, raise 50% of the life time



## Easy/ Efficiency/ Economy

### Features

- / Increase the ground clearance to improve passability;
- / This platform is provided with rough terrain tires, which are more suitable for working outside;
- / The driving speed is 6.1km/h.
- / Climbing performance is increased to 30%;
- / Integrated design of motor and reducer. The motor controls the reducer to brake, reducing the impact of braking and improving the user's comfort.
- / Potentiometer is installed on the equipment, so that the left and right wheels have different speed when steering, so the steering is more stable.
- / The drive motor is AC motor.



GTHZ170C

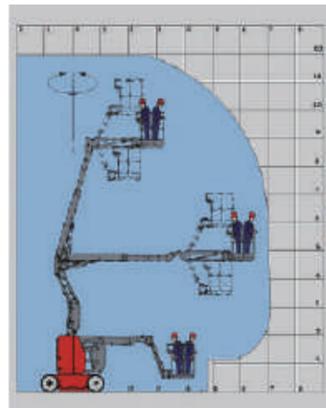
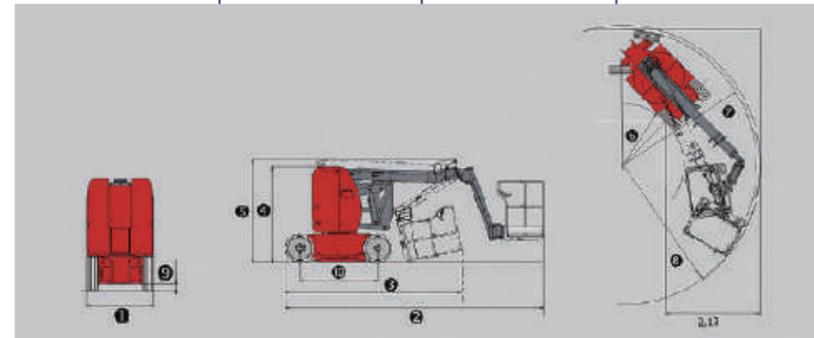
GTHZ170

GTHZ120

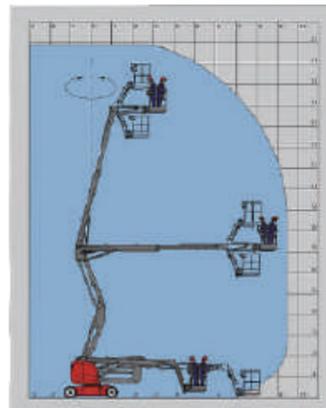
## Articulating Booms

1	Manufacturer	HANGCHA GROUP CO.,LTD.					
2	Model	GTHZ120		GTHZ170		GTHZ170C	
3	Working height	m/in	11.95 / 470.5	16.75 / 659.4	16.95 / 667.3	16.95 / 667.3	667.3
4	Platform height	m/in	9.95 / 391.7	14.75 / 580.7	14.95 / 588.6	14.95 / 588.6	588.6
5	Horizontal height	m/in	7.00 / 275.6	9.43 / 371.3	9.43 / 371.3	9.43 / 371.3	371.3
6	Up and over height	m/in	4.77 / 187.8	7.16 / 281.9	7.3 / 287.4	7.3 / 287.4	287.4
7	Length	m/in	5.48 / 215.7	6.84 / 269.3	6.9 / 271.7	6.9 / 271.7	271.7
8	Length (storage)	m/in	3.74 / 147.2	5.4 / 212.6	5.4 / 212.6	5.4 / 212.6	212.6
9	Wheel base	m/in	1.65 / 65.0	2 / 78.7	2 / 78.7	2 / 78.7	78.7
10	Width	m/in	1.22 / 48.0	1.75 / 68.9	1.75 / 68.9	1.75 / 68.9	68.9
11	Height	m/in	1.99 / 78.3	2.09 / 82.3	2.15 / 84.6	2.15 / 84.6	84.6
12	Height (storage)	m/in	2.16 / 85.0	2.09 / 82.3	2.15 / 84.6	2.15 / 84.6	84.6
13	Basket size	m/in	1.20x0.77 / 47.24x30.3	1.20x0.77 / 47.2x30.3	1.20x0.77 / 47.2x30.3	1.20x0.77 / 47.2x30.3	47.2x30.3
14	Turning radius inside	m/in	1.55 / 61.0	2.0 / 78.7	2.0 / 78.7	2.0 / 78.7	78.7
15	Turning radius outside	m/in	3.25 / 128.0	4.30 / 169.3	4.30 / 169.3	4.30 / 169.3	169.3
16	Turning radius outside (basket)	m/in	3.34 / 131.5	5.6 / 220.5	5.6 / 220.5	5.6 / 220.5	220.5
17	Ground Clearance	m/in	0.10 / 3.9	0.15 / 5.9	0.2 / 7.9	0.2 / 7.9	7.9
18	Capacity	kg/lb	200 / 441	200 / 441	230 / 507	230 / 507	507
19	Jib movement		±70°	±70°	±70°	±70°	±70°
20	Basket rotation		140°	140°	140°	140°	140°
21	Turret rotation		350°	350°	355°	355°	355°
22	Drive speed	km/h,mile/h	6.00 / 3.73	4.50 / 2.80	6.10 / 3.79	6.10 / 3.79	3.79
23	Working speed	km/h,mile/h	0.60 / 0.37	0.60 / 0.37	0.60 / 0.37	0.60 / 0.37	0.37
24	Gradeability	%	25%	22%	22%	30%	30%
25	Maxi slope acceptable	%	3°or 5%	3°or 5%	3°or 5%	3°or 5%	3°or 5%
26	Tires	m/in	0.60x0.19 / 23.6x7.5	0.60x0.19 / 23.6x7.5	0.73x0.225 / 28.7x8.9	0.73x0.225 / 28.7x8.9	28.7x8.9
27	Wheel steer		2	2	2	2	2
28	Wheel drive		2	2	2	2	2
29	Batteries (C5)	V/Ah	300Ah,2x24V	300Ah,2x24V	300Ah,2x24V	300Ah,2x24V	300Ah,2x24V
30	Weight	kg/lb	6550 / 14440	7030 / 15498	7130 / 15719	7130 / 15719	15719

### Size Range



GTHZ120



GTHZ170





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