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ISO14001
ISO14001:2015



ISO9001
ISO9001:2015



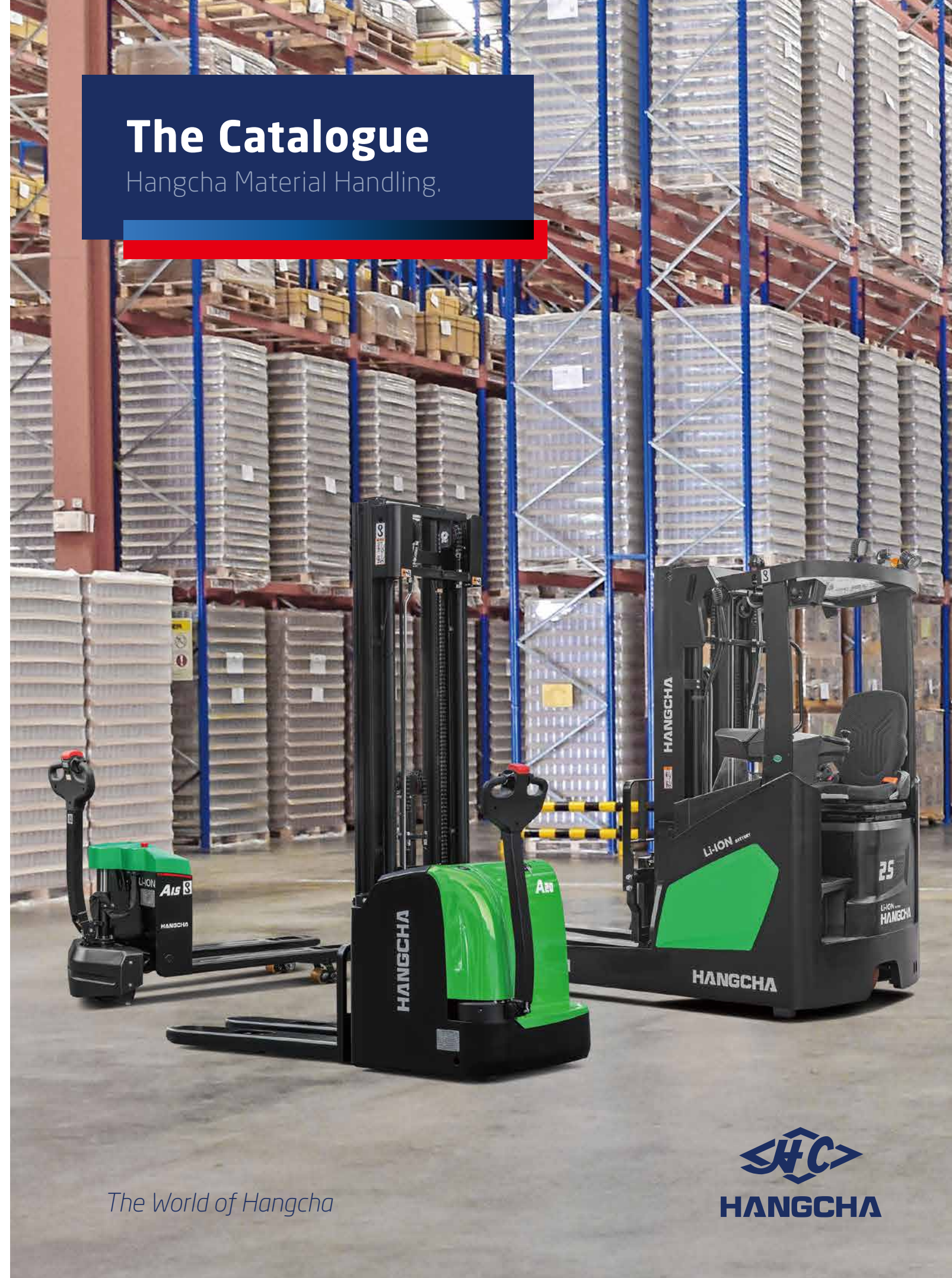
HANGCHA trucks conform
to the European Safety
Requirements.

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The Catalogue

Hangcha Material Handling.



The World of Hangcha





Welcome to HANGCHA!

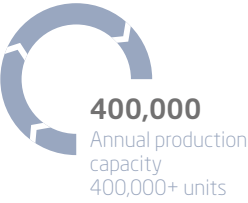
Hangcha Group is the leader in full line forklift manufacturing in China and among the top 8 in Industrial Trucks and Services in the world, and employs over 5,400 people worldwide.





















































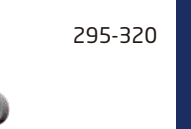
Hangcha Group was founded in 1956. 66 years later, we continue to manufacture reliable material handling equipment. In 2016, Hangcha Group went public on Shanghai Stock Exchange. In 2021, more than 247,000 new Hangcha units were sold worldwide. Quality and innovation are two of the reasons that Hangcha products are distributed to more than 180 countries & regions with about 11% in global market share.

Now, we can offer a complete fleet of material handling equipment, from 1-48t internal combustion counterbalance forklift, 0.6-48t electric forklift trucks, warehouse equipment, 3-6t side loader, empty container handler, reach stacker, AGV and much more. Our annual production capacity is more than 400,000 units thanks to the intelligent manufacturing factory.

In recent years, Hangcha Group has launched a series of new energy products varied from counterbalanced trucks, warehouse equipment and AGVs and we provide alternative solutions to diesel products, such as li-ion, high-voltage li-ion and hydrogen fuel cell trucks, which can deliver the performance of an IC truck in terms of productivity and efficiency.

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Page	
Pallet truck	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	03-34
Pallet truck	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	35-60
Pallet stacker	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	61-92
Pallet stacker	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	93-125
Reach truck	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	126-212
Electric tow tractor/ platform	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	213-260
Order picker	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	261-294
Special truck	<div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div> <div><div>LI-ION TECHNOLOGY</div></div>
	295-320



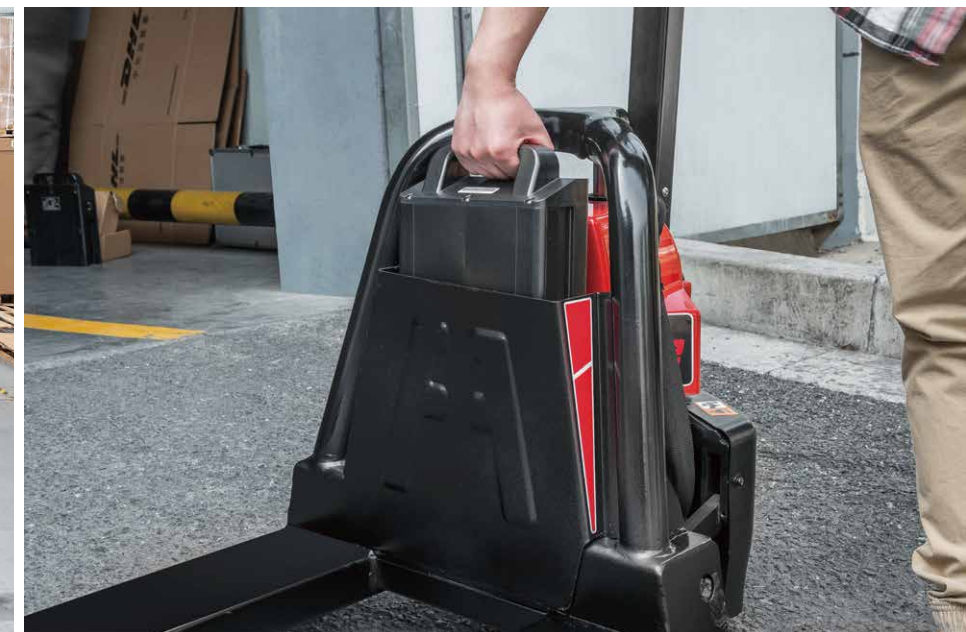
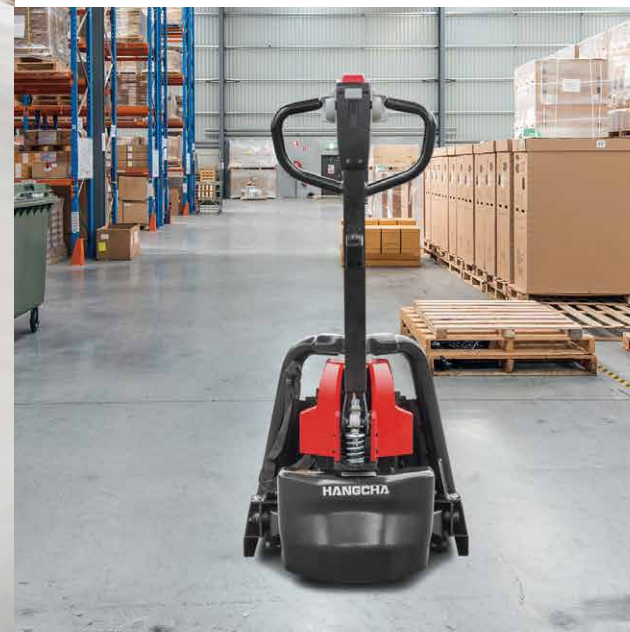
THE PALLET TRUCK WITH Li-Ion TECHNOLOGY

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



1330mm
Turning radius



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.

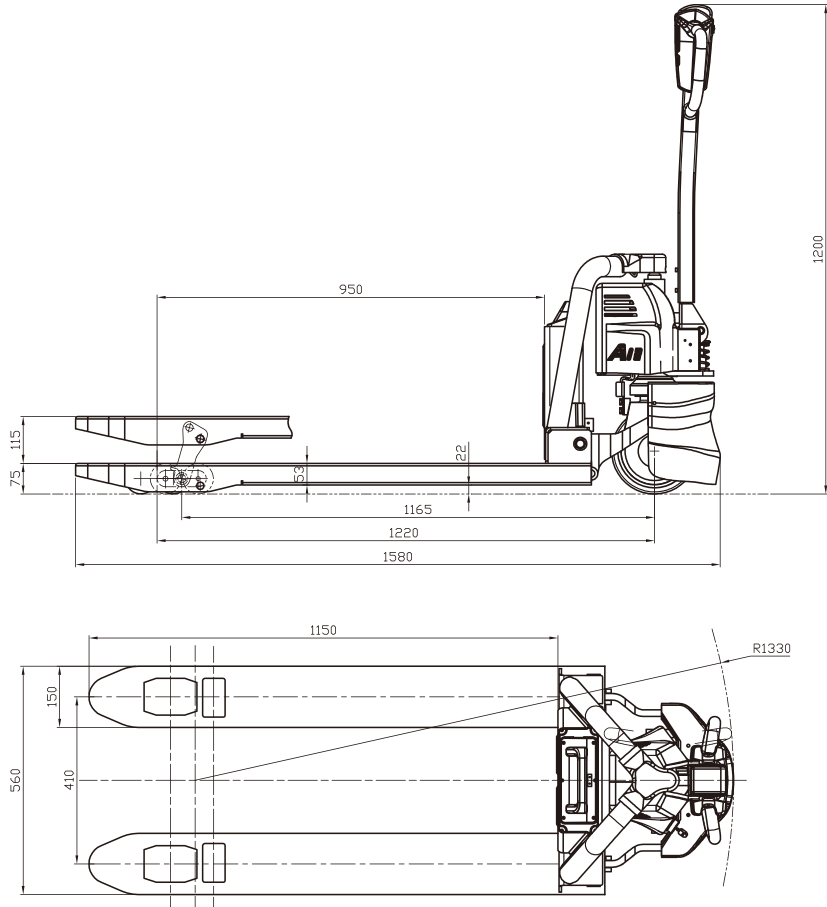


100 %
2 hours charge 3.5 hours working time

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
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	1200
	1.6	Load centre distance	c (mm)	600
Weight	1.8	Load distance, centre of drive axle to fork	x (mm)	950
	1.9	Wheelbase	y (mm)	1165 ¹⁾
	2.1	Service Weight(Including battery)	kg	130
Tyres, chassis		Battery weight	kg	4.8
	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	b10 (mm)	/
Dimensions	3.7	Tread, rear	b11 (mm)	410
	4.4	Lift	h3 (mm)	115
	4.15	Fork height,lowered	h1.3 (mm)	75
	4.19	Overall length	l1 (mm)	1580
	4.21	Overall width	b1(mm)	560
	4.22	Fork dimensions	s/e/l (mm)	53/150/1150
	4.25	Distance between fork-arms	b5 (mm)	560
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	22
	4.35	Turning radius	Wa (mm)	1330 ¹⁾
	4.36	Aisle width for pallets 1000 x 1200 crossways	Ast(mm)	1785 ^{1) 2)}
Performance data	4.37	Aisle width for pallets 800 x 1200 lengthways	Ast(mm)	1835 ^{1) 3)}
	5.1	Travel speed,laden/unladen	km/h	4/4.5
	5.2	Lift speed,laden/unladen	m/s	0.015/0.023
	5.3	Lowering speed,laden/unladen	m/s	0.064/0.021
Electric engine	5.8	Max Gradeability,laden/unladen	%	4/10
	6.1	Drive motor rating S2 60 min	kW	0.65
	6.2	Lift motor rating at S3 15%	kW	0.36
	6.4	Battery voltage,rated capacity	V/Ah	24/20
	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.





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.

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.



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 - 2.0 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.



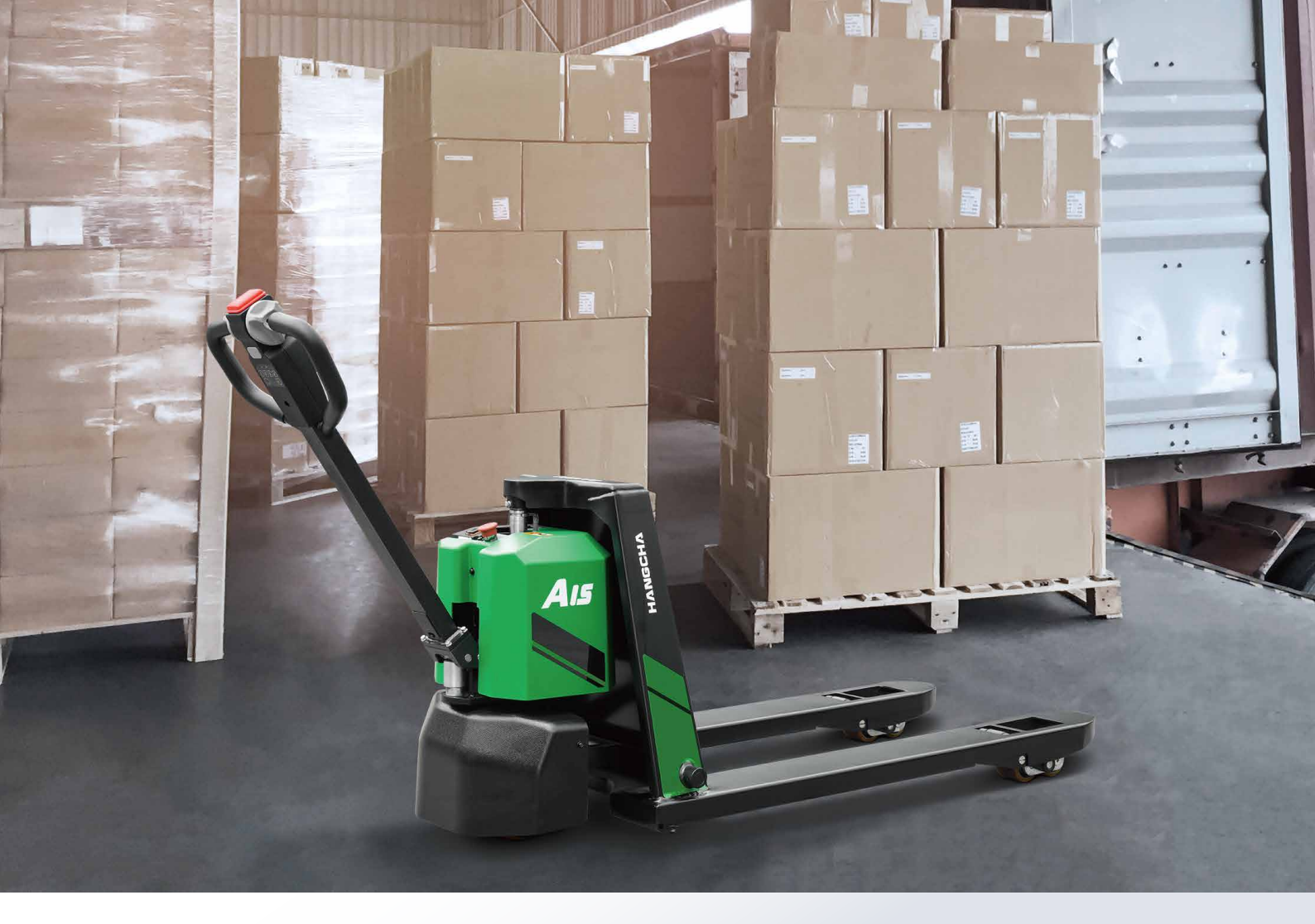
Save More Energy



Hibernate Automatically



Water-proof



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

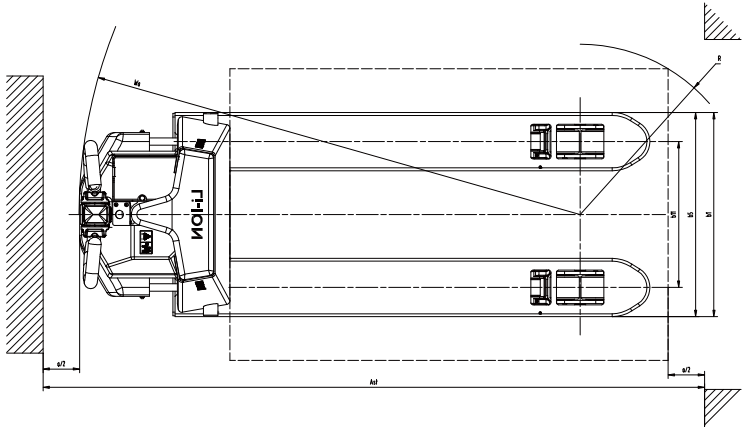
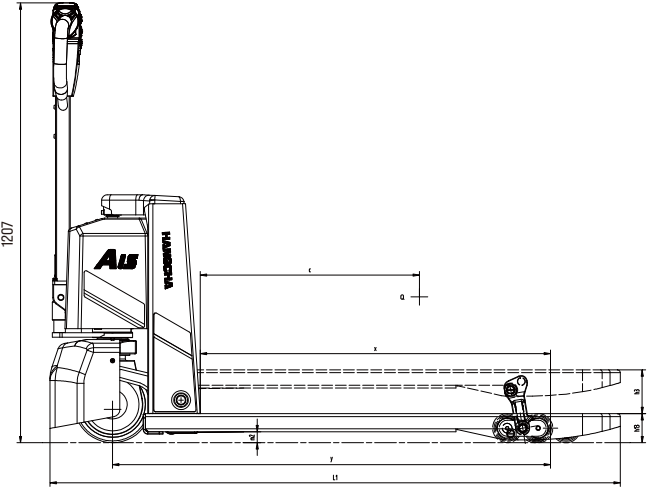
- Fork interval: 680mm
- Fork length: 1220mm
- Single load wheel
- Key switch



A series Mini Walkie Pallet Truck / Li-Ion Specification

Distinguishing mark			HANGCHA GROUP CO.,LTD.		
			CBD15-AMJ2-SI*	CBD15-AMA-SI	CBD20-AMA-SI
1.1	Manufacturer				
1.2	Manufacturer's type designation				
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 ³⁾	1123 ³⁾	1123 ³⁾
Weight	2.1	Service Weight(Including battery)	kg	140	150
		Battery weight	kg	6.25	7.7
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU
	3.2	Tyre size, front		Φ210x70	Φ210x70
	3.3	Tyre size, rear		Φ80x64	Φ80x64
	3.5	Wheels, number front / rear (x = driven wheels)		1x/4	1x/4
Dimensions	3.7	Tread, rear	b _r (mm)	400	400
	4.4	Lift	h ₃ (mm)	120	120
	4.15	Fork height,lowered	h ₁₅ (mm)	80	80
	4.19	Overall length	l ₁ (mm)	1562	1562
	4.21	Overall width	b ₁ (mm)	560	560
	4.22	Fork dimensions	s/e/l (mm)	50/160/1150	50/160/1150
	4.25	Distance between fork-arms	b _s (mm)	560/680	560/680
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	30	30
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{s1} (mm)	1763 ¹⁾	1763 ¹⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{s2} (mm)	1813 ²⁾	1813 ²⁾
	4.35	Turning radius	W _a (mm)	1296 ³⁾	1296 ³⁾
Performance data	5.1	Travel speed,laden/unladen	km/h	4.5/4.8	4.5/4.8
	5.2	Lift speed,laden/unladen	m/s	0.025/0.035	0.025/0.035
	5.3	Lowering speed,laden/unladen	m/s	0.05/0.040	0.05/0.040
	5.8	Max Gradeability,laden/unladen	%	6/15	8/15
Electric Engine	6.1	Drive motor rating S2 60 min	kW	0.65	0.65
	6.2	Lift motor rating at S3 15%	kW	0.8	0.8
	6.4	Battery voltage,rated capacity	V/Ah	24/24	24/30
	8.1	Type of drive control		DC	PMSM

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







A series Pallet Truck Mini Range With Lithium 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.
- / 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 life of battery is up to 2000 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



Built-in charger, charging is more convenient



100 %

2 hours charge 6 hours working time



Safety

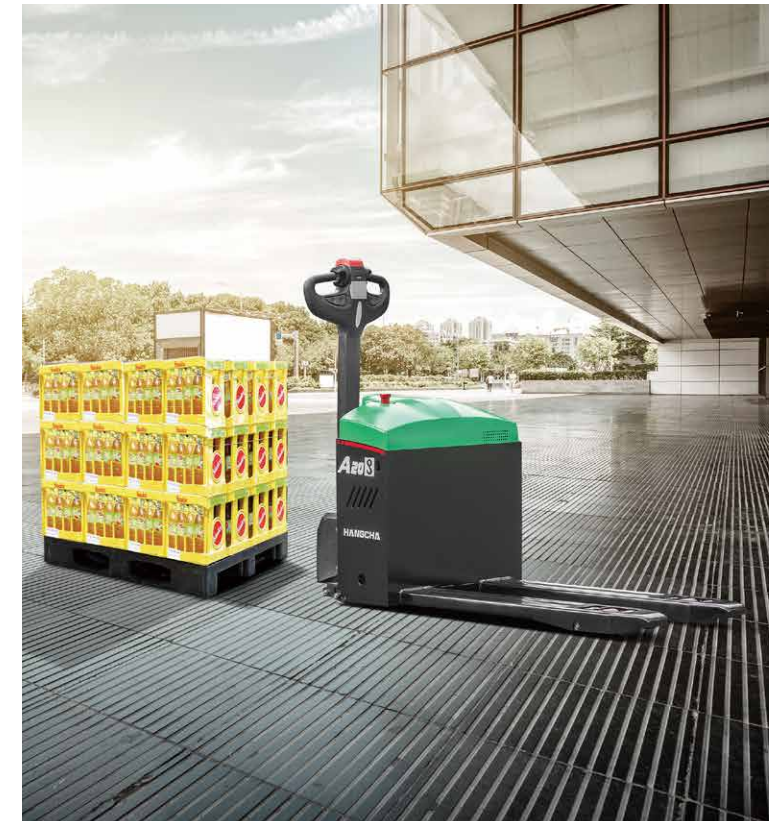
- / Release braking, reverse braking, and emergency braking can ensure safety of traveling;
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency reversing button at top of the tiller can avoid the driver from injury effectively in case of emergency during backward driving 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 drive motor
- / 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 Iron-Phosphate battery
- / Upright-tiller creep speed running
- / Guide fork for closed-deck pallets
- / Double load wheels
- / Automatic sleep function
- / Built-in charger



Options

- / Alternative fork lengths and widths
- / Single load wheel
- / PIN lock

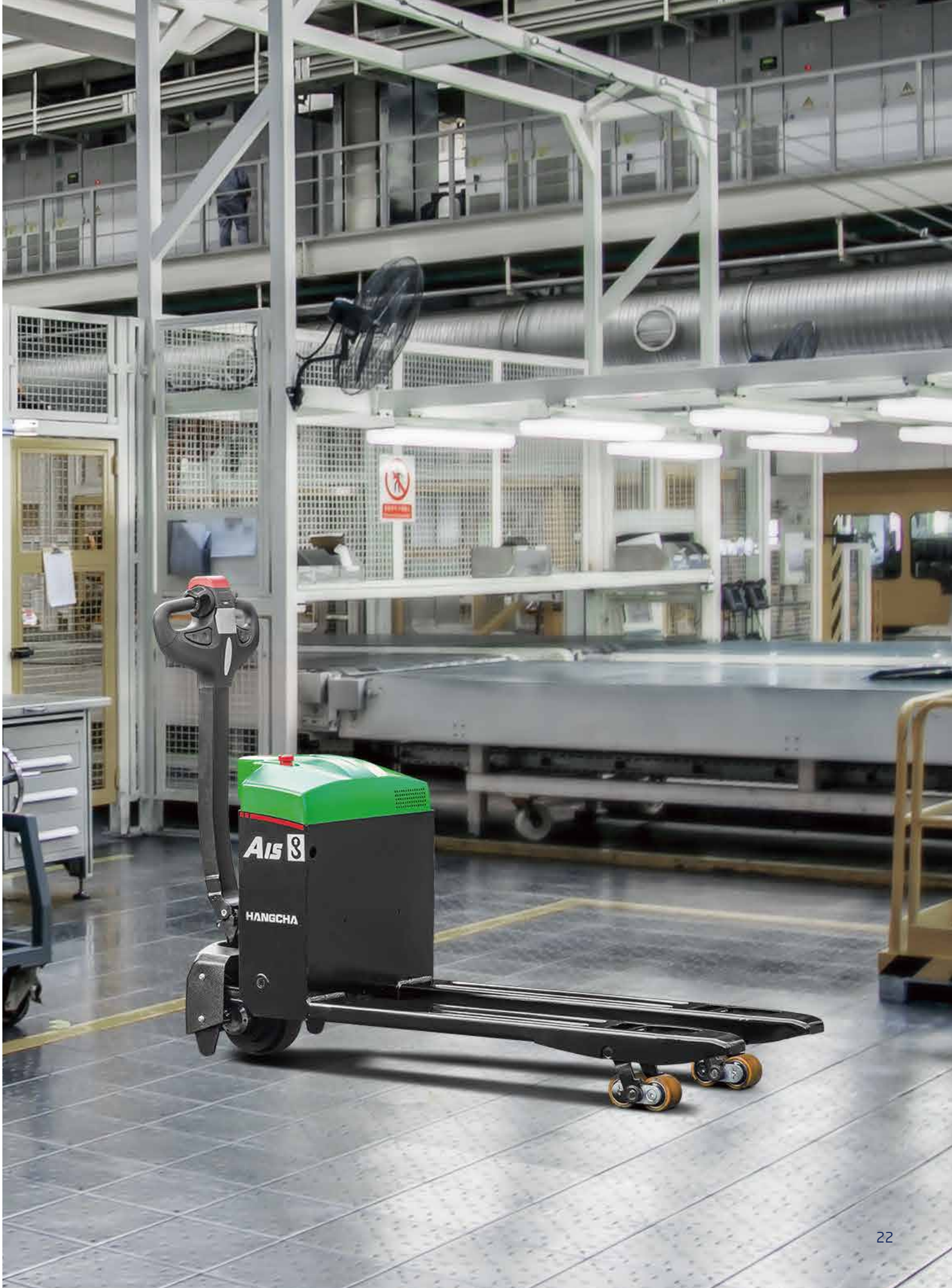
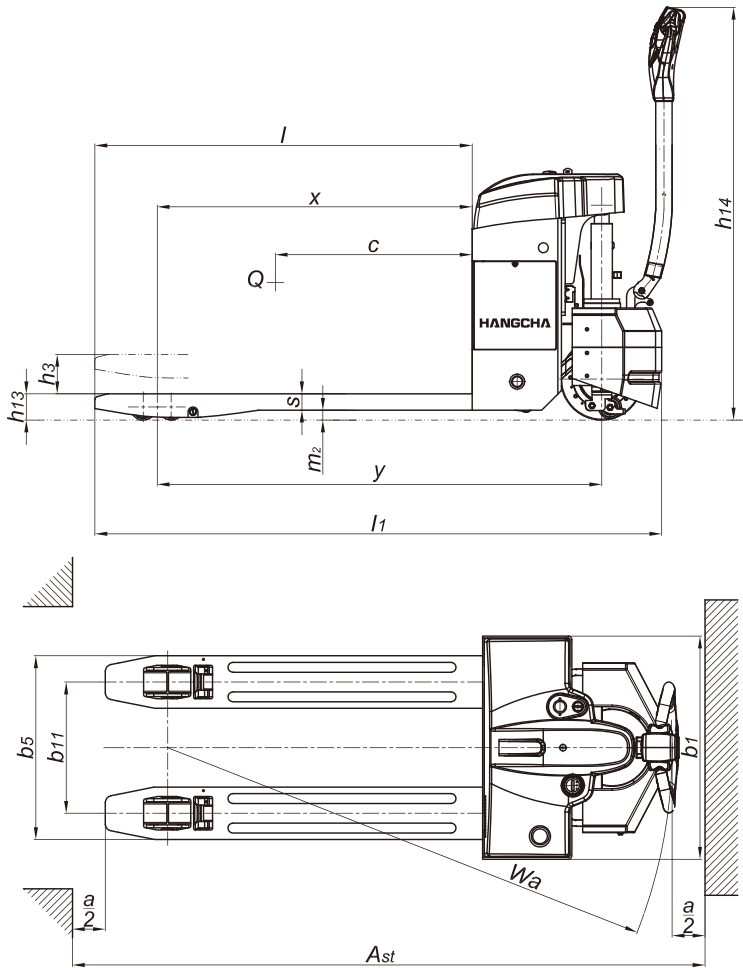


A series 1.5/2.0t Pallet Truck Mini Range III Specification:

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CBD15-A3MC2-I*	CBD20-A3MA-I*
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	1500	2000
Weight	1.6	Load centre distance	c (mm)	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	960	960
	1.9	Wheelbase	y (mm)	1225	1225
Tyres, chassis	2.1	Service Weight(Including battery)	kg	180	200
		Battery weight	kg	10.9	10.9
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU
	3.2	Tyre size, front	mm	φ 210×70	φ 210×70
	3.3	Tyre size, rear	mm	φ 80×64	φ 80×64
	3.4	Additional wheel (dimensions)	mm	φ 70×40	φ 70×40
	3.5	Wheels, number front / rear (x = driven wheels)		1x/4	1x/4
	3.6	Tread, front	b10(mm)	404	404
Dimensions	3.7	Tread, rear	b11(mm)	400	400
	4.4	Lift	h3 (mm)	120	120
	4.15	Fork height,lowered	h13(mm)	80	80
	4.19	Overall length	l1(mm)	1669	1669
	4.21	Overall width	b1(mm)	568	568
	4.22	Fork dimensions	s/e/l(mm)	50/160/1150	50/160/1150
	4.25	Distance between fork-arms	b5(mm)	560/680	560/680
	4.32	Ground clearance, centre of wheelbase	m2(mm)	30	30
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast(mm)	1850	1850
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast(mm)	1900	1900
Performance data	4.35	Turning radius	Wa(mm)	1400 ¹⁾	1400 ¹⁾
	5.1	Travel speed,laden/unladen	km/h	4.5/4.8	4.5/4.8
	5.2	Lift speed,laden/unladen	mm/s	0.050/0.060	0.050/0.060
	5.3	Lowering speed,laden/unladen	mm/s	0.040/0.045	0.040/0.045
Electric engine	5.8	Max Gradeability,laden/unladen	%	6/15	6/15
	6.1	Drive motor rating S2 60 min	kW	0.65	0.65
	6.2	Lift motor rating at S3 15%	kW	0.8	0.8
	6.4	Battery voltage,rated capacity	V/Ah	24/40	24/40
	8.1	Type of drive control		DC	DC

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

★ CE model





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.



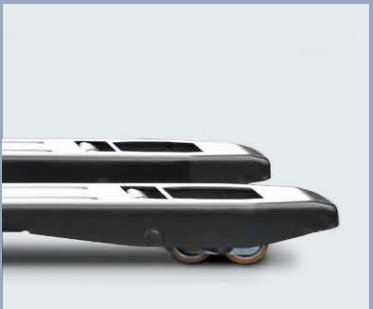
Rema tiller head



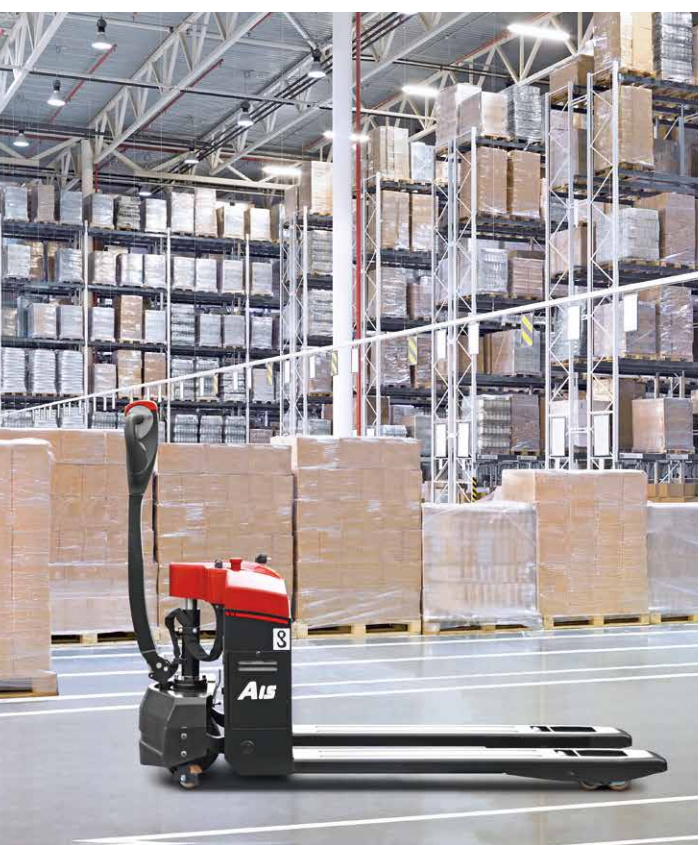
Auxillary wheels are equipped to have better stability



Modern outline design



Tandem load wheel



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.

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
- / Tiller made by REMA
- / Horn
- / Maintenance free battery
- / Internal charger
- / Walking upright
- / Guide device
- / Additional wheel
- / Tandem load wheel

Options

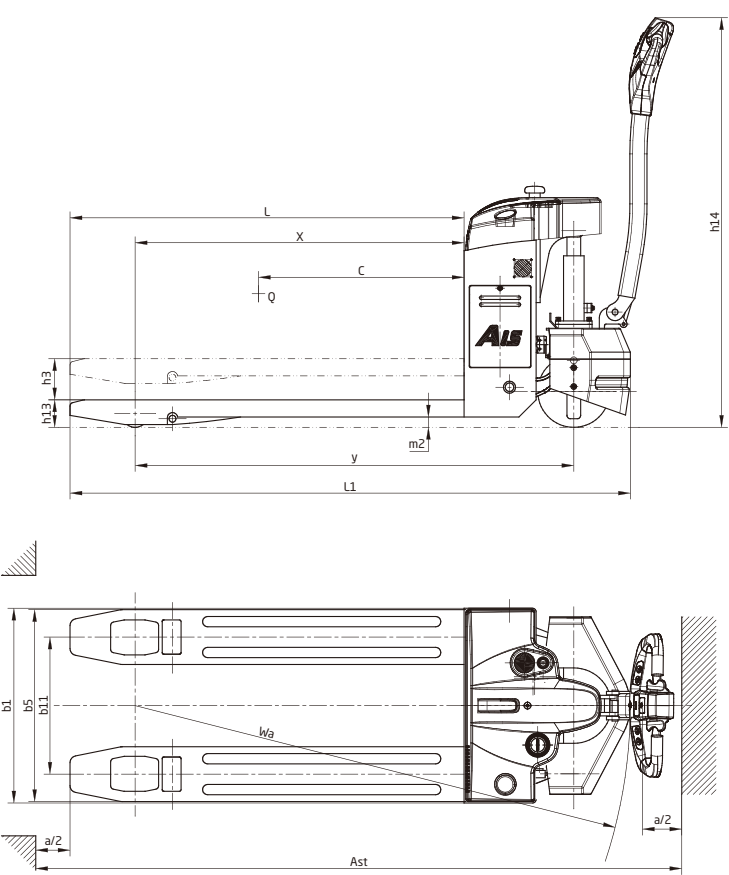
- / Different length of fork
- / Different width of outside fork
- / Single load wheel



A series Mini Range pallet truck II specification

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)	1500
	1.6	Load centre distance	c (mm)	600
Weight	1.8	Load distance, centre of drive axle to fork	x (mm)	960
	1.9	Wheelbase	y (mm)	1285
	2.1	Service Weight(Including battery)	kg	220
Tyres, chassis		Battery weight	kg	50
	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)		Φ70x40
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4
	3.6	Tread, front	b10 (mm)	404
Dimensions	3.7	Tread, rear	b11 (mm)	400
	4.4	Lift	h3 (mm)	120
	4.15	Fork height,lowered	h13 (mm)	80
	4.19	Overall length	l1 (mm)	1669
	4.21	Overall width	b1 (mm)	568
	4.22	Fork dimensions	s/e/l (mm)	50/160/1150
	4.25	Distance between fork-arms	b5 (mm)	560/680
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	30
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	1850 ¹⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	1900 ²⁾
	4.35	Turning radius	Wa (mm)	1400 ³⁾
Performance data	5.1	Travel speed,laden/unladen	km/h	4.5/4.9
	5.2	Lift speed,laden/unladen	m/s	0.050/0.060
	5.3	Lowering speed,laden/unladen	m/s	0.040/0.045
	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	2x12/70
	8.1	Type of drive control		DC
	9.1	Manufacturer		Curtis

Note: 1). VDI 2198: +358mm 2). VDI 2198: +200mm 3). When fork lowered,+60mm





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

- / 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.



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
- / Horn
- / Maintenance-free gel battery
- / Built-in charger
- / Upright-tiller creep speed running
- / Elastic additional wheels
- / Tandem load wheels

Options

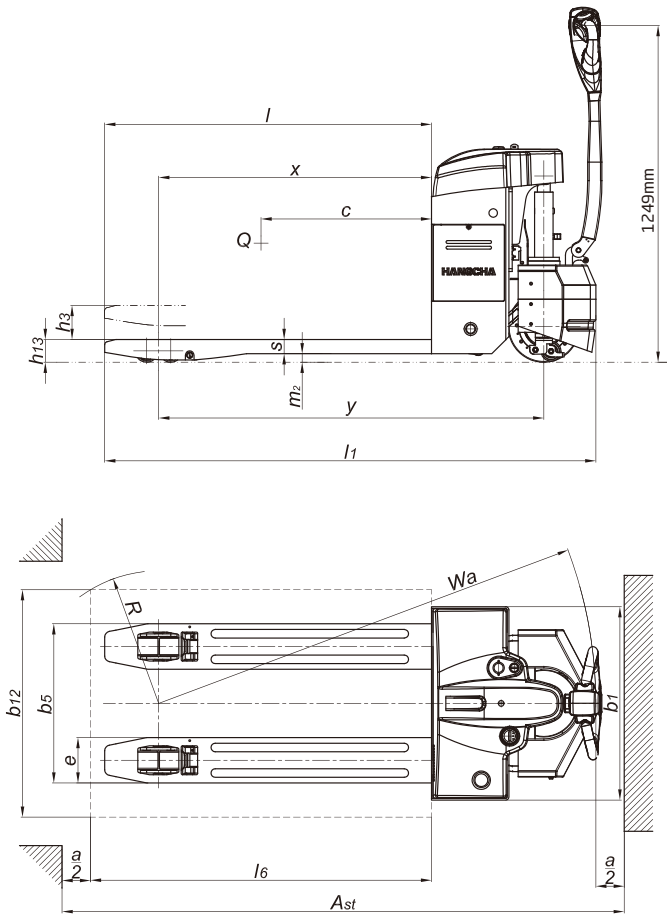
- / Various fork lengths
- / Various outer distances between forks
- / Single load wheel
- / Coded lock
- / 75mm ground clearance



A Series Mini Pallet Truck specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
	1.2	Manufacturer's type designation		CBD20-AMC1
	1.4	Operator type		Pedestrian
	1.5	Rated load	Q (kg)	2000
Weight	1.6	Load centre distance	c (mm)	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	960
Weight	1.9	Wheelbase	y (mm)	1299 ¹⁾
	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	b10 (mm)	432
Dimensions	3.7	Tread, rear	b11 (mm)	400
	4.4	Lift	h3 (mm)	120
	4.15	Height,lowered	h13 (mm)	80
	4.19	Overall length	l1 (mm)	1728
	4.21	Overall width	b1 (mm)	680
	4.22	Fork dimensions	s/e/l (mm)	50/160/1150
	4.25	Distance between fork-arms	b5 (mm)	560
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	30
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	1955 ^{1) 2)}
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	2005 ^{1) 3)}
Performance data	4.35	Turning radius	Wa (mm)	1482 ¹⁾
	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
Electric engine	5.8	Max Gradeability,laden/unladen	%	8/16
	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 mini range III

with capacities of 1,500 to 2,000kg

The A series pallet truck mini range III 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 III has the strength and durability to minimise your total cost of ownership.

Appearance

- / A series pallet truck mini range III 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 1500-2000kg, meet the needs of the majority of customers.
- / Powered by traction motor not only has good acceleration and perfect performance, but also low heat.
- / 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.

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.

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.



The ergonomic tiller head allows for easy operation with one hand



Auxiliary wheels are equipped to have better stability



Modern outline design



Tandem load wheel

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

- / 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.

Options

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

Standard specification

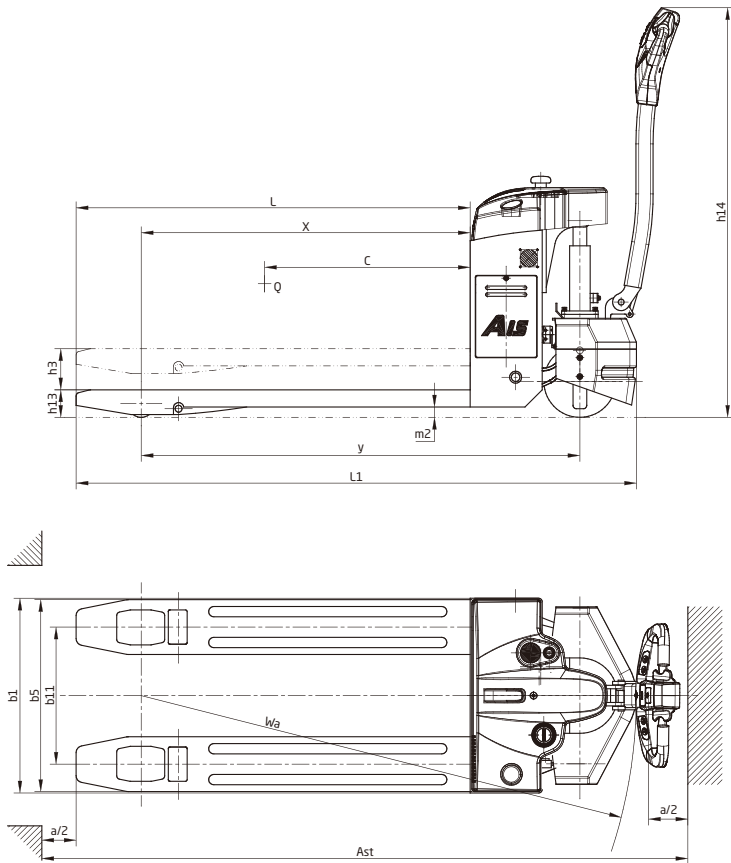
- / Permanent magnet drive motor
- / Emergency switch
- / Multi-function battery indicator
- / PU wheel
- / 1150mm fork length
- / 560mm outside fork width
- / Electronic lifting limitation
- / Non-contact proximity switch
- / Horn
- / Maintenance free battery
- / Internal charger
- / Walking upright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

A series Mini Range pallet truck III specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation		CBD15-A3MJ2*	CBD15-A3MC2*	CBD20-A3MA*
	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
Weight	1.8	Load distance, centre of drive axle to fork	x (mm)	960	960	960
	1.9	Wheelbase	y (mm)	1225 ³⁾	1225 ³⁾	1225 ³⁾
	2.1	Service Weight(Including battery)	kg	220	220	240
Tyres, chassis		Battery weight	kg	52	52	52
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU
	3.2	Tyre size, front	mm	φ210x70	φ210x70	φ210×70
	3.3	Tyre size, rear	mm	φ80x64	φ80x64	φ80×64
	3.4	Additional wheel (dimensions)	mm	φ70x40	φ70x40	φ70×40
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4	1x+2/4	1x+2/4
	3.6	Tread, front	b10 (mm)	404	404	404
Dimensions	3.7	Tread, rear	b11 (mm)	400	400	400
	4.4	Lift	h3 (mm)	120	120	120
	4.15	Fork height,lowered	h13 (mm)	80	80	80
	4.19	Overall length	l1 (mm)	1669	1669	1669
	4.21	Overall width	b1 (mm)	568	568	568
	4.22	Fork dimensions	s/e/l (mm)	50/160/1150	50/160/1150	50/160/1150
	4.25	Distance between fork-arms	bs (mm)	560/680	560/680	560/680
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	30	30	30
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	1850 ^{1) 3)}	1850 ^{1) 3)}	1850 ^{1) 3)}
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	1900 ^{2) 3)}	1900 ^{2) 3)}	1900 ^{2) 3)}
Performance data	4.35	Turning radius	Wa (mm)	1400 ³⁾	1400 ³⁾	1400 ³⁾
	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	0.05/0.06	0.05/0.06	0.035/0.048
	5.3	Lowering speed,laden/unladen	m/s	0.045/0.04	0.045/0.04	0.04/0.035
Electric engine	5.8	Max Gradeability,laden/unladen	%	6/15	6/15	6/15
	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	24/85	24/85	24/100
	8.1	Type of drive control		DC	DC	DC

Note: 1). VDI 2198: +358mm 2). VDI 2198: +200mm 3). When fork lowered,+60mm

★ CE model





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)

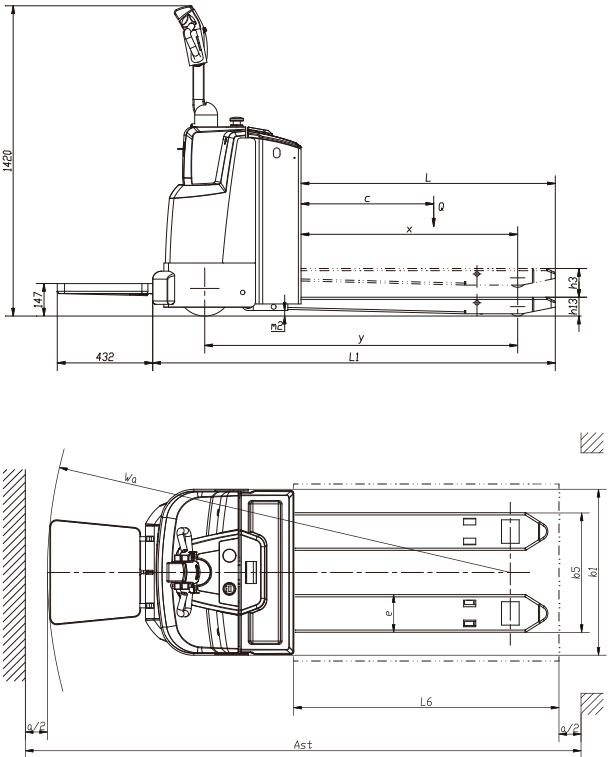
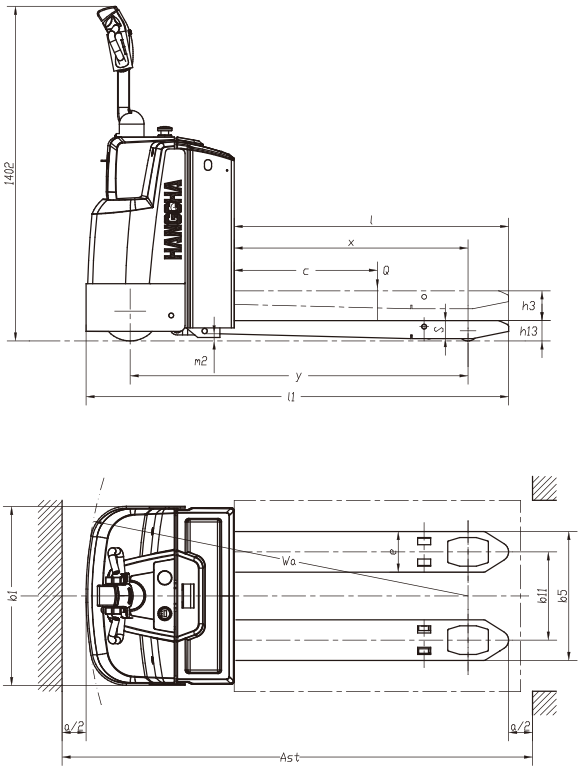


Stand-on

A Series Pallet Truck Basic Range

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation	CBD20-AEC2S CBD20-AEZ3S	CBD20-AEC2 CBD20-AEZ3
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Pedestrian
	1.5	Rated capacity/rated load	Q (kg/lb)	2000/4409
	1.6	Load centre distance	c (mm/in)	600/23.6
	1.9	Wheelbase	y (mm/in)	1415/55.7
Weight	2.1	Service Weight	kg/lb	540/1190
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	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	b5 (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 ZAPI	CURTIS ZAPI

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

Li-Ion POWERED



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

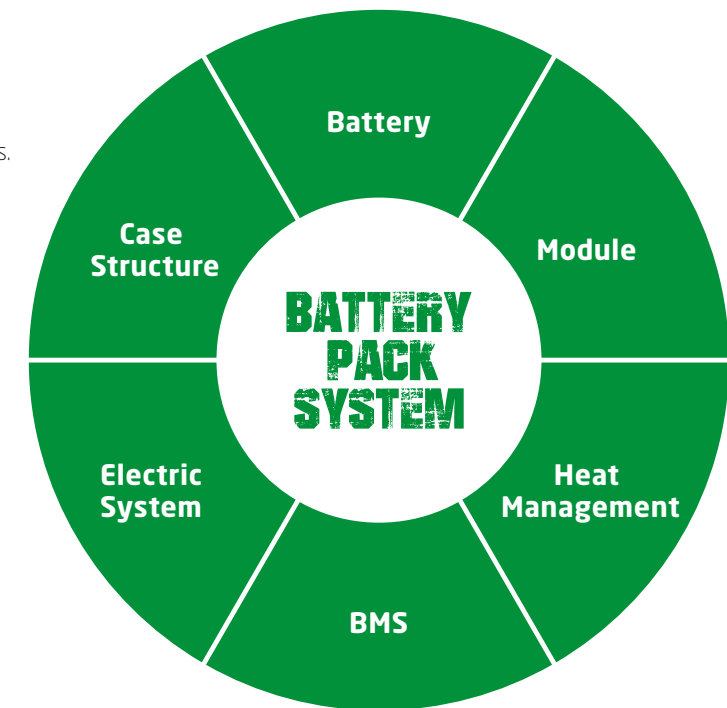


**5 YEARS
WARRANTY**

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		CBD20-AC2S-I	CBD30-AC2S-I	CBD20-AC2-I	CBD30-AC2-I
Li-Ion battery	V/Ah	24/125	24/125	24/125	24/125
Li-Ion battery,Optional	V/Ah	24/202	24/202	-	-
Titans charger		SPC-24100	SPC-24100	SPC-24100	SPC-24100



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)

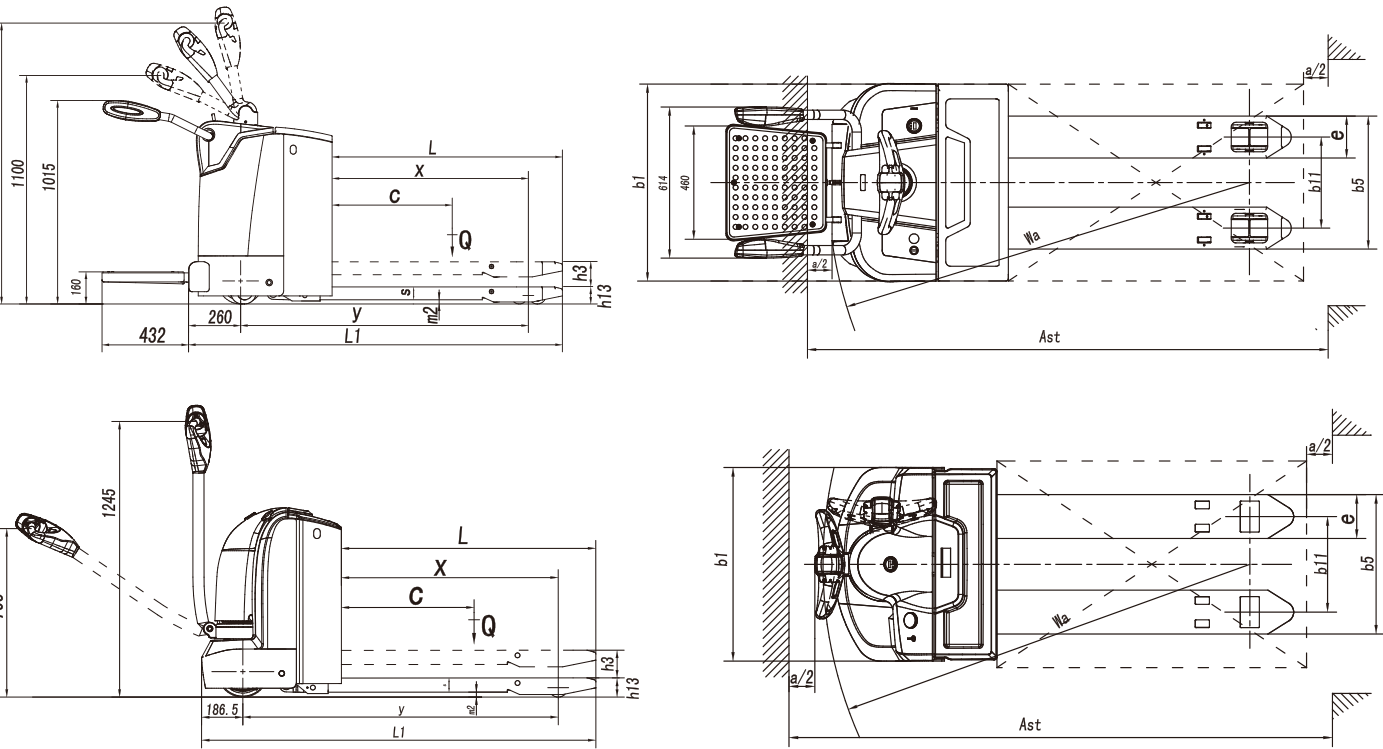
Options

- / 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		CB020-AC2S CB020-A23S	CB030-AC2 CB030-A23	CB030-AC2S CB030-A23S	CB030-AC2 CB030-A23
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Standing	Pedestrian	Standing	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	2000	2000	3000	3000
	1.6	Load centre distance	c (mm)	600	600	600	600
	1.9	Wheelbase	y (mm)	1369 ¹⁾	1357 ²⁾	1369 ¹⁾	1357 ²⁾
Weight	2.1	Service Weight	kg	726	544	750	564
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU
	3.2	Tyre size, front		Φ230x75	Φ230x75	Φ230x75	Φ230x75
	3.3	Tyre size, rear		Φ85x70	Φ85x70	Φ85x70	Φ85x70
	3.4	Additional wheel (dimensions)		Φ125x50	Φ100x40	Φ125x50	Φ100x40
	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)	575	480	575	480
	3.7	Tread, rear	b11 (mm)	370	370	370	370
Dimensions	4.4	Lift	h3 (mm)	125	125	125	125
	4.15	Fork height,lowered	h13 (mm)	85	85	85	85
	4.19	Overall length	l1 (mm)	1867	1781	1867	1781
		Overall length(unfold the pedal)	l1 (mm)	2299		2299	
	4.21	Overall width	b1 (mm)	800	750	800	750
	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	b5 (mm)	540/680	540/680	540/680	540/680
	4.32	Ground clearance,center of wheelbase	m2 (mm)	25	25	25	25
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	1997 ²⁾	1955 ²⁾	1997 ²⁾	1955 ²⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	2047 ²⁾	2005 ²⁾	2047 ²⁾	2005 ²⁾
Performance data	4.35	Turning radius	Wa (mm)	1627/2040 ¹⁾	1585 ¹⁾	1627/2040 ¹⁾	1585 ¹⁾
	5.1	Travel speed,laden/unladen	km/h	9.0/9.5	6.0/6.0	7.5/9.5	5.0/6.0
	5.2	Lift speed,laden/unladen	m/s	0.047/0.065	0.047/0.065	0.036/0.051	0.036/0.051
	5.3	Lowering speed,laden/unladen	m/s	0.075/0.070	0.073/0.070	0.060/0.055	0.060/0.055
	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	2.2	1.5	2.2	1.5
	6.2	Lift motor rating at S3 15%	kW	2.2	2.2	2.2	2.2
	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 ZAPI	CURTIS ZAPI	CURTIS ZAPI

Note: 1), When fork lowered,+68mm , 2), When fork lowered,+40mm



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.

LITHIUM POWERED



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

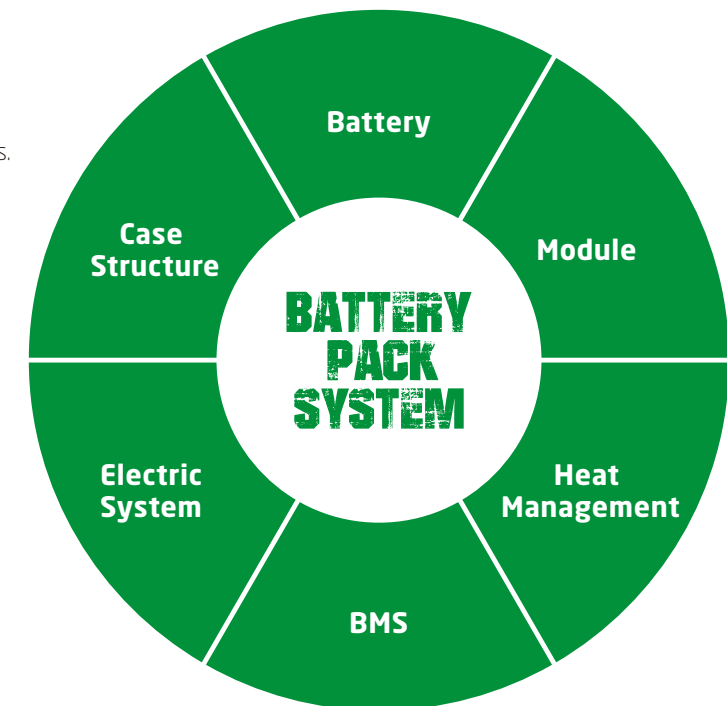


**5 YEARS
WARRANTY**

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		CBD20-AC25-ISU*	CBD30-AC25-ISU*
Li-Ion battery	V/Ah	24/125	24/125
Li-Ion battery,Optional	V/Ah	24/228	24/228
Titans charger		SPC-24100	SPC-24100

Note: * CE model

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.

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.

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.

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.

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

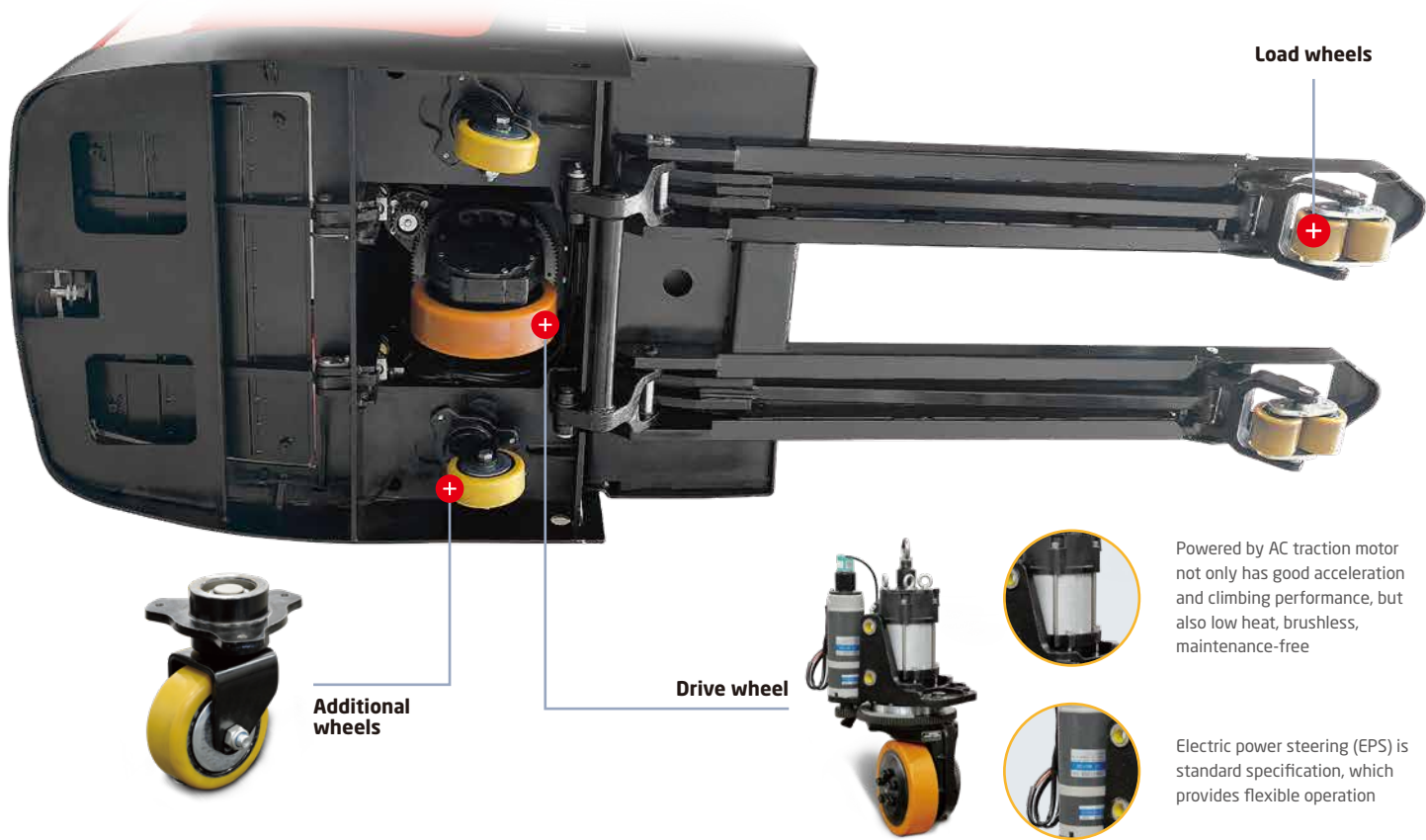


Side battery change is standard feature



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.



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.

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

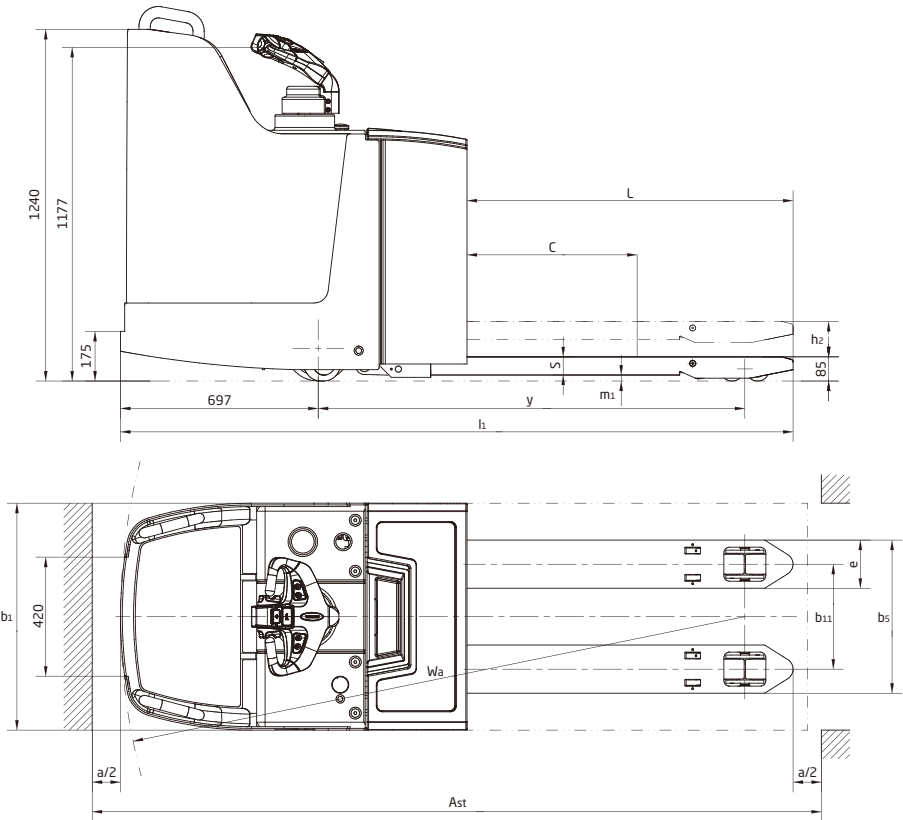
Options

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

A Series Rider Pallet Truck

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation		CBD20-ABC2S-SU* CBD20-ABZ3S-SU	CBD20-AC2S-SU* CBD20-AZ3S-SU	CBD30-ABC2S-SU* CBD30-ABZ3S-SU	CBD30-AC2S-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
	1.9	Wheelbase	y (mm)	1505	1505	1505	1505
Weight	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 ₁₀ (mm)	575	575	575	575
	3.7	Tread, rear	b ₁₁ (mm)	370	370	370	370
Dimensions	4.3	Free lift	h ₂ (mm)	125	125	125	125
	4.19	Overall length	l ₁ (mm)	2372	2372	2372	2372
	4.21	Overall width	b ₁ (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 ₅ (mm)	540/680	540/680	540/680	540/680
	4.31	Ground clearance, laden, below mast	m ₁ (mm)	21	21	21	21
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm)	2504 ¹⁾	2504 ¹⁾	2504 ¹⁾	2504 ¹⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm)	2554 ²⁾	2554 ²⁾	2554 ²⁾	2554 ²⁾
	4.35	Turning radius	W _a (mm)	2134 ³⁾	2134 ³⁾	2134 ³⁾	2134 ³⁾
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
★ CE model





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



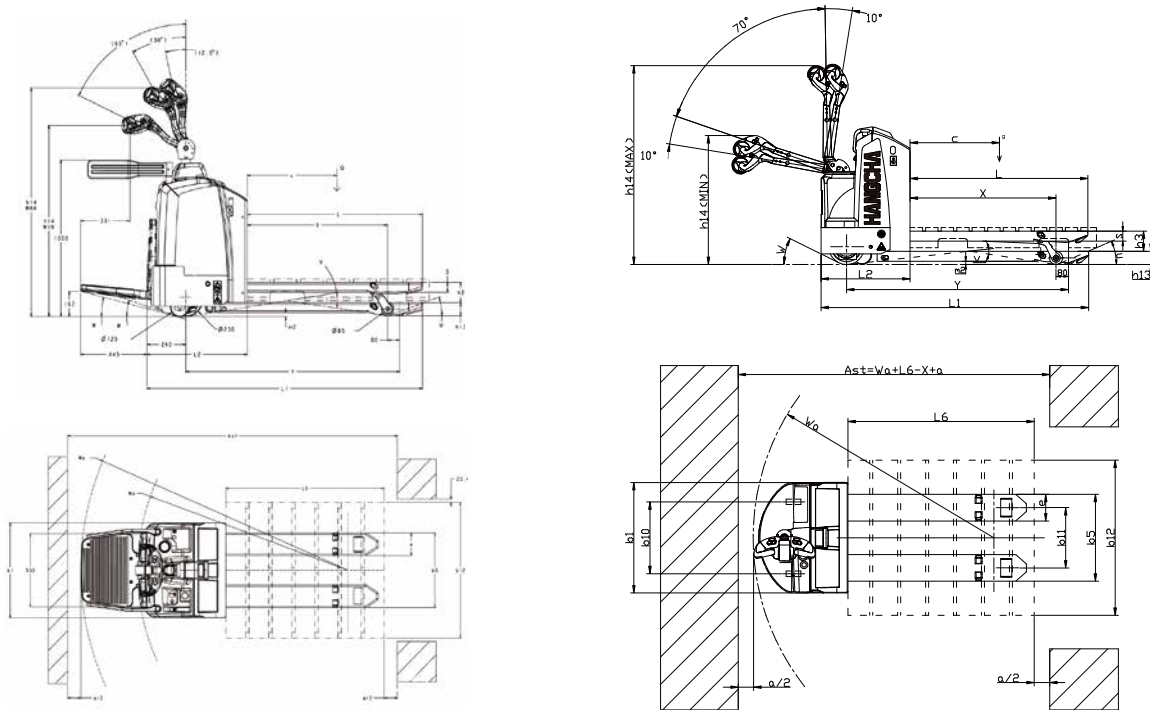
Stand-on

T Series Premium Range Pallet Truck

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.			
	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
	1.6	Load centre distance	c(mm/in)	587/23.1	586/23.0	587/23.1
	1.8	Load distance, centre of drive axle to fork	x(mm/in)	942/37.0	893/35.2	942/37.0
	1.9	Wheelbase	y(mm/in)	1352/53.2	1304/51.3	1352/53.2
		Wheelbase type		Single load wheels (Long wheelbase)	*Tandem load wheels (short wheelbase)	*Single load wheels (Long wheelbase)
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		poly	poly	poly
	3.2	Tyre size, front	mm/in	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
	3.4	Additional wheel (dimensions)	mm/in	Φ100x40/Φ3.9x1.6	Φ100x40/Φ3.9x1.6	Φ125x50/Φ4.9x2.0
	3.5	Wheel number front/rear(x=Drive wheels)		1x+2/2	1x+2/4	1x+2/2
	3.6	Tread, Front	b10 (mm/in)	461/18.1	461/18.1	461/18.1
	3.7	Tread, Rear	b11 (mm/in)	390/15.4	390/15.4	390/15.4
Dimensions	4.4	Lift	h1 (mm/in)	130/5.1	130/5.1	130/5.1
	4.9	Height drawbar in driving position min./max.	h14 mm/(in)	829/1288 (32.6/50.7)	829/1288 (32.6/50.7)	1219/1459 (48.0/57.4)
	4.15	Height, lowered	h11 (mm/in)	83/3.3	83/3.3	83/3.3
	4.19	Overall length (pedal folden/unfolden)	l1 mm/(in)	1751/68.9	1749/68.9	1844/72.89 (72.6/90.1)
	4.20	Length to face of forks	l2 (mm/in)	578/22.8	578/22.8	671/26.4
	4.21	Overall width	b1 (mm/in)	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)
	4.25	Distance between fork-arms	b5 (mm/in)	560/22.0	560/22.0	560/22.0
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	21/0.8	21/0.8	21/0.8
	4.34.1	Aisle width for pallets 1000 x 1200 crossways (pedal folden/unfolden)	As1 mm/(in)	1980/78.0	1979/77.9	2050/2488 (80.7/98.0)
	4.34.2	Aisle width for pallets 800 x 1200 lengthways (pedal folden/unfolden)	As1 mm/(in)	2007/79.0	2008/79.1	2077/2515 (81.8/99.0)
	4.35	Turning radius (pedal folden/unfolden)	W9 mm/(in)	1549/61.0	1501/59.1	1619/2057 (63.7/81.0)
	4.35	Turning radius (pedal folden/unfolden)	W9 mm/(in)	1549/61.0	1501/59.1	1619/2057 (63.7/81.0)
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)
	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)
	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)
	5.7	Gradeability,laden/unladen	%	10.0/15	10.0/15	10.0/15
		Gradeability(pedestrian)	U/V/W(%)	34/15/38	34/15/38	34/15/29
		Gradeability(Standing)	U/V/W(%)	/	/	34/15/24
	5.8	Max. Gradeability, laden/unladen	%	14.5/20	14.5/20	14.5/20
	5.10	Service brake		Electric	Electric	Electric
	6.1	Drive motor rating S2 60 min	kW/hp	1.25/1.7	1.25/1.7	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
Electric engine	6.3	Battery acc. to DIN 43531/35/36 A,B,C, no		B	B	B
		Battery dimensions	l/b/h(mm/in)	212x624x627 / 8.3x24.6x24.7	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
	6.5	Battery weight	kg/lb	212/467	212/467	312/688
	6.6	Energy consumption acc. to VDI cycle	kWh/h	0.384	0.384	0.43
	10.7	Sound pressure level at the driver's seat	dB(A)	<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.

LI-ION POWERED



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

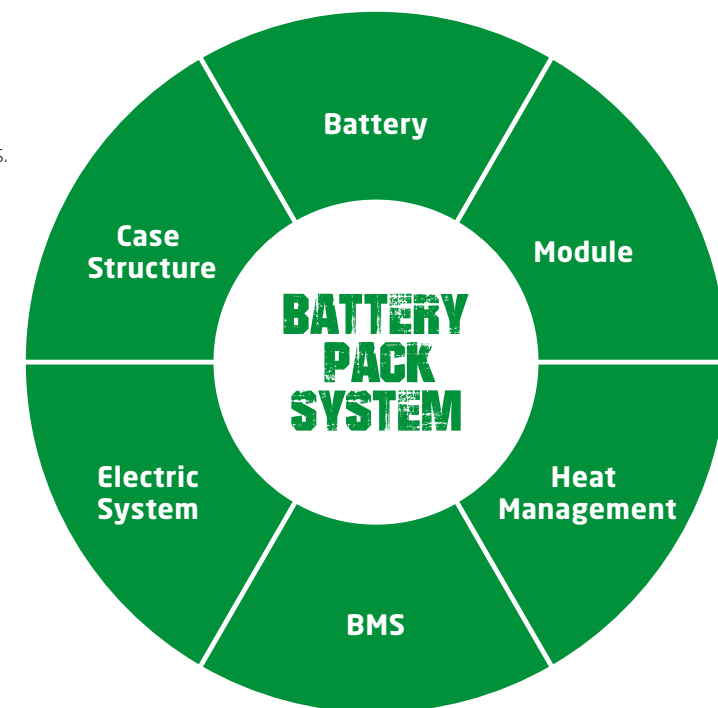


**5 YEARS
WARRANTY**

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		CBD20-AC2-Li*
Li-Ion battery	V/Ah	24/125

Note: * CE model

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



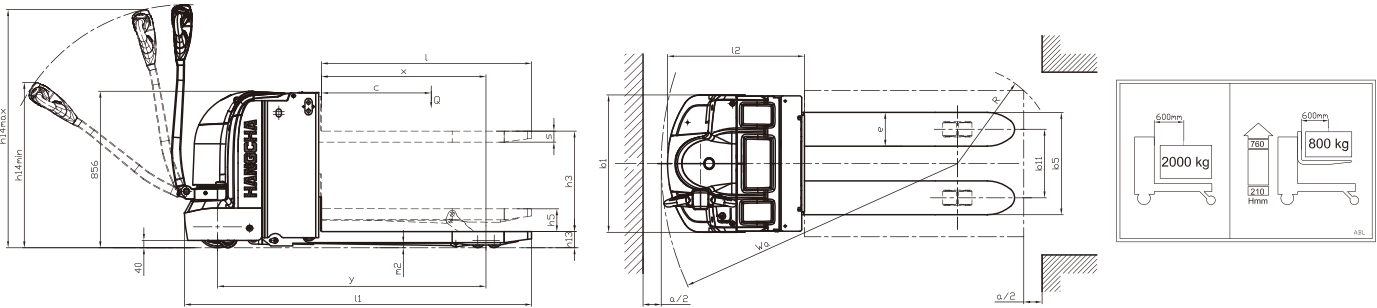
A Series Pallet Truck With High Lift Specification

Distinguishing marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
	1.2	Manufacturer's type designation		CBD20-AC2-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 ¹⁾ /33 ¹⁾
	1.9	Wheelbase	y(mm/in)	1409 ¹⁾ /55.5 ¹⁾
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	b10 (mm/in)	480/18.9
	3.7	Tread, rear	b11 (mm/in)	375/14.8
Dimensions	4.4	Lift	h3 (mm/in)	550/21.7
	4.5	Initial lift	h5 (mm/in)	125/4.9
	4.9	Height of tiller in drive position min./max.	h14(mm/in)	960/1320 (37.8/52)
	4.15	Height, lowered	h13 (mm/in)	90/3.5
	4.19	Overall length	l1 (mm/in)	1899/74.8
	4.20	Length to face of forks	l2 (mm/in)	749/29.5
	4.21	Overall width	b1(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	b5 (mm/in)	560/22
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	25/0.98
	4.33	Aisle width for pallets 1000 x 1200 crossways	Ast (mm/in)	2442 ¹⁾ /96.1 ¹⁾
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.

★ CE model



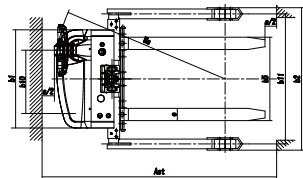
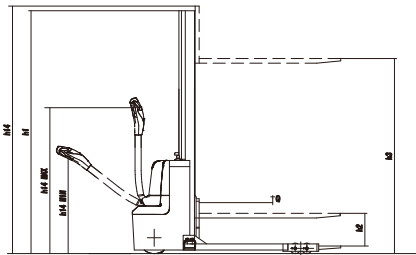
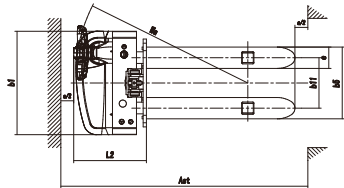
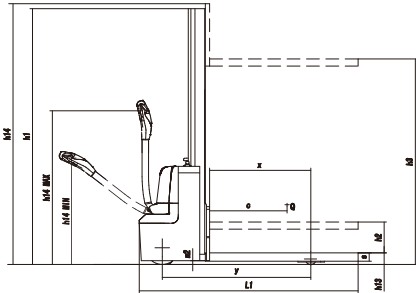


A Series Pallet Stacker Mini Range (single column)

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 ₃	Max. fork height (h ₃ +h ₁₃)	Lowered Height h ₁	Extended Height h ₄	Free Lift	Load Capacity at 600mm/23.6in	
						1.0t/2205lb	1.2t/2646lb
Single cylinder Single mast	mm/in	mm/in	mm/in	mm/in	mm/in	Kg/lb	Kg/lb
	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



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

Distinguishing mark	1.1 Manufacturer	1.2 Manufacturer's type designation	HANGCHA GROUP CO.,LTD.			
			CDD10-AMC2*	CDD12-AMC2*	CTD10-AMC2*	CTD12-AMC2*
Weight	1.4 Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	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	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	PU
	3.2 Tyre size, front	mm/in	φ250/9.8x80/3.1	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	φ85/3.3x70/2.8
	3.4 Additional wheel (dimensions)	mm/in	φ125/4.9x50/2	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	1x+1/4
	3.6 Tread, front	b ₁₀ (mm/in)	520/20.5	520/20.5	520/20.5	520/20.5
	3.7 Tread, rear	b ₁₁ (mm/in)	390/15.4	390/15.4	1060/1170/1370 (39.4/46.1/53.9)	1060/1170/1370 (39.4/46.1/53.9)
Dimensions	4.4 Lift	h ₃ (mm/in)	1500/59.1	1500/59.1	1500/59.1	1500/59.1
	4.15 Fork height,lowered	h ₁₃ (mm/in)	90/3.5	90/3.5	50/2.0	50/2.0
	4.19 Overall length	l ₁ (mm/in)	1695/66.7	1695/66.7	1695/66.7	1695/66.7
	4.21 Overall width	b ₁ (mm/in)	800/31.5	800/31.5	1160/1270/1470 (45.7/50/57.9)	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)	35/100/1070 (1.4/6.7/42.1)
	4.25 Distance between fork-arms	b ₅ (mm/in)	560/22.0	560/22.0	210-790/8.3-31.1	210-790/8.3-31.1
	4.32 Ground clearance, centre of wheelbase	m ₂ (mm/in)	35/1.4	35/1.4	35/1.4	35/1.4
	4.34.1 Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm/in)	2002/78.8	2002/78.8	2002/78.8	2002/78.8
	4.34.2 Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm/in)	2052/80.8	2052/80.8	2052/80.8	2052/80.8
	4.35 Turning radius	W _a (mm/in)	1422/56.0	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	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)	0.120/0.230 (23.6/45.3)
	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)	0.180/0.170 (35.4/33.5)
	5.8 Max Gradeability,laden/unladen	%	6/10	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	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	2.2/2.95
	6.4 Battery voltage,rated capacity	V/Ah	2x12/70	2x12/70	2x12/70	2x12/70
	8.1 Type of drive control		DC	DC	DC	DC
	9.1 Manufacturer		Curtis	Curtis	Curtis	Curtis

Note: ★ CE model



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.

Comfort

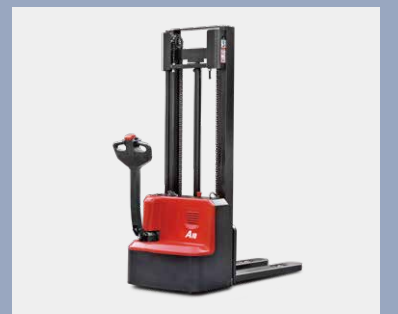
- / Built-in charger and maintenance free gel battery adopted to provide convenient usage.
- / The compact body and semicircular design provide an ideal operation in limited space.

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.



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

Options

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

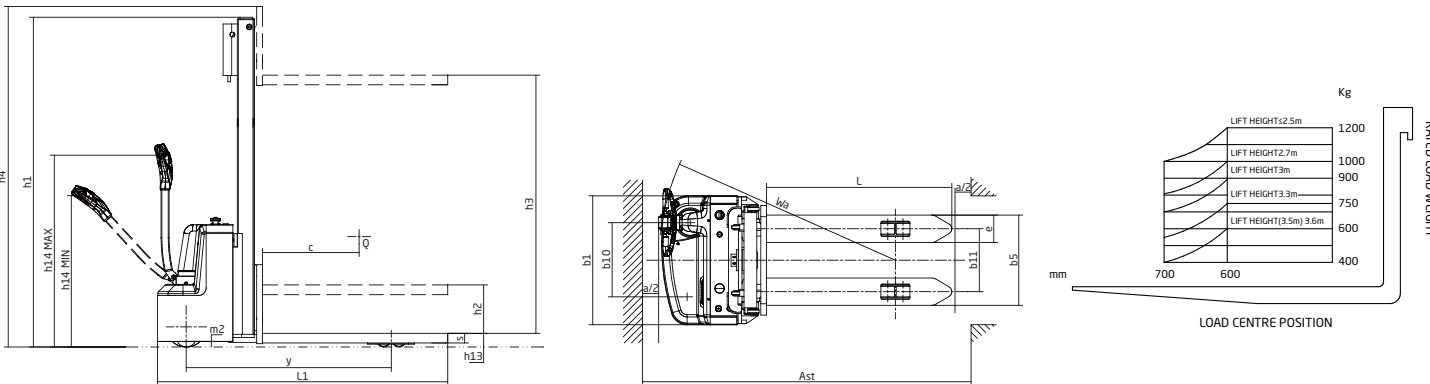
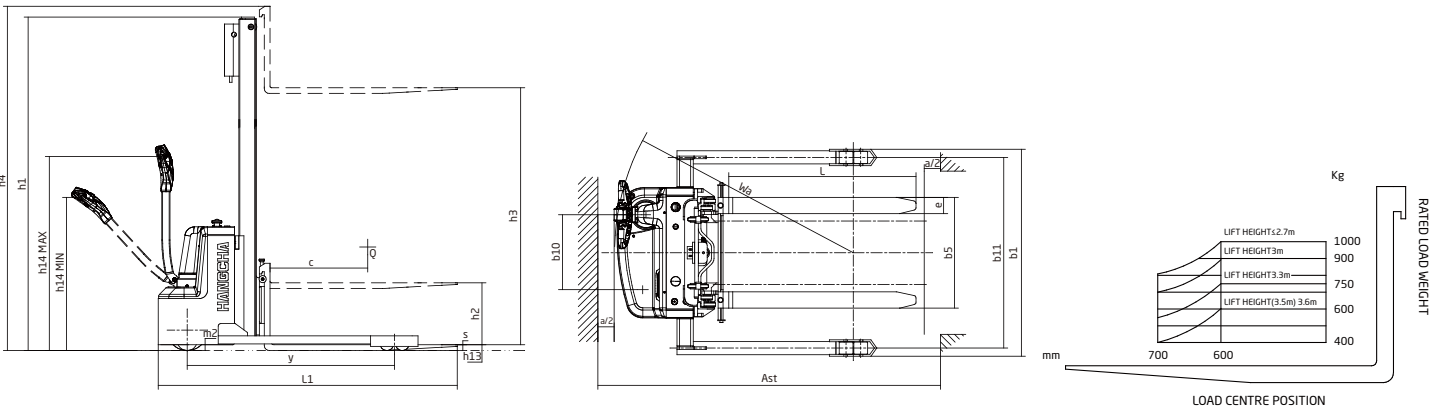
1.0/1.2t Mini Range Pallet Stacker Double Column Specification:

Mast Type	Max Lifting Height h ₃	Max. fork height (h ₃ +h ₁₃)	Lowered Height h ₁	Extended Height h ₄	Free lift	Load Capacity at 600mm	
						1.0t	1.2t
Single cylinder duplex mast	mm	mm	mm	mm	mm	Kg	Kg
	2000	2085/2050	1545	2545	0	1000	1200
	2500	2585/2550	1795	3045	0	1000	1200
	2700	2785/2750	1895	3245	0	1000	1000
	3000	3085/3050	2045	3545	0	900	900
	3300	3385/3350	2195	3845	0	750	750
	3500	3585/3550	2383	4133	0	600	600
	3600	3685/3650	2431	4231	0	600	600

A Series Pallet Stacker Mini Range-Double Column

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation	CDD10-AMC1-SZ	CTD10-AMC1-SZ	CDD12-AMC1-SZ	CTD12-AMC1-SZ
Weight	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Pedestrian	Pedestrian	Pedestrian	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	1000	1000	1200
	1.6	Load centre distance	c (mm)	600	600	600
	1.9	Wheelbase	y (mm)	1273	1273	1273
Tyres, chassis	2.1	Service Weight(Including battery)	kg	744	744	744
		Battery weight	kg	66	66	66
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	PU	PU	PU	PU
	3.2	Tyre size, front	Φ250x80	Φ250x80	Φ250x80	Φ250x80
	3.3	Tyre size, rear	Φ85x70	Φ85x70	Φ85x70	Φ85x70
	3.4	Additional wheel (dimensions)	Φ125x50	Φ125x50	Φ125x50	Φ125x50
	3.5	Wheels, number front / rear (x = driven wheels)	1x+1/4	1x+1/4	1x+1/4	1x+1/4
	3.6	Tread, front	b ₁₀ (mm)	520	520	520
	3.7	Tread, rear	b ₁₁ (mm)	390	1170	1170
Dimensions	4.4	Lift	h ₃ (mm)	3000	3000	3000
	4.9	Height drawbar in driving position min./max.	h ₁₄ (mm)	720/1220	720/1220	720/1220
	4.15	Fork height,lowered	h ₁₃ (mm)	90	50	90
	4.19	Overall length(folded pedal)	l ₁ (mm)	1800	1836	1800
	4.21	Overall width	b ₁ (mm)	800	1270	800
	4.22	Fork dimensions	s/e/l (mm)	60/170/1150	35/100/1070	60/170/1150
	4.25	Distance between fork-arms	b ₅ (mm)	560	210-790	560
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	35	35	35
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm)	2016 ¹⁾	1901 ³⁾	2016 ¹⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm)	2066 ²⁾	2101 ⁴⁾	2066 ²⁾
Performance data	4.35	Turning radius	W _a (mm)	1466	1466	1466
	5.1	Travel speed,laden/unladen	km/h	4.0/4.5	4.0/4.5	4.0/4.5
	5.2	Lift speed,laden/unladen	m/s	0.120/0.190	0.120/0.190	0.120/0.190
	5.3	Lowering speed,laden/unladen	m/s	0.140/0.150	0.140/0.150	0.140/0.150
Electric engine	5.8	Max Gradeability,laden/unladen	%	6/10	6/10	5/10
	6.1	Drive motor rating S2 60 min	kW	0.7	0.7	0.7
	6.2	Lift motor rating at S3 15%	kW	2.2	2.2	2.2
	6.4	Battery voltage,rated capacity	V/Ah	2x12/106	2x12/106	2x12/106
	8.1	Type of drive control		DC	DC	DC
	9.1	Manufacturer		Curtis	Curtis	Curtis

Note: 1), VDI 2198: +282mm 2), VDI 2198: +166mm 3), VDI 2198: +409mm 4), VDI 2198: +156mm





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	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.											
	1.2	Manufacturer's type designation	CD012-AEC2S CD014-AE23S	CD012-AEC2 CD014-AE23	CD014-AEC2S CD014-AE23S	CD014-AEC2 CD014-AE23	CD016-AEC2S CD016-AE23S	CD016-AEC2 CD016-AE23	CD012-AEC2S CD012-AE23S	CD012-AEC2 CD012-AE23	CD014-AEC2S CD014-AE23S	CD014-AEC2 CD014-AE23	CD016-AEC2S CD016-AE23S	CD016-AEC2 CD016-AE23
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Pedestrian	Standing	Pedestrian	Standing		Pedestrian		Pedestrian		Standing	Pedestrian
	1.5	Rated capacity/rated load	Q (kg/lb)	1200/2646	1200/2646	1400/3086	1400/3086	1600/3527	1600/3527	1200/2646	1200/2646	1400/3086	1400/3086	1600/3527
	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 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3	1378 ¹⁾ /54.3
Weight	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
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		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	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8	Φ85×70/3.3x2.8
	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 ₁ (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 ₂ (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)
Dimensions	4.4	Lift	h ₃ (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 _{1.5} (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 ₁ (mm/in)	2063 ²⁾ (2495 ²⁾ /81.2(98.2)	2013 ²⁾ /79.3	2063 ²⁾ (2495 ²⁾ /81.2(98.2)	2013 ²⁾ /79.3	2063 ²⁾ (2495 ²⁾ /81.2(98.2)	2013 ²⁾ /79.3	2013 ²⁾ (2445 ²⁾ /79.3(96.3)	1963 ²⁾ /77.3	2013 ²⁾ (2445 ²⁾ /79.3(96.3)	1963 ²⁾ /77.3	2013 ²⁾ (2445 ²⁾ /79.3(96.3)
	4.21	Overall width	b ₁ (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 ₅ (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 ₂ (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 _{st} (mm/in)	2280 ²⁾ /89.8	2220 ²⁾ /87.4	2280 ²⁾ /89.8	2220 ²⁾ /87.4	2280 ²⁾ /89.8	2220 ²⁾ /87.4	2310 ²⁾ /90.9	2250 ²⁾ /88.6	2310 ²⁾ /90.9	2250 ²⁾ /88.6	2310 ²⁾ /90.9
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm/in)	2330 ²⁾ /91.7	2270 ²⁾ /89.4	2330 ²⁾ /91.7	2270 ²⁾ /89.4	2330 ²⁾ /91.7	2270 ²⁾ /89.4	2360 ²⁾ /92.9	2300 ²⁾ /90.6	2360 ²⁾ /92.9	2300 ²⁾ /90.6	2360 ²⁾ /92.9
	4.35	Turning radius	W _a (mm)	1630 ¹⁾ /64.2	1570 ¹⁾ /61.8	1630 ¹⁾ /64.2	1570 ¹⁾ /61.8	1630 ¹⁾ /64.2	1570 ¹⁾ /61.8	1630 ¹⁾ /64.2	1570 ¹⁾ /61.8	1630 ¹⁾ /64.2	1570 ¹⁾ /61.8	1630 ¹⁾ /61.8
	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)
Performance data	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 ¹⁾)/3(4)	2.2(3 ¹⁾)/3(4)	2.2/3.0	3/4	2.2/3.0	2.2/3.0	2.2(3 ¹⁾)/3(4)	2.2(3 ¹⁾)/3(4)	3/4
Electric engine	6.4	Battery voltage,rated capacity	V/Ah	24/210	24/210	24/210	24/210	24/240	24/240	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 ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI

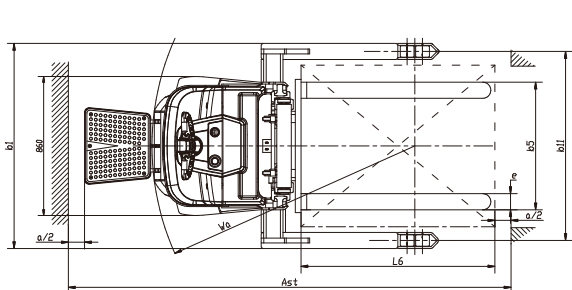
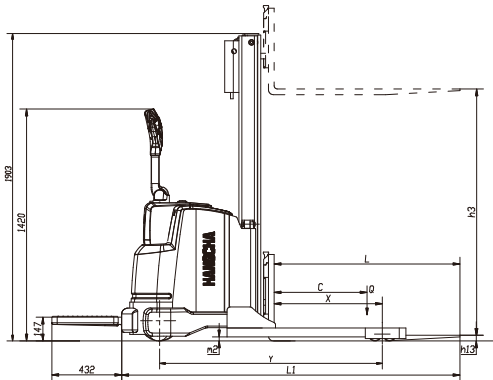
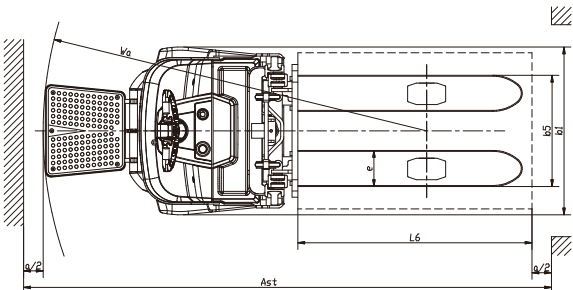
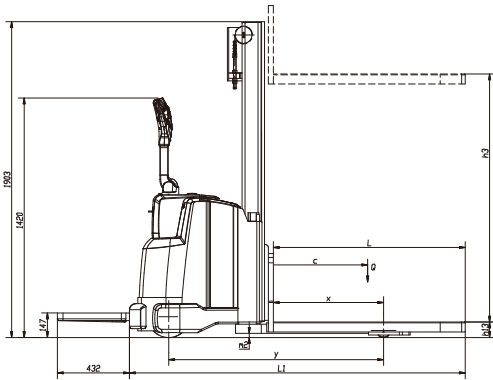
Note: 1)Mast with double lifting cylinders(including Triplex mast)+47mm(+1.9in) 2)Duplex mast with double lifting cylindrs+47mm and Triplex mast+68mm(+2.7in)

B: Straddle leg

1.2-1.6t Basic Range Pallet Stacker Truck Specification:

Mast Type	Max Lifting Height h ₃	Max. fork height (h ₃ +h _{1.3})	Lowered Height h ₁	Extended Height h ₄	Free lift	Load Capacity at 600mm/23.6in		
	mm/in	mm/in	mm/in	mm/in	mm/in	1.2t kg/lb	1.4t kg/lb	1.6t 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
Duplex full-free wide view	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
	4500/177.2	4590/180.7	2892/113.9	5142/202.4	90/3.5	500/1102	500/1102	600/1323
	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
Triplex full-free wide view	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
	3500/137.8	3590/141.3	1844/72.6	4214/165.9	1220/48	950/2094	950/2094	1000/2205
	3700/145.7	3790/149.2	1909/75.2	4409/173.6	1290/50.8	850/1874	850/1874	950/2094
	4000/157.5	4090/161.0	2009/79.1	4709/185.4	1390/54.7	750/1653	750/1653	800/1764
	4300/169.3	4390/172.8	2109/83	5009/197.2	1490/58.7	600/1323	600/1323	650/1433
	4500/177.2	4590/180.7	2159/85	5159/203.1	1590/62.6	500/1102	500/1102	550/1212

Note:The mast which h3>4500mm(177.2in)(include 4500mm)only suitable for the pallet stacker (outside fork width b5≥680mm(26.8in)).





A Series Double-column Pallet Stackers Mini Range II

with capacities of 1,200 to 1,500kg

The A series 1.2t/1.5t mini stackers is a new generation of products designed by Hangcha for warehousing and logistics applications. Using the latest permanent magnet drive technology and with advanced performance, comfortable, safe and reliable operations and low costs, the products are ideal tools for loading, unloading and handling palletized goods in warehouses, supermarkets, workshops and homes.

Appearance

- / The new generation of A series double-column pallet stackers mini range II adopts a professional industrial exterior design. The vehicle has a smooth vivid profile, a compact shape and a fully ergonomic design, and follows the latest exterior design trend.
- / With a large number of steel plate stamping and injection molding processes to enable a robust and durable high-grade product that meets environmental protection requirements.

Comfort

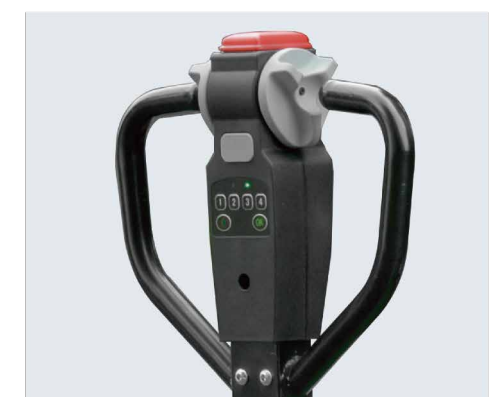
- / With the compact and stylish tiller, all operations can be easily completed with one hand.
- / The optimized design of the body structure provides an excellent operating view and to get in/out the pallet more easily.
- / Thanks to the compact, lightweight and flexible, it can be operated very easily and can pass through narrow aisles.
- / The truck can be operated in narrow space with the upright walking.
- / Gel battery: a maintenance-free battery.
- / The built-in charger is very convenient.

Safety

- / With the functions of release braking, reverse braking and emergency braking to ensure safe driving.
- / With protection for preventing sliding down a ramp to ensure safe operation.
- / The emergency reverse button on the top of the tiller can effectively prevent the driver from being injured in an emergency occurring.
- / Soft landing system can automatically slow down the lowering speed and effectively protect the goods.

High performance

- / With high power and a rated load capacity to meet the handling needs of most customers.
- / With a permanent magnet brush/synchronous motor with excellent performance and low heat generation.
- / The truck with regenerative braking provides protection for preventing sliding down a ramp.
- / The A2MJ model uses a permanent magnet brush controller with mature technology, and a motor with good universality and a low cost.
- / The A2MA model uses a permanent magnet synchronous controller with advanced technology, and a maintenance-free brushless motor with excellent performance.
- / The mast is made of special steel, and the outer mast is a welded structure, which reduces the weight of the vehicle and increases the rigidity.



The multi-function tiller is integrated with a code lock, display instruments and all operating buttons

Reliability

- / The bearing wheel adopts a clamping plate structure, which can adapt to uneven roads and improve the service life of the bearing wheel.
- / With a high-strength steel frame structure, the truck has a large residual load capacity and a long service life.
- / The truck with four-point design provides good road holding ensure high stability and a good view.
- / The whole system uses waterproof connectors, and all wires and cables have reliable protection, which greatly improves the reliability of the electrical system.
- / With a superior low noise and low vibration hydraulic power unit to enable stable and reliable lifting and lowering.
- / The hydraulic unit and the 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 greatly.
- / The stamped fork with higher strength and impact resistance, and guided fork prongs, further improve operation efficiency.



Maintenance

- / The battery indicator can duly prompt the user to charge.
- / With a rear hood that can be completely opened to expose all components and facilitate the maintenance of the truck.

Standard Specification

- / Permanent magnet brush (A2MJ) / permanent magnet synchronous (A2MA) motor
- / Permanent magnet brush (A2MJ) / permanent magnet synchronous (A2MA) controller
- / Hydraulic power unit
- / Emergency power off switch
- / PU wheel
- / Fork length: 1150mm
- / Fork interval: 560mm
- / Multi-function tiller with a code lock and display instruments
- / Horn
- / Built-in charger

Options

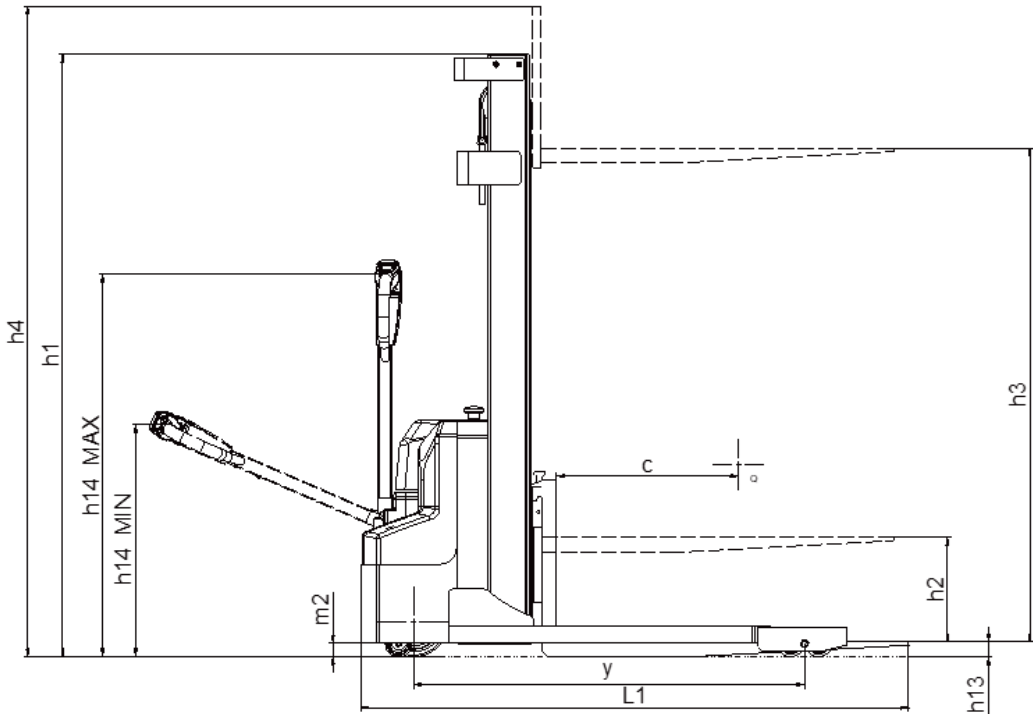
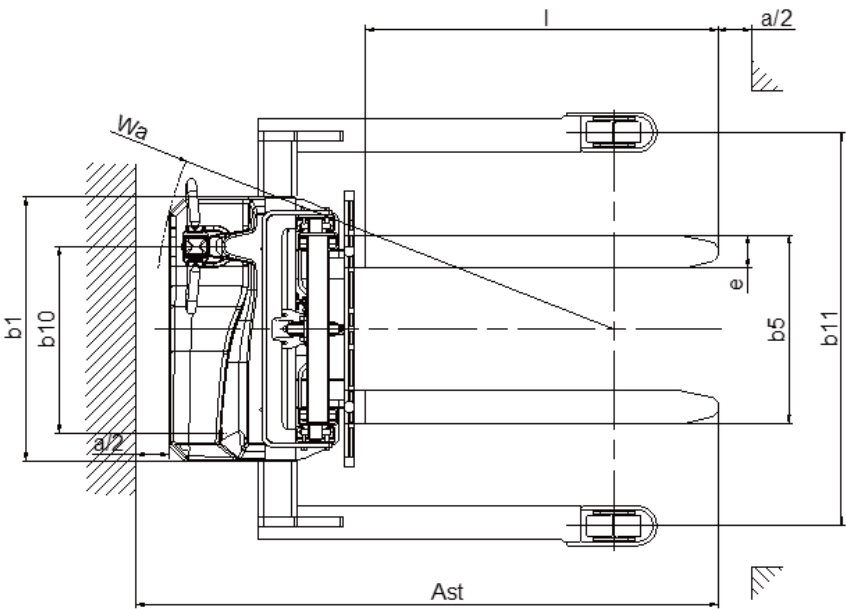
- / Lift height: 2.0-3.6m
- / A full range of optional fork length
- / Distance between fork-arms: 680mm
- / Reflective mirror
- / Key switch
- / Universal key switch
- / Working timing function
- / Charge interlocking
- / Gel battery: 24V/100/125Ah for 1.2t
- / Gel battery: 24V/125Ah for 1.5t



A Series Double-column Pallet Stackers Mini Range II Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.													
	1.2	Manufacturer's type designation		CDD12-A2MJ2-SZ*	CDD15-A2MJ2-SZ*	CDD12-A2MA-SZ	CDD15-A2MA-SZ	CDD12-A2MJ2-ISZ*	CDD15-A2MJ2-ISZ*	CDD12-A2MA-ISZ	CDD15-A2MA-ISZ	CTD12-A2MC2-SZ	CTD15-A2MC2-SZ	CTD12-A2MJ2-SZ*	CTD15-A2MJ2-SZ*	CTD12-A2MA-SZ	CTD15-A2MA-SZ
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	1200	1500	1200	1500	1200	1500	1200	1500	1200	1500	1200	1500	1200	1500
	1.6	Load centre distance	c (mm)	600	600	600	600	600	600	600	600	600	600	600	600	600	600
	1.9	Wheelbase	y (mm)	1188	1198	1188	1198	1188	1198	1188	1198	1188	1198	1188	1198	1188	1198
Weight	2.1	Service Weight(Including battery)	kg	560	630	560	630	/	/	/	/	/	/	/	/	/	/
		Battery Weight	kg	52	52	52	52	/	/	/	/	/	/	/	/	/	/
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU
	3.2	Tyre size, front		φ210×70	φ210×70	φ210×70	φ210×70	φ210×70	φ210×70	φ210×70	φ210×70	φ210x70	φ210×70	φ210x70	φ210×70	φ210×70	φ210×70
	3.3	Tyre size, rear		φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80x64	φ80×64	φ80x64	φ80×64	φ80x64	φ80×64
	3.4	Additional wheel (dimensions)		φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80x64	φ80×64	φ80x64	φ80×64	φ80x64	φ80×64
	3.5	Wheels, number front / rear (x = driven wheels)		1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4
	3.6	Tread, front	b10 (mm)	566	566	566	566	566	566	566	566	566	566	566	566	566	566
	3.7	Tread, rear	b11 (mm)	396	396	396	396	396	396	396	396	990/1190/1390	990/1190/1390	990/1190/1390	990/1190/1390	990/1190/1390	990/1190/1390
Dimensions	4.4	Lift	h3 (mm)	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
	4.9	Height drawbar in driving position min./max.	h14 (mm)	720/1160	720/1160	720/1160	720/1160	720/1160	720/1160	720/1160	720/1160	1160	1160	1160	1160	1160	1160
	4.15	Fork height,lowered	h13 (mm)	85	85	85	85	85	85	85	85	50	50	50	50	50	50
	4.19	Overall length	l1 (mm)	1698	1708	1698	1708	1698	1708	1698	1708	1665	1665	1665	1665	1665	1665
	4.21	Overall width	b1 (mm)	800	800	800	800	800	800	800	800	1110/1310/1510	1100/1270/1470	1110/1310/1510	1100/1270/1470	1110/1310/1510	1100/1270/1470
	4.22	Fork dimensions	s/e/l (mm)	60/170/1150	60/170/1150	60/170/1150	60/170/1150	60/170/1150	60/170/1150	60/170/1150	60/170/1150	35/100/1070	35/100/1070	35/100/1070	35/100/1070	35/100/1070	35/100/1070
	4.25	Distance between fork-arms	b5 (mm)	560	560	560	560	560	560	560	560	210-790	210-790	210-790	210-790	210-790	210-790
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	26	26	26	26	26	26	26	26	35	35	35	35	35	35
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	As1 (mm)	1942 ¹⁾	1952 ¹⁾	1942 ¹⁾	1952 ¹⁾	1942 ¹⁾	1952 ¹⁾	1942 ¹⁾	1952 ¹⁾	1908 ³⁾	1908 ³⁾	1908 ³⁾	1908 ³⁾	1908 ³⁾	1908 ³⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	As1 (mm)	1994 ²⁾	2004 ²⁾	1994 ²⁾	2004 ²⁾	1994 ²⁾	2004 ²⁾	1994 ²⁾	2004 ²⁾	2002 ⁴⁾	2002 ⁴⁾	2002 ⁴⁾	2002 ⁴⁾	2002 ⁴⁾	2002 ⁴⁾
	4.35	Turning radius	Ws (mm)	1392	1402	1392	1402	1392	1402	1392	1402	1392	1392	1392	1392	1392	1392
Performance data	5.1	Travel speed,laden/unladen	km/h	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5
	5.2	Lift speed,laden/unladen	m/s	0.110/0.150	0.085/0.110	0.110/0.150	0.085/0.110	0.110/0.150	0.085/0.110	0.110/0.150	0.085/0.110	0.11/0.15	0.085/0.11	0.11/0.15	0.085/0.11	0.11/0.15	0.085/0.11
	5.3	Lowering speed,laden/unladen	m/s	0.120/0.120	0.110/0.100	0.120/0.120	0.110/0.100	0.120/0.120	0.110/0.100	0.120/0.120	0.110/0.100	0.12/0.12	0.11/0.11	0.12/0.12	0.11/0.11	0.12/0.12	0.11/0.11
	5.8	Max Gradeability,laden/unladen	%	6/10	4/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10	4/10	6/10	4/10	6/10	6/10
Electric Engine	6.1	Drive motor rating S2 60 min	kW	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
	6.2	Lift motor rating at S3 15%	kW	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	6.4	Battery voltage,rated capacity	V/Ah	24/85	24/100	24/85	24/100	24/60	24/60	24/60	24/60	2x12/85	2x12/100	2x12/85	2x12/100	2x12/85	2x12/100
	8.1	Type of drive control		DC	DC	PMSM	PMSM	DC	DC	PMSM	PMSM	DC	DC	DC	DC	PMSM	PMSM

Note: 1). VDI 2198: +284mm
2). VDI 2198: +166mm
3). VDI 2198: +343mm
4). VDI 2198: +249mm
* CE model



A Series Double-column Pallet Stackers Mini Range II Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.							
	1.2	Manufacturer's type designation		CDD12-A2MC2-SZ	CDD15-A2MC2-SZ	CTD12-A2MC2-SZ	CTD15-A2MC2-SZ	CDD12-A2MC2-ISZ	CDD15-A2MC2-ISZ	CTD12-A2MC2-ISZ	CTD15-A2MC2-ISZ
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	1200	1500	1200	1500	1200	1500	1200	1500
	1.6	Load centre distance	c (mm)	600	600	600	600	600	600	600	600
	1.9	Wheelbase	y (mm)	1188	1188	1188	1188	1188	1188	1188	1188
Weight	2.1	Service Weight(Including battery)	kg	/	/	/	/	/	/	/	/
		Battery Weight	kg	/	/	/	/	/	/	/	/
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU	PU	PU	PU	PU
	3.2	Tyre size, front		φ210×70	φ210×70	φ210×70	φ210×70	φ210×70	φ210×70	φ210×70	φ210×70
	3.3	Tyre size, rear		φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64
	3.4	Additional wheel (dimensions)		φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64	φ80×64
	3.5	Wheels, number front / rear (x = driven wheels)		1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4
	3.6	Tread, front	b10 (mm)	566	566	566	566	566	566	566	566
	3.7	Tread, rear	b11 (mm)	396	396	1190	1190	396	396	1190	1190
Dimensions	4.4	Lift	h3 (mm)	2500	2500	2500	2500	2500	2500	2500	2500
	4.9	Height drawbar in driving position min./max.	h14 (mm)	1160	1160	1160	1160	1160	1160	1160	1160
	4.15	Fork height,lowered	h13 (mm)	85	85	35	35	85	85	35	35
	4.19	Overall length	l1 (mm)	1698	1708	1665	1665	1698	1708	1665	1665
	4.21	Overall width	b1 (mm)	800	800	1310	1310	800	800	1310	1310
	4.22	Fork dimensions	s/e/l (mm)	60/170/1150	60/170/1150	35/100/1070	35/100/1070	60/170/1150	60/170/1150	35/100/1070	35/100/1070
	4.25	Distance between fork-arms	b5 (mm)	560	560	210-790	210-790	560	560	210-790	210-790
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	26	26	40	40	26	26	40	40
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	As1 (mm)	1942 ¹⁾	1952 ¹⁾	1908 ³⁾	1908 ³⁾	1942 ¹⁾	1952 ¹⁾	1908 ³⁾	1908 ³⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	As1 (mm)	1994 ²⁾	2004 ²⁾	2002 ⁴⁾	2002 ⁴⁾	1994 ²⁾	2004 ²⁾	2002 ⁴⁾	2002 ⁴⁾
	4.35	Turning radius	Ws (mm)	1392	1402	1392	1392	1392	1402	1392	1392
Performance data	5.1	Travel speed,laden/unladen	km/h	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5	4.2/4.5
	5.2	Lift speed,laden/unladen	m/s	110/150	85/110	110/150	85/110	110/150	85/110	110/150	110/150
	5.3	Lowering speed,laden/unladen	m/s	120/120	110/100	120/120	110/100	120/120	110/100	120/120	120/120
	5.8	Max Gradeability,laden/unladen	%	6/10	4/10	6/10	4/10	6/10	4/10	6/10	4/10
Electric Engine	6.1	Drive motor rating S2 60 min	kW	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
	6.2	Lift motor rating at S3 15%	kW	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	6.4	Battery voltage,rated capacity	V/Ah	24/85	24/100	24/85	24/100	24/60	24/60	24/60	24/60
	8.1	Type of drive control		DC	DC	DC	DC	DC	DC	DC	DC

Note: 1). VDI 2198: +284mm
2). VDI 2198: +166mm
3). VDI 2198: +343mm
4). VDI 2198: +249mm
* CE model

Mast Specification

Mast Type	Max Lifting Height h3	Max.fork height (h3 +h13)	Lowered Height h1	Extended Height h4	Free lift	Load Capacity at 600mm	
						1.2t	1.5t
						kg	kg
Single cylinder duplex mast	2000	2085	1574	2574	0	1200	1500
	2500	2585	1824	3074	0	1200	1200
	2700	2785	1924	3274	0	1000	1000
	3000	3085	2074	3574	0	900	900
	3300	3385	2224	3874	0	750	750
	3600	3685	2458	4258	0	600	600

Straddle Leg Mast Specification

Mast Type	Max Lifting Height h3	Max.fork height (h3 +h13)	Lowered Height h1	Extended Height h4	Free lift	Load Capacity at 600mm	
						1.2t	1.5t
						kg	kg
Single cylinder duplex mast	2000	2085	1593	2593	0	1200	1500
	2500	2585	1843	3093	0	1200	1200
	2700	2785	1943	3293	0	1000	1000
	3000	3085	2093	3593	0	900	900
	3300	3385	2243	3893	0	750	750
	3600	3685	2471	4277	0	600	600



A Series High Range Pedestrian Pallet Stacker With Initial Lift

with capacities of 1,200 to 1,600kg

The A series pedestrian stacker 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 lithium battery forklift is equipped with the c-series forklift special lithium battery cell and module jointly developed by HANGCHA and CATL, standard power distribution heating function.

Appearance

- / The A series pedestrian stacker adopts a professional industrial design of exterior. The vehicle has a smooth vivid profile and a fully ergonomic design, following the latest exterior design trend.
- / 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

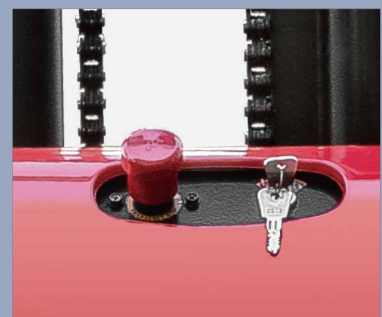
- / With AC walking motor, it has excellent acceleration performance, good climbing performance, low heat generation, no carbon brush and is maintenance-free.
- / With the new AC control system to perform accurate, stable, and more efficient control.
- / The CANBUS structure makes the whole vehicle communication 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.
- / Stepless lifting and descending speed regulation is provided for the standard configuration, to enable more precise fork control and more stable goods lifting and descending.
- / With the shanks to be initially lifted to enable a better passing ability.

Reliability

- / With the four-point low center of gravity design and a high-strength steel frame structure, the vehicle frame has a large residual load capacity and a long service life.
- / All plug connectors are imported and waterproof, and all cables have reliable protection, which increases reliability of electrical system significantly.
- / With an electric lifting limit switch to avoid overflow from the hydraulic power unit, save more energy and protect the motor of the 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.



Tiller



The non-contact proximity switch has a long life and can work reliably



Designed to be narrow with large round corners to improve suitability for concentrated shelves and with a wedge-shape chassis to provide higher passing ability



With the upper and lower pallet handling design to meet the stacking operation need and enable a higher efficiency of goods handling

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.
- / Rear cover can be completely opened, maintenance is very convenient.
- / All rotating shafts are equipped with lubricating sleeve and oil cup, which is convenient for maintenance and has a long service life.

Comfort

- / With the unique function of driving at a turtle speed with an indicator light, the vehicle can be more easily driven at a slow speed while carrying out operations in a very narrow space.
- / The optimized body structure enables the vehicle to have an excellent operating view and to access the pallet easily.
- / Different optional prong intervals and prong lengths are applicable to handling of various pallets.

Standard Specification

- / AC driving motor
- / CRUTIS/ZAPI AC controller
- / Fork lift & lower adopts stepless speed regulating
- / Imported hydraulic power unit
- / 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

Options

- / Different mast height (see parameter list for details)
- / Fork length 1220/1600mm
- / Outer distance of forks 600/680mm
- / Charger
- / Load backrest
- / Mast shield
- / Lithium Battery 202Ah
- / Lead-acid battery 240/280/340Ah

Safety

- / A function of automatic deceleration of the vehicle after the fork is lifted 500mm is provided for the standard configuration.
- / A function of prohibiting the shanks to be lifted after the fork is lifted 1800mm is provided for the standard configuration.
- / With the functions of release braking, reverse braking and emergency braking to ensure safe driving.
- / With protection for preventing sliding down a ramp to ensure safe operation.
- / The reverse brake button on the head of the joystick can effectively prevent the driver from being injured in an emergency occurring when the vehicle is reversed.
- / The truck reduces declining speed automatically when height from ground to fork is less than 100mm, which provides effective protection for goods.

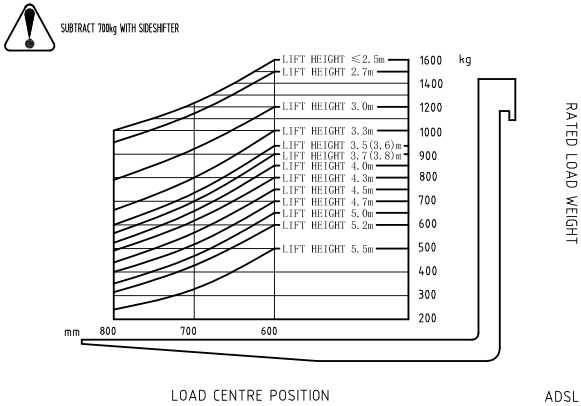


A Series High Range Pedestrian Pallet Stacker With Initial Lift Specification

Characteristics	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.					
	1.2	Manufacturer's type designation		CDD12-AC2-L* CDD12-AZ3-L	CDD14-AC2-L* CDD14-AZ3-L	CDD16-AC2-L* CDD16-AZ3-L	CDD12-AC2-LI* CDD12-AZ3-LI	CDD14-AC2-LI* CDD14-AZ3-LI	CDD16-AC2-LI* CDD16-AZ3-LI
	1.4	Operator type		Pedestrian	Pedestrian	Pedestrian	pedestrian	pedestrian	pedestrian
	1.5	Load capacity	Q(kg)	1200	1400	1600	1200	1400	1600
	1.6	Load centre distance	C(mm)	600	600	600	600	600	600
	1.8	Load distance, centre of drive axle to fork	x(mm)	683 ³⁽⁴⁾	683 ³⁽⁴⁾	683 ³⁽⁴⁾	683 ³⁽⁴⁾	683 ³⁽⁴⁾	683 ³⁽⁴⁾
	1.9	Wheelbase	y(mm)	1467 ³⁾	1467 ³⁾	1467 ³⁾	1467 ³⁾	1467 ³⁾	1467 ³⁾
Weight	2.1	Service weight	kg	1210	1215	1245	1225	1230	1245
Wheels,chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane	polyurethane	polyurethane	polyurethane
	3.2	Tyre size, front	mm	Φ230×75	Φ230×75	Φ230×75	Φ230×75	Φ230×75	Φ230×75
	3.3	Tyre size, rear	mm	Φ85×70	Φ85×70	Φ85×70	Φ85×70	Φ85×70	Φ85×70
	3.4	Additional wheels(dimensions)	mm	Φ140×55	Φ140×55	Φ140×55	Φ140×55	Φ140×55	Φ140×55
	3.5	Wheels, number front rear (x = driven wheels)		1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4
	3.6	Tread, front	b10(mm)	525	525	525	525	525	525
	3.7	Tread, rear	b11(mm)	385	385	385	385	385	385
Dimensions	4.2	Height, mast lowered	h1(mm)	1932	1932	1932	1932	1932	1932
	4.4	Lift	h3(mm)	2700	2700	2700	2700	2700	2700
	4.6	Initial lift	h5(mm)	125	125	125	125	125	125
	4.15	Height, lowered	h13(mm)	90	90	90	90	90	90
	4.19	Overall length	l1(mm)	2083 ⁴⁾	2083 ⁴⁾	2083 ⁴⁾	2083 ⁴⁾	2083 ⁴⁾	2083 ⁴⁾
	4.20	Length to face of forks	l2(mm)	934 ⁴⁾	934 ⁴⁾	934 ⁴⁾	934 ⁴⁾	934 ⁴⁾	934 ⁴⁾
	4.21	Overall width	b1(mm)	800	800	800	800	800	800
	4.22	Fork dimensions	s/e/l(mm)	60/185/1150	60/185/1150	60/185/1150	60/185/1150	60/185/1150	60/185/1150
	4.25	Distance between fork-arms	mm	570	570	570	570	570	570
	4.32	Ground clearance, centre of wheelbase	m2(mm)	21	21	21	21	21	21
	4.33	Aisle width for pallets 1000 x 1200 crossways	As1(mm)	2283 ¹⁾	2283 ¹⁾	2283 ¹⁾	2283 ¹⁾	2283 ¹⁾	2283 ¹⁾
	4.34	Aisle width for pallets 800 x 1200 lengthways	As1(mm)	2334 ²⁾	2334 ²⁾	2334 ²⁾	2334 ²⁾	2334 ²⁾	2334 ²⁾
	4.35	Turning radius	Wa(mm)	1635 ³⁾	1635 ³⁾	1635 ³⁾	1635 ³⁾	1635 ³⁾	1635 ³⁾
Performance data	5.1	Travel speed, unladen	km/h	6/6	6/6	6/6	6/6	6/6	6/6
	5.2	Lift speed, laden/unladen	m/s	0.12/0.21	0.16/0.25	0.13/0.22	0.12/0.21	0.16/0.25	0.13/0.22
	5.3	Lowering speed, lade/unladen	m/s	0.34/0.32	0.32/0.32	0.26/0.30	0.34/0.32	0.32/0.32	0.26/0.30
	5.7	Gradeability, laden/unladen	%	8/16	8/16	7/16	8/16	8/16	7/16
	5.10	Service brake		electric	electric	electric	electric	electric	electric
Electric Engine	6.1	Drive motor rating S2 60 min	kW	1.5	1.5	1.5	1.5	1.5	1.5
	6.2	Lift motor rating at S3 15 %	kW	2.2	3.2	3.2	2.2	3.2	3.2
	6.4	Battery voltage/nominal capacity K5	V/Ah	24/240	24/240	24/280	24/125	24/125	24/125
Other	8.1	Type of drive control		AC CURTIS/ZAPI					

Note : 1) VDI2198:+233mm; 2) VDI2198:+157mm; 3) Load section lowered:+68mm; 4) Triplex Mast:x-21mm; l1+21mm; l2+21mm;
★ CE model

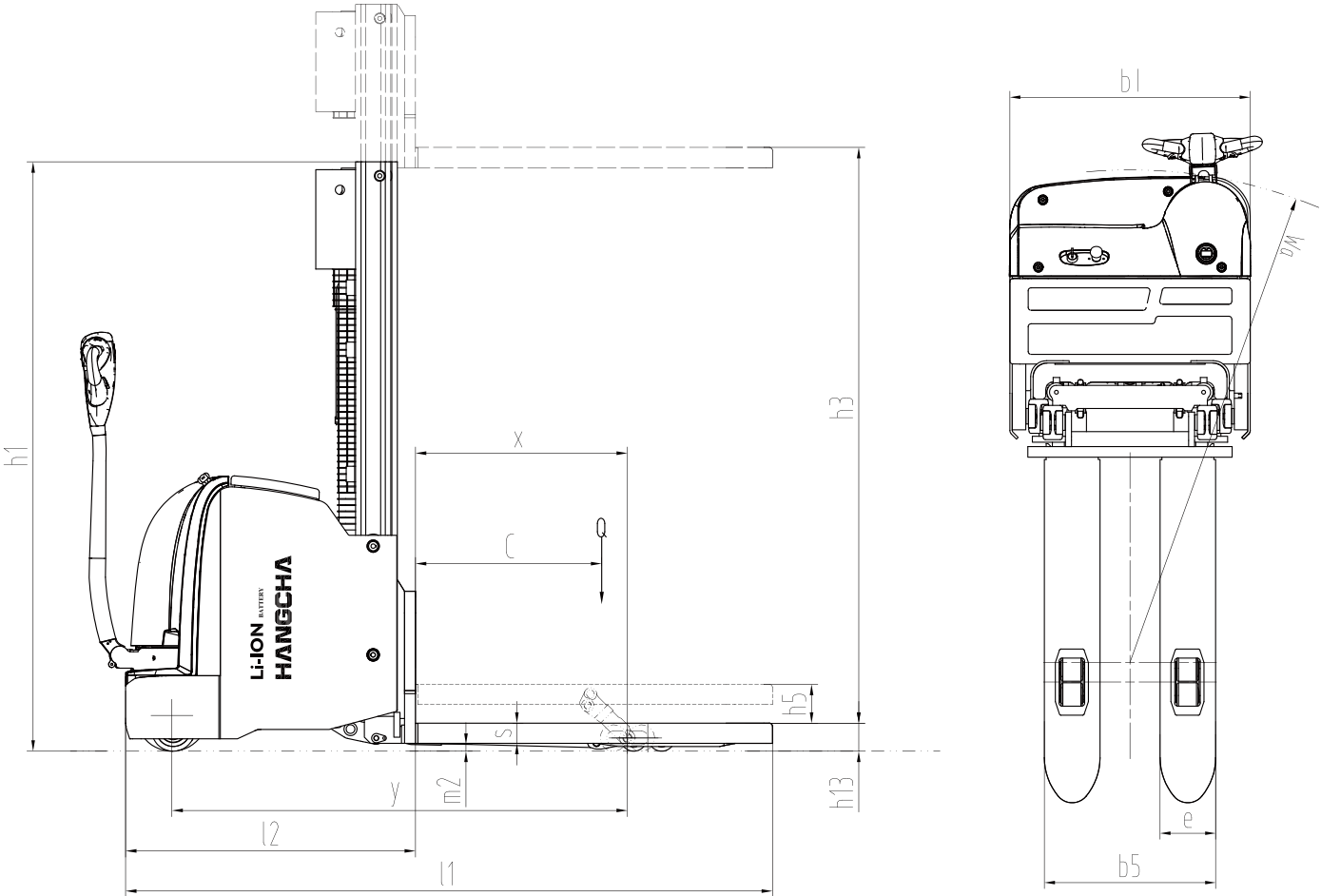
RATED CAPACITIES AND LOAD CENTRES GRAPH



Q1(kg)		Q2(kg)		Q1+Q2(kg)	
max	min	max		max	
2000	0	0		2000	
1500	100	100			
1400	200	200			
1300	300	300			
1200	400	400			
1100	500	500			
1000	600	600			
900	700	700			
800	800	800			

Mast Specification

Type	Fork lift height h3	Max.fork height (h3 +h13)	Mast lowered h1	Mast extended h4	Free lift height	Load Capacity at 600mm		
						1.2t	1.4t	1.6t
						kg	kg	kg
Wide view mast	mm	mm	mm	mm	mm	kg	kg	kg
	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
Wide view full free duplex mast	4300	4390	2832	4982	90	750	750	800
	4500	4590	2932	5182	90	700	700	750
	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
Wide view full free triplex mast	3300	3390	2285	3935	1740	950	950	1000
	3500	3590	2385	4135	1840	900	900	940
	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





LI-ION
TECHNOLOGY

INNOVATIVE LITHIUM-ION

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 LITHIUM POWER BE REVEALED



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

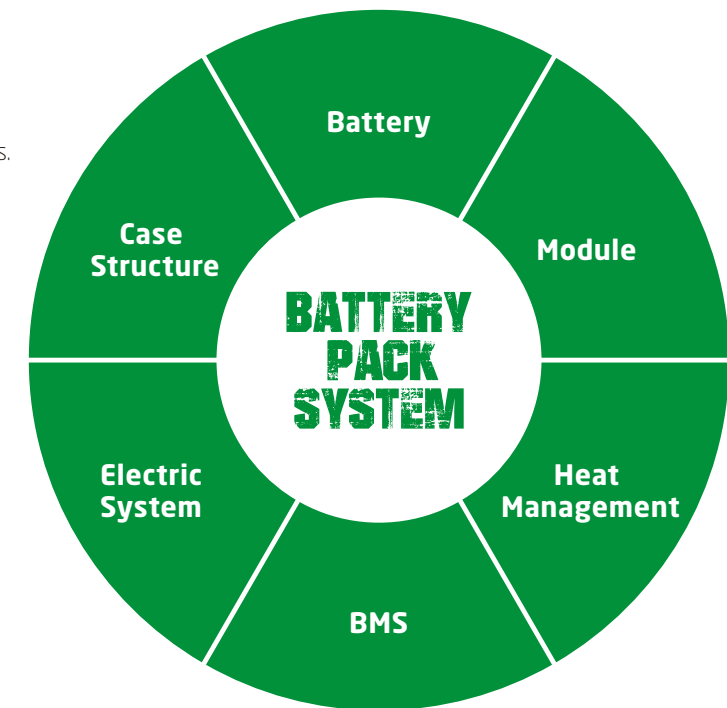


**5 YEARS
WARRANTY**

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		CDD12-AC2S-I*	CDD14-AC2S-I*	CDD16-AC2S-I*	CDD20-AC2S-I*	CTD12-AC2S-I*	CTD14-AC2S-I*	CTD16-AC2S-I*	CTD20-AC2S-I*	CDD12-AC2-I*	CDD14-AC2-I*	CDD16-AC2-I*	CDD20-AC2-I*
Li-Ion battery	V/Ah	24/125	24/125	24/125	24/125	24/125	24/125	24/125	24/125	24/125	24/125	24/125	24/125
Li-Ion battery,Optional	V/Ah	24/228	24/228	24/228	24/228	24/228	24/228	24/228	24/228	24/228	24/228	24/228	24/228
Titans charger		SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100	SPC-24100

Note: * CE model



1.2-1.6t Hi Range Pallet Stacker Truck Specification:

Mast Type	Max Lifting Height h ₃	Max. fork height (h ₃ +h _{1.3})	Lowered Height h ₁	Extended Height h ₄	Free lift	Load Capacity at 600mm		
						1.2t	1.4t	1.6t
Double cylinder duplex wide view	mm	mm	mm	mm	mm	Kg	Kg	Kg
	2000	2090	1542	2542	90	1200	1400	1600
	2500	2590	1792	3042	90	1200	1400	1600
	2700	2790	1892	3242	90	1200	1400	1600
	3000	3090	2042	3542	90	1200	1400	1600
	3300	3390	2192	3842	90	1200	1200	1300
	3500	3590	2292	4042	90	1070	1070	1130
	3600	3690	2342	4142	90	1000	1000	1050
	3800	3890	2442	4342	90	920	920	970
	4000	4090	2642	4642	90	850	850	900
Duplex full-free wide view	4300	4390	2792	4942	90	770	770	810
	4500	4590	2892	5142	90	680	680	710
	2000	2090	1595	2595	1090	1200	1400	1600
	2500	2590	1845	3095	1340	1200	1400	1600
	2700	2790	1945	3295	1440	1200	1400	1600
	3000	3090	2095	3595	1590	1200	1400	1600
	3300	3390	2245	3895	1740	1200	1200	1300
	3500	3590	2345	4095	1840	1070	1070	1130
Triplex full-free wide view	3600	3690	2395	4195	1890	1000	1000	1050
	3500	3590	1844	4214	1220	1070	1070	1130
	3700	3790	1909	4409	1290	960	960	1010
	4000	4090	2009	4709	1390	850	850	900
	4300	4390	2109	5009	1490	770	770	810
	4500	4590	2159	5159	1590	680	680	710
	4700	4790	2259	5459	1590	600	600	630
	5000	5090	2354	5744	1700	500	500	530
	5200	5290	2409	5909	1790	440	440	470
	5500	5590	2509	6209	1890	320	320	350

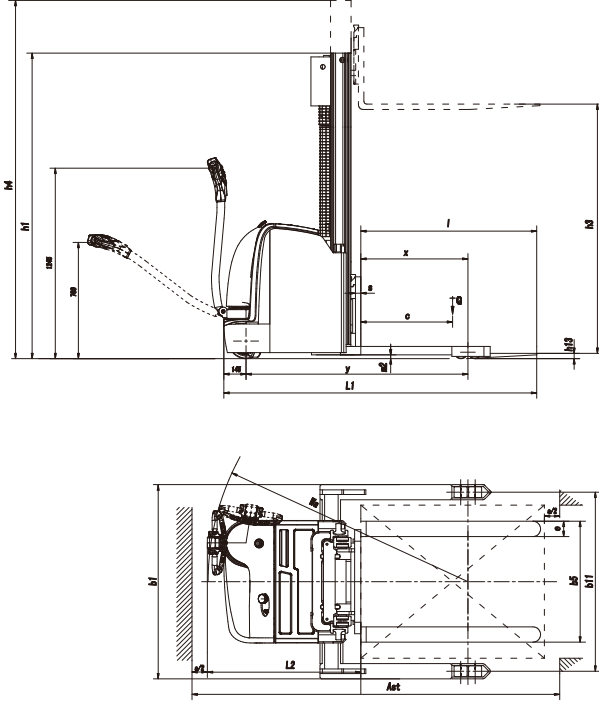
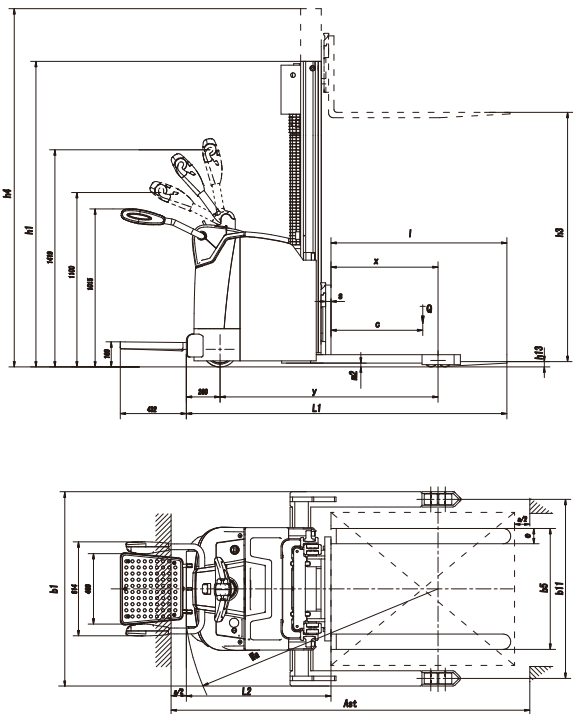
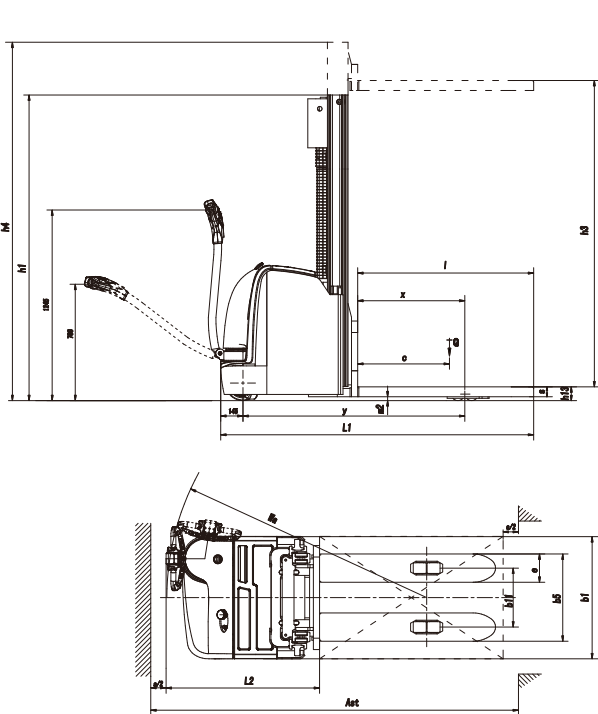
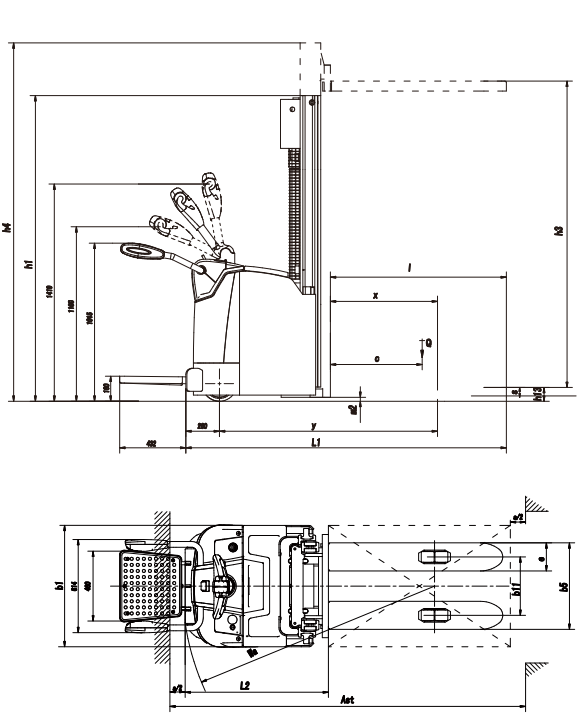
2.0t Hi Range Pallet Stacker Truck Specification:

Mast Type	Max Lifting Height h ₃	Max. fork height (h ₃ +h _{1.3})	Lowered Height h ₁	Extended Height h ₄	Free lift	Load Capacity at 600mm
						2.0t
Double cylinder duplex wide view	mm	mm	mm	mm	mm	Kg
	2000	2090	1647	2647	90	2000
	2500	2590	1897	3147	90	2000
	2700	2790	1997	3347	90	1800
	3000	3090	2147	3647	90	1600
	3300	3390	2297	3947	90	1350
	3500	3590	2397	4147	90	1180
	3600	3690	2447	4247	90	1100
	3800	3890	2547	4447	90	980
	4000	4090	2747	4747	90	950
Duplex full-free wide view	4300	4390	2897	5047	90	860
	4500	4590	2997	5247	90	760
	2000	2090	1700	2700	1090	2000
	2500	2590	1950	3200	1340	2000
	2700	2790	2050	3400	1440	1800
	3000	3090	2200	3700	1590	1600
	3300	3390	2350	4000	1740	1350
	3500	3590	2450	4200	1840	1180
Triplex full-free wide view	3600	3690	2500	4300	1890	1100
	3500	3590	1944	4314	1130	1180
	3700	3790	2009	4509	1200	1020
	4000	4090	2109	4809	1300	950
	4300	4390	2209	5109	1400	860
	4500	4590	2259	5259	1500	760
	4700	4790	2359	5559	1500	680
	5000	5090	2454	5844	1610	570
	5200	5290	2509	6009	1700	510
	5500	5590	2609	6309	1800	400

A Series Pallet Stacker Truck Hi Range

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.															
	1.2	Manufacturer's type designation	CD012-AC2S* CD012-AZ3S	CD012-AC2* CD012-AZ3	CD014-AC2S* CD014-AZ3S	CD014-AC2* CD014-AZ3	CD016-AC2S* CD016-AZ3S	CD016-AC2* CD016-AZ3	CD020-AC2S* CD020-AZ3S	CD020-AC2* CD020-AZ3	CTD12-AC2S* CTD12-AZ3S	CTD12-AC2* CTD12-AZ3	CTD14-AC2S* CTD14-AZ3S	CTD14-AC2* CTD14-AZ3	CTD16-AC2S* CTD16-AZ3S	CTD16-AC2* CTD16-AZ3	CTD20-AC2S* CTD20-AZ3S	CTD20-AC2* CTD20-AZ3
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Standing	Pedestrian	Stand-on	Pedestrian	Stand-on	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	1200	1200	1400	1400	1600	1600	2000	2000	1200	1200	1400	1400	1600	1600	2000
	1.6	Load centre distance	c (mm)	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Weight	1.9	Wheelbase	y (mm)	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
	2.1	Service Weight	kg	1310	1177	1315	1182	1362	1215	1405	1258	1380	1247	1385	1252	1432	1285	1475
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU	PU
	3.2	Tyre size, front		φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75	φ230x75
	3.3	Tyre size, rear		φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70	φ85x70
	3.4	Additional wheel (dimensions)		φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55	φ140x55
	3.5	Wheels, number front / rear (x = driven wheels)		1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4	1x+1/4
	3.6	Tread, front	b10 (mm)	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
	3.7	Tread, rear	b11 (mm)	385	385	385	385	385	385	385	1000/1170/1370	1000/1170/1370	1000/1170/1370	1000/1170/1370	1000/1170/1370	1000/1170/1370	1000/1170/1370	1000/1170/1370
Dimensions	4.4	Lift	h3 (mm)	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700
	4.15	Fork height,lowered	h13 (mm)	90	90	90	90	90	90	90	50	50	50	50	50	50	50	50
	4.19	Overall length	l1 (mm)	2095 ¹⁾	2050 ¹⁾	2095 ¹⁾	2050 ¹⁾	2095 ¹⁾	2050 ¹⁾	2095 ¹⁾	2050 ¹⁾	2005 ¹⁾	2050 ¹⁾	2005 ¹⁾	2050 ¹⁾	2005 ¹⁾	2050 ¹⁾	2005 ¹⁾
		Overall length(unfold the pedal)	l1 (mm)	2527 ¹⁾		2527 ¹⁾		2527 ¹⁾		2527 ¹⁾		2482 ¹⁾		2482 ¹⁾		2482 ¹⁾		2482 ¹⁾
	4.21	Overall width	b1 (mm)	800	800	800	800	800	800	800	1100/1270/1470	1100/1270/1470	1100/1270/1470	1100/1270/1470	1100/1270/1470	1100/1270/1470	1100/1270/1470	1100/1270/1470
	4.22	Fork dimensions ISO 2331	s/e/ (mm)	65/185/1150	65/185/1150	65/185/1150	65/185/1150	65/185/1150	65/185/1150	65/185/1150	35/100/1070	35/100/1070	35/100/1070	35/100/1070	35/100/1070	35/100/1070	40/122/1070	40/122/1070
	4.25	Distance between fork-arms	bs (mm)	570/680	570/680	570/680	570/680	570/680	570/680	570/680	210-790	210-790	210-790	210-790	210-790	210-790	210-790	210-790
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	30	30	30	30	30	30	30	40	40	40	40	40	40	40	40
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	2312 ¹⁾	2318 ¹⁾	2312 ¹⁾	2318 ¹⁾	2312 ¹⁾	2318 ¹⁾	2312 ¹⁾	2318 ¹⁾	2342 ¹⁾	2348 ¹⁾	2342 ¹⁾	2348 ¹⁾	2342 ¹⁾	2348 ¹⁾	2342 ¹⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	2362 ¹⁾	2368 ¹⁾	2362 ¹⁾	2368 ¹⁾	2362 ¹⁾	2368 ¹⁾	2362 ¹⁾	2368 ¹⁾	2392 ¹⁾	2398 ¹⁾	2392 ¹⁾	2398 ¹⁾	2392 ¹⁾	2398 ¹⁾	2392 ¹⁾
	4.35	Turning radius	Wa (mm)	1662	1668	1662	1668	1662	1668	1662	1668	1662	1668	1662	1668	1662	1668	1668
Performance data	5.1	Travel speed,laden/unladen	km/h	7.0/7.0	6.0/6.0	7.0/7.0	6.0/6.0	7.0/7.0	6.0/6.0	7.0/7.0	5.0/6.0	7.0/7.0	6.0/6.0	7.0/7.0	6.0/6.0	7.0/7.0	5.0/6.0	7.0/7.0
	5.2	Lift speed,laden/unladen	m/s	0.087/0.133	0.087/0.133	0.129/0.198	0.129/0.198	0.108/0.160	0.108/0.160	0.098/0.160	0.098/0.160	0.087/0.133	0.087/0.133	0.129/0.198	0.129/0.198	0.108/0.160	0.108/0.160	0.098/0.160
	5.3	Lowering speed,laden/unladen	m/s	0.155/0.158	0.155/0.158	0.213/0.200	0.213/0.200	0.185/0.155	0.185/0.155	0.195/0.155	0.195/0.155	0.155/0.158	0.155/0.158	0.213/0.200	0.213/0.200	0.185/0.155	0.185/0.155	0.195/0.155
	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	8/16	5/16	8/16
Electric engine	6.1	Drive motor rating S2 60 min	kW	2.2	1.5	2.2	1.5	2.2	1.5	2.2	2.2	2.2	1.5	2.2	1.5	2.2	1.5	2.2
	6.2	Lift motor rating at S3 15%	kW	2.2	2.2	3	3	3	3	3	3	2.2	2.2	3	3	3	3	3
		Steering motor power	kW	0.2		0.2		0.2		0.2		0.2		0.2		0.2		0.2
	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	24/240	24/280	24/240	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
	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
★ CE model





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

LET THE LITHIUM POWER BE REVEALED



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

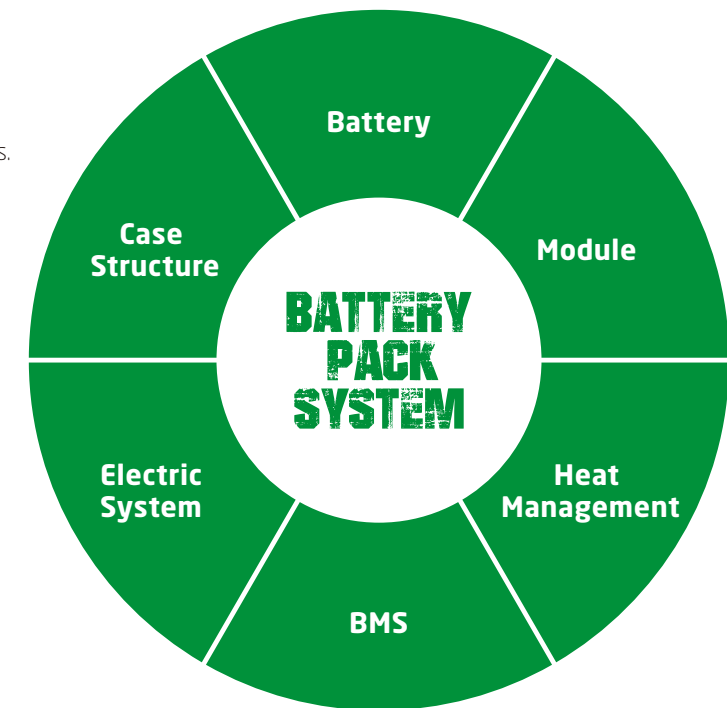


**5 YEARS
WARRANTY**

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		CPDB08-AC2S-I* CPDB08-AZ3S-I	CPDB12-AC2S-I* CPDB12-AZ3S-I	CPDB16-AC2S-I* CPDB16-AZ3S-I	CPDB20-AC2S-I* CPDB20-AZ3S-I
Li-Ion battery	V/Ah	24/125	24/125	24/125	24/125
Li-Ion battery,Optional	V/Ah	24/228	24/228	24/228	24/228
Titans charger		SPC-24100	SPC-24100	SPC-24100	SPC-24100

Note: * CE model



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.

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.

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

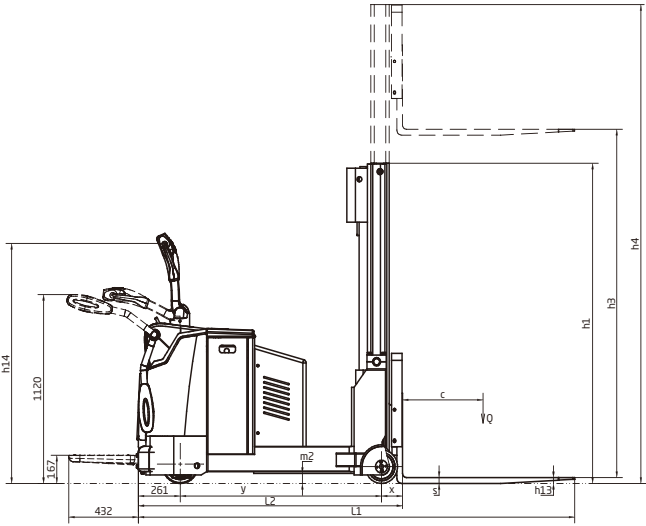
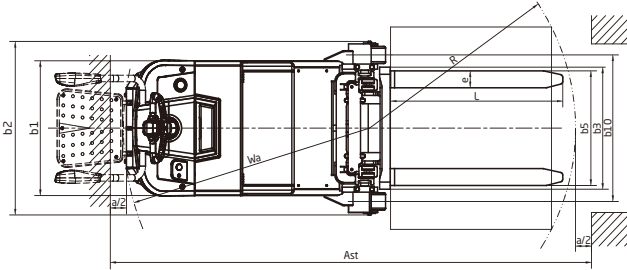
Options

- / 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°/ Backword 6°
- / Different length of fork
- / Load backrest

A Series Electric counterbalanced stacker

Distinguishing marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer’s type designation		CPDB08-AC2S* CPDB08-AZ3S	CPDB12-AC2S* CPDB12-AZ3S	CPDB16-AC2S* CPDB16-AZ3S	CPDB20-AC2S* CPDB20-AZ3S
	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 (t)	0.8	1.2	1.6	2.0
	1.6	Load centre distance	c(mm)	500	500	500	500
	1.8	Load distance, centre of drive axle to fork	x(mm)	131	131	141	151
	1.9	Wheelbase	y(mm)	1023	1150	1371	1571
Weights	2.1	Service Weight incl.battery(see line6.5)	kg	1800	2030	2240	2316
	2.2	Axle loading,laden front/rear	kg	420/2180	310/2840	450/3200	531/3595
	2.3	Axle loading,unladen front/rear	kg	935/865	1090/860	1150/900	1189/937
Wheels, Chassis	3.1	Tyres:solid rubber,superelastic,pneumatic,polyurethane		PU	PU	PU	PU
	3.2	Tyre size, front	mm	Φ230×75	Φ230×75	Φ250×100	Φ250×100
	3.3	Tyre size, rear	mm	Φ200×100	Φ200×100	Φ200×100	Φ200×100
	3.5	Wheels, number front / rear (x = driven wheels)		1×/2	1×/2	1×/2	1×/2
	3.6	Tread, front	b10 (mm)	870	870	870	870
	4.2	Height,mast lowered	h1 (mm)	1892	1892	1892	1997
Basic Dimensions	4.4	Lift	h3 (mm)	2700	2700	2700	2700
	4.9	Height of tiller in drive position min./max.	h14(mm)	1115/1420	1115/1420	1115/1420	1115/1420
	4.15	Height, lowered	h13 (mm)	35	35	35	45
	4.19	Overall length	l1 (mm)	2485 ¹⁾	2612 ¹⁾	2822 ¹⁾	3032 ¹⁾
	4.20	Length to face of forks	l2 (mm)	1415 ¹⁾	1542 ¹⁾	1752 ¹⁾	1962 ¹⁾
	4.21	Overall width	b1/b2(mm)	800/1030	800/1030	800/1030	800/1030
	4.22	Fork dimensions	s/e/l (mm)	35/100/1070	35/100/1070	35/100/1070	45/100/1070
	4.24	Fork-carriage width	b3(mm)	700	700	700	700
	4.25	Distance between fork-arms	b5 (mm)	210-680	210-680	210-680	210-680
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	60	60	60	60
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	2760 ¹⁾	2810 ¹⁾	3019 ¹⁾	3228 ¹⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	2870 ¹⁾	2920 ¹⁾	3129 ¹⁾	3339 ¹⁾
Performance Data	4.35	Turning radius	Wa (mm)	1380	1430	1630	1830
	5.1	Travel speed, laden/unladen	km/h	5.5/6.0	5.5/6.0	5.5/6.0	5.5/6.0
	5.2	Lift speed, laden/unladen	m/s	0.160/0.235	0.145/0.220	0.135/0.230	0.110/0.180
	5.3	Lowering speed, laden/unladen	m/s	0.200/0.200	0.200/0.200	0.200/0.200	0.200/0.200
Electric-motor	5.7	Gradeability, laden/unladen	%	6/10	6/10	6/10	6/10
	6.1	Drive motor rating S2 60 min.	kW	1.5	1.5	3	3
	6.2	Lift motor rating at S3 15%	kW	2.2	3.2	3.2	3.2
	6.4	Battery voltage/nominal capacity K5	(V)/(Ah)	24/240	24/280	24/350	24/350
Others	6.5	Battery weight	kg	215	250	300	300
	8.1	Type of drive control		CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI

Note:1).Triplex mast +21mm
Specifications are subject to change without notice.
★ CE model



0.8t/1.2t/1.6t Mast specification

Type	Fork lift height	Max. fork height (h ₃ +h ₁₃)	Mast lowered h ₁	Mast extended h ₄	Free lift	Capacity load capacity at 500mm		
	h ₃					0.8t	1.2t	1.6t
	mm	mm	mm	mm	mm	kg	kg	kg
Wide view mast	2000	2035	1542	2542	0	800	1200	1600
	2500	2535	1792	3042	0	800	1200	1600
	2700	2735	1892	3242	0	800	1200	1600
	3000	3035	2042	3542	0	800	1200	1600
	3300	3335	2192	3842	0	800	1200	1600
	3500	3535	2292	4042	0	800	1200	1600
	3600	3635	2342	4142	0	700	1200	1600
	3700	3735	2392	4242	0	680	1180	1540
	3800	3835	2442	4342	0	660	1150	1480
	4000	4035	2642	4642	0	620	1100	1400
	4300	4335	2792	4942	0	530	1050	1340
	4500	4535	2892	5142	0	440	1000	1300
Wide view full free duplex mast	2000	2035	1595	2595	1035	800	1200	1600
	2500	2535	1845	3095	1285	800	1200	1600
	2700	2735	1945	3295	1385	800	1200	1600
	3000	3035	2095	3595	1535	800	1200	1600
	3300	3335	2245	3895	1685	800	1200	1600
	3500	3535	2345	4095	1785	800	1200	1600
	3600	3635	2395	4195	1835	700	1200	1600
Wide view full free triplex mast	3500	3535	1844	4214	1165	800	1200	1600
	3700	3735	1909	4409	1235	680	1180	1540
	4000	4035	2009	4709	1335	620	1100	1400
	4300	4335	2109	5009	1435	530	1050	1340
	4500	4535	2159	5159	1535	440	1000	1300
	4700	4735	2259	5459	1535	380	950	1220
	5000	5035	2354	5744	1645	300	800	1000
	5200	5235	2409	5909	1735	—	680	850
	5500	5535	2509	6209	1835	—	550	700

2.0t Mast specification

Type	Fork lift height	Max. fork height (h ₃ +h ₁₃)	Mast lowered h ₁	Mast extended h ₄	Free lift	Capacity load capacity at 500mm
	h ₃					2.0t
	mm	mm	mm	mm	mm	kg
Wide view mast	2000	2045	1647	2647	0	2000
	2500	2545	1897	3147	0	2000
	2700	2745	1997	3347	0	2000
	3000	3045	2147	3647	0	2000
	3300	3345	2297	3947	0	2000
	3500	3545	2397	4147	0	2000
	3600	3645	2447	4247	0	1950
	3700	3745	2497	4347	0	1900
	3800	3845	2547	4447	0	1840
	4000	4045	2747	4747	0	1800
	4300	4345	2897	5047	0	1680
	4500	4545	2997	5247	0	1600
Wide view full free duplex mast	2000	2045	1700	2700	1045	2000
	2500	2545	1950	3200	1295	2000
	2700	2745	2050	3400	1395	2000
	3000	3045	2200	3700	1545	2000
	3300	3345	2350	4000	1695	2000
	3500	3545	2450	4200	1795	2000
	3600	3645	2500	4300	1845	1950
Wide view full free triplex mast	3500	3545	1944	4314	1175	2000
	3700	3745	2009	4509	1245	1900
	4000	4045	2109	4809	1345	1800
	4300	4345	2209	5109	1445	1680
	4500	4545	2259	5259	1545	1600
	4700	4745	2359	5559	1545	1480
	5000	5045	2454	5844	1655	1200
	5200	5245	2509	6009	1745	1000
	5500	5545	2609	6309	1845	800



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.



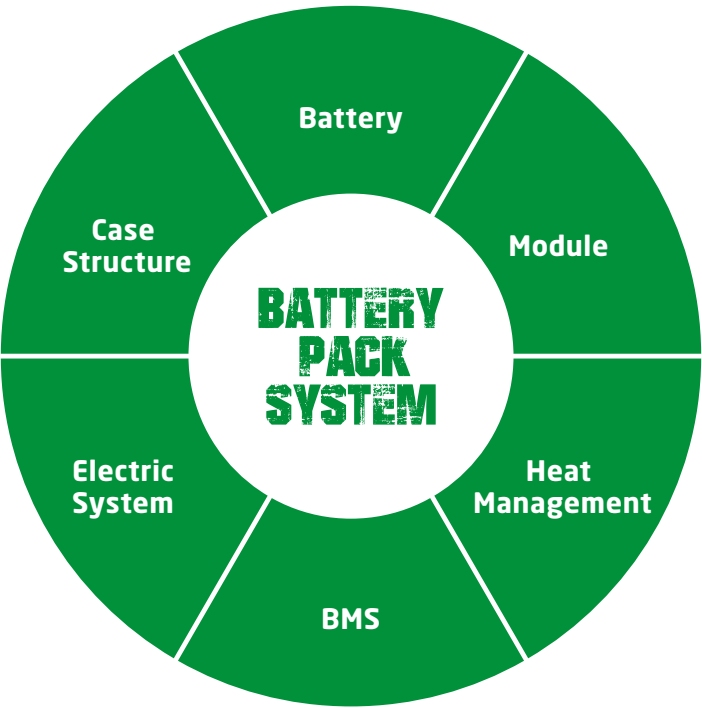
HANGCHA provides Li-Ion battery (LiFePO4) with 5 years or 10000 hours warranty.



INNOVATIVE SOLUTIONS NEW POWER NOW

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Lead-acid batteries
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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-AC2S-LI*	CDD14-AC2S-LI*	CDD16-AC2S-LI*
Li-Ion battery	V/Ah	24/125	24/125	24/125
Li-Ion battery,Optional	V/Ah	24/228	24/228	24/228
Titans charger		SPC-24100	SPC-24100	SPC-24100

Note: * CE model

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

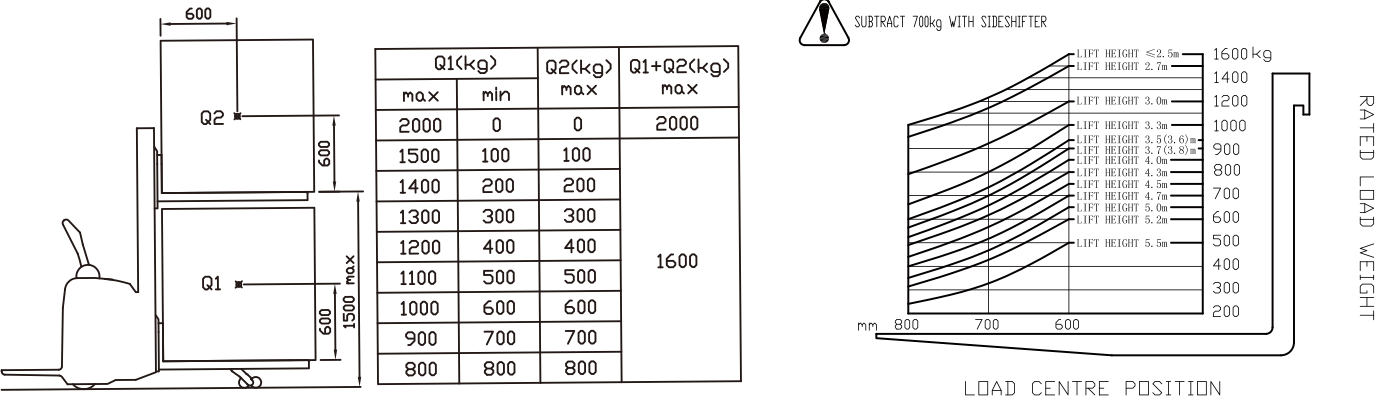
Type	Fork lift height h ₃	Max.fork height (h ₃ +h ₁₊₃)	Mast lowered h ₁	Mast extended h ₄	Free lift height	Load capacity at 600mm		
						1.2t	1.4t	1.6t
	mm	mm	mm	mm	mm	kg	kg	kg
Wide view duplex mast	2000	2090	1582	2582	90	1200	1400	1600
	2500	2590	1832	3082	90	1200	1400	1600
	2700	2790	1932	3282	90	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
Full free duplex mast	4300	4390	2832	4982	90	750	750	800
	4500	4590	2932	5182	90	700	700	750
	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
Full free triplex mast	3300	3390	2285	3935	1740	950	950	1000
	3500	3590	2385	4135	1840	900	900	940
	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

Characteristics	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation		CDD12-AZ3S-L CDD12-AC2S-L*	CDD14-AZ3S-L CDD14-AC2S-L*	CDD16-AZ3S-L CDD16-AC2S-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	1350
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 ₁₀ (mm)	520	520	520
	3.7	Tread, rear	b ₁₁ (mm)	385	385	385
Dimensions	4.2	Height, mast lowered	h ₁ (mm)	1932	1932	1932
	4.3	Free lift	h ₂ (mm)	0	0	0
	4.4	Lift	h ₃ (mm)	2700	2700	2700
	4.5	Height, mast extended	h ₄ (mm)	3282	3282	3282
	4.6	Initial lift	h ₅ (mm)	125	125	125
	4.15	Height, lowered	h ₁₊₃ (mm)	90	90	90
	4.19	Overall length (pedal folded)	l ₁ (mm)	2135	2135	2135
	4.20	Length to face of forks	l ₂ (mm)	985	985	985
	4.21	Overall width	b ₁ (mm)	800	800	800
	4.22	Fork dimensions DIN ISO 2331Fork 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 ₂ (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
	6.1	Drive motor rating S2 60 min	kW	2.2	2.2	2.2
Electric-engine	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

Note: * CE model

CAPACITY 1.6T





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

with capacities of 1,200 to 1,600kg

The A series pallet stacker with reach fork 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

- / 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

LITHIUM POWERED



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

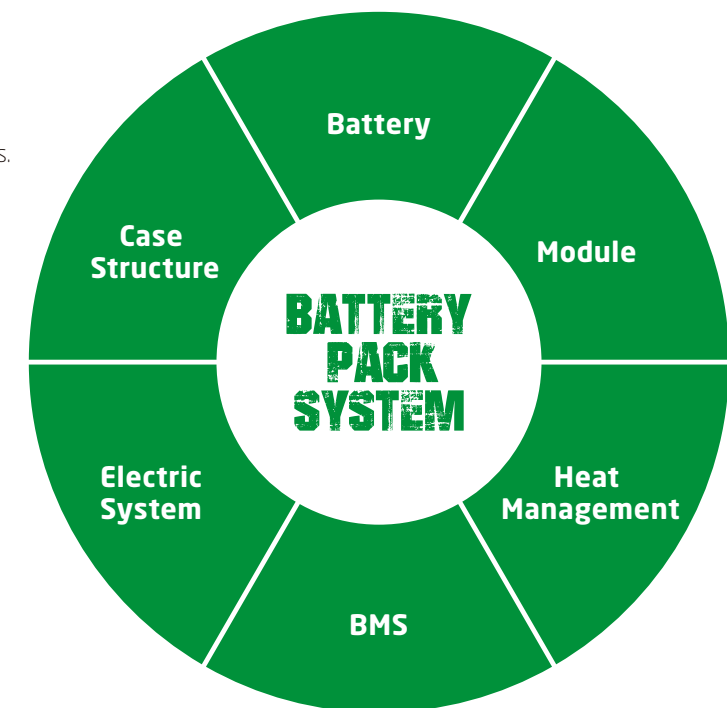


**5 YEARS
WARRANTY**

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		CQDB12-AC2S-IJ*	CQDB16-AC2S-IJ*
Li-Ion battery	V/Ah	24/125	24/125
Li-Ion battery,Optional	V/Ah	24/228	24/228
Titans charger		SPC-24100	SPC-24100

Note: * CE model



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.

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 atuomatically 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



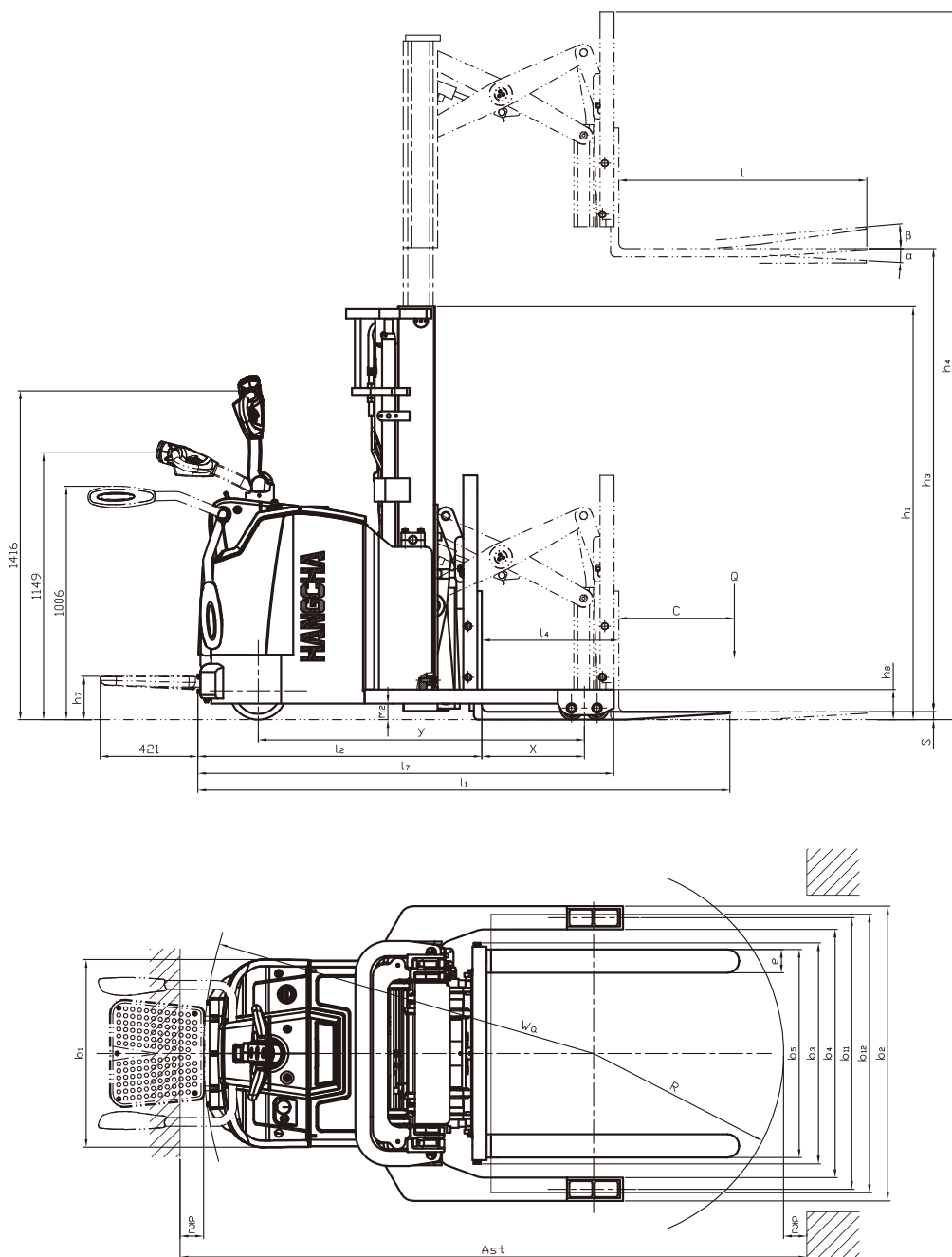
A Series High Range Stand-on Pallet Stacker With Reach Fork

Distinguishing marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CQDB12-AC2S-J* CQDB12-AZ3S-J	CQDB16-AC2S-J* CQDB16-AZ3S-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	Q (kg)	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
Weight	2.1	Service Weight	kg	1870	2000
Tyres,chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane
	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 ₁₀ (mm)	0	0
	3.7	Tread, rear	b ₁₁ (mm)	1170	1170
	4.1	Tilt of fork carriage forward/backward	α/β(°)	3/5	3/5
Dimensions	4.2	Height ,mast lowered	h ₁ (mm)	2040	2040
	4.4	Lift	h ₃ (mm)	2700	2700
	4.5	Height, mast extended	h ₄ (mm)	3752	3752
	4.8	stand height	h ₇ (mm)	185	185
	4.10	Height of wheel arms	h ₈ (mm)	130	130
	4.19	Overall length	l ₁ (mm)	2295	2295
	4.20	Length to face of forks	l ₂ (mm)	1225	1225
	4.21	Overall width	b ₁ /b ₂ (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 ₃ (mm)	920	920
	4.25	Distance between fork-arms	b ₅ (mm)	200-896	200-896
	4.26	Distance between wheel arms	b ₄ (mm)	1070	1070
	4.28	Reach distance	l ₄ (mm)	590	590
	4.32	Ground clearance, centre of wheelbase	m ₂ (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	W _a (mm)	1682	1682
	4.37	Length across wheel arms	l ₇ (mm)	1794	1794
Performance data	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
	5.10	Service brake		Electromagnetic braking	Electromagnetic braking
	6.1	Drive motor rating S2 60 min	kW	1.5	3
Electric-engine	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
Addition data	8.1	Type of drive control		AC CURTIS AC ZAPI	AC CURTIS AC ZAPI
	10.5	Steering design		EPS	EPS

Note: * CE model

1.2t/1.6t Mast specification

Type	Fork lift height h ₃	Mast lowered h ₁	Mast extended h ₄	Free lift height	Capacity	
					Load capacity at 600mm	
					1.2t kg	1.6t kg
Wide view mast	mm	mm	mm	mm		
	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

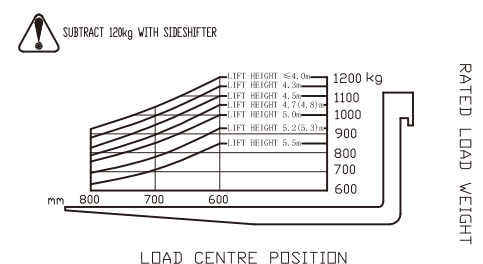


A Series High Range Stand-on Pallet Stacker With Mast Move

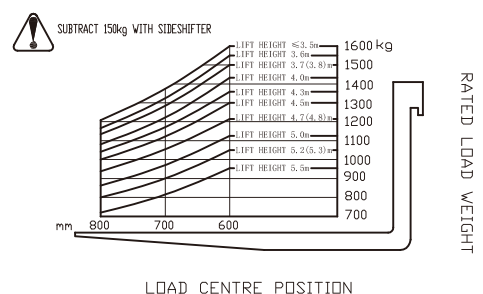
with capacities of 1,200 to 2,000kg

The truck combines benefits of regular stacker and counterbalanced stacker. It can be used for non-standard pallets, enclosed pallets, and enclose 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.

RATED CAPACITIES AND LOAD CENTRES GRAPH



RATED CAPACITIES AND LOAD CENTRES GRAPH



Li-Ion POWERED



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

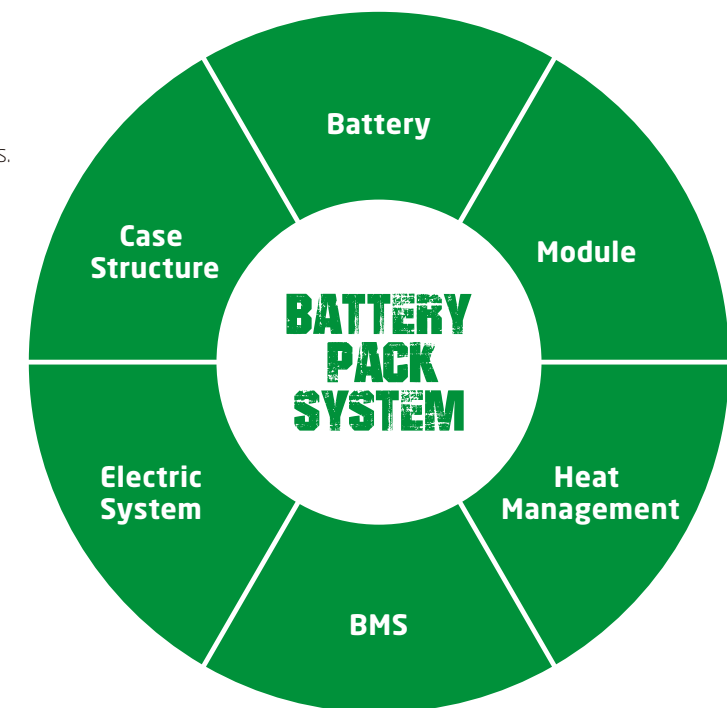


**5 YEARS
WARRANTY**

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		CQDB12-AC2S-I*	CQDB16-AC2S-I*	CQDB20-AC2S-I*
Li-Ion battery	V/Ah	24/125	24/125	24/125
Li-Ion battery,Optional	V/Ah	24/228	24/228	24/228
Titans charger		SPC-24100	SPC-24100	SPC-24100

Note: * CE 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.
- / The electronic limit system can reduce vibration and noise when mast move forward.

Options

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

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
- / The electronic limitation to be acted when mast move forward



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

- / Three-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



BUCHER hydraulic unit



Multi-function tiller

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

Distinguishing marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation		CQDB12-AC2S* CQDB12-AZ3S	CQDB16-AC2S* CQDB16-AZ3S	CQDB20-AC2S* CQDB20-AZ3S
	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)	1200	1600	2000
	1.6	Load centre distance	c(mm)	500	500	500
	1.8	Load distance, centre of load axle to fork	x (mm)	450	450	440
	1.9	Wheelbase	y (mm)	1311	1311	1511
Weight	2.1	Service weight	kg	1800	2000	2200
Tyres,chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane
	3.2	Tyre size, front	mm	φ250×80	φ250×80	φ250×80
	3.3	Tyre size, rear	mm	φ210×85	φ210×85	φ210×85
	3.5	Wheels, number front/rear (×=driven wheels)		1×/2	1×/2	1×/2
	3.7	Tread, rear	b11 (mm)	981	981	981
Dimensions	4.1	Tilt of fork carriage forward/backward	α/β(°)	3/5	3/5	3/5
	4.2	Height, mast lowered	h1 (mm)	1930	1930	2035
	4.4	Lift	h3 (mm)	2700	2700	2700
	4.5	Height, mast extended	h4 (mm)	3655	3655	3655
	4.8	Stand height	h7(mm)	170	170	170
	4.10	Height of wheel arms	h8 (mm)	226	226	226
	4.19	Overall length	l1 (mm)	2202	2202	2412
	4.20	Length to face of forks	l2 (mm)	1132	1132	1342
	4.21	Overall width	b1/b2(mm)	1040/1074	1040/1074	1040/1074
	4.22	Fork dimensions	s/e/l (mm)	35/100/1070	35/100/1070	45/100/1070
	4.24	Fork-carriage width	b3(mm)	902	902	902
	4.25	Distance between fork-arms	b5 (mm)	200-750	200-750	200-750
	4.26	Distance between wheel arms	b4(mm)	772	772	772
	4.28	Reach distance	l4(mm)	590	590	590
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	55	55	55
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	2617	2617	2817
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	2654	2654	2854
	4.35	Turning radius	Wa (mm)	1600	1600	1800
	4.37	Length across wheel arms	l7(mm)	1704	1704	1904
Performance data	5.1	Travel speed, laden/unladen	km/h	5.5/6.0	5.5/6.0	5.5/6.0
	5.2	Lift speed, laden/unladen	m/s	0.140/0.200	0.110/0.170	0.100/0.155
	5.3	Lowering speed, laden/unladen	m/s	0.190/0.155	0.175/0.130	0.175/0.130
	5.4	Reaching speed, laden/unladen	m/s	0.100/0.100	0.100/0.100	0.100/0.100
	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	1.5	1.5	1.5
	6.2	Lift motor rating at S3 15%	kW	3	3	3
	6.4	Battery voltage/nominal capacity K5	V/Ah	24/280	24/340	24/340
	6.5	Battery weight	kg	250	280	280
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

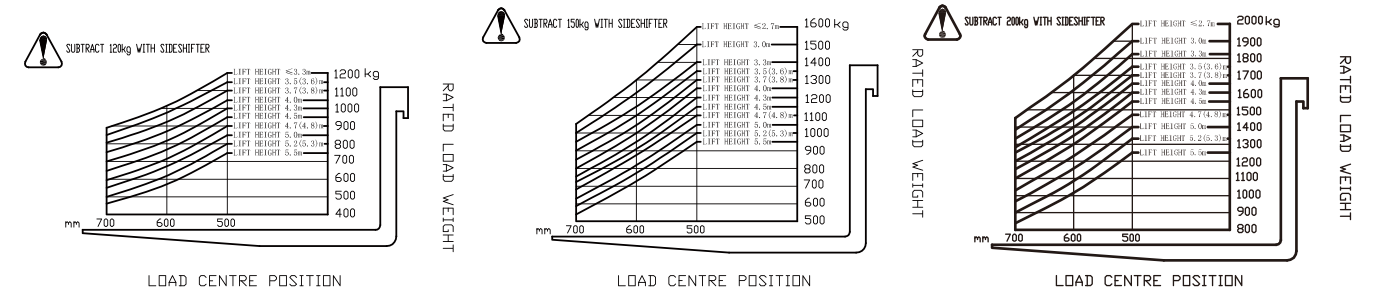
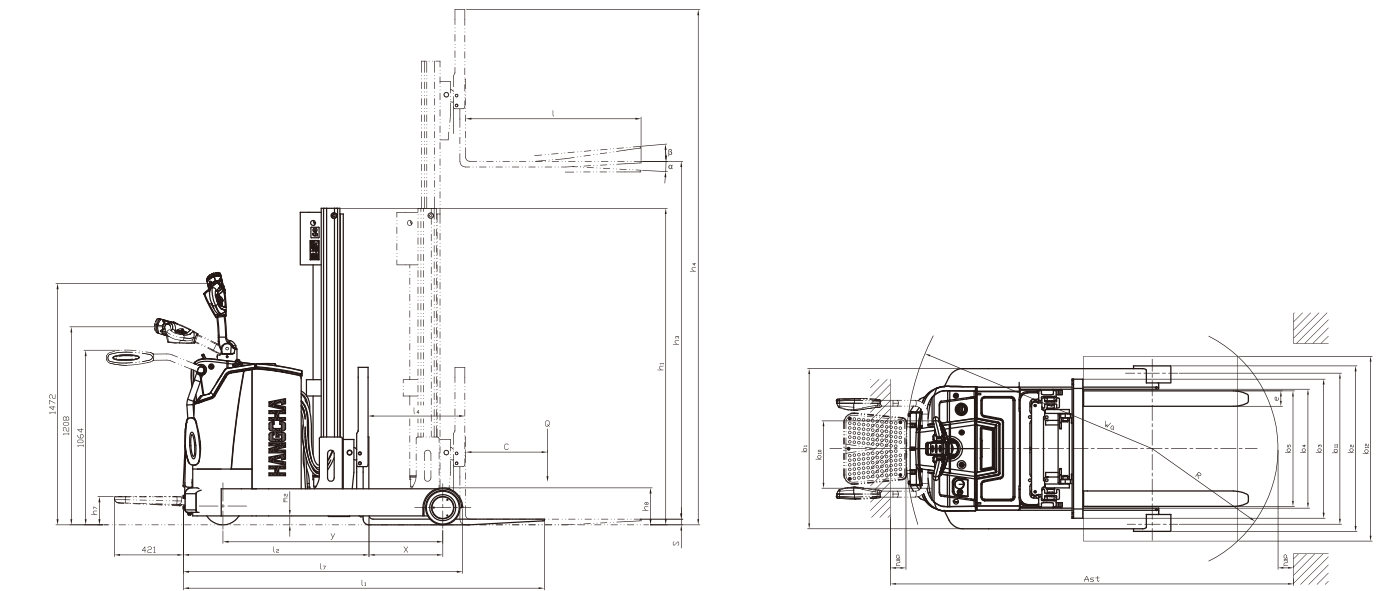
Note: * CE model

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	
					1.2t	1.6t
Wide view mast	mm	mm	mm	mm	kg	kg
	2000	1580	2955	105	1200	1600
	2500	1830	3455	105	1200	1600
	2700	1930	3655	105	1200	1600
	3000	2080	3955	105	1200	1500
	3300	2230	4255	105	1200	1400
	3500	2330	4455	105	1150	1350
	3600	2380	4555	105	1150	1350
	3700	2430	4655	105	1100	1300
	3800	2480	4755	105	1100	1300
	4000	2680	4955	105	1050	1250
Wide view full free triplex mast	4300	2830	5255	105	1000	1200
	4500	2930	5455	105	950	1150
	3500	1875	4455	920	1150	1350
	3700	1940	4655	985	1100	1300
	4000	2040	4955	1085	1050	1250
	4300	2140	5255	1185	1000	1200
	4500	2190	5455	1235	950	1150
	4700	2290	5655	1335	900	1100
	5000	2390	5965	1435	850	1050
	5200	2440	6155	1485	800	1000
	5500	2540	6455	1585	750	950

2.0t Mast specification

Type	Fork lift height h3	Mast lowered h1	Mast extended h4	Free lift height	Capacity	
					Load capacity at 500mm	
					2.0t	
Wide view mast	mm	mm	mm	mm	kg	
	2000	1685	2955	115	2000	
	2500	1935	3455	115	2000	
	2700	2035	3655	115	2000	
	3000	2185	3955	115	1900	
	3300	2335	4255	115	1820	
	3500	2435	4455	115	1750	
	3600	2485	4555	115	1750	
	3700	2535	4655	115	1700	
	3800	2585	4755	115	1700	
	4000	2785	4955	115	1650	
Wide view full free triplex mast	4300	2935	5255	115	1600	
	4500	3035	5455	115	1550	
	3500	1975	4455	1020	1750	
	3700	2040	4655	1085	1700	
	4000	2140	4955	1185	1650	
	4300	2240	5255	1285	1600	
	4500	2290	5455	1335	1550	
	4700	2390	5655	1435	1480	
	5000	2485	5965	1530	1400	
	5200	2540	6155	1585	1330	
	5500	2640	6455	1685	1250	





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.



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



Tiller

Safety

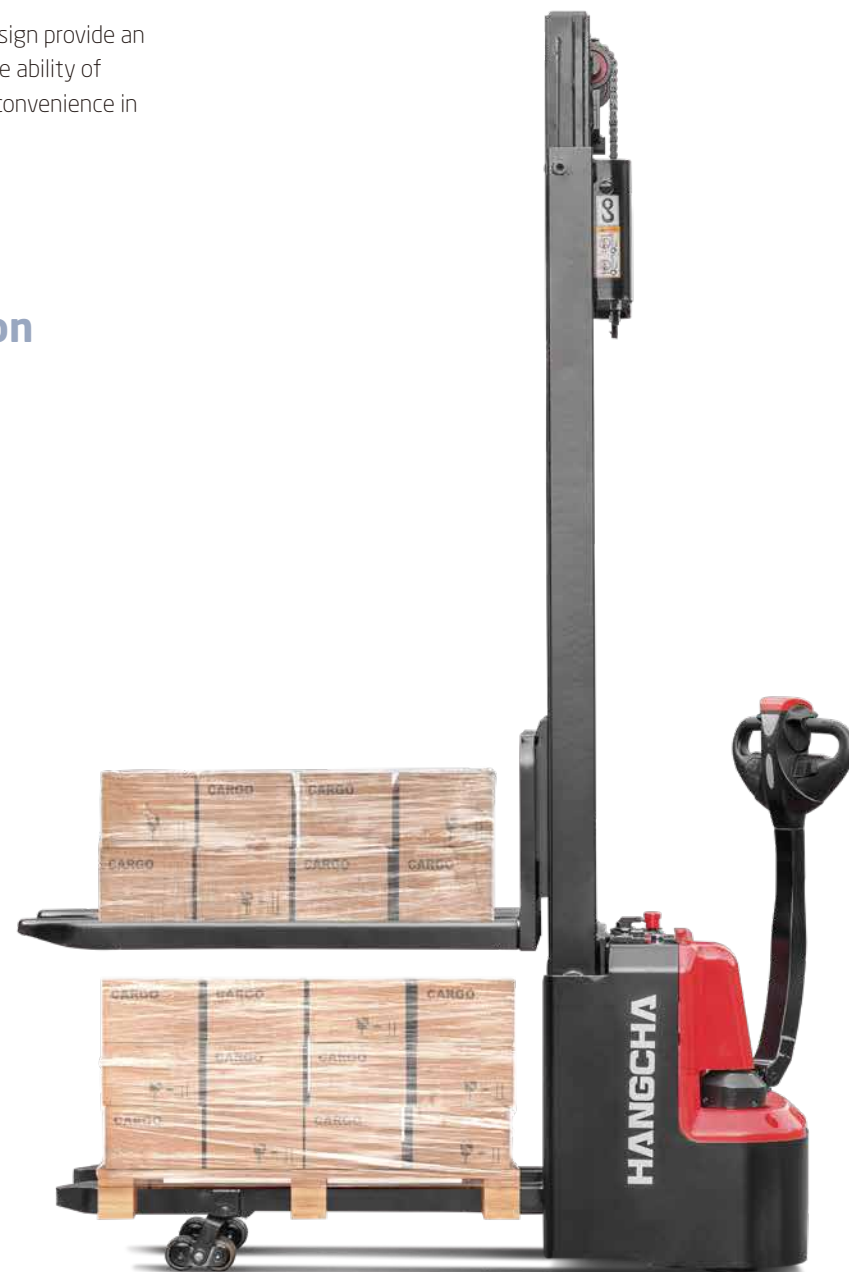
- / Three braking system of regenerative braking, reverse current braking, parking brake, insures the safe operation.
- / Anti-slope on gradient can keep the safety.
- / The emergency button on the tiller head can effectively avoid the harm to the driver.
- / The standard equipped electronic lifting 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



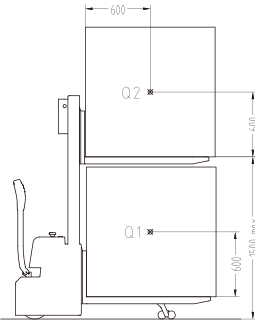
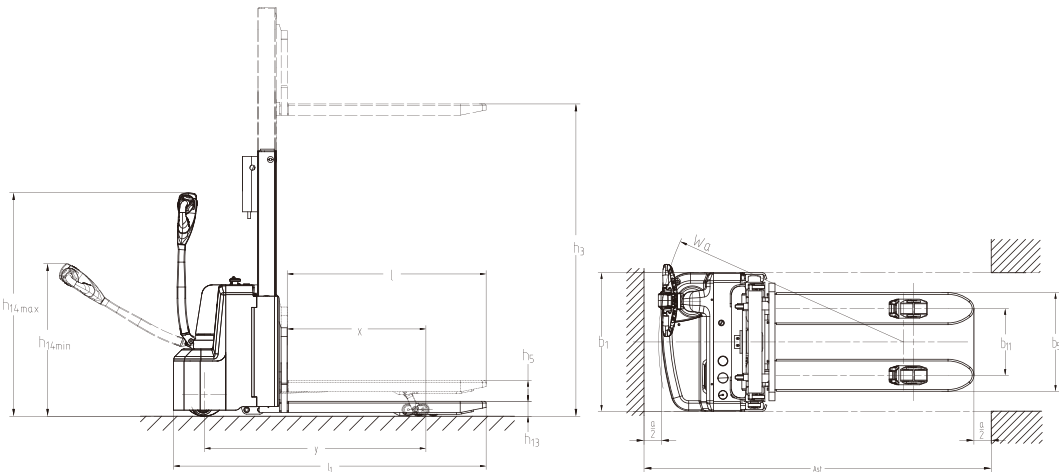
A Series Mini Range Pallet Stacker With Initial Lift Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CDD10-AMC2-L	CDD12-AMC2-L
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Pedestrian	Pedestrian
	1.5	Rated capacity/rated load	Q (kg)	1000	1200
	1.6	Load centre distance	c (mm)	600	600
	1.9	Wheelbase	y (mm)	1281	1281
Weight	2.1	Service Weight(Including battery)	kg	760	760
		Battery Weight	kg	66	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 ₁₀ (mm)	520	520
	3.7	Tread, rear	b ₁₁ (mm)	385	385
Dimensions	4.4	Lift	h ₃ (mm)	3000	3000
	4.6	initial lift	h ₅ (mm)	120	120
	4.9	Height drawbar in driving position min./max.	h ₁₄ (mm)	720/1220	720/1220
	4.15	Fork height,lowered	h ₁₃ (mm)	86	86
	4.19	Overall length(folded pedal)	l ₁ (mm)	1807	1807
	4.21	Overall width	b ₁ (mm)	800	800
	4.22	Fork dimensions	s/e/l (mm)	60/185/1150	60/185/1150
	4.25	Distance between fork-arms	b ₅ (mm)	570	570
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	21	21
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm)	2010 ^{1) 3)}	2010 ^{1) 3)}
Performance data	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm)	2060 ^{2) 3)}	2060 ^{2) 3)}
	4.35	Turning radius	W _a (mm)	1415 ³⁾	1415 ³⁾
	5.1	Travel speed,laden/unladen	km/h	6/6	6/6
	5.2	Lift speed,laden/unladen	m/s	0.115/0.150	0.110/0.150
	5.3	Lowering speed,laden/unladen	m/s	0.140/0.135	0.140/0.135
Electric engine	5.8	Max Gradeability,laden/unladen	%	8/16	8/16
	6.1	Drive motor rating S2 60 min	kW	1.1	1.1
	6.2	Lift motor rating at S3 15%	kW	2.2	2.2
	6.4	Battery voltage,rated capacity	V/Ah	2x12/106	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 ₃	Max. fork height (h ₃ +h ₁₃)	Lowered Height h ₁	Extended Height h ₄	Free lift	Load Capacity at 600mm	
						1.0t	1.2t
Single cylinder duplex mast	mm	mm	mm	mm	mm	Kg	Kg
	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) max	Q1+Q2(kg) max
max	min		
1200	0	0	1200
1100	100	100	1200
1000	200	200	
900	300	300	
800	400	400	
700	500	500	
600	600	600	



XC Series Reach Truck
With Lithium Power
with capacities of 1,400 to 2,500kg

A NEW DIMENSION OF PERFORMANCE

XC SERIES REACH TRUCK WITH LITHIUM POWER

- / The XC series reach truck with lithium power fully utilize the advantages of lithium battery and achieve disruptive innovations in vehicle structure, functional configuration, performance parameters, ergonomics, and operating vision.
- / We cater for a wide range of applications whilst ensuring optimum energy efficiency. Regardless of your special requirements – whether confined spaces or lifting height reaches 13m, load capacity of up to 2,500 kg or individual customisation with various options – we have the truck you need.
- / Compact size of the lithium battery pack and breaking through the traditional structure design, makes the truck style more novel and more efficient.

MAXIMUM TRAVELLING SPEED

14km/h

MAXIMUM LIFTING SPEED

0.81m/s

HIGH RESIDUAL CAPACITY

6,500mm

MAXIMUM LOAD CAPACITY

2,500kg

MAXIMUM LIFT HEIGHT

13,000mm





BEING ENVIRONMENTALLY FRIENDLY, EFFICIENT AND DURABLE

- / CATL lithium battery is standard for all series, adopting 80V voltage system which can provides fast charging and long service life and less energy loss.
- / The special-shaped lithium battery pack design provides a large operating space in the cab and a broad view.



Charging port



Battery removal

 Working time **> 10h**

 Fast charging time **≤ 2h**

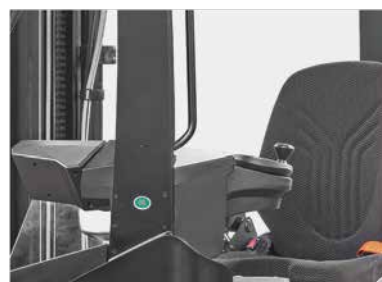
Lithium battery capacity		
1.4 t	Std.	80V/250Ah
1.6 t		
1.8 t		
2.0 t	Opt.	80V/404Ah
2.5 t		

Note: Std. 80V/250Ah, Work time > 6h;
Opt. 80V/404Ah, Work time >10h



A NOVEL PROFILE STYLE AND COMPACT INTERIOR DESIGN

With fewer exposed fasteners of the inside covers, the interior is compact and stylish.

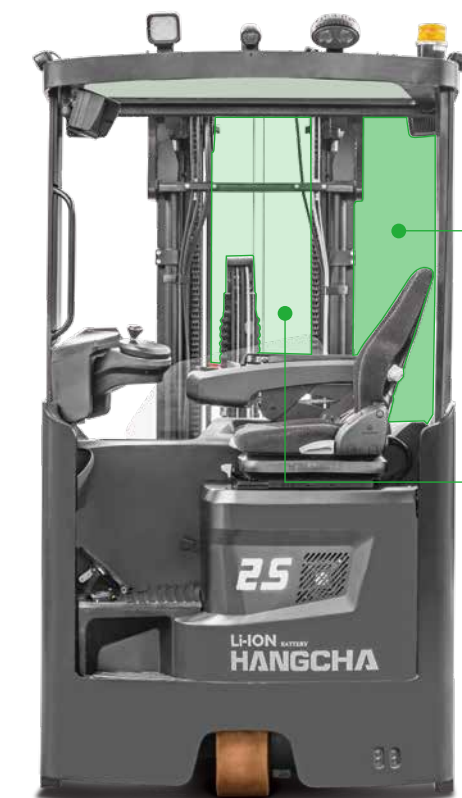


Thanks to the special-shaped design of the battery pack and the breakthrough in the body structure, which can provide a wider view.



The improved mast structure and piping arrangement enables a broader vision for stacking operations

/ The hydraulic tubing and the wires are on both sides of the mast, overlapping with the chain, making full use of the space and reducing the line of sight.



The compact mast design enables operator have a wider view around the outside of the mast.

The middle cylinder is arranged eccentrically to enable the driver to have a wider view around the inside of the mast.

EXCELLENT ERGONOMIC DESIGN



Steering wheel position can also be adjusted



The pedal height can be adjusted electrically

Dashboard angle adjustment

Control with a fingertip switch

Integral suspended seat

MULTIFUNCTIONAL INTERACTIVE COLOR-SCREEN INSTRUMENTS

The new multifunctional 4.3 inch color-screen instruments developed for the XC series reach truck have easier human-machine interfaces.



More status indication



- 1

1. Lifting height
2. Local time
3. Load weight
- 2

1. Driving mode
2. Fork action
3. Operating time
4. Maximum allowable lifting height
- 3

1. Steering mode
2. Battery power
3. Travelling speed
- 4

Various status signs and warning signs are displayed in a queue according to actual needs

More convenient shortcut button

Thanks to the integrated design of the instrument function buttons, the truck console saves a lot of physical buttons, making it more concise and efficient.



- 5

Height selection
- 6

Height limit
- 7

Lighting control
- 8

Battery removal
- 9

Optional function switching screen
- 10

↑ Button Driving mode switching
- 11

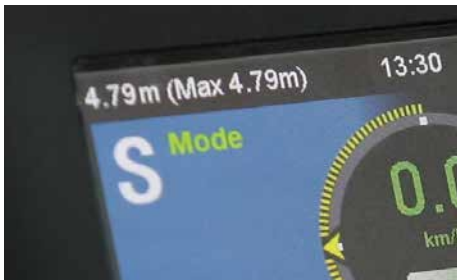
↓ Button Turtle speed mode

COMPREHENSIVELY IMPROVED FUNCTION CONFIGURATION



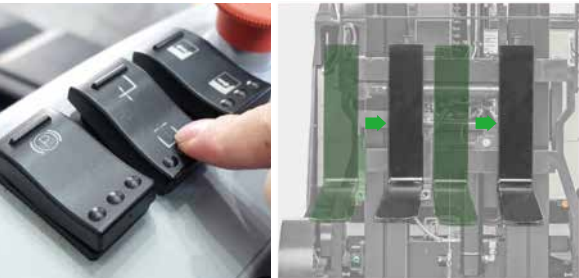
Height selection

Multiple heights can be pre-set on the instrument. After the function is enabled, when the fork is about to be lifted to the preset height, the lifting speed will gradually slow down and the fork will finally stop at the set height steadily.



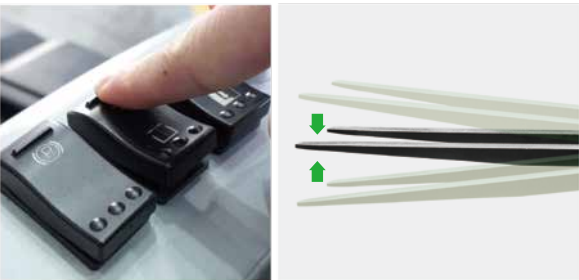
Height limit

After this function is enabled, when the fork is lifted to a certain height, this height will be set as the maximum allowable lifting height. Afterwards, whenever the fork is about to be lifted to this height, the lifting speed will gradually slow down and the fork will steadily finally stop at this height.



Central sideshift

Simple, reliable and fast: The central positioning of the sideshift occurs automatically, eliminating the time-consuming, cautious approach of the required position. (Only for fingertip system)



Horizontal fork

Particularly at high lift heights, the forks' tilt position is often very hard to detect. The automatic horizontal positioning significantly simplifies and accelerates pallet entry. (Only for fingertip system)



**Faster, easier and safer
stacking and retrieval
operations**

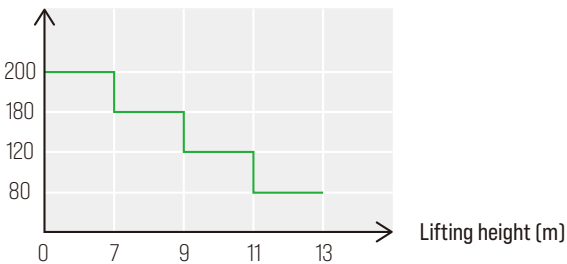


SAFETY FROM EVERY ANGLE

Drive control limit

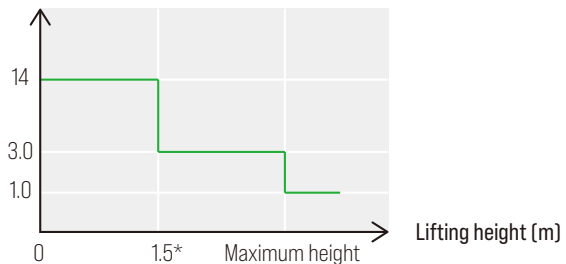
Drive control limits the travelling speed and traverse speed as soon as the forks are raised. This increases the safety when manoeuvring with a raised pallet in front of the storage rack, while still ensuring more sensitive manoeuvring during the work cycle.

Traverse speeds
(mm/s)



Note: The above table is only for 2.0/2.5t, the parameters of other models are not the same.

Travelling speed
(km/h)



*: 1.5m is only for the fingertip system.
The parameter of mechanical control system is the height of free lift.



The battery is in an inappropriate position and the indicator light is lit

Battery lock with creep speed interlock

Installed on the battery latch in the motor compartment. Monitors the locking of the battery pack. If the battery pack is not retracted or not locked, travel is restricted to creep speed.



EASY MAINTENANCE

The battery pack can be replaced quickly. The driver can unlock and remove the battery while sitting on his seat.

Remove battery pack step

1



Step on the unlocking pedal

2



Mast moves operating lever forward


3



Remove the battery


The hood can be easily dismantled and mounted to facilitate routine maintenance operations.

1




Dismount the plastic fasteners

2




Remove the hood

3




The main components are fully exposed

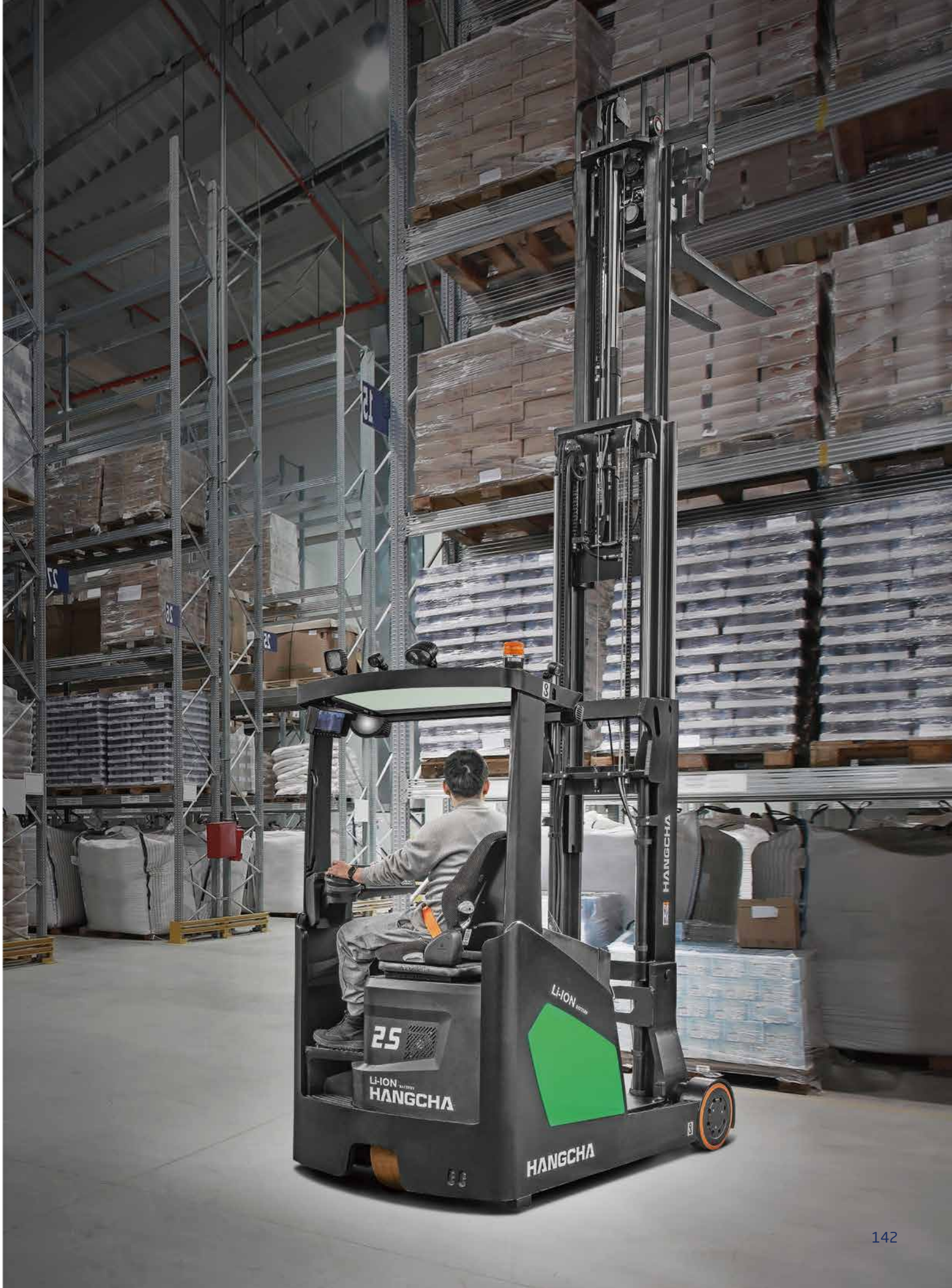
The seat can be turned open at a large angle, which is convenient for maintenance work.



Rotate the seat away



Special hinge design enables a larger opening angle (>180°)

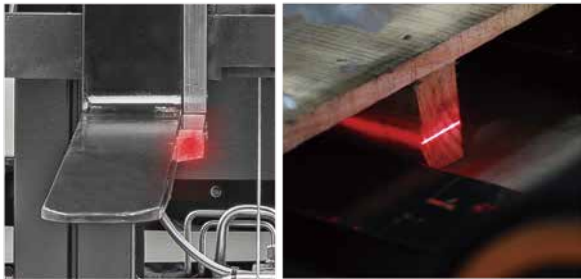


WE GIVE YOU ALL THE OPTIONS



Stacking and retrieval via video monitoring

Our video camera allows for the precise and quick access of extremely high locations. The position of the camera on the forks enables operators to efficiently and reliably control stacking and retrieval operations from their seating position/viewpoint. They no longer have to look up, which noticeably reduces the strain on their shoulders and neck. Also, information on the pallets is easily visible, even at great heights.



Easier stacking and retrieval with positioning laser

Our positioning lasers significantly simplify the stacking and retrieval process and increase the safety for load and rack. The laser sources are integrated into the fork tips, projecting a red line on the area ahead. This allows the operator to adjust the fork more accurately to be able to drive effortlessly into the pallet.



Easy access

Easy access protects the reach truck against unauthorised use. Authorisation management is directly controlled via the truck's display. Customised to your requirements and company size – you can choose between the key(Std.), PIN code and transponder.



Safety at any blind spots with Floor Spot

Floor Spot projects a blue dot on the floor around the truck. Especially at blind intersections or at the end of rack aisles, the Floor Spot alerts an approaching truck in time to respond.



100% clear view thanks to panorama roof panel

Maximum visibility: The panorama roof panel without cross beams provides maximum visibility of the goods and forks.



Optimum traction via traction control system

Optimum traction is ensured with braking of the drive wheel, which would otherwise spin on wet or dusty floors.



XC Series Reach Truck With Lithium Power Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.				
	1.2	Model		CQD14-XC5-SI* CQD14-XC5D-SI*	CQD16-XC5-SI* CQD16-XC5D-SI*	CQD18-XC5-SI* CQD18-XC5D-SI*	CQD20-XC5-SI* CQD20-XC5D-SI*	CQD25-XC5-SI* CQD25-XC5D-SI*
	1.3	Power unit		Li-ION battery	Li-ION battery	Li-ION battery	Li-ION battery	Li-ION battery
	1.4	Manual		Seated	Seated	Seated	Seated	Seated
	1.5	Rated capacity/rated load	Q(t)	1.4	1.6	1.8	2	2.5
	1.6	Load centre distance	c(mm)	600	600	600	600	600
	1.8	Load distance	x(mm)	360 ¹⁾⁷⁾¹¹⁾	410 ¹⁾⁷⁾¹¹⁾	385 ⁸⁾	362 ²⁰⁾	484 ²⁰⁾
	1.8.1	Load distance, mast reached forward	x1(mm)	211 ²⁾	211 ²⁾	203	232	232
	1.9	Wheelbase	y(mm)	1355	1405	1405	1471	1601
Weight	2.1	Net weight incl. battery (see row 6.5)	(kg)	3330	3370	3370	3470	3620
Tyres, chassis	3.1	Tyres		PU	PU	PU	PU	PU
	3.2	Tyre size, front		φ343×140	φ343×140	φ343×140	φ343×140	φ400×160
	3.3	Tyre size, rear		φ285×100	φ285×100	φ285×100	φ343×108	φ343×108
	3.5	Wheels, number front/rear (x = driven wheels)		1x/2	1x/2	1x/2	1x/2	1x/2
	3.7	Tread width, rear	b1(mm)	1174	1174	1174	1162	1162
Dimensions	4.1	Tilt of fork carriage forward/backward	α/β(°)	2.0/5.0	2.0/5.0	2.0/5.0	2.0/5.0	2.0/5.0
	4.2	Height, mast lowered	h1(mm)	2100	2100	2100	2100	2100
	4.3	Free lift	h2(mm)	105	105	110	110	110
	4.4	Lift	h3(mm)	3000	3000	3000	3000	3000
	4.5	Height, mast extended	h4(mm)	3965	3965	3965	3965	3965
	4.7	Height of overhead guard	h6(mm)	2263	2263	2263	2263	2263
	4.8	Seat height	h7(mm)	1159	1159	1159	1159	1159
	4.10	Height of support arms	h8(mm)	308	308	308	365.5	365.5
	4.19	Overall length	l1(mm)	2400 ³⁾⁸⁾¹²⁾	2400 ³⁾⁸⁾¹²⁾	2425 ⁷⁾	2514 ²¹⁾	2542 ²¹⁾
	4.20	Length to face of forks	l2(mm)	1250 ³⁾⁸⁾¹²⁾	1250 ³⁾⁸⁾¹²⁾	1275 ⁷⁾	1364 ²¹⁾	1392 ²¹⁾
	4.21	Overall width	b1/b2(mm)	1270/1270	1270/1270	1270/1270	1270/1270	1270/1270
	4.22	Fork dimensions	s/e/l(mm)	35×120×1150	35×120×1150	40×122×1150	40×122×1150	40×122×1150
	4.23	Fork carriage ISO 2328, class/type A, B		II A	II A	II A	II A	II A
	4.24	Fork-carriage width	b3(mm)	830	830	830	830	830
	4.25	Distance between fork-arms	b5(mm)	750	750	750	750	750
	4.26	Distance between wheel arms	b4(mm)	940	940	940	940	940
	4.28	Reach distance	l4(mm)	571 ⁴⁾⁷⁾¹³⁾	621 ⁴⁾⁷⁾¹³⁾	588 ⁸⁾	594 ²⁰⁾	716 ²⁰⁾
	4.32	Ground clearance, centre of wheelbase	m2(mm)	80	80	80	80	80
	4.33	Aisle width for pallets 1000 × 1200 sideways	Aa1(mm)	2687 ⁵⁾⁸⁾¹⁴⁾	2701 ⁵⁾⁸⁾¹⁴⁾	2719 ⁸⁾	2802 ²²⁾	2867 ²⁴⁾
	4.34	Aisle width for pallets 800 × 1200 lengthways	Aa1(mm)	2740 ⁶⁾¹⁰⁾¹⁵⁾	2745 ⁶⁾¹⁰⁾¹⁵⁾	2768 ¹⁰⁾	2855 ²³⁾	2896 ²⁵⁾
Performance data	5.1	Travel speed, laden/unladen	(km/h)	14/14	14/14	14/14	14/14	14/14
	5.2	Lift speed, laden/unladen	(m/s)	0.61/0.81	0.59/0.81	0.5/0.7	0.48/0.7	0.45/0.7
	5.3	Lowering speed, laden/unladen	(m/s)	XC4-0.52/0.52	XC4-0.52/0.52	XC4-0.52/0.52	XC4-0.52/0.52	XC4-0.52/0.52
				XC4D-0.56/0.56	XC4D-0.56/0.56	XC4D-0.56/0.56	XC4D-0.56/0.56	XC4D-0.56/0.56
	5.4	Traverse speed w. / w.o. load	(m/s)	0.24/0.24	0.24/0.24	0.2/0.2	0.2/0.2	0.2/0.2
	5.8	Max.gradeability, laden/unladen 5min	(%)	10.0/15.0	10.0/15.0	10.0/15.0	10.0/15.0	10.0/15.0
Electric-engine	5.10	Service brake		Electromagnetic	Electromagnetic+Mech.	Electromagnetic+Mech.	Electromagnetic+Mech.	Electromagnetic+Mech.
	6.1	Drive motor rating S2 60 min.	(kW)	8.1	8.1	8.1	8.1	8.1
	6.2	Lift motor rating at S3 15%	(kW)	20	20	20	20	20
	6.3	Battery as per DIN 43531 /35/36 A, B, C, no		no	no	no	no	no
	6.4	Battery voltage, nominal capacity	(V/Ah)	80/250	80/250	80/250	80/250	80/250
	6.4.1	Battery voltage, rated capacity, Optional	(V/Ah)	80/404	80/404	80/404	80/404	80/404
Addition data	6.5	Battery weight (±5%)	(kg)	275	275	275	360	360
	10.1	Operating pressure for attachments	(bar)	150	150	150	150	150
	10.2	Oil flow for attachments	(l/min)	18	18	18	18	18
	10.7	Sound pressure level LpAZ (at the driver's seat)	(db(A))	68	68	68	68	68

Note: 1) h3>7000mm:-25mm. 2) h3>7000mm:-8mm. 3) h3>7000mm:+25mm. 4) h3>7000mm:-33mm. 5) h3>7000mm:+19mm. 6) h3>7000mm:+23mm. 7) With optional battery 80V/404Ah,h3>7000mm:-90mm.
8) With optional battery 80V/404Ah, h3>7000mm: +90mm. 9) With optional battery 80V/404Ah, h3>7000mm: +68mm. 10) With optional battery 80V/404Ah, h3>7000mm: +82mm. 11) With optional battery 80V/404Ah,h3>7000mm:-115mm.
12) With optional battery 80V/404Ah, h3>7000mm: +115mm. 13) With optional battery 80V/404Ah, h3>7000mm: -123mm. 14) With optional battery 80V/404Ah, h3>7000mm: +87mm. 15) With optional battery 80V/404Ah, h3>7000mm: +105mm.
16) With optional battery 80V/404Ah:-90mm. 17) With optional battery 80V/404Ah: +90mm. 18) With optional battery 80V/404Ah: +67mm. 19) With optional battery 80V/404Ah: +81m. 20) h3≥12000mm:-150mm. 21) h3≥12000mm:+150mm.
22) h3≥12000mm:+115mm. 23) h3≥12000mm:+137mm. 24) h3≥12000mm:+105mm. 25) h3≥12000mm:+134mm;
★ CE model

Features

NO.	System	Features	CQD14/16/18/20/25-XC5-SI*	CQD14/16/18/20/25-XC5D-SI*
1	Control	Control with a mechanical control lever	●	/
2		Control with a fingertip switch	/	●
3		Height display	○ (Only for triplex mast, excluding the free lift range)	● (Including the free lift range)
4		Height selection	○ (Only for triplex mast, excluding the free lift range)	● (Including the free lift range)
5		Height limit	○ (Only for triplex mast, excluding the free lift range)	● (Including the free lift range)
6		Central sideshift	/	○
7		Horizontal fork alignment	/	○
8		Mast reach damping system	●	●
9		Electric lowering limit - Stop forks above outriggers if mast is retracted	○	○
10		Soft landing system	/	○
11		Lifting damping system	●	●
12		Drive control limit	●	●
13		Drive wheel skid control system	○	○
14		Battery lock with creep speed interlock	●	●
15		Travelling speed control at corner	●	●
16		180° steering mode	●	●
17		360° steering mode	○	○
18	Transmission system	ZF transmission	●	●
19	Electronic accessories	USB power socket	●	●
20		Fork positioning laser	○	○
21		Video monitoring	○	○
22		Keyed start	●	●
23		Start with a PIN code or by a card	○	○
24		Beep	○	○
25		Operating light (in the direction of the fork)	●	●
26		Operating light (in the reverse direction of the fork)	○	○
27		Alarm light	●	●
28		Blue light	○	○
29	Ergonomic design	Three-sided one line laser projection light	○	○
30		Electrical adjustment of pedal height	○	○
31		Adjustable steering wheel	●	●
32	Fault Diagnosis	Instrument angle adjustment	●	●
33		Suctioned oil filter clogging alarm	○	○
34	Seat	Backflow oil filter clogging alarm	○	●
35		Sequential Seat Belt Interlock System	●	●
36		BF6-3 suspension seat	●	/
37	Other	MS665/522 suspension seat	○	●
38		Panorama roof	○	○
39		PVC ceiling	○	○
40		Curved rearview mirror	○	○
41		Left and right rear view mirrors	○	○
42		Cold storage	○	○
43		Load backrest	●	●
44		Fire extinguisher	○	○
45		Electric fan	○	○
46		OPS system	●	●

Note: ● Standard; ○ Optional
★ CE model

1.4/1.6t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range α/β
	mm	mm	mm	mm	(°)
Wide view duplex mast	2700	1950	3665	105	2/5
	3000	2100	3965	105	2/5
	3300	2250	4265	105	2/5
	3500	2350	4465	105	2/5
	3600	2400	4565	105	2/5
	4000	2650	4965	105	2/5
	4300	2790	5265	105	2/5
	4500	2900	5465	105	2/5
	4800	3095	5765	105	2/5
	5000	3195	5965	105	2/5
Full free triple mast	4000	2030	4965	1065	2/5
	4500	2160	5465	1185	2/5
	5000	2300	5965	1335	2/5
	5500	2450	6465	1485	2/5
	6000	2625	6965	1660	2/5
	6500	2800	7465	1835	2/5
	7000	3000	7965	2035	2/5
	7500	3060	8465	2095	2/5
	8000	3250	8965	2285	2/5
	8500	3420	9465	2455	2/5
	9000	3580	9965	2615	2/5
	9500	3760	10465	2795	2/5
	10000	3920	10965	2955	2/5
	10500	4100	11465	3135	2/5
	11000	4300	11965	3335	2/5

2.0t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range α/β
	mm	mm	mm	mm	(°)
Wide view duplex mast	2700	1950	3665	110	2/5
	3000	2100	3965	110	2/5
	3300	2250	4265	110	2/5
	3500	2350	4465	110	2/5
	3600	2400	4565	110	2/5
	4000	2650	4965	110	2/5
	4300	2790	5265	110	2/5
	4500	2900	5465	110	2/5
	4800	3095	5765	110	2/5
	5000	3195	5965	110	2/5
Full free triple mast	4000	2085	4965	1120	2/5
	4500	2165	5465	1200	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4250	11465	3285	2/5
	11000	4450	11965	3485	2/5
	11500	4700	12465	3735	2/5
	12000*	4900	12965	3935	2/5
	12500*	5150	13465	4185	2/5
	13000*	5400	13965	4435	2/5

* When you choose the mast, the dimensions of the truck will be affected. Please refer to the performance parameter table for details.

1.8t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range α/β
	mm	mm	mm	mm	(°)
Wide view duplex mast	2700	1950	3665	110	2/5
	3000	2100	3965	110	2/5
	3300	2250	4265	110	2/5
	3500	2350	4465	110	2/5
	3600	2400	4565	110	2/5
	4000	2650	4965	110	2/5
	4300	2790	5265	110	2/5
	4500	2900	5465	110	2/5
	4800	3095	5765	110	2/5
	5000	3195	5965	110	2/5
Full free triple mast	4000	2085	4965	1120	2/5
	4500	2165	5465	1200	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4250	11465	3285	2/5
	11000	4450	11965	3485	2/5
	11500	4700	12465	3735	2/5

2.5t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range α/β
	mm	mm	mm	mm	(°)
Wide view duplex mast	2700	1950	3665	110	2/5
	3000	2100	3965	110	2/5
	3300	2250	4265	110	2/5
	3500	2350	4465	110	2/5
	3600	2400	4565	110	2/5
	4000	2650	4965	110	2/5
	4300	2790	5265	110	2/5
	4500	2900	5465	110	2/5
	4800	3095	5765	110	2/5
	5000	3195	5965	110	2/5
Full free triple mast	4000	2085	4965	1120	2/5
	4500	2165	5465	1200	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4300	11465	3335	2/5
	11000	4500	11965	3535	2/5
	11500	4800	12465	3835	2/5
	12000*	5000	12965	4035	2/5
	12500*	5300	13465	4335	2/5
	13000*	5600	13965	4635	2/5

* When you choose the mast, the dimensions of the truck will be affected. Please refer to the performance parameter table for details.

1.4t Residual Load Capacity Chart

Capacity(kg)		Load center distance(mm)						
		600	700	800	900	1000	1100	1200
Lifting height (mm)	≤6000	1400	1210	1070	920	780	660	550
	6500	1300	1120	990	840	720	600	490
	7000	1200	1030	910	770	650	540	430
	7500	1100	940	830	700	580	470	370
	8000	1050	900	790	660	550	440	350
	8500	1000	850	750	620	510	410	320
	9000	900	770	670	550	450	350	260
	9500	800	680	590	480	380	290	200
	10000	700	590	510	400	310	230	150
	10500	550	450	390	300	210	130	60
	11000	350	280	230	150	80	10	0

1.8t Residual Load Capacity Chart

Capacity(kg)		Load center distance(mm)						
		600	700	800	900	1000	1100	1200
Lifting height (mm)	≤6000	1800	1570	1390	1210	1050	900	780
	6500	1700	1480	1310	1130	980	840	720
	7000	1600	1390	1230	1060	910	780	660
	7500	1500	1300	1150	990	850	720	600
	8000	1450	1250	1110	950	810	690	570
	8500	1400	1210	1070	910	780	660	550
	9000	1300	1120	990	840	710	600	490
	9500	1200	1030	910	770	650	530	430
	10000	1100	940	830	700	580	470	370
	10500	950	810	710	590	480	380	290
	11000	750	630	550	440	350	260	170
	11500	550	450	390	300	210	130	60

2.5t Residual Load Capacity Chart

Capacity(kg)		Load center distance(mm)						
		600	700	800	900	1000	1100	1200
Lifting height (mm)	≤6500	2500	2200	1960	1730	1530	1360	1200
	7000	2450	2150	1920	1700	1500	1330	1170
	7500	2350	2060	1840	1620	1430	1260	1110
	8000	2300	2020	1800	1590	1400	1230	1080
	8500	2250	1970	1760	1550	1360	1200	1050
	9000	2150	1880	1680	1480	1300	1140	990
	9500	2050	1800	1600	1400	1230	1080	940
	10000	1950	1710	1520	1330	1160	1010	880
	10500	1800	1570	1400	1220	1060	920	790
	11000	1500	1300	1150	1000	860	730	620
	11500	1300	1130	990	850	720	610	500
	12000	1250	1080	950	810	690	580	470
	12500	1150	990	870	740	620	510	410
	13000	1000	860	750	630	520	420	330

1.6t Residual Load Capacity Chart

Capacity(kg)		Load center distance(mm)						
		600	700	800	900	1000	1100	1200
Lifting height (mm)	≤6000	1600	1390	1230	1060	920	780	660
	6500	1500	1300	1150	990	850	720	610
	7000	1400	1210	1070	920	780	660	550
	7500	1300	1120	990	840	710	600	490
	8000	1250	1080	950	810	680	570	460
	8500	1200	1030	910	770	650	530	430
	9000	1100	940	830	700	580	470	370
	9500	1000	850	750	620	510	410	320
	10000	900	770	670	550	450	350	260
	10500	750	630	550	440	350	260	170
	11000	550	450	390	300	210	130	60

2.0t Residual Load Capacity Chart

Capacity(kg)		Load center distance(mm)						
		600	700	800	900	1000	1100	1200
Lifting height (mm)	≤6500	2000	1750	1560	1360	1200	1040	910
	7000	1950	1710	1520	1330	1160	1010	880
	7500	1850	1620	1440	1250	1090	950	820
	8000	1800	1570	1400	1220	1060	920	790
	8500	1750	1530	1360	1180	1030	890	760
	9000	1650	1440	1280	1110	960	830	700
	9500	1550	1350	1190	1030	890	760	650
	10000	1450	1260	1110	960	820	700	590
	10500	1300	1130	990	850	720	610	500
	11000	1000	860	750	630	520	420	330
	11500	800	680	590	480	390	290	210
	12000	750	630	550	450	350	260	180
	12500	650	550	470	370	280	200	120
13000	500	410	350	260	180	110	40	



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.

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

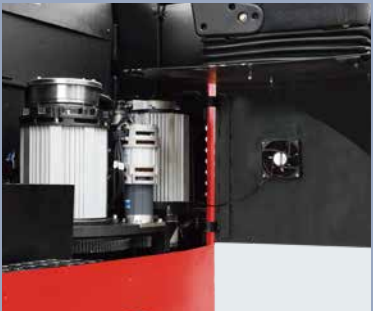
- / Operating levers of ergonomic design, integrated console, all important operating parts are within the reach of your hands.
- / The mast of optimized design with wide view avoids blocking the sight of the operator, and large size of the fork shelf offers wider view.
- / The seat can be adjusted forward 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

Li-Ion POWERED



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

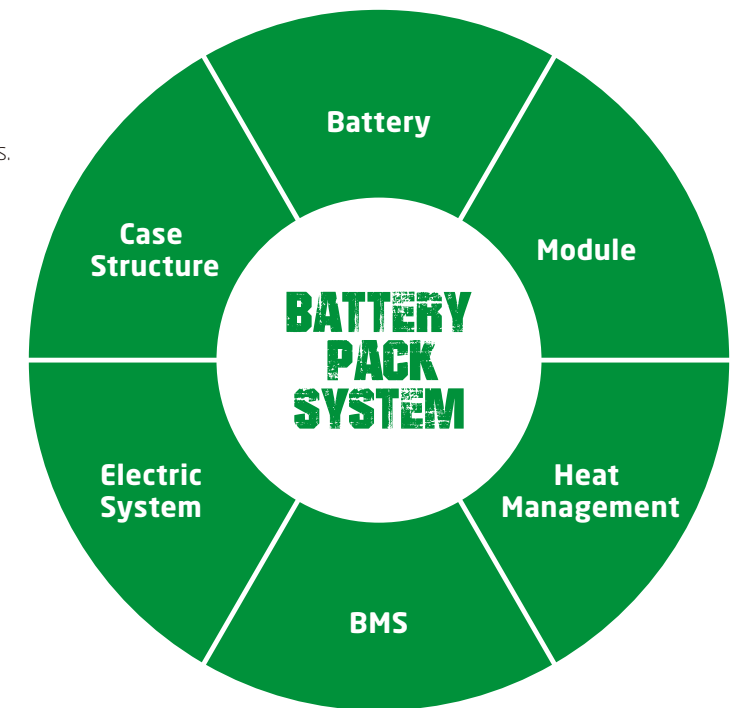


**5 YEARS
WARRANTY**

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: Can charge and operate at the same time, fully charged in 2hours.
- / 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-AC5-I*	CQD18-AC5-I*	CQD20-AC5-I*
Li-Ion battery	V/Ah	80/302	80/302	80/302
Titans charger		SLC-80100	SLC-80100	SLC-80100

Note: * CE model



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.

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.

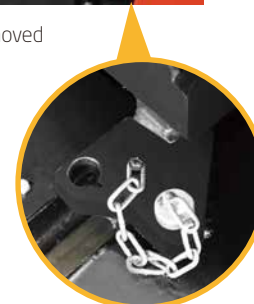
High-performance Mast

- / The operator has wider view in the load direction.
- / Built-in sideshifter 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.



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
- / Sideshifter
- / 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
- / 4.3-12.5m full-free triplex mast
- / 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

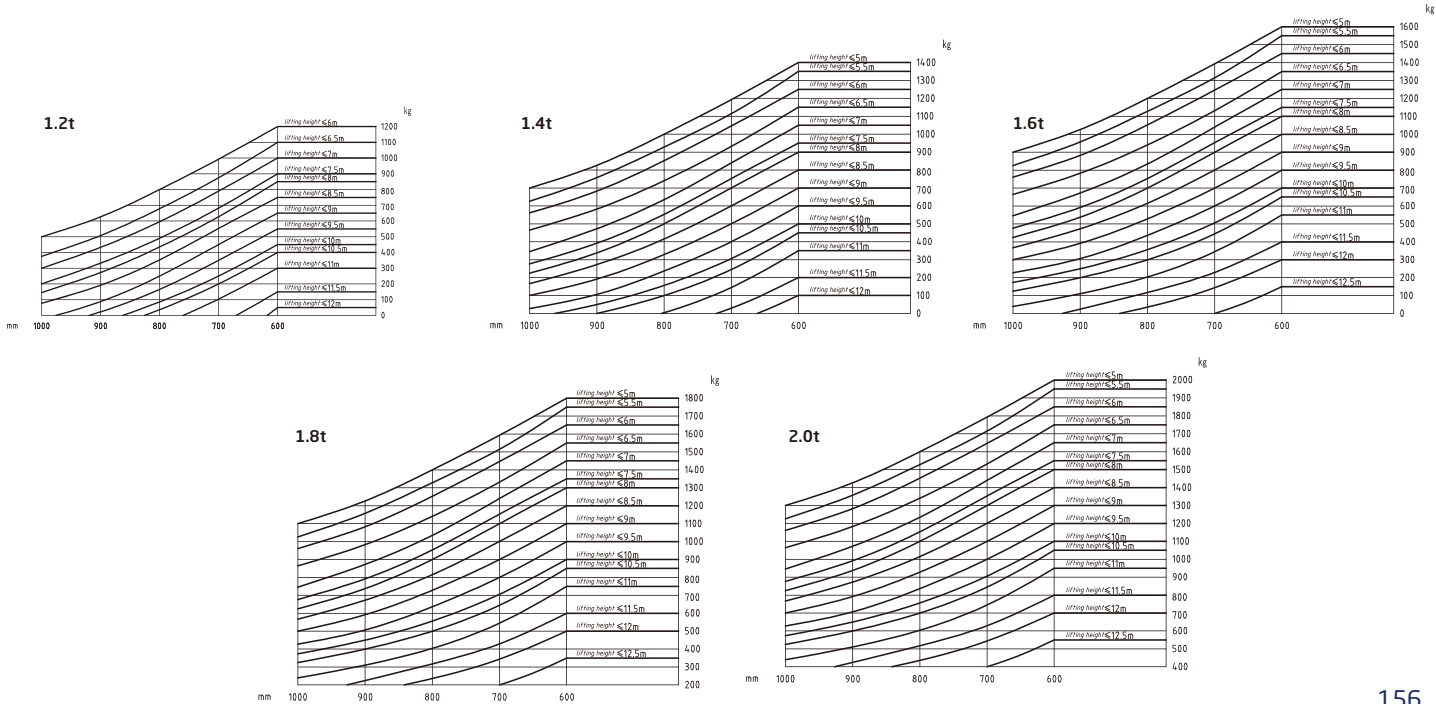
A Series Reach Truck

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.				
	1.2	Manufacturer's type designation		CQD12-AC5* CQD12-AD6*	CQD14-AC5* CQD14-AD6*	CQD16-AC5* CQD16-AD6*	CQD18-AC5* CQD18-AD6*	CQD20-AC5* CQD20-AD6*
	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,mast reached forward	x ₁ (mm)	203	203	203	233	233
	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)		1x/2	1x/2	1x/2	1x/2	1x/2
	3.7	Tread width,rear	b ₁₁ (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	h ₁ (mm)	2100	2100	2100	2100	2100
	4.4	Lift	h ₃ (mm)	3000	3000	3000	3000	3000
	4.7	Height of overhead guard	h ₆ (mm)	2200	2200	2200	2200	2200
	4.10	Height of support arms	h ₆ (mm)	305	305	305	361	361
	4.19	Overall length	l ₁ (mm)	2463	2463	2553	2553	2553
	4.20	Length to face of forks	l ₂ (mm)	1393	1393	1483	1483	1483
	4.21	Overall width	b ₁ /b ₂ (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	b ₅ (mm)	244-882	244-882	244-882	244-882	244-882
	4.28	Reach distance	l ₄ (mm)	528	528	438	468	538
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm)	2838	2838	2907	2907	2922
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm)	2897	2897	2980	2980	2984
	4.35	Turning radius	W _a (mm)	1735	1735	1735	1735	1804
	4.37	Length across wheel arms	l ₇ (mm)	1883	1883	1883	1913	1983
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

Note: * CE model

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				
		mm	mm	Without backrest	With backrest	Without backrest	With backrest	Forward	Backward	1.2t	1.4t	1.6t	1.8t	2.0t
Wide view duplex mast	QA20B	mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg	kg	kg	kg
		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
		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
Full free triplex mast	QA20V (imported steel)	5000	2315	5670	5965	1596	1350	2	4	1200	1400	1600	1800	2000
		5500	2490	6170	6465	1796	1525	2	4	1200	1350	1550	1750	1950
		6000	2665	6670	6965	1995	1700	2	4	1200	1250	1450	1650	1850
		6500	2835	7170	7465	2136	1870	2	4	1100	1150	1350	1550	1750
		7000	3020	7670	7965	2350	2055	2	4	1000	1050	1250	1450	1650
		7500	3180	8170	8465	2510	2215	2	4	900	950	1150	1350	1550
		8000	3350	8670	8965	2680	2385	2	4	850	900	1100	1300	1500
		8500	3580	9170	9465	2910	2615	2	4	750	800	1000	1200	1400
		9000	3800	9670	9965	3130	2835	2	4	650	700	900	1100	1300
		9500	3970	10170	10465	3300	3005	2	4	550	600	800	1000	1200
		10000	4100	10670	10965	3430	3135	2	4	450	500	700	900	1100
		10500	4250	11170	11465	3580	3285	2	4	400	450	650	850	1050
		11000	4450	11670	11965	3780	3485	2	4	300	350	550	750	950
		11500	4700	12170	12465	4030	3735	2	4	150	200	400	600	800
		12000	4900	12670	12965	4230	3935	2	4	50	100	300	500	700
		12500	5150	13170	13465	4480	4185	2	4	\	\	150	350	550





A Series Premium Version Reach Truck

with capacities of 1,200 to 2,000kg

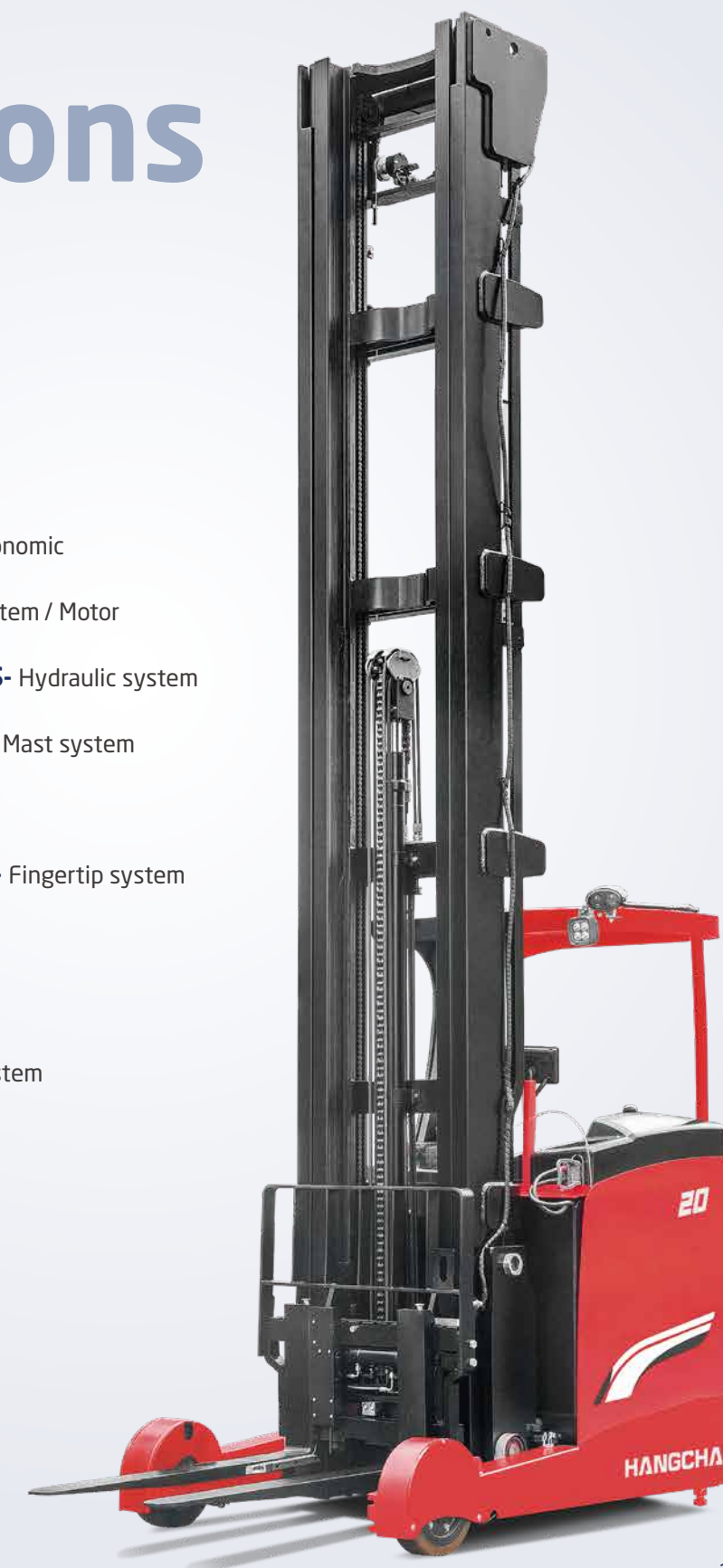
After several years of design, development, and manufacturing, Hangcha launched a new product lately –the A Series Premium Version Reach Truck: CQD12/14/16/20-AD2H. This truck is mainly used in multi-level warehouse. CQD20-AD2H rated load capacity is 2 tons, maximum lifting height is 12.5m, and the load 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.

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



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

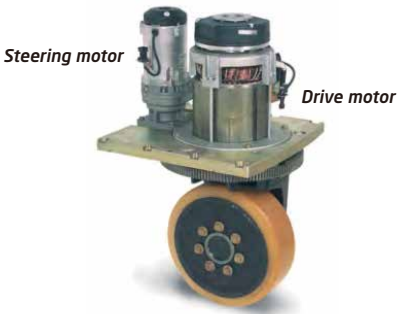


Overall Appearance Design

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.

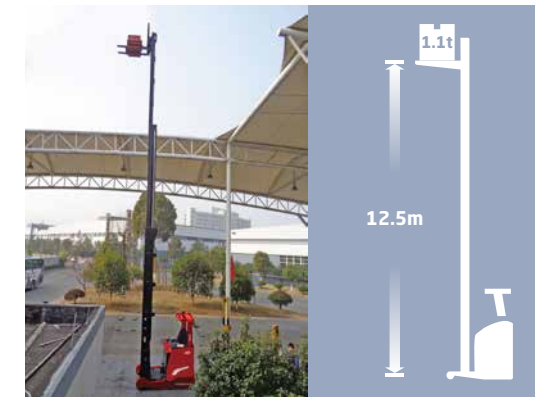


Standard configuration: Battery side roll-out + trolley(optional)



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.

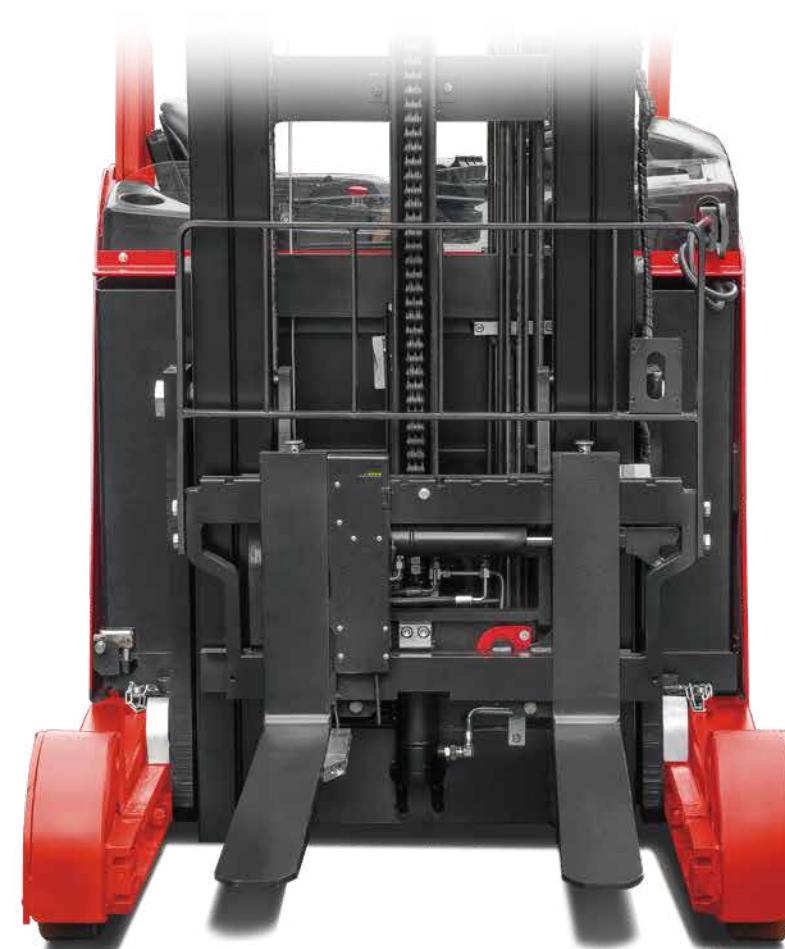


Maximum 12.5m, lifting 1.1t

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



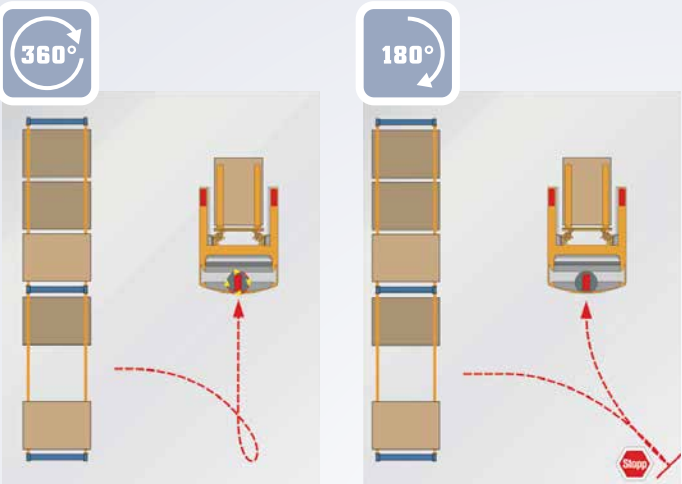
Optional: Camera system

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

- / 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)

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

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

Li-Ion Battery Pack specification

Type		CQD20-AC5H-1*
Li-Ion battery	V/Ah	51.52/500

Note: * CE model

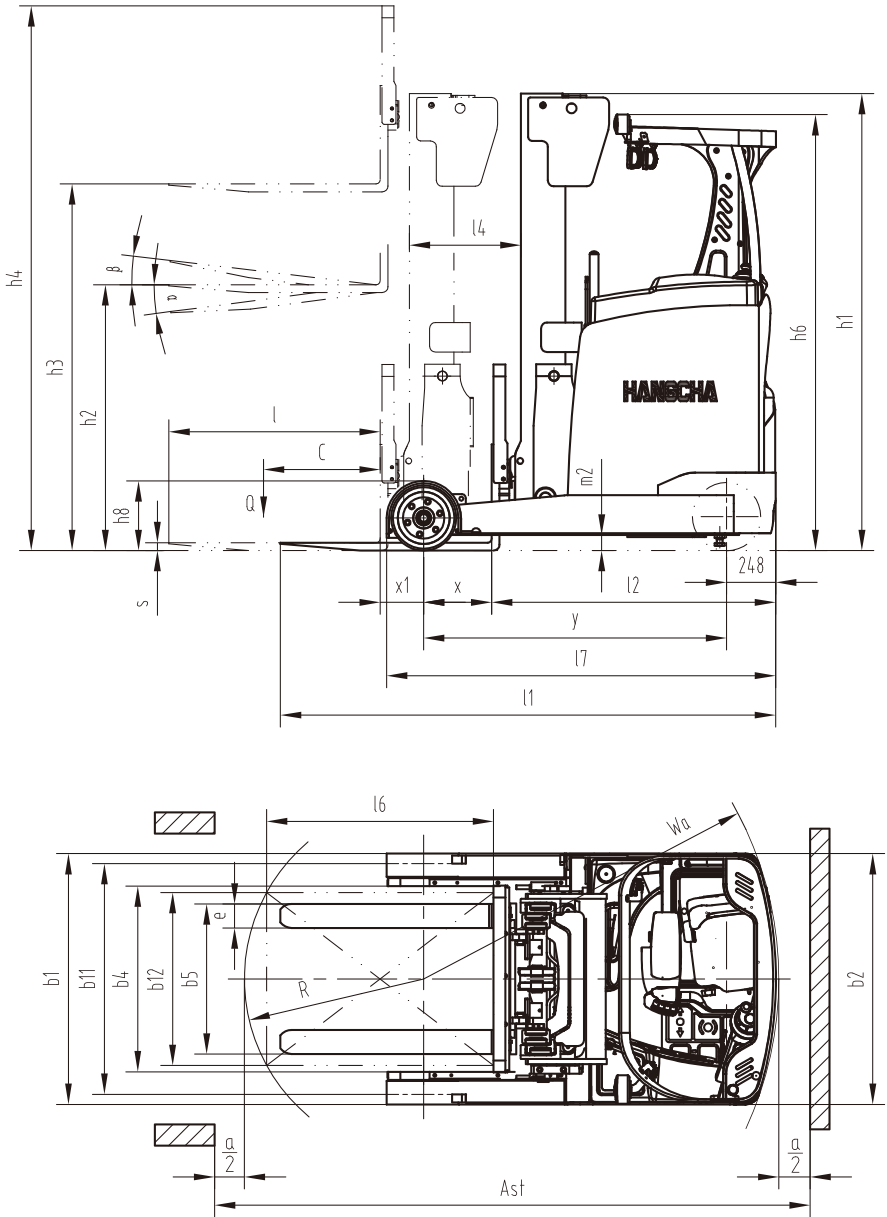


A SERIES PREMIUM VERSION REACH TRUCK

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation		QCD12-AD6H* QCD12-ACSH	QCD14-AD6H* QCD14-ACSH	QCD16-AD6H* QCD16-ACSH	QCD20-AD6H* QCD20-ACSH*
	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 ¹⁾
	1.8.1	Load distance, centre of drive axle to fork,mast reached forward	x ₁ (mm)	221	221	221	221
	1.9	Wheelbase	y (mm)	1460	1460	1460	1535
Weight	2.1	Service weight (including battery)	kg	3407 ¹⁾	3407 ¹⁾	3407 ¹⁾	3458 ¹⁾
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 ₁₁ (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 ₁ (mm)	2315	2315	2315	2315
	4.3	Free lift	h ₂ (mm)	1350	1350	1350	1350
	4.4	Lift	h ₃ (mm)	5000	5000	5000	5000
	4.5	Height, mast extended	h ₄ (mm)	5965	5965	5965	5965
	4.7	Height of overhead guard	h ₆ (mm)	2200	2200	2200	2200
	4.8	Seat height/stand height	h ₇ (mm)	1045	1045	1045	1045
	4.19	Overall length	l ₁ (mm)	2509	2509	2509	2509 ¹⁾
	4.20	Length to face of forks	l ₂ (mm)	1439	1439	1439	1439 ¹⁾
	4.21	Overall width	b ₁ /b ₂ (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 ₃ (mm)	942	942	942	942
	4.25	Distance between fork-arms	b ₅ (mm)	382-746	382-746	382-746	382-746
	4.26	Distance between wheel-arms	b ₄ (mm)	940	940	940	940
	4.28	Reach distance	l ₄ (mm)	490	490	490	565 ¹⁾
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	68.5	68.5	68.5	68.5
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm)	2871	2871	2871	2889 ¹⁾
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm)	2938	2938	2938	2945 ¹⁾
	4.35	Turning radius	W _a (mm)	1725	1725	1725	1800
Performance data	4.37	Length across wheel arms	l ₇ (mm)	1895	1895	1895	1970
	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		Parking brake		Electric	Electric	Electric	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	980 ¹⁾
Addition data		Battery dimensions	l/b/h(mm)	1223×355×784	1223×355×784	1223×355×784	1223×355×784 ¹⁾
	8.1	Type of drive control		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
		Manufacturer/Type		INMOTION/CURTIS	INMOTION/CURTIS	INMOTION/CURTIS	INMOTION/CURTIS
	10.1	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

★ CE model



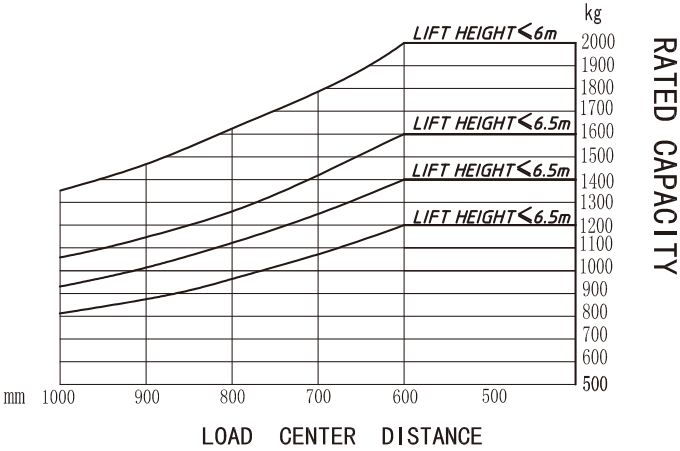
Ast=Wa+R+a=

$$Wa+\sqrt{(l_6-x)^2+(\frac{b_{12}}{2})^2}+a$$

A SERIES PREMIUM VERSION REACH FORKLIFT MAST SPECIFICATION

Type	Model	Lifting height h ₃	Mast lowered h ₁	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)	mm	mm	mm	mm	mm	mm			kg	kg	kg	kg	kg
		5000	2315	5670	5965	1596	1350	2	4	1200	1400	1600	2000	2000 ¹⁾
		5500	2490	6170	6465	1796	1525	2	4	1200	1400	1600	2000	2000 ¹⁾
		6000	2665	6670	6965	1995	1700	2	4	1200	1400	1600	2000	2000 ¹⁾
		6500	2835	7170	7465	2136	1870	2	4	1200	1400	1600	1900	2000 ¹⁾
		7000	3020	7670	7965	2350	2055	2	4	1000	1200	1400	1700	1800 ¹⁾
		7500	3180	8170	8465	2510	2215	2	4	900	1100	1300	1600	1700 ¹⁾
		8000	3350	8670	8965	2680	2385	2	4	850	1050	1250	1550	1650 ¹⁾
		8500	3580	9170	9465	2910	2615	2	4	800	1000	1200	1500	1600 ¹⁾
		9000	3800	9670	9965	3130	2835	2	4	750	950	1150	1450	1550 ¹⁾
		9500	3970	10170	10465	3300	3005	2	4	700	900	1100	1400	1500 ¹⁾
		10000	4100	10670	10965	3430	3135	2	4	650	850	1050	1350	1450 ¹⁾
		10500	4250	11170	11465	3580	3285	2	4	600	800	1000	1300	1400 ¹⁾
		11000	4450	11670	11965	3780	3485	2	4	550	750	950	1250	1350 ¹⁾
		11500	4700	12170	12465	4030	3735	2	4	500	700	900	1200	1300 ¹⁾
		12000	4900	12670	12965	4230	3935	2	4	450	650	850	1150	1250 ¹⁾
		12500	5150	13170	13465	4480	4185	2	4	400	600	800	1100	1200 ¹⁾

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

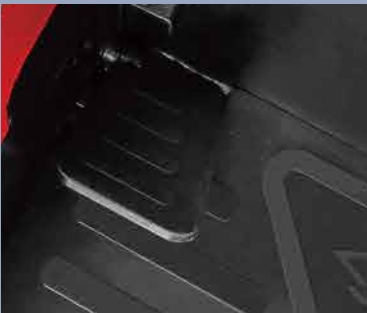
- / An optimal four-link suspension mechanism forces the drive wheel and the auxiliary wheels, thereby reducing slipping of the drive wheel.
- / A disc mechanical brake and regenerative braking system make the truck safer and more reliable.
- / Turn speed is controlled to the turning radius, providing 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

Li-ion POWERED



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

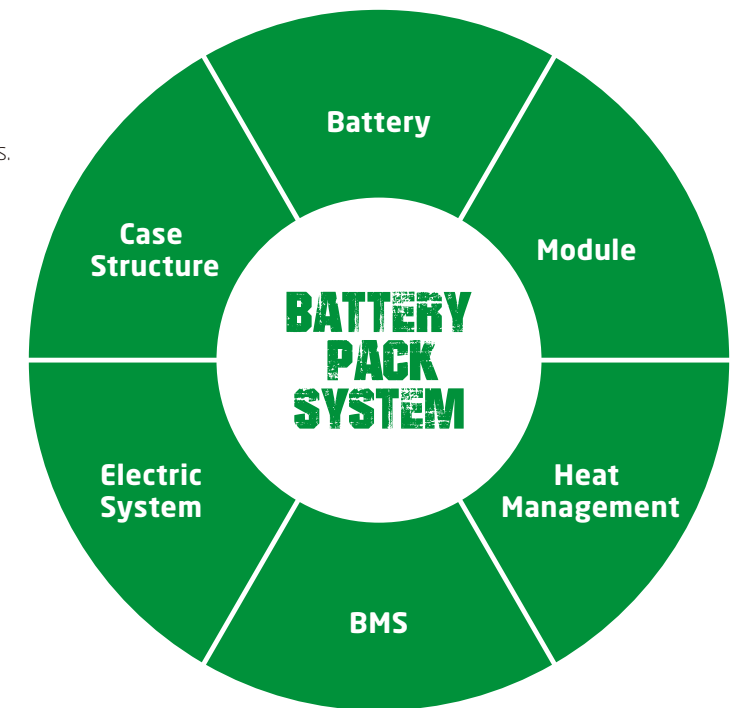


**5 YEARS
WARRANTY**

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.
- / 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. They are maintenance free and do not require a battery change when used for multi-shift operations.

Li-Ion Battery Specification

Type		CQD15-AC5S-I*	CQD18-AC5S-I*
Battery voltage, capacity	V/Ah	48/228*	48/228*
Option capacity	V/Ah	48/302	48/302
Titans charger		SLC-48100	SLC-48100

Note: * Available for cold storage
* CE model

COMFORTABLE DESIGN

It's convenient for getting on/off.



Floor height: 280mm.

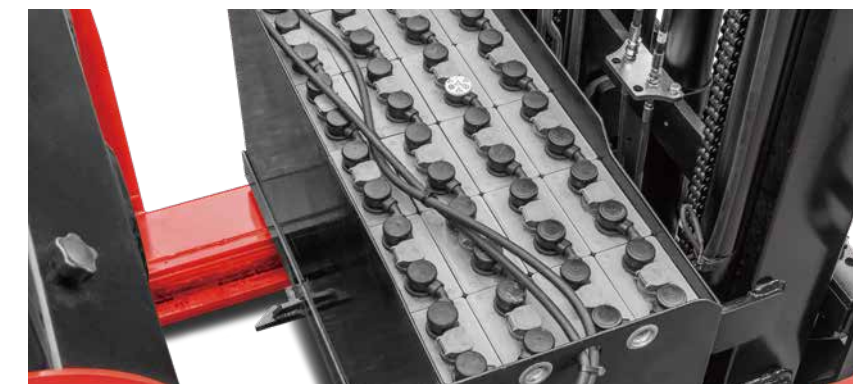
Optimal lifting system

- / 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.



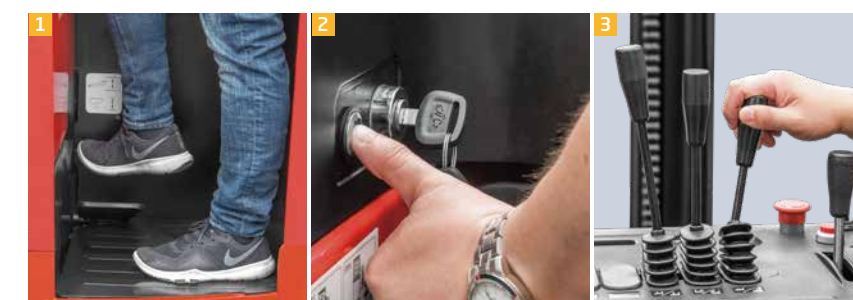
Battery removal

- 1 Step on the unlocking pedal
- 2 Press the safety switch
- 3 Mast moves operating lever forward

BATTERY REPLACEMENT OPERATION PROCESS

Battery insertion

- 2 Press the safety switch
- 3 Mast moves operating lever backward



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 for 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.



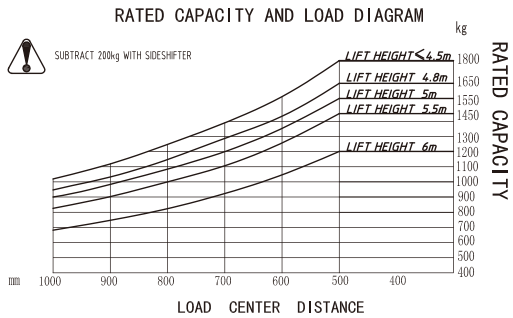
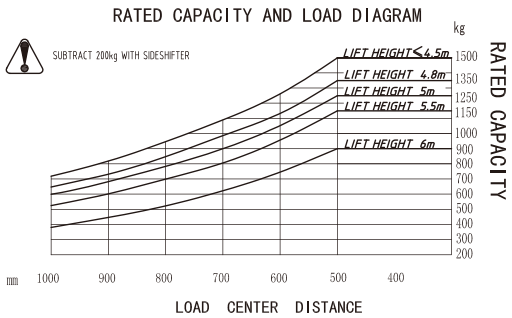
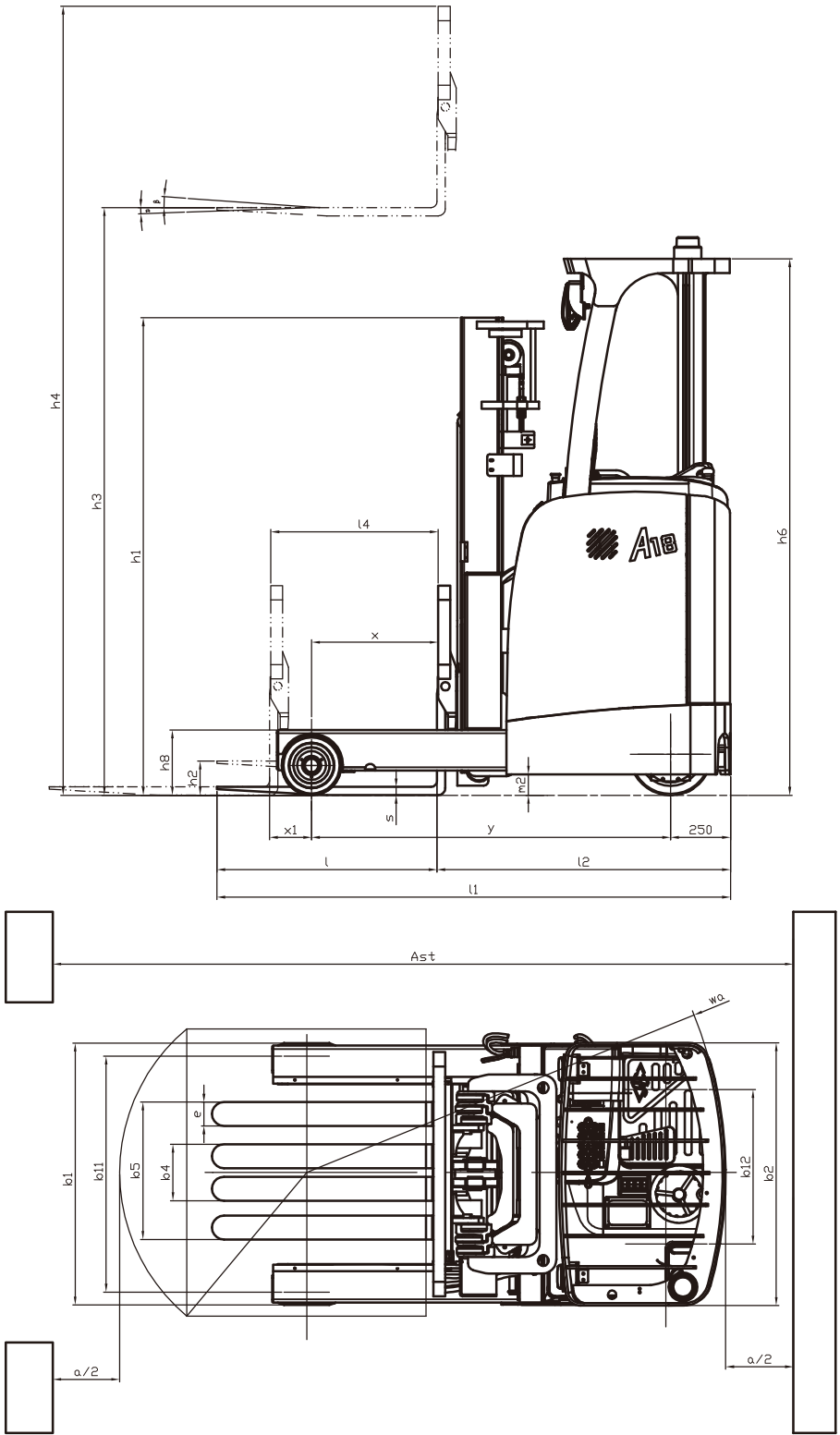
A Series 1.5~1.8t Stand-on Reach Truck Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CQD15-AC55*	CQD18-AC55*
	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 ₁ (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(×=driven wheels)		2/1×+2	2/1×+2
	3.6	Tread width,front	b ₁₁ (mm)	986	986
	3.7	Tread width,rear	b ₁₂ (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 ₁ (mm)	1995	1995
	4.3	Lift	h ₃ (mm)	3000	3000
	4.4	Mast Extended height	h ₄ (mm)	3886	3886
	4.5	Free lift	h ₂ (mm)	100	100
	4.6	Height of overhead guard	h ₆ (mm)	2240	2240
	4.7	Ground clearance,below mast	m ₂ (mm)	80	80
	4.8	Height of support arms	h ₈ (mm)	275	275
	4.9	Overall length	l ₁ (mm)	2146	2146
	4.10	Length to face of forks	l ₂ (mm)	1226	1226
	4.11	Overall width	b ₁ /b ₂ (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 ₄ /b ₅ (mm)	230-720	230-720
	4.14	Reach distance	l ₄ (mm)	550	700
	4.15	Aisle width for pallets 1100 x 1100 , clearance 200	A _{st} (mm)	2710	2745
	4.16	Aisle width for pallets 1000 x 1200 crossways,clearance 200	A _{st} (mm)	2666	2715
	4.17	Turning radius	W _a (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

Note: * CE model

1.5~1.8t Mast Specification

Type	Model	Lifting height h ₃	Mast lowered h ₁	Mast extended h ₄		Free lifting height h ₂		Tilting range		Load capacity at 500mm	
				With backrest	With backrest	Forward	Backward	Forward	Backward	1.5t	1.8t
		mm	mm	mm	mm	(°)	(°)			kg	kg
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
		5000	3095	5886	100	3	5			1250	1550
Full free triplex mast	QAZ18N	4500	2055	5376	1179	3	5			1500	1800
		5000	2215	5876	1339	3	5			1250	1550
		5500	2395	6376	1519	3	5			1150	1450
		6000	2595	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



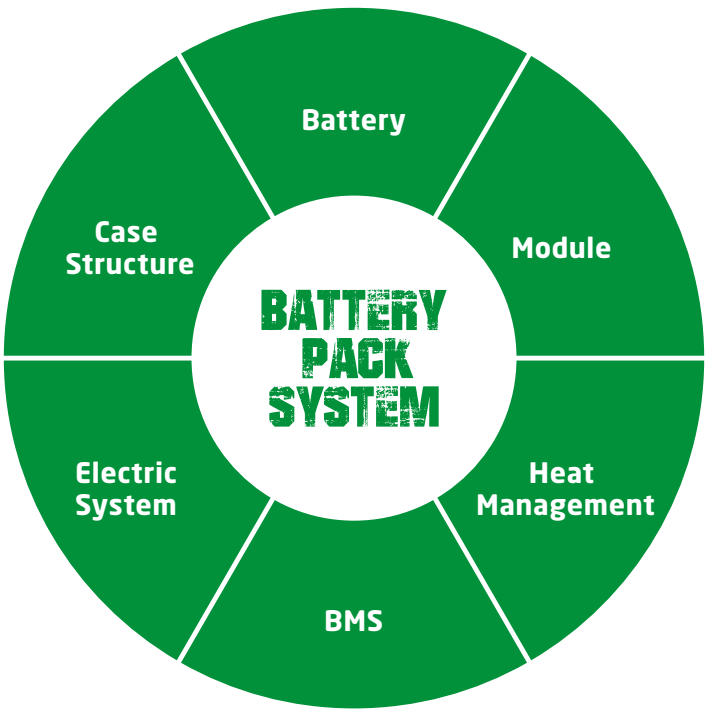
Forks can tilt forward/backward for easy loading



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.
- / 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. They are maintenance free and do not require a battery change when used for multi-shift operations.



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



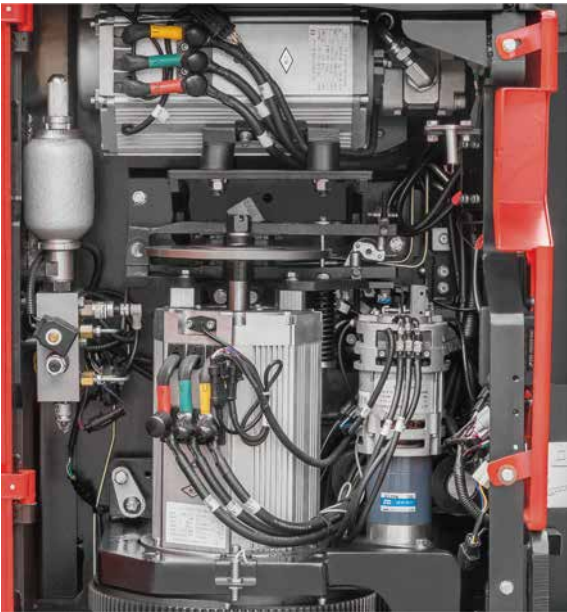
Li-Ion Battery Specification

Type		CQD20-AC5S-1*	CQD25-AC5S-1*
Battery voltage, capacity	V/Ah	48/302	48/302
Titans charger		SLC-48100	SLC-48100

Note: * CE model

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 Specification

- / 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

- / 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-AC5S					
	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.

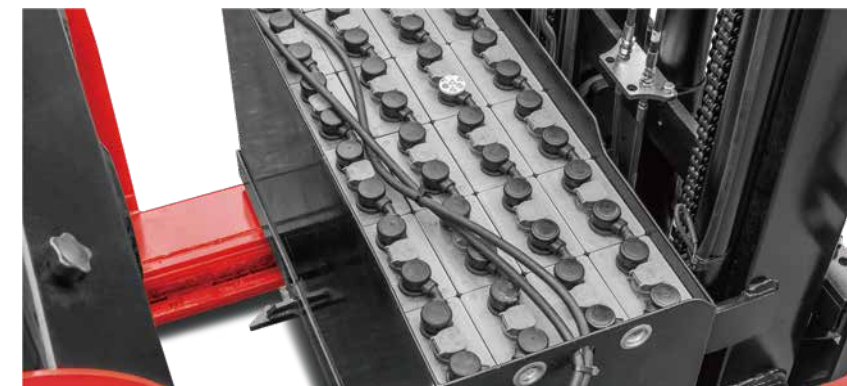
Optimal lifting system

- / 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.



Battery removal

- 1 Step on the unlocking pedal
- 2 Press the safety switch
- 3 Mast moves operating lever forward

BATTERY REPLACEMENT OPERATION PROCESS

Battery insertion

- 2 Press the safety switch
- 3 Mast moves operating lever backward



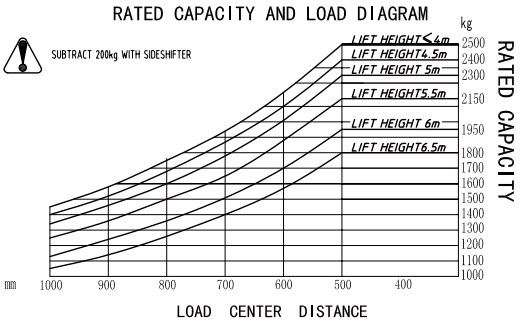
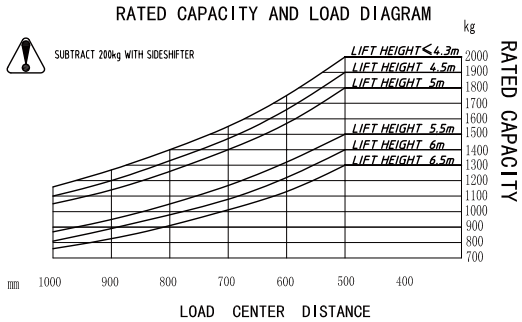
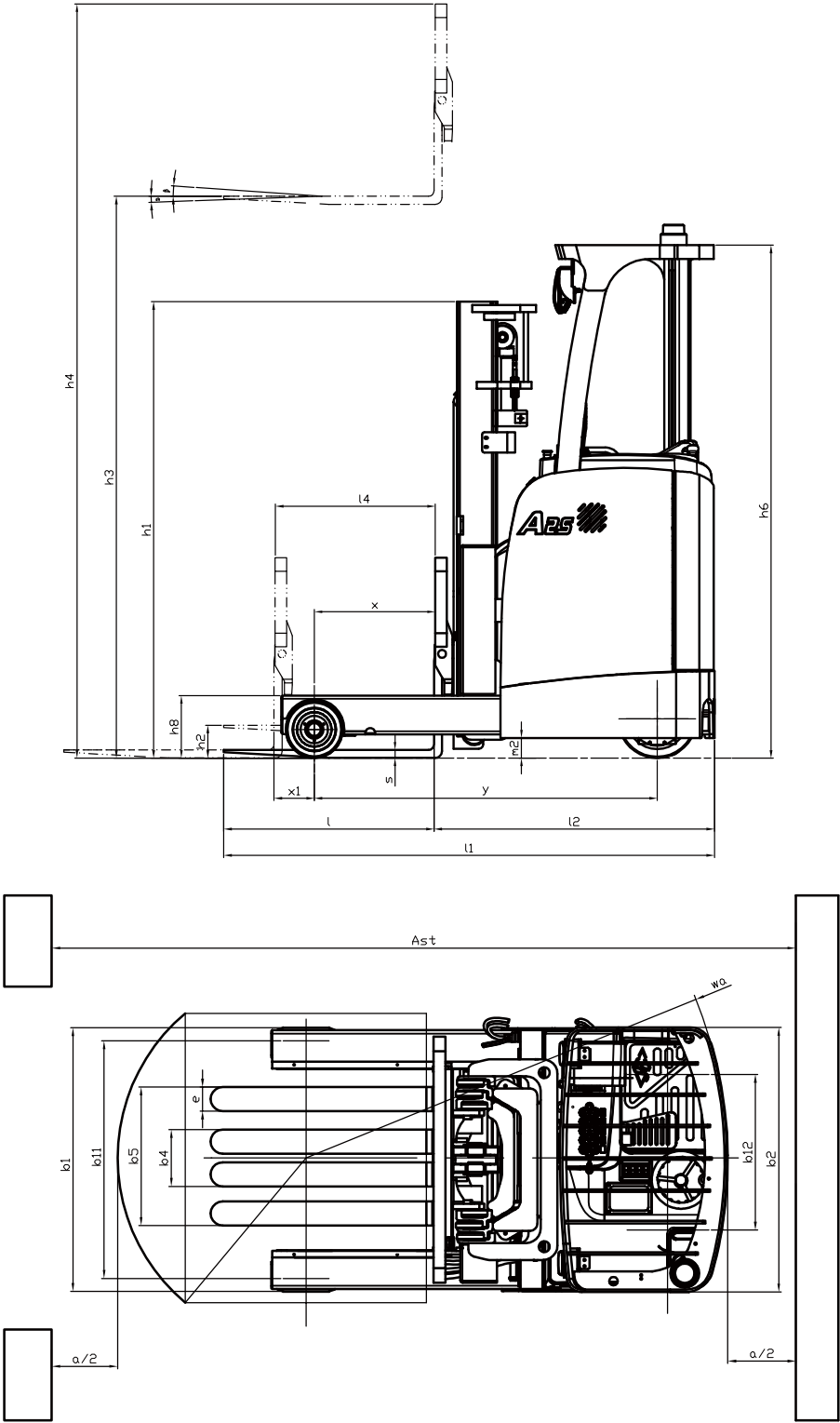
A series stand on reach truck 2.0-2.5t specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CQD20-AC5S*	CQD25-AC5S*
	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	x1 (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	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(×=driven wheels)		2/1×+2	2/1×+2
	3.6	Tread width,front	b11(mm)	1074	1074
	3.7	Tread width,rear	b12(mm)	685	685
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	3/5	3/5
	4.2	Height, mast lowered	h1 (mm)	2045	2045
	4.3	Lift	h3 (mm)	3000	3000
	4.4	Mast Extended height	h4 (mm)	3876	3876
	4.5	Free lift	h2(mm)	105	105
	4.6	Height of overhead guard	h6 (mm)	2245	2245
	4.7	Ground clearance,below mast	m2 (mm)	80	80
	4.8	Height of support arms	h8 (mm)	275	275
	4.9	Overall length	l1 (mm)	2180	2255
	4.10	Length to face of forks	l2 (mm)	1260	1335
	4.11	Overall width	b1/b2(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	b4/b5 (mm)	278-784	278-784
	4.14	Reach distance	l4 (mm)	665	790
	4.15	Aisle width for pallets 1100 x 1100 , clearance 200	Ast (mm)	2775	2880
	4.16	Aisle width for pallets 1000 x 1200 crossways,clearance 200	Ast (mm)	2740	2860
	4.17	Turning radius	Wa (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

Note: * CE model

2.0~2.5t Mast Specification

Type	Model	Lifting height h ₃	Mast lowered h ₁	Mast extended h ₄	Free lifting height h ₂	Tilting range		Load capacity center at 500mm	
				With backrest	With backrest	Forward	Backward	2.0t	2.5t
		mm	mm	mm	mm	(°)	(°)	kg	kg
Wide view duplex mast	QAZ25M	2500	1795	3376	105	3	5	2000	2500
		2700	1895	3576	105	3	5	2000	2500
		3000	2045	3876	105	3	5	2000	2500
		3500	2295	4376	105	3	5	2000	2500
		4000	2645	4876	105	3	5	2000	2500
		4300	2795	5176	105	3	5	2000	2400
		4500	2895	5376	105	3	5	1900	2400
		5000	3145	5876	105	3	5	1800	2300
		4300	2040	5176	1164	3	5	2000	2400
		4500	2105	5376	1229	3	5	1900	2400
Full free triplex mast	QAZ25N	5000	2265	5876	1389	3	5	1800	2300
		5500	2445	6376	1569	3	5	1500	2150
		6000	2615	6876	1739	3	5	1400	1950
		6500	2850	7376	1974	3	5	1300	1800
		7000	3070	7876	2194	3	5	700	1000





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 LORD 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

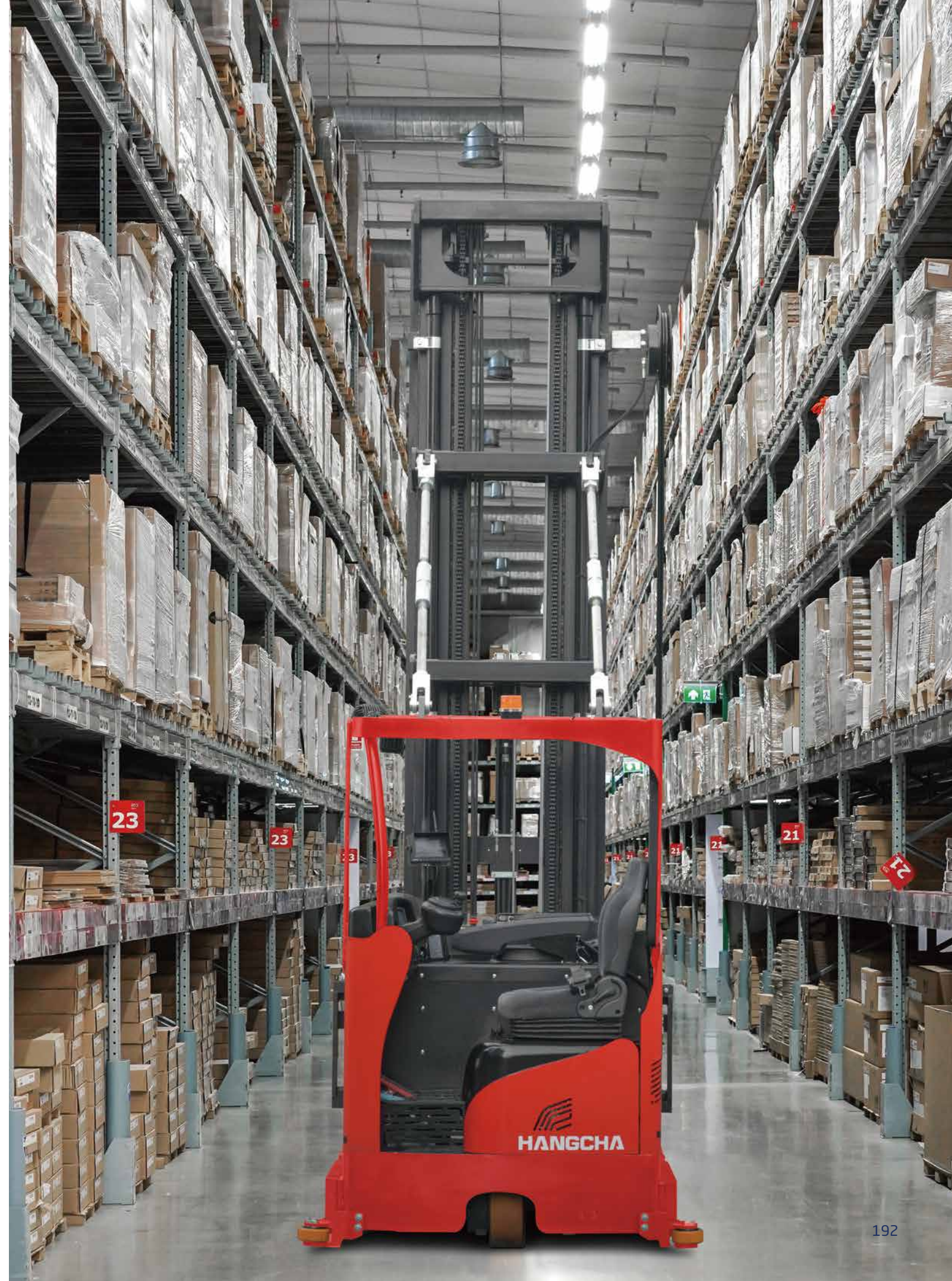
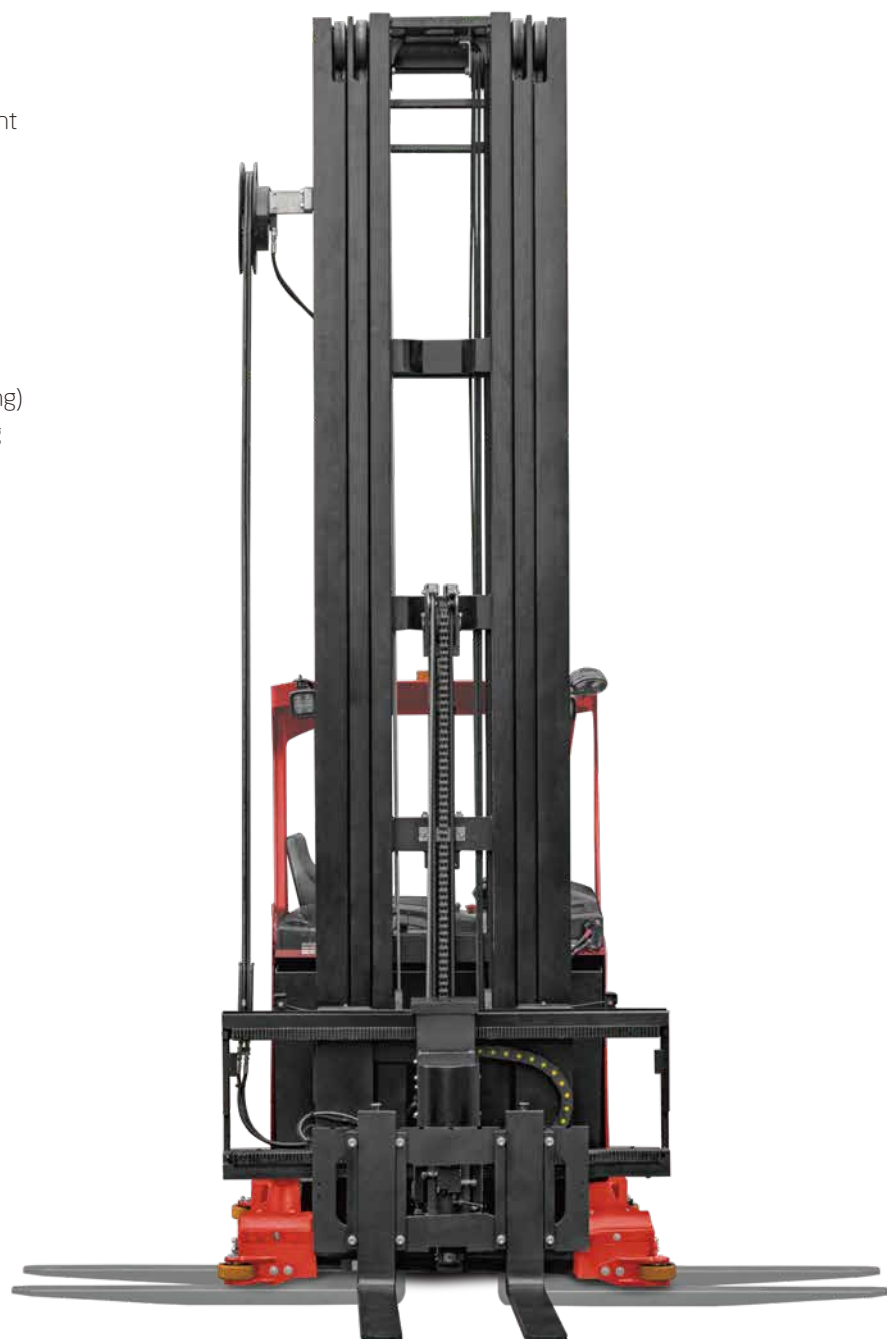
- / The unique modular design ensures that an individual truck specification can match the application precisely in order to maximise productivity at all times.
- / The driving system adopts a gearbox with a large speed ratio, so that the motor requires a higher speed and a smaller torque.
- / The LED 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
- / Lithium battery 51.52V/500Ah





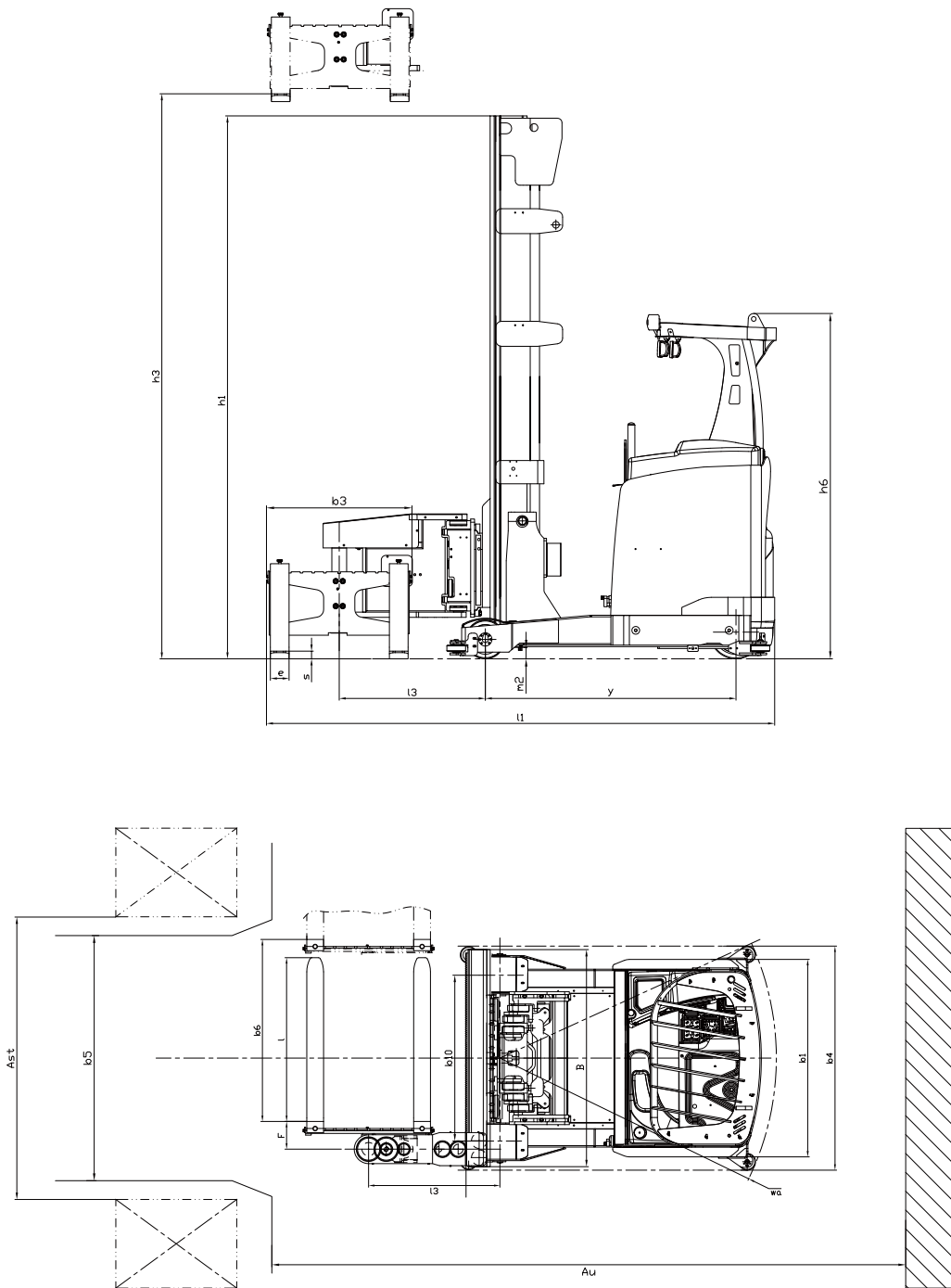
A Series 1.2t Man-down Turret Truck Specification

Characteristics	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
	1.2	Manufacturer's model designation		CSD12-AED6*
	1.3	Power unit		Electric
	1.4	Operation		Seated
	1.5	Load carrying capcity	Q(kg)	1200
	1.6	Load centre	c(mm)	600
	1.9	Wheelbase	y(mm)	1610
Weight	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	b1o(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
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

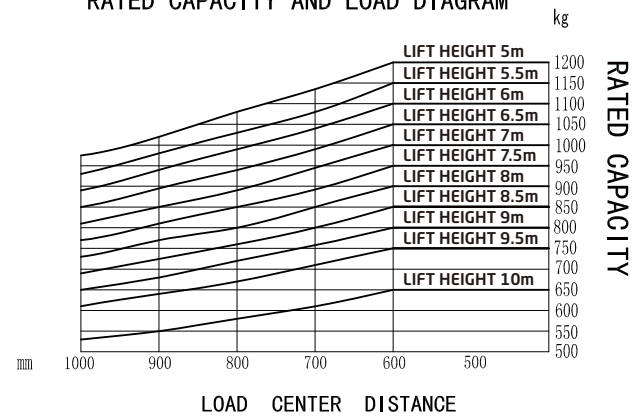
Note: * CE model

Mast Specification

Type	Model	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Load capacity center at 600mm
		mm	mm	mm	mm	1.2t
Wide view duplex mast	ASE12M	5000	3500	6000	/	kg
		5500	3700	6500	/	1200
		6000	4000	7000	/	1150
		6500	4250	7500	/	1100
		7000	4500	8000	/	1050
		7500	4750	8500	/	1000
		8000	5000	9000	/	950
		8500	5250	9500	/	900
		9000	5500	10000	/	850
						800
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	650



RATED CAPACITY AND LOAD DIAGRAM





Turret Stockpicker

with capacities of 3,000 to 3,500lbs

The 3,000-3,500lbs man-up tri-lateral stacker for narrow aisles and high bay warehouses can meet the needs of customers for operations in narrow aisles and high stacking heights. Featuring a high lift, high load capacity and small turning radius, as well as advanced performance, easy operations, high safety and reliability, etc., it is an ideal solution for material handling, stacking and picking in high level warehouse.

EXCELLENT ERGONOMIC

Comfort

- / Electro-hydraulic proportional integrated control system allows for more accurate and smooth operations.
- / EPS (Electric Power Steering) makes steering more gentle and comfortable.
- / The joystick can be adjusted according to the operator's using habits.
- / A new integrated instrument has complete functions and clear readings.



You can conveniently change the driving mode between stand-on type and seated type.



Low step on height for easy on and off.



Equipped with the electro-hydraulic control buffer system, the fork slows down automatically when arriving at an end of any position to reduce the impact.



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



SIMPLY ROBUST. SIMPLY RELIABLE.

Appearance

/ Streamlined surface modelling, smooth profile outlines, attractive and agreeable.

Stability

/ Wide body structure design allows the stacker to have good stability.
/ Frame and mast made of high-strength framework structure and low center of gravity enable good stability.





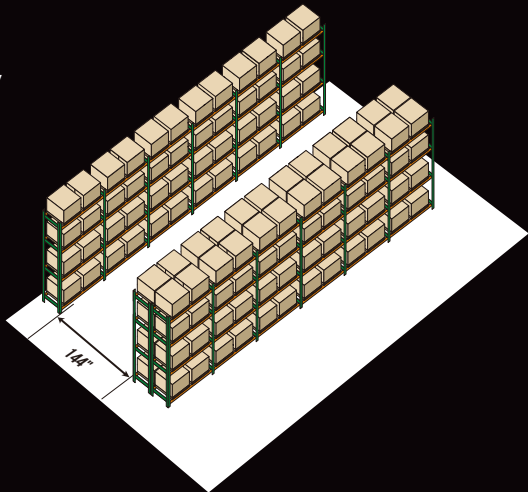
MAXIMUM EFFICIENCY

- / The narrow aisles required for operations and the fork lift height up to 483 inch maximize the space availability of your warehouses.
- / The high lift mast boasts high load capacity and improved stacking efficiency.
- / The high-power AC oil pump motor and the large-displacement silent gear pumps are used to greatly increase the lifting and lowering speed, as well as its operating efficiency.
- / The energy-saving electro-hydraulic control hydraulic system makes the whole stacker energy-saving and efficient and enables the battery to support longer operating hours.
- / With multi-speed models, the stacker is adapted to different operating conditions.

How HANGCHA VNA delivers space savings

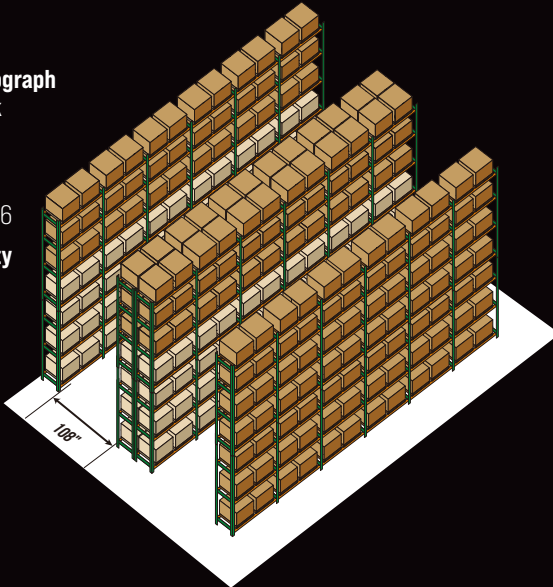
Traditional Sit-Down/Counterbalance:

Aisle width: 144"
Pallet levels: 4
Pallet positions: 144



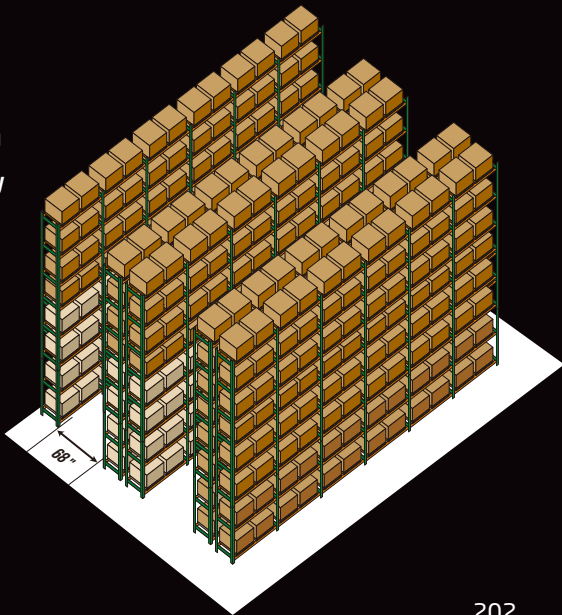
Narrow Aisle Pantograph Single Reach Truck

Aisle width: 108"
Pallet levels: 7
Pallet positions: 336
133% more capacity

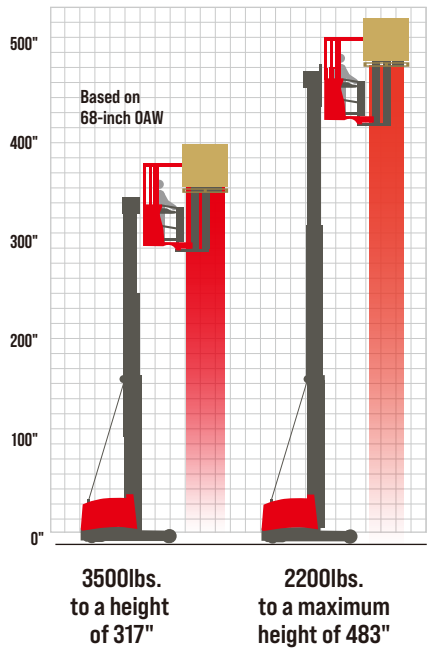


Very Narrow Aisle

Aisle width: 68"
Pallet levels: 8
Pallet positions: 480
233% more capacity



More Height 483"





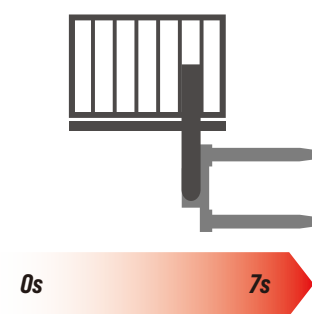
HIGH PERFORMANCE IN HIGH RACKS.

Advancement

- / Electromagnetic brake is used to realize intelligent braking allows for more efficient and safer braking.
- / With the advanced electro-hydraulic control system, the traveling speed is automatically associated with the lifting height and turning angle; The load weight is automatically associated with the lifting height; Thus the fork position is intelligently identified and the traveling speed is controlled.
- / The integrated mechanical, electrical and hydraulic control achieves the step-less speed regulation of the driving and the fork movement, allowing for more precise and stable control.
- / The large-screen LCD display and the gauges with fault self-diagnosis functions can accurately display information in harsh environments.
- / With efficient and precise adjustment performance, the newly equipped AC control system supports longer operating hours after being charged once.
- / The dynamic variable hydraulic system enables lowered oil temperature, being energy-saving and efficient.

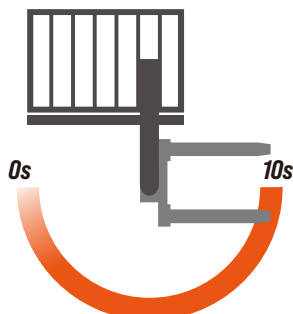


The fork has high lifting and lowering speeds and high operating efficiency.



Traverse Speed

Complete full traverse in 7 seconds.



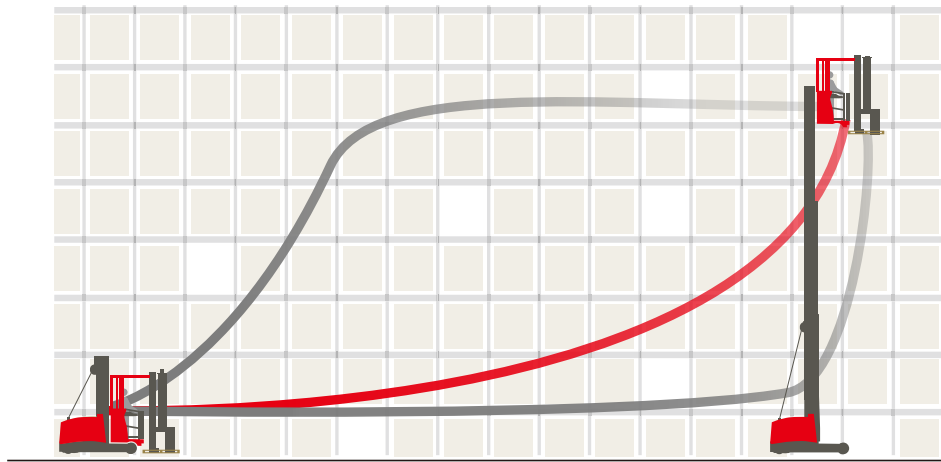
Pivot Speed

Complete a full, 180-degree pivot in 10 seconds.



Auto Positioning System

Takes the most effective route to the next rack location.



/ Increased Productivity
/ Increased Pick Accuracy

/ Reduced Operator Fatigue
/ Flexibility

Reliability and safety

- / The low center of gravity at three pivots and the high strength of the main force-bearing components such as frame and mast are designed to meet heavy-duty operating conditions.
- / The main electrical components such as the motor controller, contactor, power plug and emergency cut-off switch are all products of well-known brands.
- / The AC power system has high efficiency, complete protection functions and greatly improved reliability and service life.
- / The optional front and rear wheel braking systems allowing large braking torque are suitable for indoor slippery roads.
- / The double safety pedals, left and right guardrails, automatic induction joystick and other active and passive safety systems are equipped to prevent hazards caused by mis-operation.



The optimized design of the wide-view mast enables the operator to get a better view and thus operate the stacker more safely.

Maintainability

- / The brushless AC motor is maintenance-free and significantly reduces the operating costs.
- / The fully open door enables easy repair, maintenance and commissioning.
- / The battery removed side roll out enables easy repair and maintenance.
- / The electronically controlled electrical components are placed together and are highly integrated.



Options

- / Different battery (compartment) sizes
- / Forks of different specifications
- / Different lift height
- / Blue light
- / Fan
- / 12 V power plug
- / Fire extinguisher
- / Monitoring system
- / Magnetic navigation;
- / Guide roller
- / Load height limiting device

Standard Specification

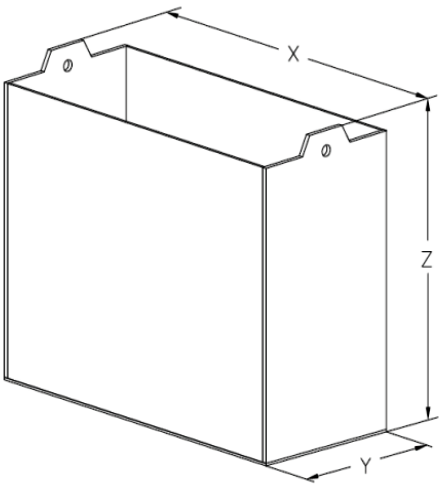
- / AC motor and controller
- / Stand-on type & seated type
- / Electro-hydraulic proportional valve system
- / Low-noise gear oil pump
- / Battery side roll out
- / Electric horn
- / Reverse buzzer
- / Multi-function instrument
- / Fork height display
- / Alarm light
- / LED light in the cabin
- / Safety rope
- / Polyurethane wheel tyre
- / Laneway mode
- / Electric power steering system
- / Electromagnetic parking brake
- / Security operating system
- / Travelling speed control during lifting
- / Central sideshift
- / Chain looseness reminder
- / Travelling speed control at corner
- / Lateral barriers left and right

Mast Specification

	Total height h3 + h8	Lift h3	Auxiliary Lift h8	Free lift h2 + h8	Height mast lowered h1	Height, mast extended h4	Load capacity @600mm/24inch	
							CSDS14	CSDS16
	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	lb/kg	lb/kg
Double full free mast	212(5375)	140(3565)	71(1810)	71(1810)	131(3330)	253(6435)	3000(1361)	3500(1588)
	226(5740)	155(3930)	71(1810)	71(1810)	138(3510)	268(6800)	3000(1361)	3500(1588)
	242(6144)	171(4334)	71(1810)	71(1810)	146(3715)	284(7205)	3000(1361)	3500(1588)
	258(6548)	187(4738)	71(1810)	71(1810)	154(3915)	300(7610)	3000(1361)	3500(1588)
	274(6952)	202(5142)	71(1810)	71(1810)	162(4120)	316(8015)	3000(1361)	3500(1588)
	290(7356)	218(5546)	71(1810)	71(1810)	170(4320)	331(8415)	2900(1315)	3500(1588)
	306(7760)	234(5950)	71(1810)	71(1810)	178(4520)	347(8820)	2800(1270)	3500(1588)
	321(8164)	250(6354)	71(1810)	71(1810)	186(4725)	363(9225)	2600(1180)	3400(1540)
	337(8568)	266(6758)	71(1810)	71(1810)	194(4925)	379(9630)	2500(1135)	3300(1495)
	345(8770)	274(6960)	71(1810)	71(1810)	198(5025)	387(9830)	2400(1090)	3200(1450)
Triplex full free mast	279(7090)	208(5280)	71(1810)	140(3560)	138(3308)	321(8150)	3000(1361)	3500(1588)
	303(7700)	232(5890)	71(1810)	148(3770)	138(3510)	345(8760)	2900(1315)	3500(1588)
	327(8310)	256(6500)	71(1810)	156(3975)	146(3715)	369(9370)	2700(1225)	3400(1540)
	351(8920)	280(7110)	71(1810)	165(4180)	154(3915)	393(9980)	2580(1170)	3200(1450)
	375(9530)	304(7720)	71(1810)	173(4385)	162(4120)	417(10590)	2360(1070)	3000(1361)
	399(10140)	328(8330)	71(1810)	181(4590)	170(4320)	441(11200)	2200(1000)	2800(1270)
	423(10750)	352(8940)	71(1810)	189(4800)	178(4520)	465(11810)	2020(915)	2600(1180)
	447(11360)	376(9550)	71(1810)	197(5005)	186(4725)	489(12420)	1900(860)	2400(1090)
	471(11970)	400(10160)	71(1810)	205(5210)	194(4925)	513(13030)	1750(795)	2250(1020)
	483(12275)	412(10465)	71(1810)	209(5315)	198(5025)	525(13335)	1600(725)	2050(930)

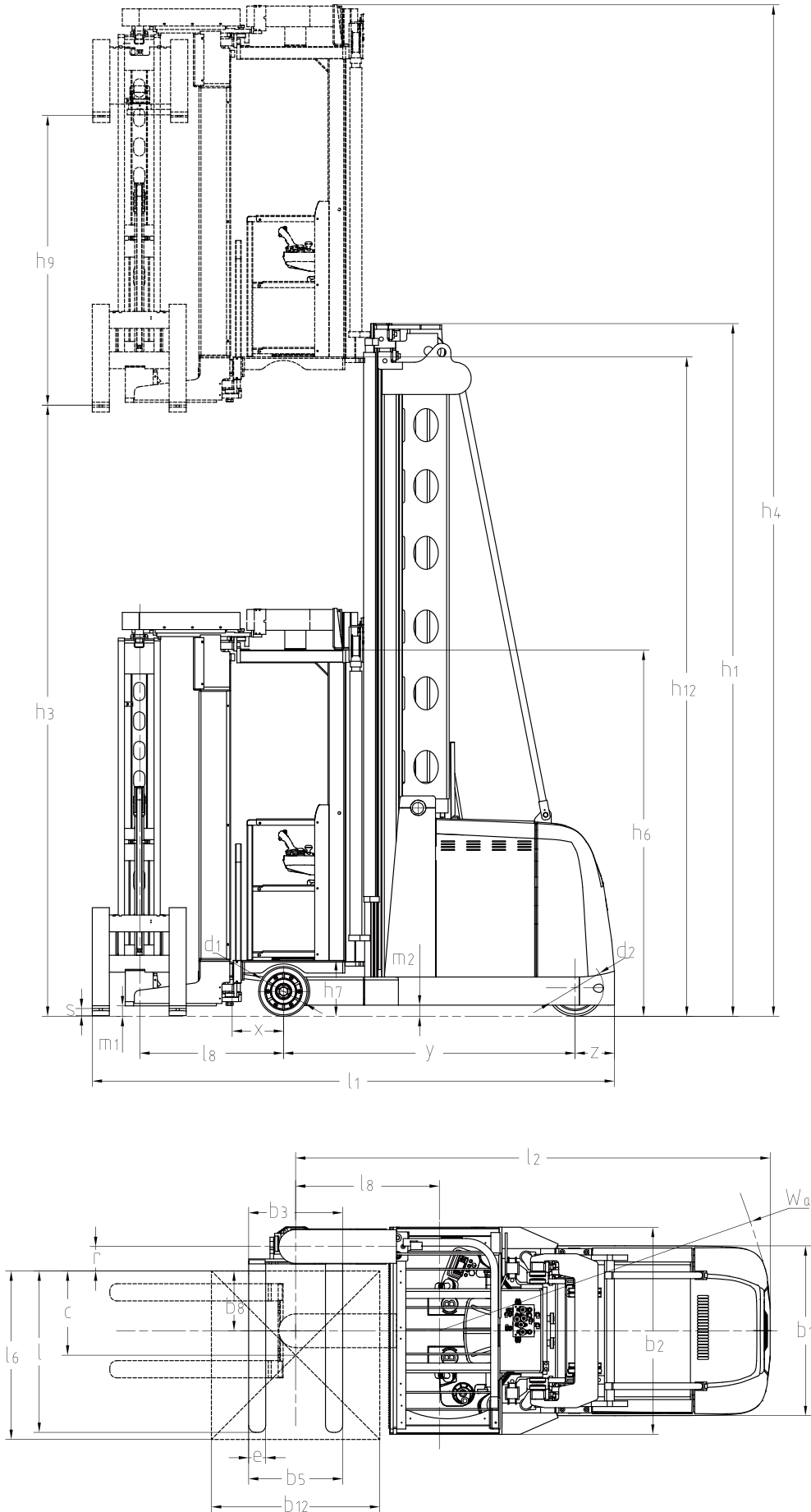
Table 1

Battery and compartment size				A	B	C	D	E
6.4	Battery Voltage		V	80	80	80	80.5	80.5
	Battery Type			Lead-acid	Lead-acid	Lead-acid	Lithium	Lithium
	Battery capacity maximum 5 Hr Rate		Ah	465	620	930	604	906
	Battery Compartment	"X" Max.	in(mm)	40.5(1028)	40.5(1028)	40.5(1028)	40.5(1028)	40.5(1028)
		"Y" Max.	in(mm)	24.1(611)	28(711)	39.3(999)	24.1(611)	31.9(810)
		"Z" Max.	in(mm)	30.4(772)	30.4(772)	30.4(772)	30.31(770)	32.68(830)
6.5	Minimum Batt.Wt.		lb(kg)	2555(1159)	3245(1472)	4504(2043)	1069(485)	1323(600)
	Maximum Batt.Wt.		lb(kg)	2824(1281)	3587(1627)	4978(2258)	1135(515)	1411(640)
1.9	Wheelbase		y (in\mm)	77.9(1978)	81.8(2078)	77.9(1978)	81.8(2078)	81.8(2078)
4.19	Overall length		l1 (in\mm)	142.5(3620)	146.5(3720)	157.7(4005)	142.5(3620)/146.5(3720)	142.5(3620)/146.5(3720)
4.20	Length to face of forks		l2 (in\mm)	136.1(3456)	140(3556)	151.2(3841)	136.1(3456)/140(3556)	136.1(3456)/140(3556)
4.35	Turning Radius		Wa (in\mm)	80.9(2258)	92.8(2358)	104.1(2643)	80.9(2258)/92.8(2358)	80.9(2258)/92.8(2358)



Turret Stockpicker Specification

Distinguishing mark	1.1	Manufacturer			HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation			CSDS14-XC1-NA	CSDS16-XC1-NA	CSDS14-XC1-NAI	CSDS16-XC1-NAI
	1.3	Drive			Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker			standing / seated	standing / seated	standing / seated	standing / seated
	1.5	Rated capacity/rated load	Q	lb (kg)	3000(1361)	3500(1588)	3000(1361)	3500(1588)
	1.6	Load centre distance	c	in (mm)	24(600)	24(600)	24(600)	24(600)
	1.8	Load distance, centre of drive axle to fork	x	in(mm)	14.5(366)	14.5(366)	14.5(366)	14.5(366)
	1.9	Wheelbase	y	in (mm)	see table 1	see table 1	see table 1	see table 1
	1.10	Centre of drive wheel / counterweight	z	in (mm)	11(280)	11(280)	11(280)	11(280)
Weight	2.1	Service Weight		lb (kg)	6600	7100	6600	7100
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		in (mm)	polyurethane	polyurethane	polyurethane	polyurethane
	3.2	Tyre size, front			Φ14x8.1(Φ355x205)	Φ14x8.1(Φ355x205)	Φ14x8.1(Φ355x205)	Φ14x8.1(Φ355x205)
	3.3	Tyre size, rear			Φ16x6.7(Φ406x170)	Φ16x6.7(Φ406x170)	Φ16x6.7(Φ406x170)	Φ16x6.7(Φ406x170)
	3.5	Wheels, number front / rear (x = driven wheels)			2/1x	2/1x	2/1x	2/1x
	3.6	Tread, front	b10	in (mm)	49.9(1266)	49.9(1266)	49.9(1266)	49.9(1266)
	3.6	Tread, rear	b11	in (mm)	49.9(1266)	49.9(1266)	49.9(1266)	49.9(1266)
Dimensions	4.2	Height, mast lowered	h1	in (mm)	131(3330)	131(3330)	131(3330)	131(3330)
	4.4	Lift	h3	in (mm)	140(3565)	140(3565)	140(3565)	140(3565)
	4.5	Height, mast extended	h4	in (mm)	253(6435)	253(6435)	253(6435)	253(6435)
	4.7	Height of overhead guard (cabin)	h6	in (mm)	103(2610)	103(2610)	103(2610)	103(2610)
	4.8	Standing height	h7	in (mm)	16(410)	16(410)	16(410)	16(410)
	4.11	Auxiliary lift	h9	in (mm)	71(1810)	71(1810)	71(1810)	71(1810)
	4.14	Standing height raised	h12	in (mm)	154.5(3925)	154.5(3925)	154.5(3925)	154.5(3925)
	4.19	Overall length	l1	in (mm)	see table 1	see table 1	see table 1	see table 1
	4.20	Length to face of forks	l2	in (mm)	see table 1	see table 1	see table 1	see table 1
	4.21	Overall width	b1/b2	in (mm)	47.6(1210)/58.1(1475)	47.6(1210)/58.1(1475)	47.6(1210)/58.1(1475)	47.6(1210)/58.1(1475)
	4.22	Fork dimensions	s/e/l	in (mm)	2x4.8x45.3(50x122x1150)	2x4.8x45.3(50x122x1150)	2x4.8x45.3(50x122x1150)	2x4.8x45.3(50x122x1150)
	4.24	Fork-carriage width	b3	in (mm)	26.4(670)	26.4(670)	26.4(670)	26.4(670)
	4.25	Distance between fork-arms	b5	in (mm)	25.6(650)	25.6(650)	25.6(650)	25.6(650)
	4.29	Reach, sideways		in (mm)	49.2(1250)	49.2(1250)	49.2(1250)	49.2(1250)
	4.31	Ground clearance, laden, below mast	m1	in (mm)	3.2(80)	3.2(80)	3.2(80)	3.2(80)
	4.32	Ground clearance, centre of wheelbase	m2	in (mm)	3.2(80)	3.2(80)	3.2(80)	3.2(80)
	4.35	Turning radius	Wa	in (mm)	see table 1	see table 1	see table 1	see table 1
	4.38.1	Total lift	h3+h9	in (mm)	211.6(5375)	211.6(5375)	211.6(5375)	211.6(5375)
	4.38.2	Order picking height		in (mm)	217.5(5525)	217.5(5525)	217.5(5525)	217.5(5525)
	4.38.7	Inner clear height of operator compartmen		in (mm)	83.5(2120)	83.5(2120)	83.5(2120)	83.5(2120)
Performance data	5.1	Travel speed, laden/unladen		mph(km/h)	6.9/7.5(11/12)	6.5/7.5(10.5/12)	6.9/7.5(11/12)	6.5/7.5(10.5/12)
	5.2	Lift speed, laden/unladen		fpm(m/s)	104.3/120(0.53/0.61)	102.4/120(0.52/0.61)	104.3/120(0.53/0.61)	102.4/120(0.52/0.61)
	5.3	Lowering speed, laden/unladen		fpm(m/s)	88.6/98.5(0.45/0.5)	88.6/98.5(0.45/0.5)	88.6/98.5(0.45/0.5)	88.6/98.5(0.45/0.5)
	5.4	Traverse speed,laden/unladen		fpm(m/s)	37.4/39.4(0.19/0.2)	37.4/39.4(0.19/0.2)	37.4/39.4(0.19/0.2)	37.4/39.4(0.19/0.2)
	5.7	Gradeability, laden/unladen		%	5	5	5	5
	5.10	Service brake			Electric	Electric	Electric	Electric
	5.11	Parking brake			Electric	Electric	Electric	Electric
	5.12	Retarder			Electric	Electric	Electric	Electric
Electric-engine	6.1	Drive motor rating S2 60 min		hp(kW)	10.7(8)	10.7(8)	10.7(8)	10.7(8)
	6.2	Lift motor rating at S3 15%		hp(kW)	36.2(27)	36.2(27)	36.2(27)	36.2(27)
	6.4	Battery voltage, nominal capacity K5 "A"		V/Ah	80/465	/	/	/
		Battery voltage, nominal capacity K5 "B"		V/Ah	80/620	80/620	/	/
		Battery voltage, nominal capacity K5 "C"		V/Ah	/	80/930	/	/
		Battery voltage, nominal capacity K5 "D"		V/Ah	/	/	80.5/604	80.5/604
		Battery voltage, nominal capacity K5 "E"		V/Ah	/	/	/	80.5/906
	6.5	Battery weight		lb (kg)	see table 1	see table 1	see table 1	see table 1
		Battery dimensions		in (mm)				
		Max. battery weight	l/b/h	lb (kg)				
		Min. battery weight		lb (kg)				
	6.6	Battery charging time		h	see table 1	see table 1	see table 1	see table 1
Misc.	8.1	Type of drive control			MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
	8.4	Sound pressure level at operator's ear as per EN 12053		db(A)	65	65	65	65
	8.6	Steering			Electric	Electric	Electric	Electric







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 sideways 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.
- / Sideways 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 | / Battery indicator |
| / Electric steering system | / Warning signal when reversing |
| / Inching switch(LH/RH) | / Multi-function handlebar |
| / Emergency cut off switch | / Horn |
| / Stand-on pedal with shock absorber | / Tool box |
| / Adjustable supportive backrest | / Standard lead-acid battery |
| / Sideways change battery | |

Options

- | | |
|------------------------|---------------------------------------|
| / Warning light | / Turning indicators |
| / Working light | / Different height of towing coupling |
| / Handrail | / Review Mirror |
| / Big capacity battery | |



Li-Ion POWERED



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

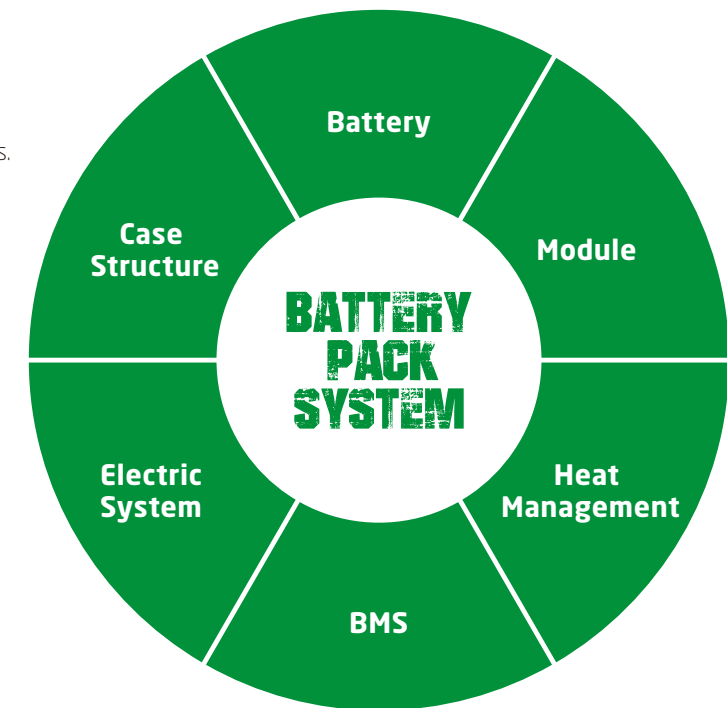


**5 YEARS
WARRANTY**

INNOVATIVE SOLUTIONS NEW POWER NOW

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- / 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

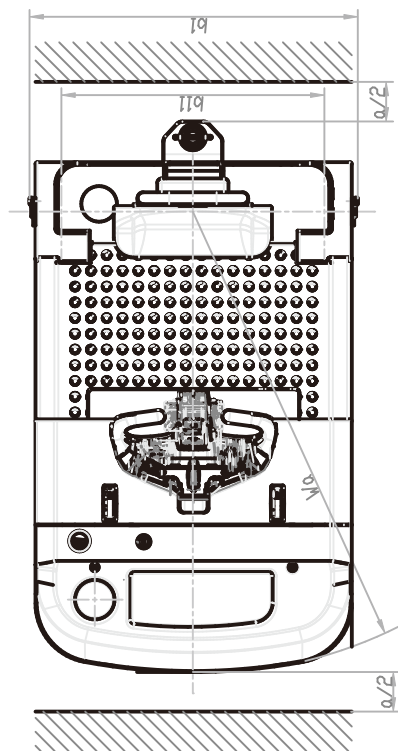
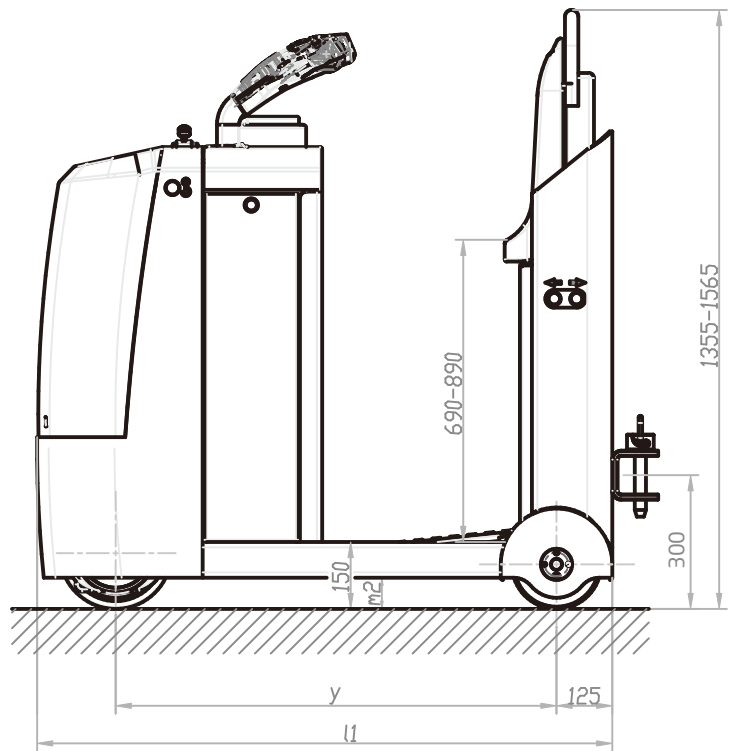
Type		QDD3-ASC2-I* QDD3-ASZ3-I	QDD5-ASC2-I* QDD5-ASZ3-I
Li-Ion battery	V/Ah	24/125	24/228
Li-Ion battery , Optional	V/Ah	24/228	-
Titans charger		SPC-24100	SPC-24100

Note: * CE model

A Series Electric Tow Tractor

Distinguishing marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation		QDD3-ASC2* QDD3-ASZ3	QDD3-ASC2-I* QDD3-ASZ3-I	QDD5-ASC2* QDD5-ASZ3	QDD5-ASC2-I* QDD5-ASZ3-I
	1.3	Drive		Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		standing	standing	standing	standing
	1.5	Load capacity/rated load	Q (kg/lb)	3000	3000	5000	5000
	1.7	Rated drawbar pull	F (N/lbf)	600	600	1000	1000
Weights	1.9	Wheelbase	y (mm/in)	957	995	978	1016
	2.1	Service Weight	kg/lb	900	900	1000	1000
Wheels, Chassis	2.3	Axle loading, front/rear	kg/(lb)	610/290	610/290	700/300	700/300
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU
	3.2	Tyre size, front	mm/in	φ230×75	φ230×75	φ250×100	φ250×100
	3.3	Tyre size, rear	mm/in	φ200×100	φ200×100	φ200×100	φ200×100
Dimensions	3.5	Wheels, number front /rear (x=drive wheels)		1×/2	1×/2	1×/2	1×/2
	3.7	Track width, rear	b11 (mm/in)	669	669	669	669
	4.8	Seat height/stand height	h7 (mm/in)	150	150	150	150
	4.19	Overall length(without traction pin)	l1 (mm/in)	1289	1327	1289	1327
	4.21	Overall width	b1 (mm/in)	830	830	830	830
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	70	70	70	70
Performance Data	4.35	Turning radius	Wa (mm/in)	1172	1210	1172	1210
	5.1	Travel speed, laden/unladen	km/h (mph)	7.0/10.0	7.0/10.0	7.0/10.0	7.0/10.0
	5.5	Drawbar pull at 60 minute rating	N/lbf	600	600	1000	1000
	5.6	Max. Drawbar pull at 5 minute rating	N/lbf	2400	2400	3200	3200
	5.7	Gradeability, laden	%	4	4	4	4
	5.10	Service brake		Electronmagnetic	Electronmagnetic	Electronmagnetic	Electronmagnetic
E-Motor	6.1	Drive motor rating S2 60 min.	kW/hp	2.2	2.2	3	3
	6.4	Battery voltage,rated capacity(STD.)	V/Ah	24/270	24/120	24/360	24/202
		Battery voltage,rated capacity(OPT.)	V/Ah	24/360	24/228	24/450	-
Others	8.1	Type of drive control		CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI	CURTIS ZAPI

Specifications are subject to change without notice.
Note: * CE model



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 THEM POWERED



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

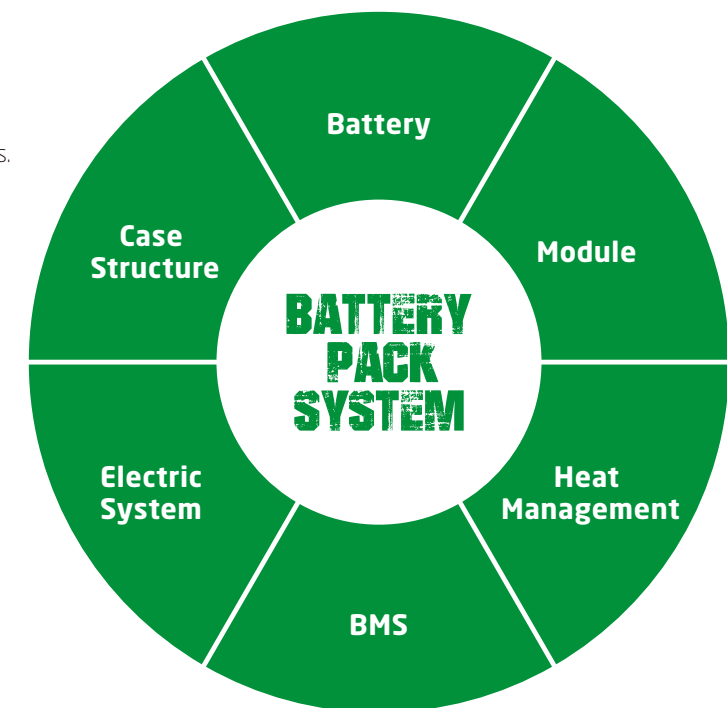


**5 YEARS
WARRANTY**

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- / Adapted to low temperatures: Comes standard with an electrical heating feature , ensuring normal operation in low temperatures.
- / Quick charging: Can charge and operate at the same time, fully charged in 2hours.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
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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		QDD20-AC2-I*	QDD20-AC2S-I*	QDD40-AC2-I*	QDD40-AC2S-I*	QDD60-AC2-I*	QDD60-AC2S-I*
Li-Ion battery	V/Ah	48/228	48/228	48/228	48/228	48/228	48/228
Titans charger		SLC-48100	SLC-48100	SLC-48100	SLC-48100	SLC-48100	SLC-48100

Note: * CE model

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
- / Inching switch



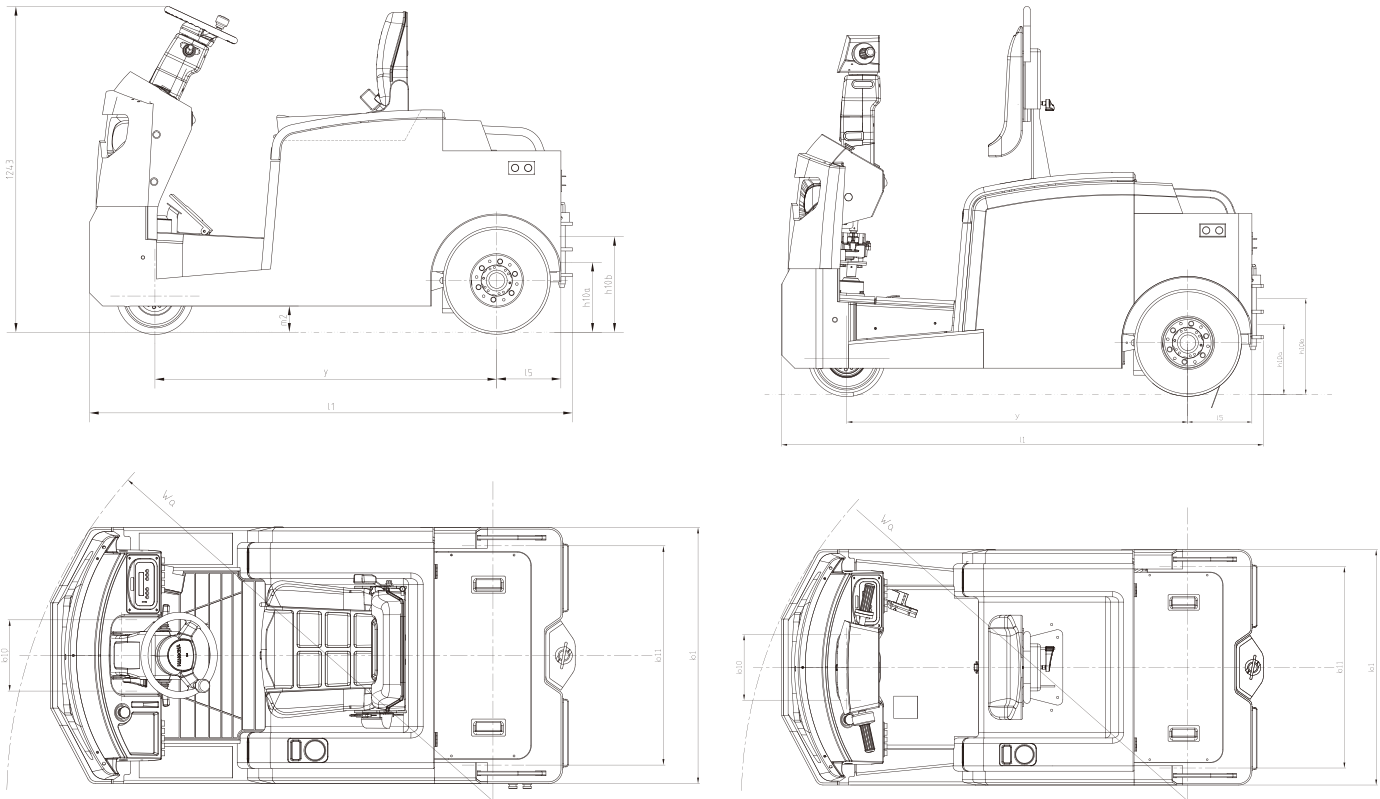
Electronic power steering system
(for stand-up driving type tractor)



A series Electric Tow Tractor specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.					
	1.2	Manufacturer's type designation		QDD20-AC2* QDD20-AD2	QDD20-AC2S* QDD20-AD2S	QDD40-AC2* QDD40-AD2	QDD40-AC2S* QDD40-AD2S	QDD60-AC2* QDD60-AD2	QDD60-AC2S* 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	6
	1.7	Rated drawbar pull	F(N)	500	500	1000	1000	1500	1500
	1.9	Wheelbase	y(mm)	1145	1145	1305	1305	1305	1305
Weights	2.1	Service Weight （Including battery）	kg	880	880	1080	1080	1150	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
Dimensions	3.6	Tread, front	b10 (mm)	0	0	250	250	250	250
	3.7	Tread, rear	b11 (mm)	770	770	770	770	770	770
	4.1.2	Coupling height	h10 (mm)	365/267	365/267	365/267	365/267	365/267	365/267
	4.1.7	Overhang	ls(mm)	245	245	245	245	245	245
	4.1.9	Overall length	l1 (mm)	1684	1684	1844	1844	1844	1844
	4.2.1	Overall width	b1(mm)	900	900	900	900	900	900
	4.3.2	Ground clearance, centre of wheelbase	m2 (mm)	100	100	100	100	100	100
	4.3.5	Turning radius	Wa (mm)	1600	1600	1763	1763	1763	1763
Performance	5.1	Travel speed, laden/unladen	km/h	6/13	6/13	6/13	6/13	6/13	6/13
	5.6	Max. Drawbar pull	N	2000	2000	4000	4000	4500	4500
	5.7	Gradeability, laden/unladen	%	5/25	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	4.28
	6.2	Type of drive motor		AC	AC	AC	AC	AC	AC
	6.4	Battery voltage, nominal capacity K5,Standard	V/Ah	48/165	48/165	48/210	48/210	48/275	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	48/280~350
	Controller		CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	

★ CE model



X series Electric Tow Tractor
with capacities of 6,000 to 10,000kg

Li-Ion POWERED



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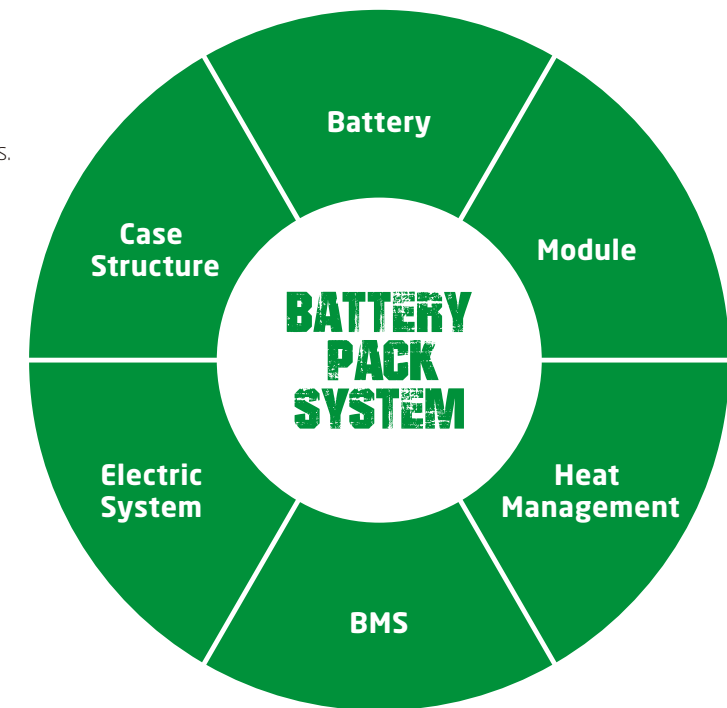


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- / Quick charging: Can charge and operate at the same time, fully charged in 2hours.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



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Lead-acid batteries
8-10 hours 100%

Rapid charging and opportunity charging ensure continuous availability of vehicles.

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Li-Ion Battery Pack specification

Type		QDD60-XD3-I*	QDD70-XD3-I*	QDD80-XD3-I*	QDD90-XD3-I*	QDD100-XD3-I*
Li-Ion battery	V/Ah	48/302	48/302	48/302	48/302	48/456
Titans charger		SLC-48200R	SLC-48200R	SLC-48200R	SLC-48200R	SLC-48200R

Note: * CE model

Environment/ Efficiency/ Economy



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.



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 Electric Tow Tractor



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.

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

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



X series 6.0-10t Lead-acid Battery Tow Tractor Specification

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.							
	1.2	Model	QDD60-XD3*	QDD70-XD3*	QDD70-XD3-L*	QDD80-XD3*	QDD80-XD3-L*	QDD90-XD3*	QDD90-XD3-L*	QDD100-XD3*
	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)	7000	7000	8000	8000	9000	9000	10000
	1.7	Rated tractive power	F (N)	1500	1750	2000	2000	2250	2250	2500
Weight	1.9	Wheelbase	y (mm)	1035	1035	1035	1035	1035	1250	1250
	2.1.1	Net weight incl. battery (see row 6.5)	kg	1220	1270	1450	1330	1450	1380	1550
Tyres, chassis	2.3	Axle load without load front/rear	kg	540/680	590/680	700/750	590/740	700/750	590/790	700/850
	3.1	Tyres, front/rear		Pneumatic/Pneumatic	Pneumatic/Pneumatic	SE/Pneumatic	Pneumatic/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
	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
	3.5	Wheels, number front/rear (* = driven wheels)		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
Dimensions	3.7	Tread width, rear	h10 (mm)	870	870	870	870	870	870	870
	4.7	Height of overhead guard	h6 (mm)	2140	2140	2140	2140	2140	2140	2140
	4.8	Seat height/stand height	h7 (mm)	1020	1020	1020	1020	1020	1020	1020
	4.1.2	Coupling height	h10 (mm)	274	274	274	274	274	274	274
	4.1.2.1	2nd coupling height	mm	330	330	330	330	330	330	330
	4.1.2.2	3. Coupling height	mm	386	386	386	386	386	386	386
	4.1.3	loading height without load	h11 (mm)	686	686	686	686	686	686	686
	4.1.6	loading area length	l3 (mm)	395	395	395	395	395	395	395
	4.1.7	Overhang length	l5 (mm)	350	350	350	350	350	350	350
	4.1.8	Loading area width	b9 (mm)	908	908	908	908	908	908	908
	4.1.9	Overall length	l1 (mm)	1830	1830	2045	1830	2045	1830	2045
	4.2.1	Overall width	b1 (mm)	996	996	996	996	996	996	996
	4.3.2	Ground clearance, centre of wheelbase	m2 (mm)	135	135	135	135	135	135	135
	4.3.5	Turning radius	Wa (mm)	1650	1650	1865	1650	1865	1650	1865
Performance data	4.3.6	Smallest pivot point distance	b13 (mm)	600	600	600	600	600	600	600
	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	8.5/18
	5.5	Drawbar pull w. / w.o. load	N	1500	1750	1750	2000	2250	2250	2500
	5.6	Max. drawbar pull, laden/unladen	N	4500	5250	5250	6000	6000	6750	7500
	5.7	Gradeability laden/unladen	%	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
Electrics	6.1	Drive motor, output S2 60 min.	Kw	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
	6.4	Battery voltage/nominal capacity K5	V/Ah	48/300	48/300	48/420	48/360	48/420	48/360	48/420
	6.5	Battery weight	kg	502	502	685	560	685	560	685
Misc.	8.1	Type of drive control		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

Note: * CE model

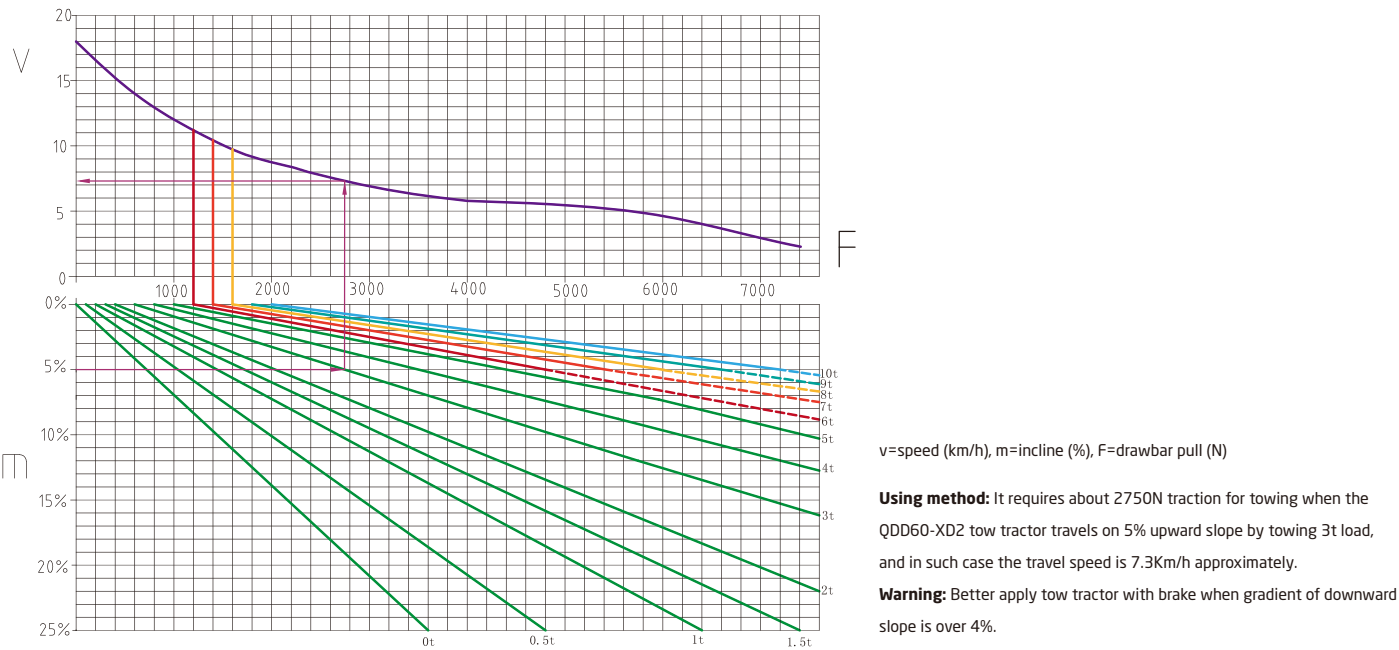
Battery specification

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

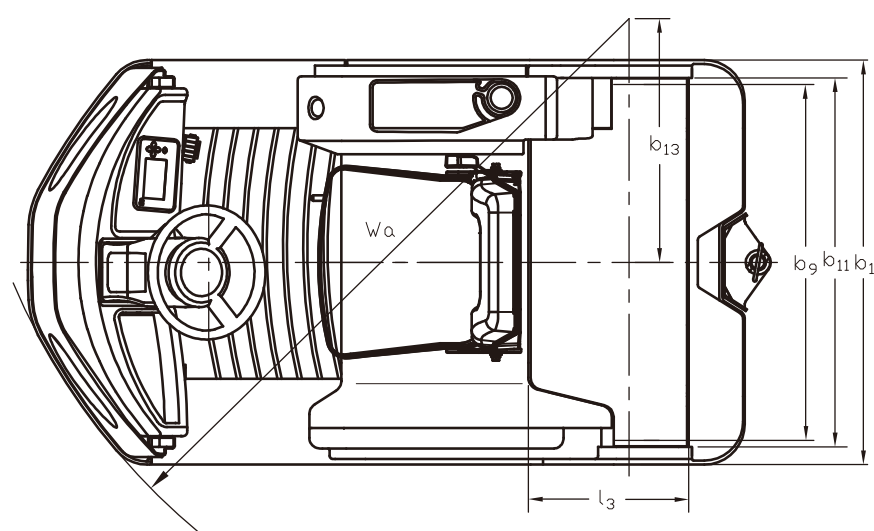
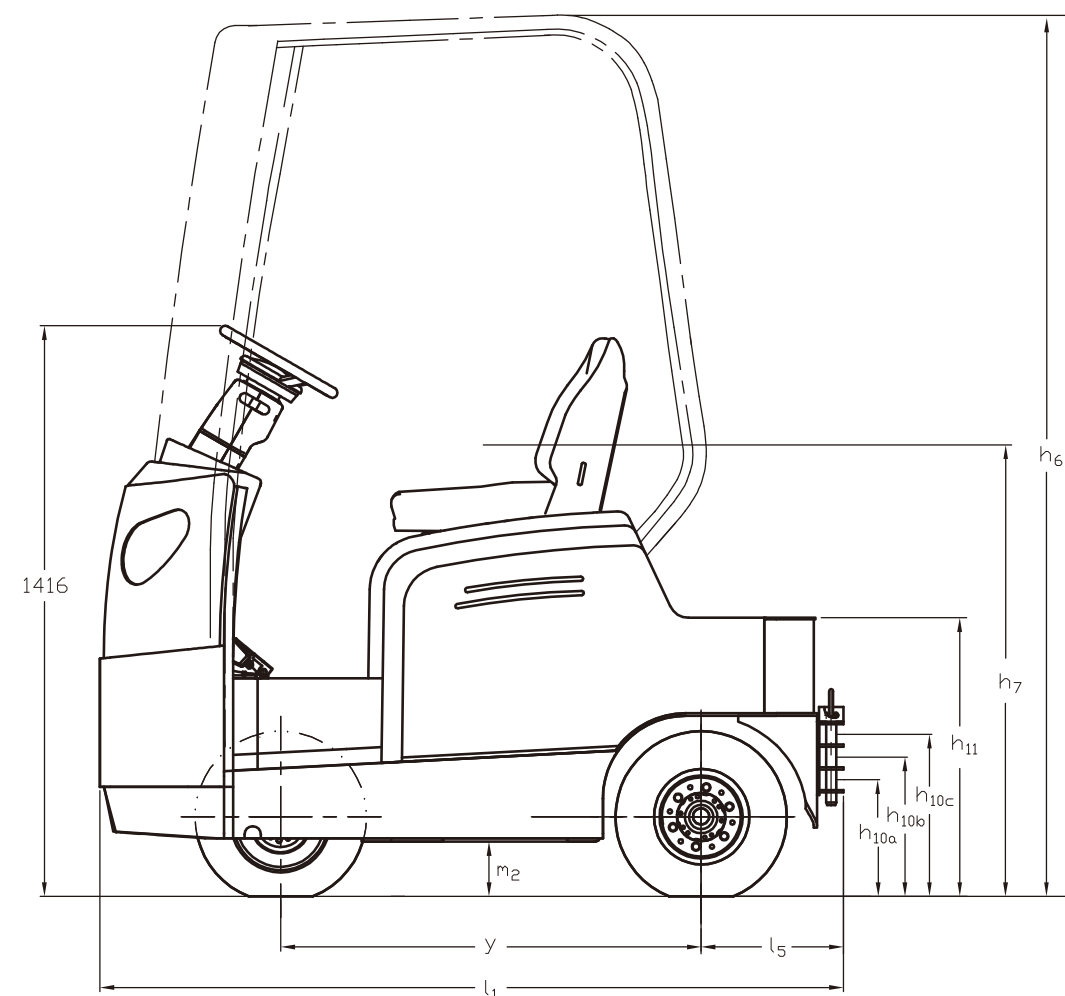
Traction device specification

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



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, enviromental 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



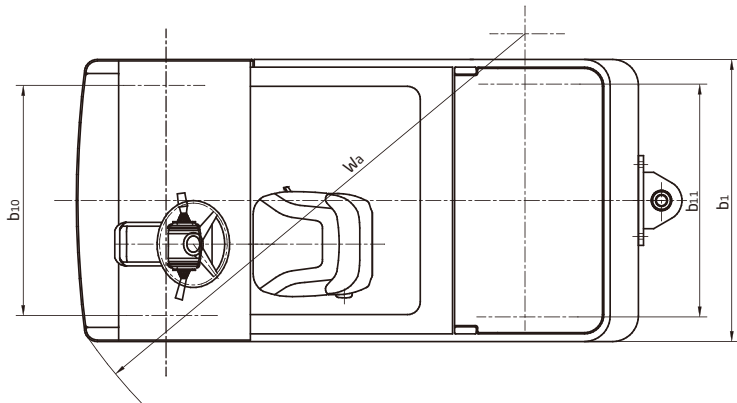
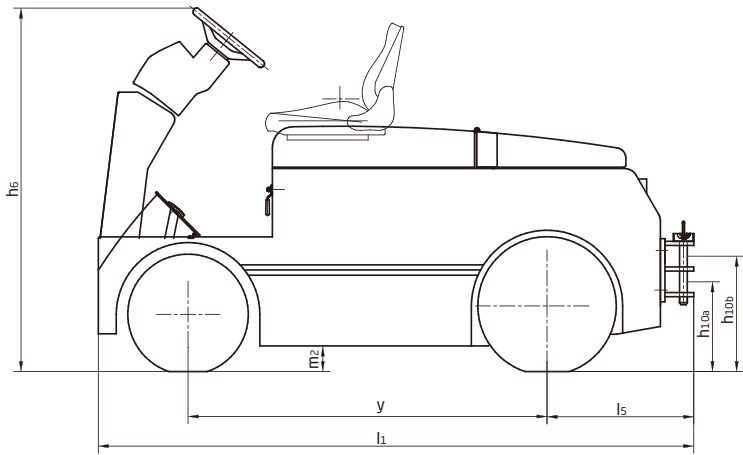
Side change battery design is convenient for changing battery



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

10-15t Electric Tow Tractor

Distinguishing marks	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.			
	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		5.0-8	
	3.3	Tyre size, rear	6.0-9		6.0-9	
	3.5	Wheels, number front / rear (x = driven wheels)	2/2		2/2	
	3.6	Tread, front	b10 (mm/in)	897.5/35.3	897.5/35.3	
	3.7	Tread, rear	b11 (mm/in)	908/35.7	908/35.7	
Dimensions	4.7	Height of overhead guard (cabin)	h6 (mm/in)	1440/56.7	2112/83.1	1440/56.7 2112/83.1
	4.12	Coupling height	h10 (mm/in)	350/450	13.8/17.7	350/450 13.8/17.7
	4.19	Overall length	l1 (mm/in)	2122/83.5		2322/91.4
	4.21	Overall width	b1 (mm/in)	1100/43.3		1100/43.3
	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	100/4		100/4
	4.35	Turning radius	Wa (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



X Series Electric Tow Tractor

with capacities of 20,000 to 32,000kg

Easy/
Efficiency/
Economy



Appearance

/ With the integrated steel structure, the internationally-fashionable large arc and streamline pattern is utilized. The appearance is beautiful. The vehicle is applicable to such works as traction, pushing and handling.

Safety

- / Advanced AC control system-The high-frequency IMOTION integrated controller can guarantee stable and accurate vehicle running. The motor has fine electric control matching performance, and has such functions as stable start-up, regenerative braking, plug braking, anti-slip at ramp and so on. It is energy-saving, high-efficiency, safe and reliable.
- / With the vacuum servo braking system, double-cavity and double-pipe are arranged in X lay-out. The front and rear parts are provided with differential pressure. All wheels can be braked. The servo ratio is great, braking is safe, stable and reliable; with the vacuum bucket design, when the power is ineffective, servo braking can be reliably realized.
- / The mater electric switch is provided, the vehicle safety can be guaranteed through emergency power shut-off.

Advancedness

- / The fully AC power system provides strong power and more accurate speed-adjusting performance. AC power system is used for both running and steering.
- / The high-efficiency power system and high-performance battery extend the operating time after one charging.
- / The LED display instrument of the international first-class brand is utilized; such instrument has functions of electric quantity display, timing meter and failure self-diagnosis. Without the handheld unit, changing vehicle performance and overhaul can be completed via the instruments. The failure will be displayed both in code and text, which is more visual and easy for reading.
- / At the vehicle rear side, there are the operating switches (front and behind electric switches, emergency power shut-off switch).
- / The vehicle battery can be replaced through being hoisted or laterally moved out, which provides convenience for use by the user.
- / The electric system of the whole vehicle utilizes the waterproof design; the electric control utilizes the forced cooling and can also have functions of heat emission, air guide, dust prevention, waterproofing.
- / The bottom plate at the rear part of the vehicle can be used as the loading platform, and can carry 500kg.



At the vehicle left rear side, there are the operating switches (front and behind electric switches, emergency power shut-off switch). The hook can be conveniently and safely manipulated



The imported and fully AC power system has advanced performance, is fully enclosed, utilizes forced air-cooling and is safe and reliable



Remote control (optional): Vehicle management system: Vehicle status enquiry and record, alarm for overspeed, door lock, radar and so on. The equipment can be provided with 7-inch touch screen. The operation is simple and convenient. With overall data display & real-time status reminding, monitoring, management and service can be realized in remote way



With the internationally-advanced and transversely-arranged driving unit, the special reduction gearbox is utilized, and the great reduction ratio design is used

Stability

/ The battery is placed at the bottom of the vehicle frame and between the front axle and rear axle. With the ultra-low gravity center, the excellent stability of the whole vehicle is ensured.

Comfort

/ The man-machine interactive system utilizes the new-type digital panel and combined rocker switch, the vehicle travel condition can be displayed clearly, and it is simple, reliable and visual.

/ With such special technologies for vehicle as transversely-arranged oil cylinder steering axle, fully-hydraulic steering device and so on, the steering radius is small, and the special operating force is less than 10N.

/ With the advanced chassis elastic suspension technology and long wheelbase design, the vehicle has fine smoothness.

/ The integrated driver's cab has large visual field and is made of irregular tubes. The driver's cab is flexibly connected to the vehicle body, has fine tightness, can isolate sound, vibration, heat and so on. Better comfort is offered for the driver. With the wide operating space and lower boarding/get-down pedal, the operator can board or get down conveniently.

/ The front and rear angles of inclination of the steering wheel are adjustable; the seat can be adjusted by 150mm to front or rear. The operator can select the best driving position.

Environmental protection

/ With such advantages of mute, non-pollution and saving energy, the environmental protection requirements can be met.

/ The whole vehicle utilizes the asbestos-free material.

Maintainability

/ Such electric elements as electric control, contactor, instrument, accelerator and so on are products of internationally well-known brands, and have high reliability.

/ AC power system is used for both running and steering. The motor is maintenance-free, and the maintenance cost for carbon brush replacement and so on is reduced.

/ With the rear cover design provided with air spring, large openness and barrier-free rear view, maintenance for such electric elements as battery, motor, controller and so on is very convenient.

Standard specification

/ Head lamp (high beam head lamp and dipped head lamp)

/ Boarding handle

/ Large and integrated rubber pedal cushion

/ Steering signal lamp

/ Steering wheel adjustable device

/ High-power AC drive system

/ LED rear work lamp assembly

/ Standard seat

/ Fully hydraulic steering

/ Multi-functional combined instrument

/ Front windshield wipers

/ Vacuum servo hydraulic brake

/ Electric horn

/ Front windshield wiper water

/ Standard battery

/ Reversing buzzer

/ Reflecting mirror

/ Fully-enclosed driver's cab

/ Top light

/ Inching switch

/ Sun-shield

/ Fan

/ Standard traction pin

/ Front bumper

Options

/ High-performance imported lead-acid battery

/ Speed limit

/ Warm air blower

/ Large-capacity domestically-made lead-acid battery

/ Speed limit alarm

/ Solid tyre

/ Domestically-made lithium iron phosphate battery

/ Traction pin height solution

/ Semi-enclosed driver's cab

/ Imported lithium iron phosphate battery

/ Alarm light

/ Rear windshield wipers

/ Battery charger

/ Rear work light

/ Rear windshield wiper water

/ Suspended seat

/ Extinguisher

/ Remote management system



The integrated driver's cab has large visual field and is made of irregular tubes. The driver's cab is flexibly connected to the vehicle body, has fine tightness, can isolate sound, vibration, heat and so on. With the wide operating space, better comfort is offered for the driver.



The large LED display screen has functions of electric quantity display, timing meter and failure self-diagnosis. Without the handheld unit, changing vehicle performance and overhaul can be completed via the instruments. The failure will be displayed both in code and text, which is more visual and easy for reading.



The battery can be replaced through being hoisted or laterally moved out, which provides convenience for use by the user.



X series 20-32t Electric Tow Tractor Specification

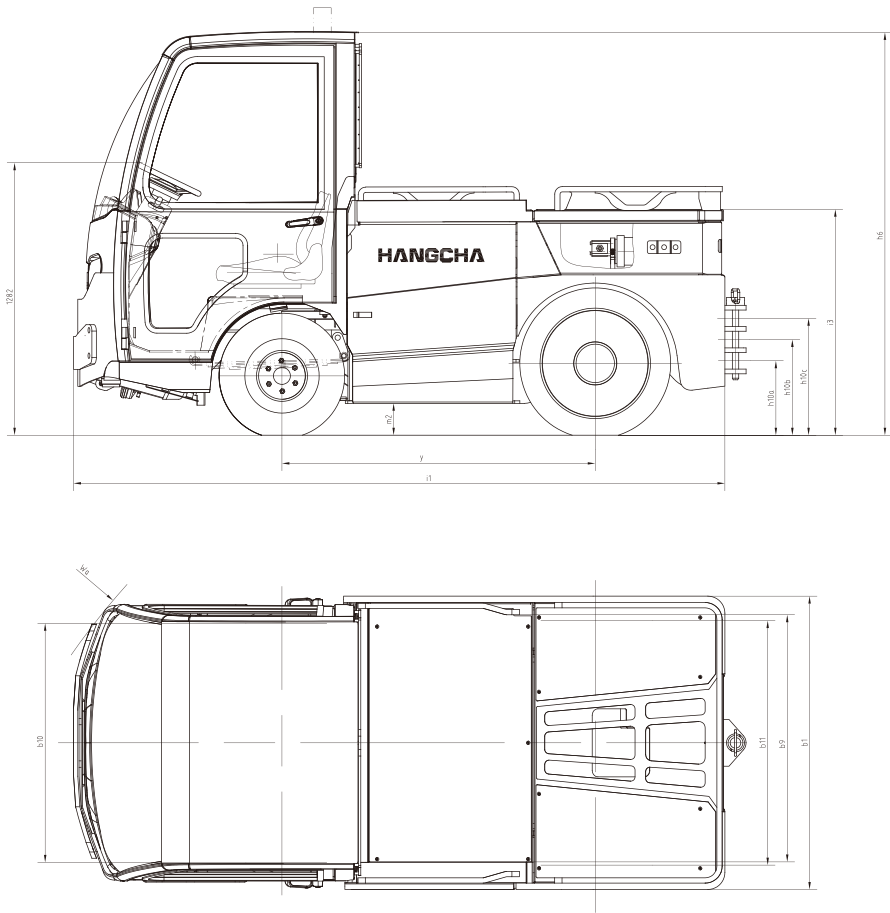
Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.				
	1.2	Manufacturer's type designation	QSD200-XD3*	QSD250-XD3*	QSD250-XD3-L*	QSD320-XD3*	QSD320-XD3-L*
	1.5	Rated capacity/rated load	Q (kg)	20000	25000	25000	32000
	1.7	Rated drawbar pull	F (N)	5000	6300	6300	7000
	1.9	Wheelbase	y (mm)	1475	1475	1760	1475
Weight	2.1	Service Weight	kg	3550	3750	4350	4000
	2.2	Axle loading, front/rear	kg	1410/2825	1600/2150	1800/2550	1650/2350
Tyres, chassis	3.2	Tyre size, front		6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR
	3.3	Tyre size, rear		7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	28×9-15-12PR
	3.5	Wheels, number front / rear (x = driven wheels)		2/2	2/2	2/2	2/2
	3.6	Tread, front	b10 (mm)	1124.5	1124.5	1124.5	1124.5
	3.7	Tread, rear	b11 (mm)	1130	1130	1130	1150
Dimensions	4.7	Height of overhead guard (cabin)	h6 (mm)	1895	1895	1895	1895
	4.12	Coupling height	h10 (mm)	550/450/350	550/450/350	550/450/350	550/450/350
	4.16	Length of loading surface	l3 (mm)	1685	1685	1970	1685
	4.18	Width of loading surface	b9 (mm)	1160	1160	1160	1160
	4.19	Overall length	l1 (mm)	3065	3065	3350	3350
Performance data	5.1	Travel speed, laden/unladen	km/h	- / 25	- / 25	- / 25	- / 25
	5.5	Drawbar pull at 60 minute rating	N	5000	6300	6300	7000
	5.6	Max. Drawbar pull at 5 minute rating	N	20000	20000	20000	26000
	5.7	Gradeability, laden/unladen	%	- / 33%	- / 33%	- / 33%	- / 33%
	5.10	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic
Electric-engine	6.1	Drive motor rating S2 60 min	kW	25	25	25	30
	6.4	Battery voltage, nominal capacity K5	V/Ah	80/500	80/500	80/775	80/620
	6.5	Battery weight	kg	1200	1200	1920	1480

Note: * CE model

Li-Ion Battery Pack specification

Type		QSD200-XD3-I*	QSD250-XD3-IL*	QSD320-XD3-IL*
Li-Ion battery	V/Ah	80.5/456	80.5/456	80.5/456

Note: * CE model



X Series Electric Platform Truck
with capacities of 1,500 to 5,000kg

The X series electric flatbed handler is a new series of products independently developed by Hangcha. With exterior design, safety, reliability, advancement and comfort, etc. reaching the level of the world’s advanced brands and featuring high speed, high efficiency and high safety, it is an ideal choice for the short- and medium-distance goods handling at railway stations, vehicle companies, etc.

**Easy/
Efficiency/
Economy**



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.
- / An optional configuration is provided: a full range of long-lasting batteries, large-capacity lead-acid battery. With a large distance from the ground, a small turning radius and a good passing ability.

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.
- / The battery lid with a gas spring provided for the standard configuration makes the repair, maintenance and replacement of the battery convenient and is applicable to continuous operating conditions.



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



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 efficient AC power system has complete protection functions and greatly improved reliability and service life, powering the electric braking with protection for preventing sliding down a ramp.
- / With the battery placed at the bottom of the vehicle frame, the vehicle has good stability, safety and reliability.
- / Thanks for the brake system and anti-slip function, it provides safety and reliability.



Fully hydraulic steering (4-5t)

The follow-up steering system provided for the standard configuration has the advantages of low energy consumption, low noise, light steering force, a good feel, safe and reliable steering, etc.

Standard specification

- / LED light system
- / LCD screen
- / Standard battery
- / Side charging (lithium battery)
- / Emergency power-off switch
- / Horn
- / Reversing buzzer
- / File box
- / Cup holder
- / Traction pin
- / Angle adjustable steering wheel
- / Floating control platform
- / Seat belt
- / Combination LED three-color taillights
- / Chair

Options

- / EPS (Electric Power Steering) system
- / Reflecting mirror
- / Large capacity lead-acid battery
- / Large-diameter steering wheel
- / Alarm light
- / High performance lead acid battery
- / Suspension seat
- / Acoustic and optical alarm
- / Side charging (lead acid)
- / Large capacity lithium battery
- / Non-standard series platform
- / Blue light lamp
- / Battery side roll out
- / Non-standard series platform
- / LED Rear working light
- / Side shift battery trolley
- / OPS system
- / Terminal power supply
- / Voice-type reversing buzzer
- / Fire extinguisher
- / Charger
- / Solid tyre
- / Non-standard color
- / EPB (Electric Parking Brake)

Options (with cab)

- / Fully-enclosed cab
- / Semi-enclosed cab
- / Get on hand
- / RearView mirror
- / Ceiling light
- / Fan
- / Front single blade wiper
- / Front wiper sprinkler
- / Heater
- / Front glass defroster
- / Sunshade
- / Cooling and heating air conditioner



X Series Electric Platform Truck Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.									
	1.2	Manufacturer's type designation		BD15-XD2*/BD15-XC2*	BD15-XD2-I*/BD15-XC2-I*	BD20-XD2*/BD20-XC2*	BD20-XD2-I*/BD20-XC2-I*	BD30-XD2*/BD30-XC2*	BD30-XD2-I*/BD30-XC2-I*	BD40-XC2*	BD40-XC2-I*	BD50-XC2*	BD50-XC2-I*
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated
	1.5	Rated capacity/rated load	Q (kg)	1500	1500	2000	2000	3000	3000	4000	4000	5000	5000
	1.9	Wheelbase	y (mm)	1235	1235	1500	1500	1500	1500	1900	1900	1900	1900
Weight	2.1	Service Weight	kg	1000	892	1200	942	1260	1000	1790	1515	1800	1525
	2.3	Axle loading, unladen front/rear	kg	515/485	460/432	615/585	486/456	665/595	535/465	895/895	745/770	900/900	750/775
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		5.00-8-10PR	5.00-8-10PR	5.00-8-10PR	5.00-8-10PR	6.00-9-10PR	6.00-9-10PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR
	3.3	Tyre size, rear		5.00-8-10PR	5.00-8-10PR	5.00-8-10PR	5.00-8-10PR	6.00-9-10PR	6.00-9-10PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR
	3.5	Wheels, number front / rear (x = driven wheels)		4(x=2)	4(x=2)	4(x=2)	4(x=2)	4(x=2)	4(x=2)	4(x=2)	4(x=2)	4(x=2)	4(x=2)
	3.6	Tread, front	b10 (mm)	1095	1095	1095	1095	1095	1095	1290	1290	1290	1290
	3.7	Tread, rear	b11 (mm)	1130	1130	1130	1130	1145	1145	1290	1290	1290	1290
	4.7	Height of overhead guard (cabin)	h6 (mm)	1865	1865	1865	1865	1900	1900	1990	1990	1990	1990
Dimensions	4.12	Coupling height	h10 (mm)	350	350	350	350	400	400	440	440	440	440
	4.16	Length of loading surface	l3 (mm)	1600	1600	2000	2000	2000	2000	2600	2600	2600	2600
	4.18	Width of loading surface	b9(mm)	1300	1300	1300	1300	1300	1300	1500	1500	1500	1500
	4.19	Overall length	l1 (mm)	2875	2875	3275	3275	3275	3275	3875	3875	3875	3875
	4.21	Overall width	b1(mm)	1300	1300	1300	1300	1300	1300	1500	1500	1500	1500
		Overall Height	(mm)	1210	1210	1210	1210	1244	1244	1335	1335	1335	1335
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	120	120	120	120	155	155	175	175	175	175
	4.35	Turning radius	Wa (mm)	2850	2850	3300	3300	3300	3300	3900	3900	3900	3900
Performance data	5.1	Travel speed, laden/unladen	km/h	13.5/18	13.5/18	14/18	14/18	13/20	13/20	13/16	13/16	12/16	12/16
	5.6	Max. Drawbar pull	N	5200	5200	5200	5200	6500	6500	9000	9000	9000	9000
	5.8	Max. gradeability, laden	%	12%x50	12%x50	12%x50	12%x50	12%x50	12%x50	12%x50	12%x50	12%x50	12%x50
	5.10	Service brake		Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic	Electromagn+Hydraulic
		Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Electric-engine	6.1	Drive motor rating S2 60 min	kW	5	5	5	5	5	5	6	6	6	6
	6.4	System battery voltage, nominal capacity K5	V/Ah	72/125	80/125	72/180	80/125	72/180	80/125	72/240	80/228	72/240	80/228
	6.5	Battery weight	kg	268	150	418	150	418	150	485	210	485	210
		Battery dimensions	(mm)	1072/402/321	1070/400/370	1072/566/321	1070/400/370	1072/566/321	1070/400/370	1072/566/321	1070/564/370	1072/566/321	1070/564/370
	10.7	Sound pressure level at the driver's seat	dB (A)	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65

Note:
Electric control configuration: D1(INMOTION) / C1(CURTIS)
★ CE model

1.5/2.2/3.0t Specifications of platforms

Length \ Width	1600	2000	2240	2400	3000	4000	4500
	■ Standard configuration	■ Standard configuration	● ■	● ■			
1300			● ■	● ■			
1400		● ■	● ■	● ■			
1500				● ■	● ■	● ■	● ■
1800						○ ■	

Note: ● Preferably select ○ optional Guardrail height: ■ 220: □ 320mm

4.0/5.0t Specifications of platforms

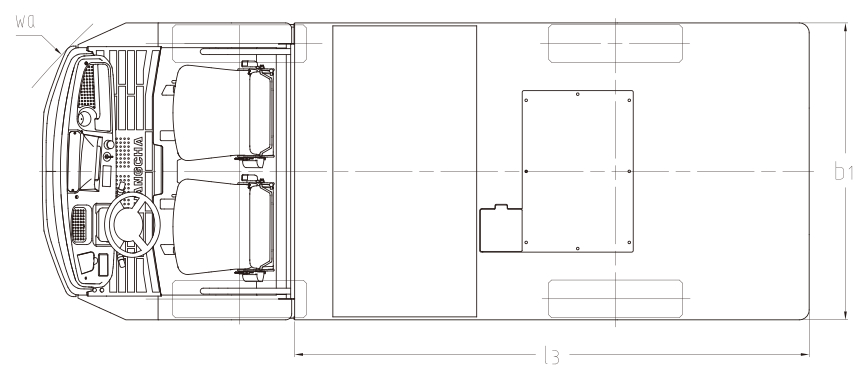
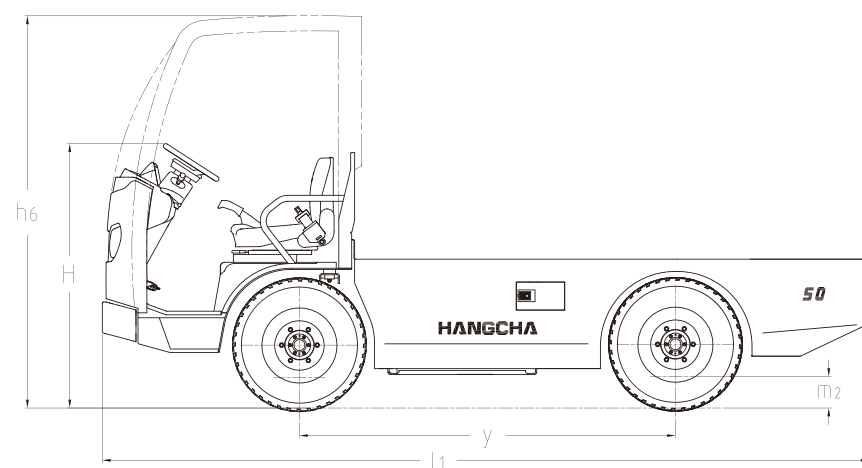
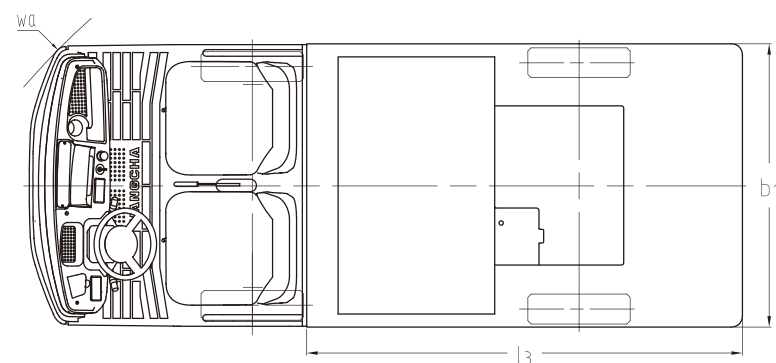
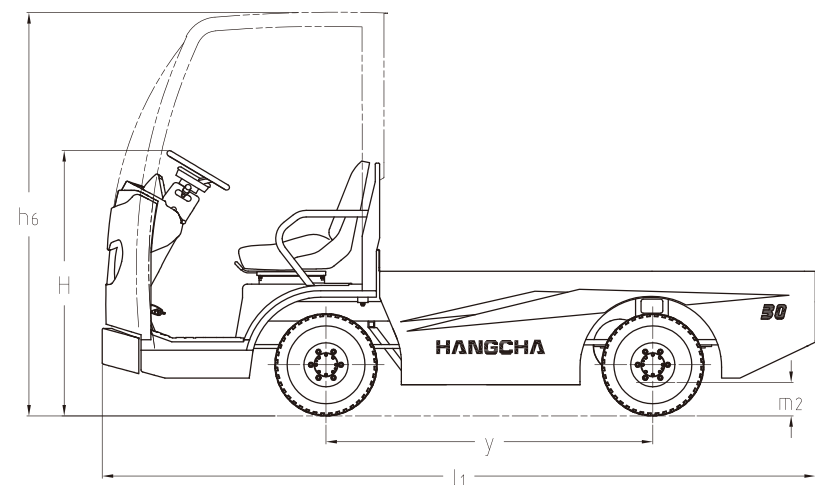
Length \ Width	2600	3200	4000	4600	5000	6000
	■ Standard configuration	● ■	● ■	○ ■		
1500		○ ■	○ ■			
1600			○ ■			
1800			○ ■			
2000			○ ■	○ ■	○ ■	○ ■
2600				○ ■		

Note: ● Preferably select ○ optional Guardrail height: ■ 220: □ 320mm

Table of the battery (72v)

Model \ A.h	BD15	BD20	BD30	BD40	BD50
	★				
120	■	■	■		
125	☆				
140	☆○◇▽				
165					
180		★	★		
228		△	△	▲	▲
220		▽	▽	▽	
240		☆	☆	★	★
300		☆○◇▽	☆○◇▽	☆○◇▽	☆○◇▽
330		☆○◇▽	☆○◇▽	☆○◇▽	☆○◇▽
420				☆○	☆○

Note:
Standard battery: ZIBO(★), ENEROC(■▲)
Optional battery: ZIBO(☆), TIANNENG(○), FAAM(◇), HOPPECKE(▽), ENEROC(△)
Lead-acid battery: Red text 12V, Blue text 6V, Black text 2V,
Lithium battery: Green text, 77.28V(■), 80.5V(△▲)





X Series Electric Tow Tractor

with capacities of 20,000 to 32,000kg

Exterior

/ With a streamlined integral steel structure, a vivid stylish profile formed by a combination of large arcs and streamlined curved surfaces and a centered driving position, the vehicle is suitable for pushing operations.

Safety

- / An advanced AC control system—the high-frequency integrated IMOTION controller ensures stable and accurate driving, good performance of electronic control matching the motor, and with the functions of stable starting, regenerative braking, reverse braking and anti-sliding on ramps, etc., is energy-saving and is highly safe and reliable.
- / Electric vacuum assisted braking: the double-chamber and double-pipeline all-wheel braking systems with front and rear dynamic proportional partial pressure control performs safe, stable and reliable braking. The large-capacity vacuum cylinder designed can reliably assist braking (by pumping the pedal six times) to enable higher safety when the vehicle is not powered.
- / With the electrical main switch to perform emergency shut-off and ensure the safety of the vehicle.
- / The S-EPS (Electric Power Steering) synchronous steering system and the synchronous steering axle operate according to road conditions to ensure straight driving and safe and reliable steering.
- / Double safety hook operation: the pull rod is equipped with a safety device to prevent mis-operation of the pull rod, simple but reliable and highly safe.
- / The water resistance level of the vehicle is IPX5. Key parts (for electric control, etc.) are placed in the high position of the vehicle body to prevent road surface water from entering and ensure strong wading ability, safety and reliability.

Comfort

- / With the human-machine interaction system that consists of compact and reliable novel digital multifunctional instruments and a combination rocker switch, the operations of the vehicle can be shown clearly.
- / The entire cab (console) is fully suspended, with good sealing and less vibration, plus a suspended seat for great operating comfort.
- / The chassis elastic suspension technology and the long wheelbase design enable a great ride comfort.
- / The wide-view cab with an integral frame constituted by profiled steel pipes is flexibly connected to the body and has good sealing, sound insulation, vibration isolation and heat insulation, etc., so that the driver's comfort is improved. The large operating space and low boarding steps allow the operator to very easily get on and off the vehicle.
- / The forward and backward inclination angles of the hand wheel is adjustable and the seat can be adjusted by 150mm backwards and forwards, so that the operator can choose the best driving position.



Advancement

- / The AC power system provides strong power and has more precise speed regulation performance.
- / High-efficiency power system and high-performance lithium iron phosphate battery: the lithium battery is installed vertically. A standard 80.5V456A.h battery is provided for the standard configuration. The battery can last for a long time.
- / The LED-screen have the functions of battery display, timer and fault self-diagnosis, without a handheld unit, maintenance and changing of the vehicle performance can be completed through the instruments. Faults are indicated in the form of a combination of codes and text, which are clearer and easier to read.
- / There are operating switches at the rear of the vehicle: front and rear jog switches and an emergency shut-off switch.
- / For the standard configuration, the vehicle is equipped with LED lights and integrated high-beam and low-beam headlights.
- / The electric parts of the vehicle are designed to be water-proof and forced air cooling is provided for electric control, where the functions of heat dissipation, ventilation, dust resistance and water resistance.



Environmental protection

- / Silence, no pollution, energy saving and other advantages meet environmental protection requirements.
- / Asbestos-free materials are used for the vehicle.

Maintainability

- / The electric components such as the electric controller, contactor, instruments and accelerator light are all of internationally-renowned brands and have high reliability.
- / An AC power system is used for driving and steering, and the motor is maintenance-free motor so that the maintenance cost of replacing the carbon brush light is reduced.
- / The wide-opened front hood, the easy-to-dismount electric controller hood plate, etc. make maintenance and commis-sioning very convenient.
- / The easy-to-dismount electric controller hood plate and the rear hood plate make the maintenance and commissioning of drive and electric control very convenient.



Standard Specification

- / LED headlights (high-beam and low-beam)
- / Turn signal lights
- / Combination real LED operating light
- / Multi-function instrument cluster
- / Electric horn
- / Reverse buzzer
- / Ceiling light
- / USB interface
- / Boarding handle
- / Steering wheel adjusting device
- / Standard seat
- / Front wiper
- / Standard lithium battery
- / Reflective mirror
- / Jog switch
- / Large integral rubber pedal pads
- / High-power AC drive system
- / Electric power-assisted synchronous steering system
- / Vacuum assisted hydraulic braking
- / Sunshade
- / Standard traction pin

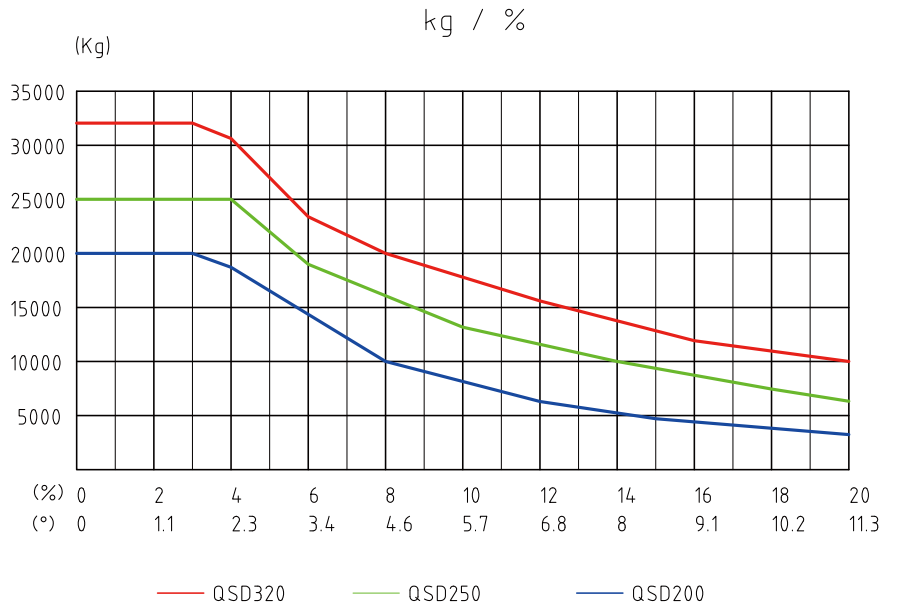
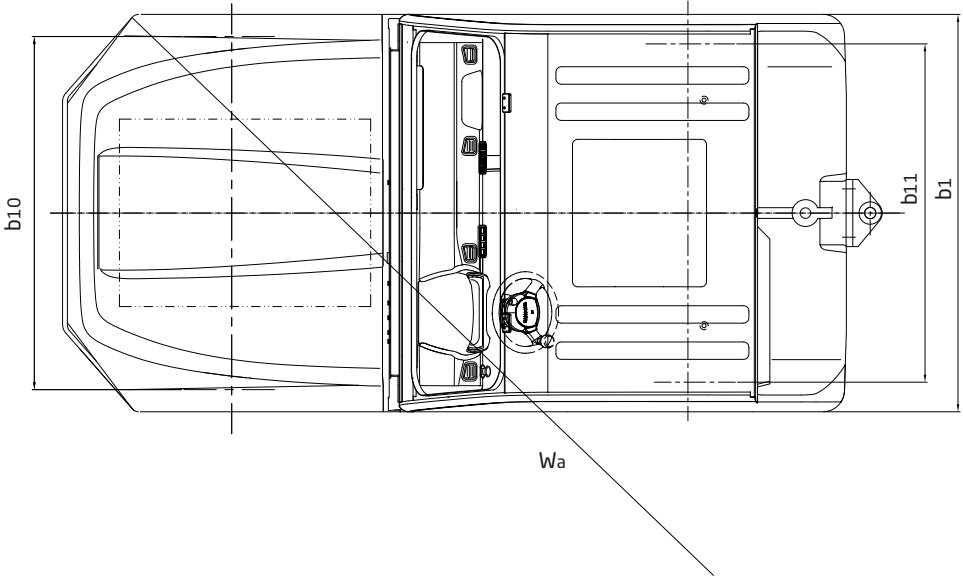
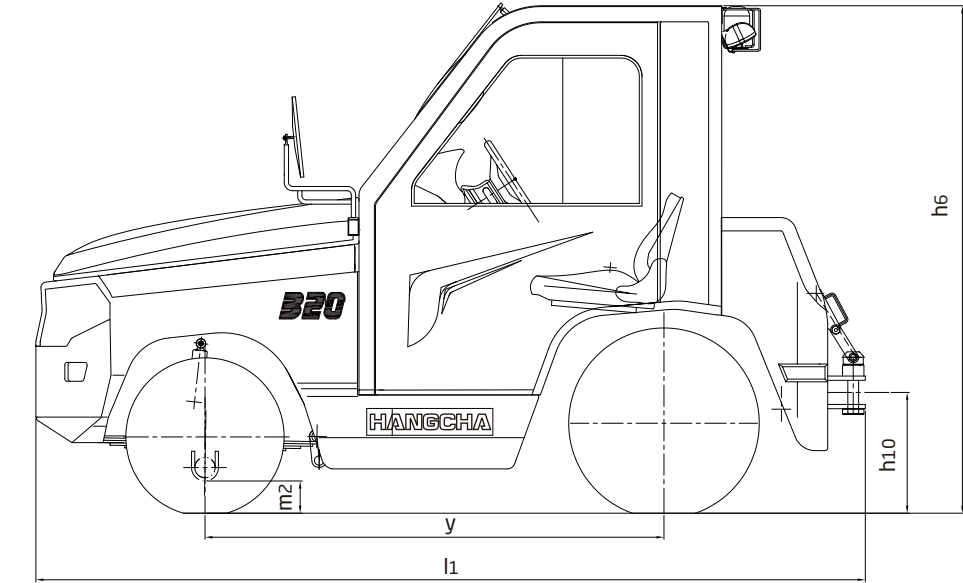
Options

- / Semi-enclosed cab
- / Heater
- / Suspended seat
- / OPS
- / Traction pin height scheme
- / Rear platform rail
- / Lithium iron phosphate battery 404-542-808
- / Turning deceleration
- / Reversing video
- / Air conditioner
- / Battery charger
- / Fire extinguisher
- / Speed limit
- / Monitoring equipment
- / Fully enclosed cab

X Series Electric Tow Tractor Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation		QSD200-XD3-MI*	QSD250-XD3-MI*	QSD320-XD3-MI*
Weight	1.5	Rated capacity/rated load	Q (kg)	20000	25000	32000
	1.7	Rated drawbar pull	F (N)	10000	11000	12000
	1.9	Wheelbase	y (mm)	1710	1710	1710
Tyres, chassis	2.1	Service Weight	kg	3400	3600	3780
	2.2	Axle loading, front/rear	kg	930/2470	1010/2590	960/2820
Tyres, chassis	3.2	Tyre size, front		6.50-10-10PR	6.50-10-10PR	6.50-10-10PR
	3.3	Tyre size, rear		7.00-12-12PR	7.00-12-12PR	28×9-15-14PR
	3.5	Wheels, number front / rear (x = driven wheels)		2/2	2/2	2/2
	3.6	Tread, front	b10 (mm)	1322	1322	1322
	3.7	Tread, rear	b11 (mm)	1280	1280	1260
Dimensions	4.7	Height of overhead guard (cabin)	h6 (mm)	1895	1895	1895
	4.12	Coupling height	h10 (mm)	450	450	450
	4.19	Overall length	l1 (mm)	3090	3090	3090
	4.21	Overall width	b1 (mm)	1480	1480	1480
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	120	120	120
Performance data	4.35	Turning radius	Wα (mm)	3350	3350	3350
	5.1	Travel speed, laden/unladen	km/h	- / 25	- / 25	- / 25
	5.5	Drawbar pull at 60 minute rating	N	10000	11000	12000
	5.7	Gradeability, laden/unladen	%	- / 33%	- / 33%	- / 33%
Electric- engine	5.10	Service brake		Hydraulic	Hydraulic	Hydraulic
	6.1	Drive motor rating S2 60 min	kW	23	30	30
	6.4	Battery voltage, nominal capacity K5	V/Ah	80.5/456	80.5/456	80.5/456
	6.5	Battery weight	kg	380	380	380

Note: * CE model





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

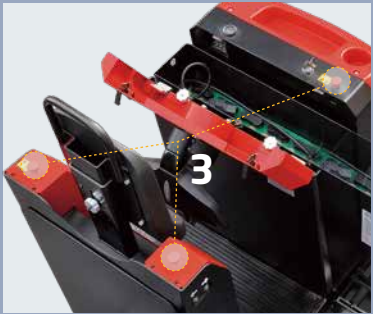
- / AC motor without carbon brushes, maintenance-free, cost saving.
- / Integrated battery indicator, hour meter and self-diagnostic instrument.

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

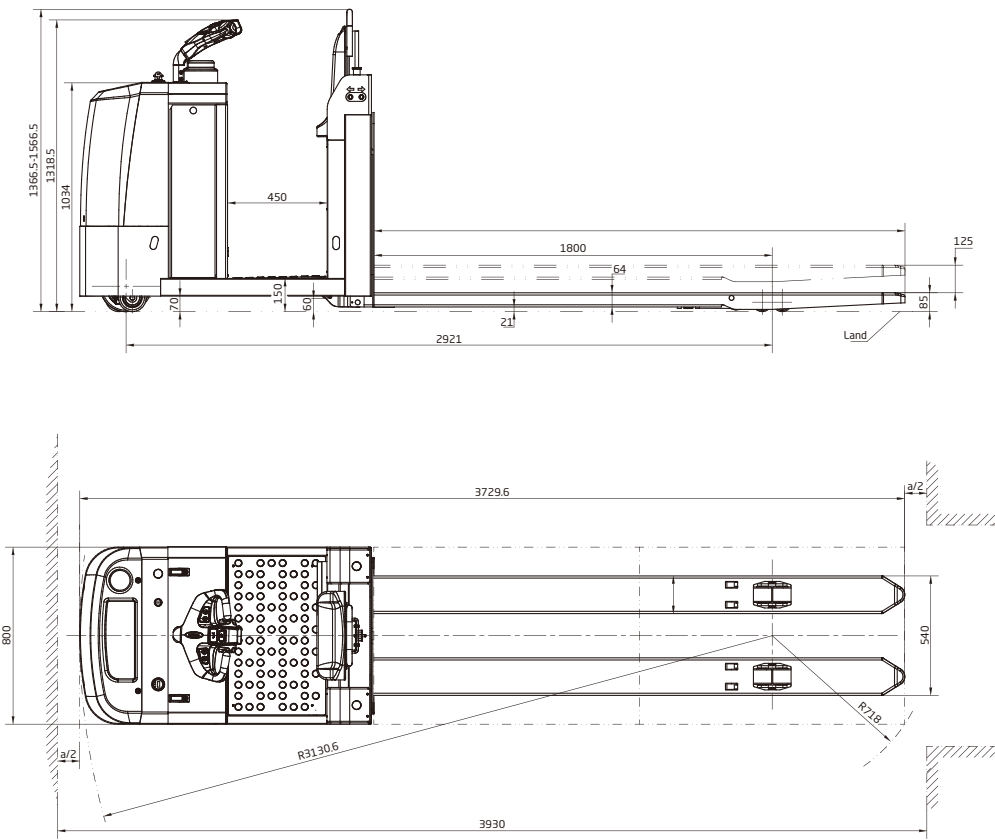


Standard Specification

- / 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-AC2-L
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Order-picker
	1.5	Rated capacity/rated load	Q (kg)	2500
	1.6	Load centre distance	c (mm)	1200
	1.9	Wheelbase	y (mm)	2921
Weight	2.1	Service Weight	kg	1130
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU
	3.2	Tyre size, front		Φ230x75
	3.3	Tyre size, rear		Φ85x70
	3.4	Additional wheel (dimensions)		Φ125x50
	3.5	Wheels, number front / rear (x = driven wheels)		1x+2/4
	3.6	Tread, front	b10 (mm)	546
Dimensions	3.7	Tread, rear	b11 (mm)	370
	4.4	Lift	h3 (mm)	125
	4.15	Fork height,lowered	h13 (mm)	85
	4.19	Overall length	l1 (mm)	3730
	4.21	Overall width	b1 (mm)	800
	4.22	Fork dimensions	s/e/l (mm)	64/170/2400
	4.25	Distance between fork-arms	bs (mm)	540
	4.32	Ground clearance,center of wheelbase	m2 (mm)	21
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	3930
	4.35	Turning radius	Wa (mm)	3130
Performance Data	5.1	Travel speed,laden/unladen	km/h	7.0/10
	5.2	Lift speed,laden/unladen	m/s	0.032/0.069
	5.3	Lowering speed,laden/unladen	m/s	0.042/0.033
	5.8	Max.Gradeability,laden/unladen	%	6/16
Electric Engine	6.1	Drive motor rating S2 60 min	kW	2.2
	6.2	Lift motor rating at S3 15%	kW	2.2
	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





SIMPLE/SOLID/SMART



SMALL WAREHOUSE



SUPERMARKETS



LABORATORIES

Reliability

- / With a high-strength steel frame structure, the vehicle frame is robust and reliable.
- / All wires and cables have reliable protection, which greatly improves the reliability of the electrical system.
- / Switches, connectors, instruments and other key parts are all of leading international brands and have excellent performance and reliable quality.

High performance

- / A green and environmentally friendly, efficient energy-saving CATL lithium battery is provided for the standard configuration.
- / An integrated charger enables easy and quick charging.
- / For the standard configuration a load tray and platform tray that can be lifted manually/electrically are provided to enable higher picking and transportation efficiency.
- / The maintenance-free brushless AC walking motor has excellent acceleration performance and low heat generation.



The advanced AC control system performs accurate, stable and efficient control.
The CANBUS bus structure makes the communication of the vehicle faster and more reliable.

A Series Storage Assist Vehicle

with capacities of 215kg

With a comprehensive safety protection system, excellent ergonomic design, an advanced control system and excellent performance, the vehicle is reliable, stable, comfortable and safe, and may be used for picking, transportation and other operations in narrow, low environments such as small warehouses, supermarkets, laboratories, etc.



ADDED SECURITY. THE SCIENCE OF DESIGN

Comfort

- / The mast ascending and descending buffering function offers more comfort.
- / An optional tray that can be lifted electrically can be operated easily, stably and comfortably.
- / Multi-layer pedal pads and door pads reduce operator fatigue.
- / For the standard configuration, multi-function instruments have multiple functions such as mode selection, wheel position display, etc., and can clearly display various information of the vehicle.



Right and left hand sensing



Front and rear flashing lights

Safety

- / The right and left hand sensing and safety pedal ensure the operator is in the correct operating position.
- / For the standard configuration a tilt switch sensor and a door guardrail sensing switch are provided to improve the operation safety.
- / The driving speed is correlated with lifting height, the higher the lifting height, the lower the driving speed and the correspondingly smaller the acceleration.
- / The turning proportional deceleration function provided for the standard configuration ensures smooth and safe turning.
- / The manual emergency descending function can be performed at the rear of the vehicle.
- / With the operating platform bottom safety protection, front and rear flashing lights and other functions, the surrounding personnel can be alerted and protected, and the driving danger can be reduced.

Maintenance

- / The maintenance-free brushless AC motor significantly reduces the operating cost.
- / The integrated battery display, timer and fault self-diagnosis gauge facilitate maintenance.
- / All components are placed at the front of the frame, so just open the hood, and then the vehicle can be repaired easily and quickly.



A lower operation panel is designed to enables the operations such as operation platform lifting, brake release, etc. to be performed outside the vehicle so as to facilitate vehicle maintenance.



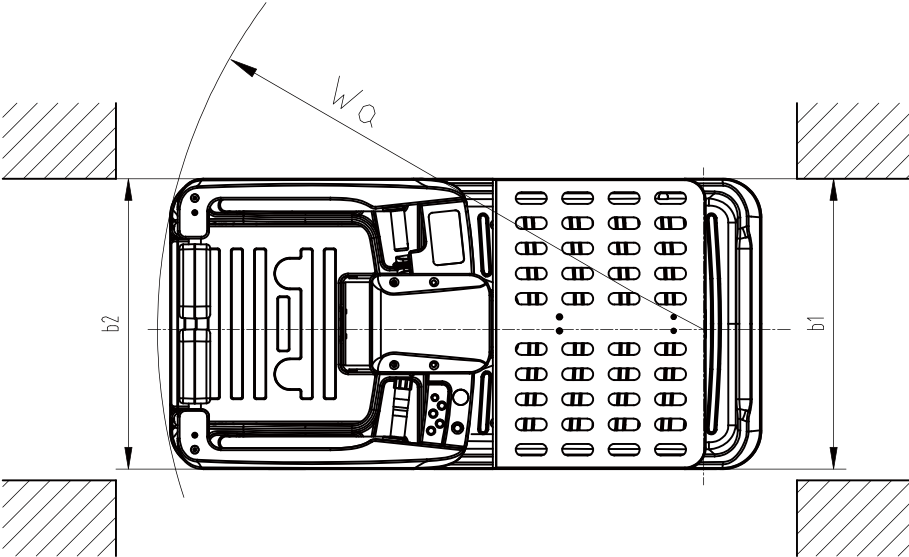
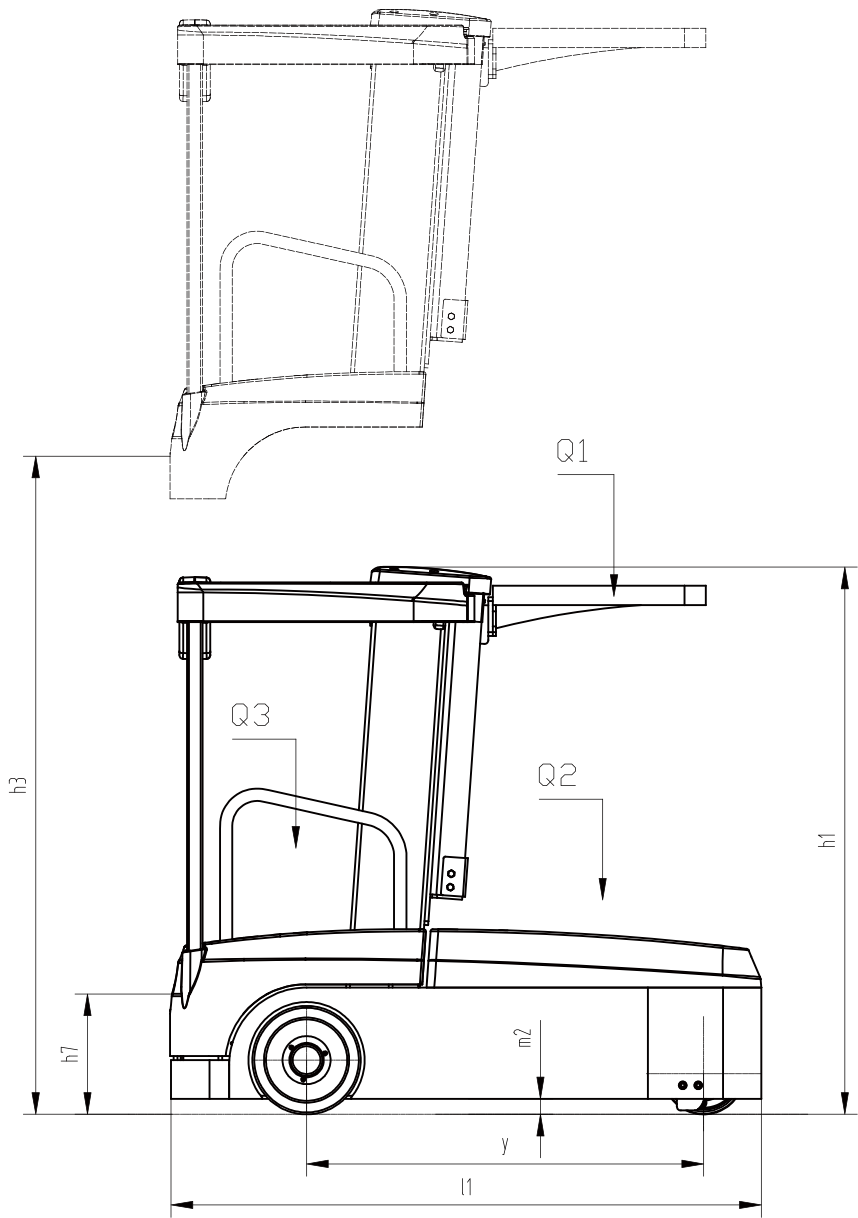
Options

- / Blue light
- / Warning light
- / Front working light
- / Side roller
- / Electric lifting pallet
- / Back cushion

A Series Storage Assist Vehicle Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
	1.2	Model		CJD02-AMC1-M11*
	1.5	Rated capacity on load tray	Q1(kg)	100
		Rated capacity on load deck	Q2(kg)	115
		Rated capacity on standing platform	Q3(kg)	135
1.9	Wheelbase	y(mm)	1026	
Weight	2.1	Service weight	kg	600
Tyres/chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		polyurethane
	3.2	Tyre size,front	mm	Ø210×83
	3.3	Tyre size, rear	mm	Ø280×60
	3.5	Wheels, number driving, caster/loading (x=drive wheels)		1x./2
Dimensions	4.2	Height,mast lowered	h1(mm)	1414
	4.4	Lift	h3(mm)	2995
	4.5	Height, mast extended	h4(mm)	4409
	4.8	Seat height/standing height	h7(mm)	300
	4.19	Overall length	l1(mm)	1525
	4.21	Overall width	b1/b2(mm)	750/750
	4.31	Ground clearance, centre of wheelbase	m2(mm)	40
Performance data	4.35	Turning radius	Wa(mm)	1210
	5.1	Travel speed,laden/unladen	km/h	8/8
	5.2	Lift speed,laden/unladen	mm/s	260/300
	5.3	Lowering speed,lade/unladen	mm/s	250/250
	5.7	Gradeability,laden/unladen	%	5
Electric-engine	5.10	Service brake		Electromagnetic
	6.1	Drive motor rating S2 60 min	kw	0.65
	6.2	Lift motor rating at S3 15 %	kw	2.2
	6.4	Battery voltage/nominal capacity K3, Maintenance free	V/Ah	24/125
		Type of battery		Lithium
Addition data	10.7	Sound pressure level at the driver's seat	dB(A)	68

Note: * CE model





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.

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.

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.

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.



Safety

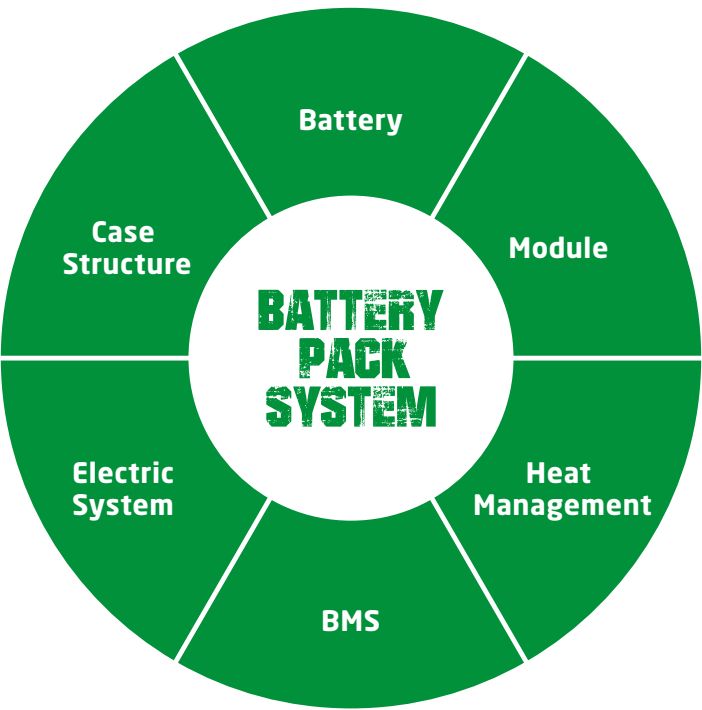
- / The tilt angle detection system, as standard configuration, makes the truck stop operation when it tilts forward / backward or left / right to certain angle, and the operation may not be resumed until the cab is lowered to the level below certain height.
- / Side barriers with detecting switch are 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.



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		CJD10-AC3-M1I*	CJD10-AC3-M1KI*	CJD10-AC4-M2I*	CJD10-AC4-M2KI*
Li-Ion battery	V/Ah	25.76/604	25.76/604	25.76/604	25.76/604
Titans charger		SPC-24100Q	SPC-24100Q	SPC-24100Q	SPC-24100Q

Note: * CE model



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



**5 YEARS
WARRANTY**



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 dectection 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

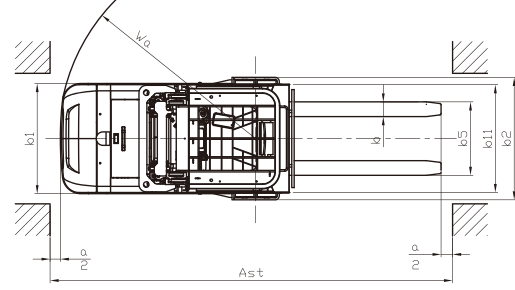
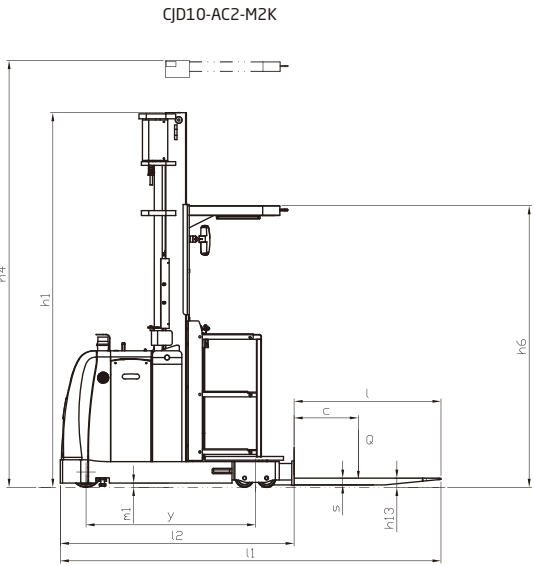
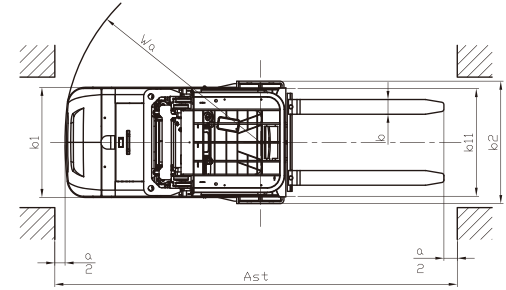
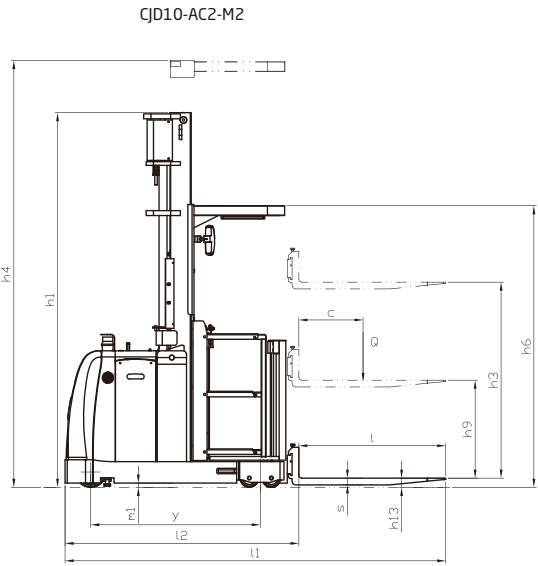
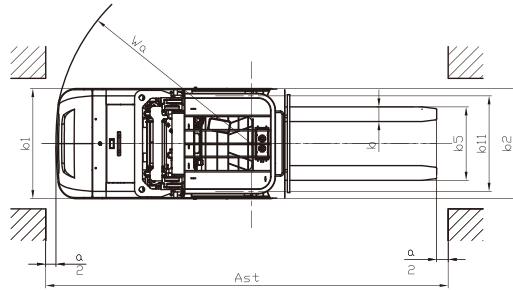
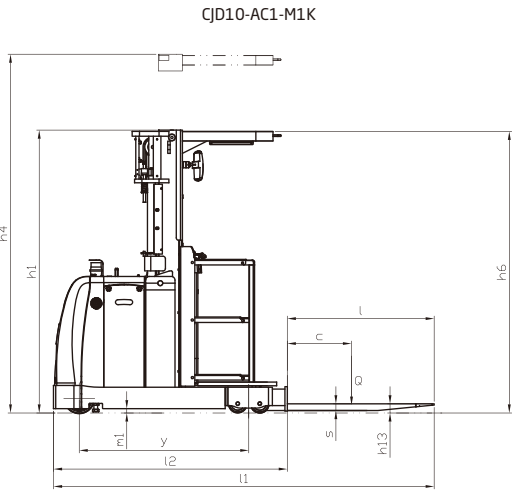
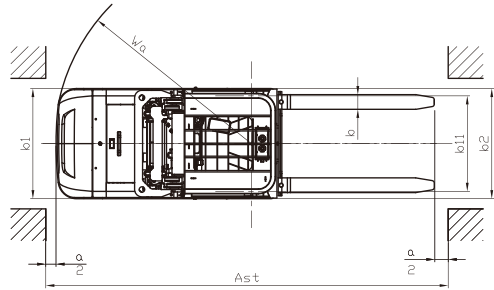
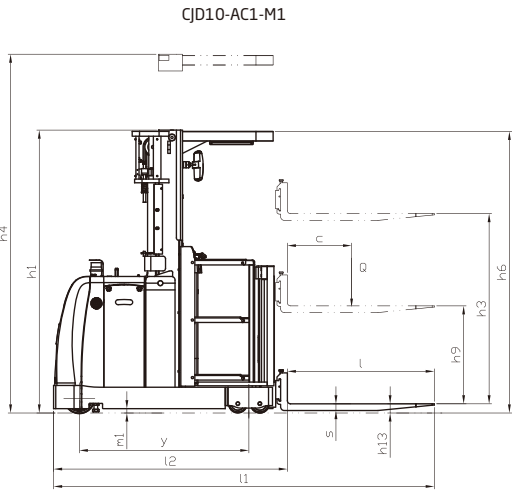


Better vision for operation

A Series Medium Level Order Picker

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation		CJD10-AC3-M1*	CJD10-AC3-M1K**	CJD10-AC4-M2*	CJD10-AC4-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
Dimensions	3.7	Tread,rear	b11(mm)	780	780	880	880
	4.2	Height,mast lowered	h1(mm)	2310	2310	3060	3060
	4.4	Lift	h3(mm)	3000	3000	4500	4500
	4.5	Height, mast extended	h4(mm)	5310	5310	7560	7560
	4.7	Height of overhead guard (cabin)	h6(mm)	2300	2300	2300	2300
	4.11	Additional lift	h9(mm)	800	/	800	/
	4.15	Height,lowered	h13(mm)	75	75	75	75
	4.19	Overall length	l1(mm)	3110	3110	3110	3110
	4.20	Length to face of forks	l2(mm)	1910	1910	1910	1910
	4.21	Overall width	b1/b2(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	b5(mm)	240~800	540	240~800	540
	4.31	Ground clearance,laden,below mast	m1(mm)	35	35	35	35
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast(mm)	3235	3235	3235	3235
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast(mm)	3357	3357	3357	3357
	4.35	Turning radius	Wa(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
★ CE model





A Series Electric Stock Picker

with capacities of 1,000lbs

The A Series Electric Stock Picker is designed to meet order fulfillment needs in narrow aisle environments. This stock picker has a comprehensive safety protection system, excellent ergonomics, and an advanced control system. Being reliable, comfortable, safe, and stable, all while providing excellent performance, it is the perfect choice for increasing productivity in small load order fulfilling environments such as retail and manufacturing applications.

Comfort

- / The truck is designed for smooth elevation and stable reach when lifting and placing loads, reducing operator fatigue.
- / Lifting & lowering of the mast are buffered to enable more comfort.
- / CURTIS multi-function instrument display includes functions such as mode selection and wheel position. The instruments also clearly display various information about the order picker.

Reliability

- / The vehicle's frame is robust and reliable thanks to its high-strength steel frame structure.
- / All of the stock picker's wires and cables are protected. This greatly improves the reliability of the electrical system.
- / Switches, connectors, instruments, and other key parts are all high-quality products with excellent performance and quality.

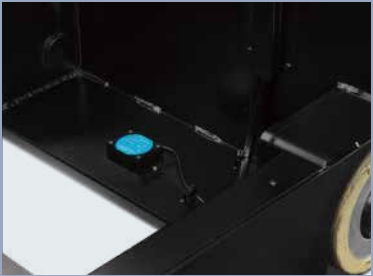
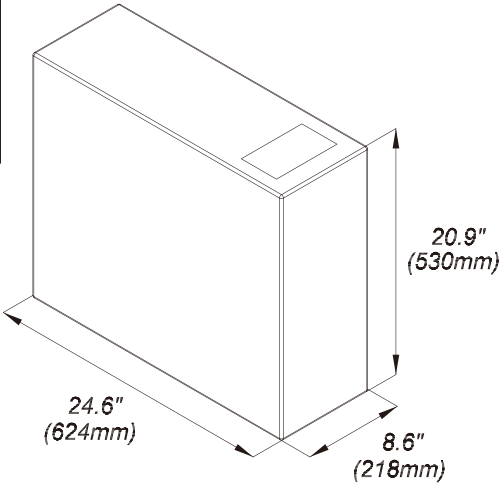
Maintenance

- / The brushless AC motor is maintenance-free. This saves the end-user time and money.
- / The integrated display shows remaining power, advanced diagnostics, and timing for convenience when operating and maintaining the stock picker.
- / The rear hood can be easily removed. This is convenient for maintenance of the hydraulic unit, electric control, motor, and other parts.

CATL Lithium Iron Phosphate Battery Packs

- / Integrated Battery Management System (BMS) continually monitors energy management and ensures reliable operation.
- / HANGCHA provides these Lithium Iron Phosphate (LiFePO₄) battery packs with up to a 5 year or 10,000 hour warranty.
- / See warranty certificate for specific warranty information on the Lithium Iron Phosphate battery packs.

Standard Battery Capacity	
Battery Capacity (V/Ah) (kW-h)	24V/125Ah 3.00kW-h
Charger	Built-in (24V/40Ah)



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



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



Battery side roll out and built-in charger are standard features of the stock picker. This allows for easy battery replacement and convenient charging



The large front and rear trays greatly improve the operator's efficiency



The guardrails are equipped with detection switches. The stock picker will not work until the guardrails are put up



Standard Specification

- / AC Traction Motor
- / CURTIS Controller
- / Front Load Tray
- / Foldable Rear Load Tray
- / Automatically Decelerates when
- / Cornering
- / CURTIS Multi-Function Instrument
- / Display
- / Maintenance-Free Battery
- / Battery Locking Mechanism
- / Built-in Charger
- / Emergency Cut-Off Switch
- / Safety Pedal
- / Tilt Switch
- / Left and Right Guardrail
- / Back Cushion
- / Electromagnetic Brake

Performance

- / The brushless AC traction motor features excellent acceleration, outstanding climbing ability, low heat emission, and is maintenance-free.
- / The advanced CURTIS control system provides precise, smooth, and efficient control of the stock picker.
- / CANBUS structure allows for the whole vehicle to communicate faster and more reliably.

Safety

- / The low mast provides the operator with perfect visibility.
- / The controller offers limits the stock picker's speed when cornering to ensure smooth and safe operation.
- / The safety pedals include a sensor to ensure the operator has their feet properly positioned on the platform. It automatically stops travel, lift, and lower functions if the operator doesn't have their foot on the pedal.
- / The hydraulic system has an emergency manual lowering valve that can be operated from the rear of the stock picker to lower the platform.



Simultaneous Travel and Lift

With productivity in mind, Hangcha designed the stock picker to travel and lift simultaneously. This allows operators to move around a facility while raising or lowering the stock picker to their desired height in one smooth, seamless operation. The truck reaches a maximum speed of 3.4 mph and adjusts speed based on lift height.



A Series Electric Stock Picker with Lithium-ion Technology Specification

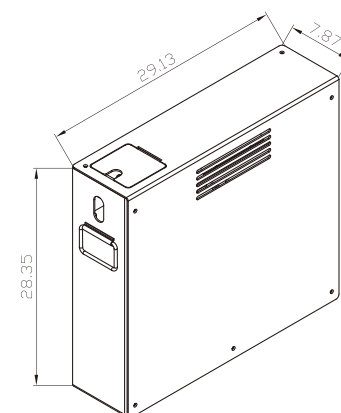
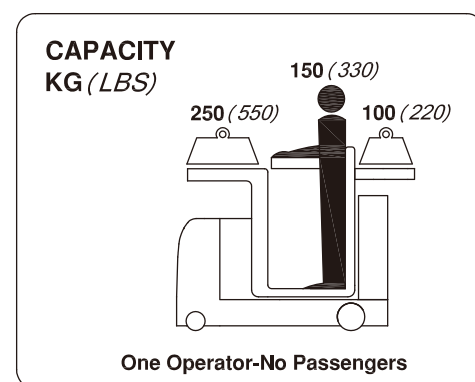
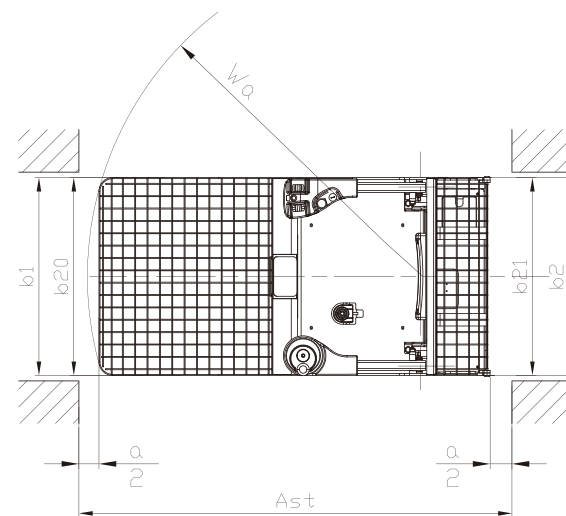
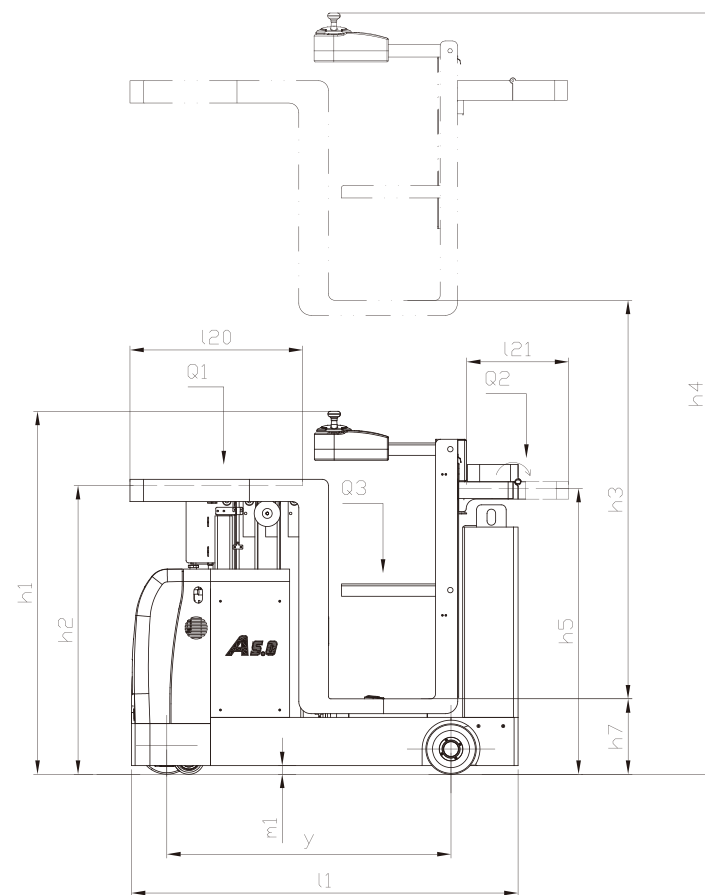
Distinguishing Marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
		HCFA Model		OPM05Li
	1.2	Model		CJD05-AC1-MNAI
	1.3	Drive: electric (battery or mains),diesel,petrol,fuel gas		Electric
	1.4	Operator Type: hand,pedestrian,standing,seated,order-picker		Order Picker
	1.5	Rated Capacity on Front Tray	Q _f (lb/kg)	550/250
		Rated Capacity on Back Tray	Q _b (lb/kg)	220/100
		Rated Capacity on Standing Tray	Q _s (lb/kg)	330/150
	1.9	Wheelbase	y(in/mm)	45.3/1150
Weight	2.1	Service Weight	lb/kg	2885/1310
Tires Chassis	3.1	Tires: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane
	3.2	Tire Size, driving wheels	in/mm	Ø9×3/Ø230×75
	3.3	Tire Size, loading wheels	in/mm	Ø8×3/Ø204×76
		Tire 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 ₁ (in/mm)	57.8/1468
	4.4	Lift	h ₃ (in/mm)	145.7/3700
	4.5	Height, mast extended	h ₄ (in/mm)	203.5/5168
	4.8	Seat Height/Standing Height	h _r (in/mm)	11.8/300
	4.19	Overall Length	l ₁ (in/mm)	62.3/1582
	4.21	Overall Width	b ₁ /b ₂ (in/mm)	31.5/31.5,800/800
	4.31	Ground Clearance, laden, below mast	m ₁ (in/mm)	1.4/35
		Initial Height of Front Tray	h ₂ (in/mm)	46/1168
		Initial Height of Back Tray	h ₅ (in/mm)	45.5/1156
		Front Tray Size	l ₂₀ ×b ₂₀ (in/mm)	27.6×31.5,700×800
		Back Tray Size	l ₂₁ ×b ₂₁ (in/mm)	16×31.5,407×800
		The Channel Width	A _{st} (in/mm)	80.3/2040
	4.35	Turning Radius	W _a (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, laden/unladen	fpm mm/s	45.3/42.4 230/215
	5.7	Gradeability, laden	%	5
	5.10	Service Brake		Electromagnetic
Electric Motor	6.1	Drive Motor Rating at 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	24/125
		Type of Battery		Lithium-ion
	6.5	Battery Weight	lb/kg	110/50
Additional Data	10.7	Sound Pressure Level at the Driver's Seat	dB(A)	69

Optional :
1、Lift h3=116.5in/2960mm

A Series Electric Stock Picker Specification

Distinguishing Marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
		HCFA Model		OPM05
	1.2	Model		CJD05-AC1-MNA
	1.3	Drive: electric (battery or mains),diesel,petrol,fuel gas		Electric
	1.4	Operator Type: hand, pedestrian, standing, seated, order-picker		Order picker
	1.5	Rated Capacity on Front Tray	Q _f (lb/kg)	550/250
		Rated Capacity on Rear Tray	Q _b (lb/kg)	220/100
		Rated Capacity on Standing Tray	Q _s (lb/kg)	330/150
	1.9	Wheelbase	y(in/mm)	45.3/1150
Weight	2.1	Service Weight	lb/kg	3216/1460
Tires & Chassis	3.1	Tires: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane/Rubber
	3.2	Tire Size, driving wheels	in/mm	Ø9×3/Ø230×75
	3.3	Tire Size, loading wheels	in/mm	Ø8×3/Ø204×76
		Tire 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 ₁ (in/mm)	57.8/1468
	4.4	Lift	h ₃ (in/mm)	145.7/3700
	4.5	Height, mast extended	h ₄ (in/mm)	203.5/5168
	4.8	Seat Height/Standing Height	h _r (in/mm)	11.8/300
	4.19	Overall Length	l ₁ (in/mm)	61.6/1564
	4.21	Overall Width	b ₁ /b ₂ (in/mm)	31.5/31.5,800/800
	4.31	Ground Clearance, laden, below mast	m ₁ (in/mm)	1.4/35
		Initial Height of Front Tray	h ₂ (in/mm)	46/1168
		Initial Height of Rear Tray	h ₅ (in/mm)	45.5/1156
		Front Tray Size	l ₂₀ ×b ₂₀ (in/mm)	27.6×31.5,700×800
		Behind Tray Size	l ₂₁ ×b ₂₁ (in/mm)	16×31.5,407×800
		Channel Width	A _{st} (in/mm)	79.7/2025
	4.35	Turning Radius	W _a (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, laden/unladen	fpm mm/s	45.3/42.4 230/215
	5.7	Gradeability, laden	%	5
	5.10	Service Brake		Electromagnetic
Electric Motor	6.1	Drive Motor Rating S2 at 60 min	hp/kw	2/1.5
	6.2	Lift Motor Rating S3 at 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
Others Additional Data	10.7	Sound Pressure Level at the Driver's Seat	dB(A)	69
	11.1	Type of Drive Control		Curtis AC

Optional :
1. Lift h3=116.5in/2960mm
2. Optional Larger Battery Capacity: 24V/300Ah, lead-acid



A Series High-lift Order Picker

with capacities of 1,200kg

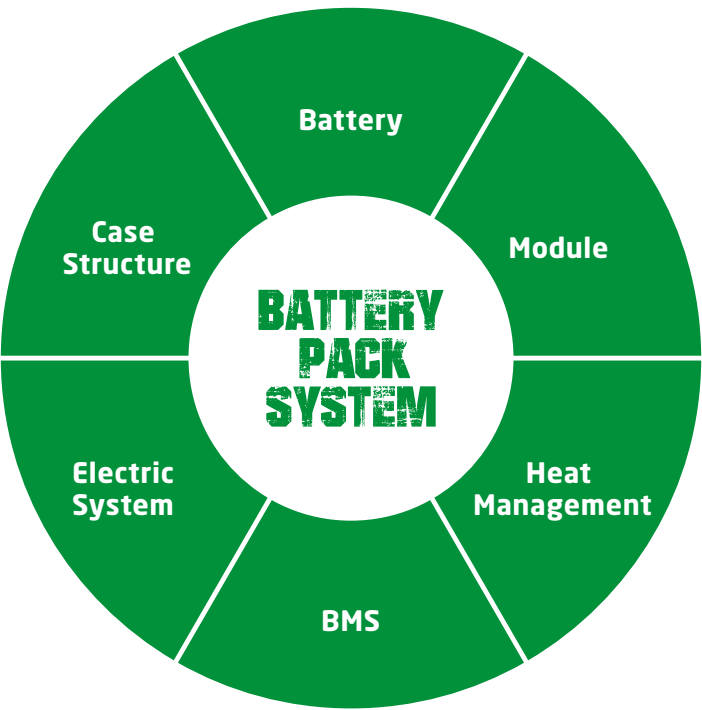
The A Series high-lift order picker, a high-end warehouse equipment, provides a comprehensive safety protection system, excellent ergonomics design and advanced control system. Being reliable and stable, comfortable and safe, and along with excellent performance, it is a perfect option for cargo picking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



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		CJD12-AC4-HI*	CJD12-AC4-HK1*
Li-Ion battery	V/Ah	51.52/500	51.52/500
Titans charger		SLC-48200	SLC-48200

Note: * CE model



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





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.



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

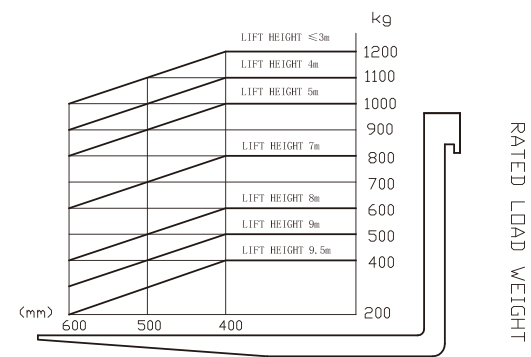
Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.	
	1.2	Model		CJD12-AC4-H*	CJD12-AC4-HK**
	1.3	Drive:electric (battery or mains),diesel,petrol,fuel gas		Electric	Electric
	1.4	Operator type:hand,pedestrian,standing,seated,order-picker		Order picker	Order picker
	1.5	Rated capacity/rated load	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
	2.1	Service weight	kg	3960	3810
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	b11(mm)	856	856
Dimensions	4.2	Height,mast lowered	h1(mm)	2465	2465
	4.4	Lift	h3(mm)	5000	5000
	4.5	Height, mast extended	h4(mm)	7465	7465
	4.7	Height of overhead guard (cabin)	h6(mm)	2300	2300
	4.8	Standing height	h7(mm)	266	266
	4.11	Supplementary lift	h9(mm)	800	/
	4.15	Height,lowered	h13(mm)	75	75
	4.19	Overall length	l1(mm)	3400	3400
	4.20	Length to face of forks	l2(mm)	2200	2200
	4.21	Overall width	b1/b2(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	b5(mm)	/	540
	4.27	Width over guide rollers	b6(mm)	1200	1200
	4.31	Ground clearance,laden,below mast	m1(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	Wa(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	0.371/0.411	0.371/0.411
	5.3	Lowering speed,lade/unladen	m/s	0.486/0.448	0.486/0.448
	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
Addition data	10.7	Sound pressure level at the driver's seat	dB(A)	69	69

Note : * Without auxiliary lift
★ CE model

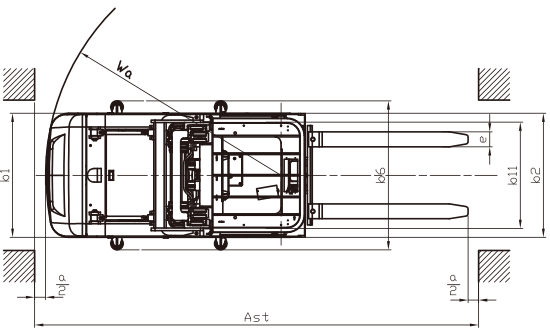
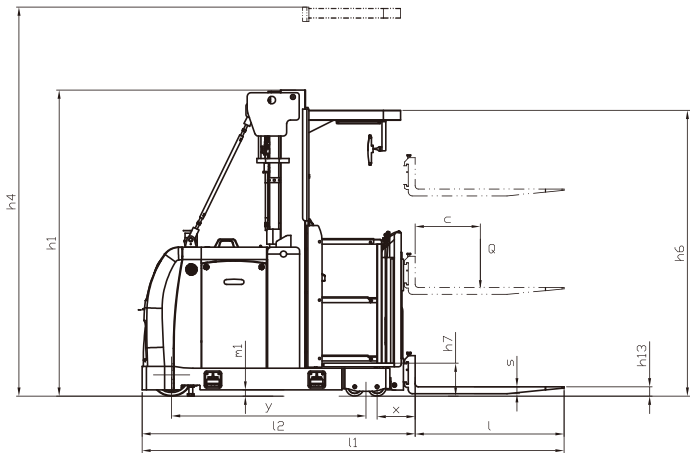
Mast Specification

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 ₅ (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

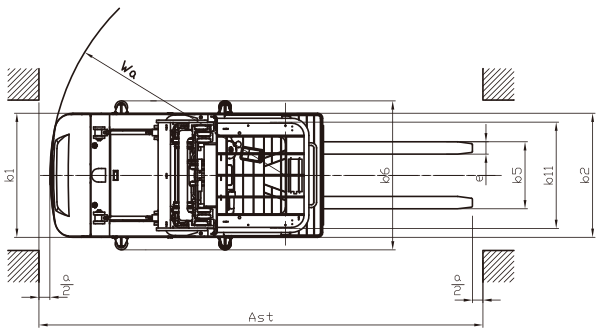
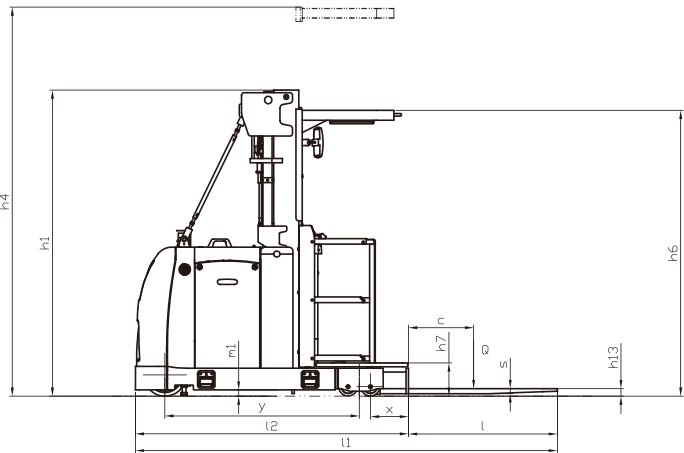
RATED CAPACITIES AND LOAD CENTRES GRAPH



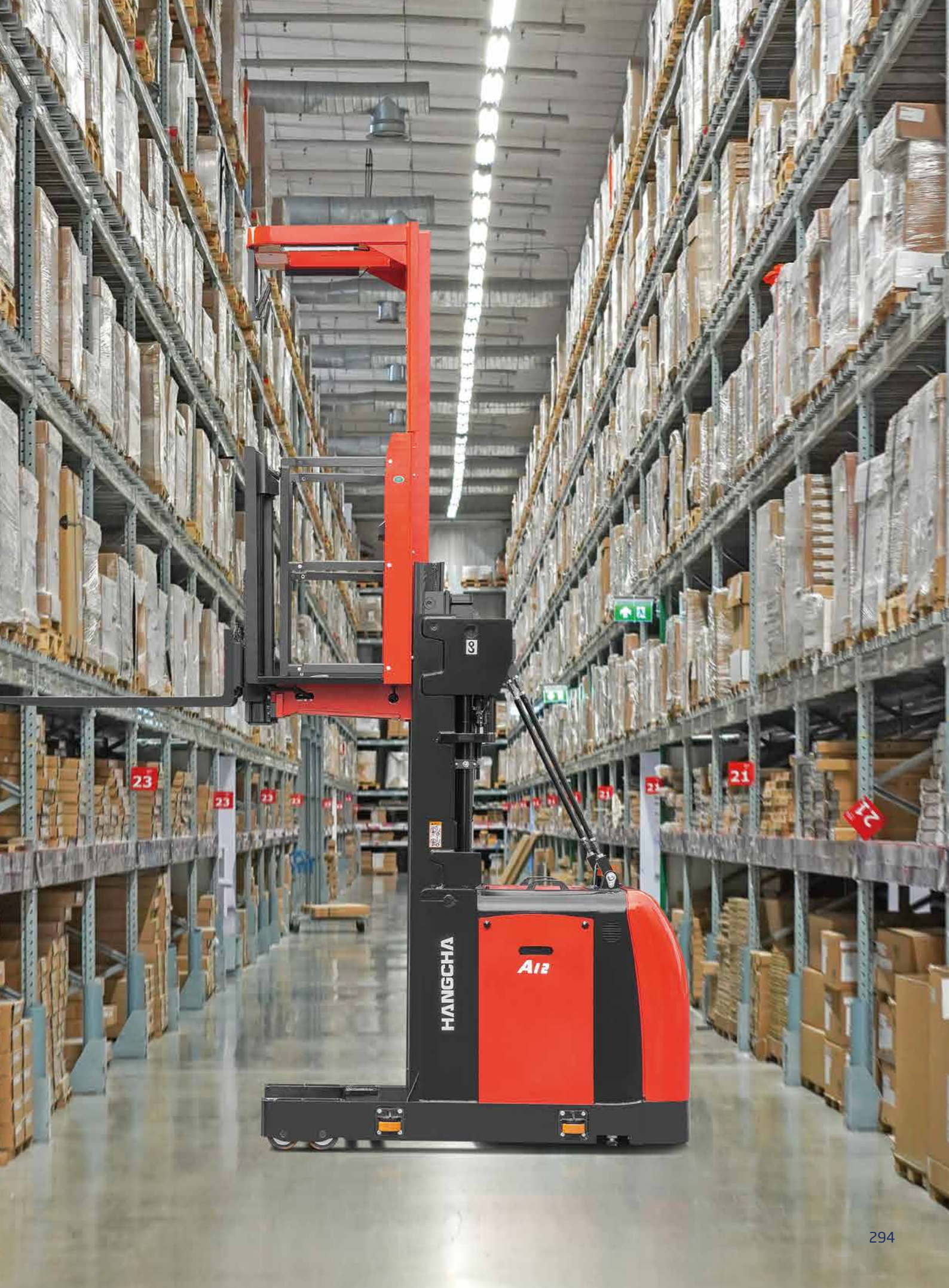
LOAD CENTRE POSITION



CJD12-AC1-H



CJD12-AC1-HK





XB Series Pallet Truck With Scissor Lift

Wide applicability

/ Flexible device movement, quick and convenient operation, large loading capacity, high lifting height.

High structural strength

/ High strength rectangular tube, Self-lubricating nylon slider, long service life and stable performance.

High performance

/ Permanent magnet motor, One-piece hydraulic power pack, colloidal maintenance-free battery, high performance, stable and efficient.

Reliability

/ Side support system, one-way throttle valve on lifting hydraulic cylinder, Waterproof connector, safety and reliability in performance.

Safety

/ Three emergency braking functions, emergency reverse button on Joystick, electronic lift limit, ensure the safety of personnel and cargo.

Maintenance convenience

/ The battery is removed from the side of chassis, One piece plastic cover, easy to maintaining.



Double scissors structure, rectangular tube profile, more stable and stronger



One-piece cover, covering almost all important components, convenient for maintenance



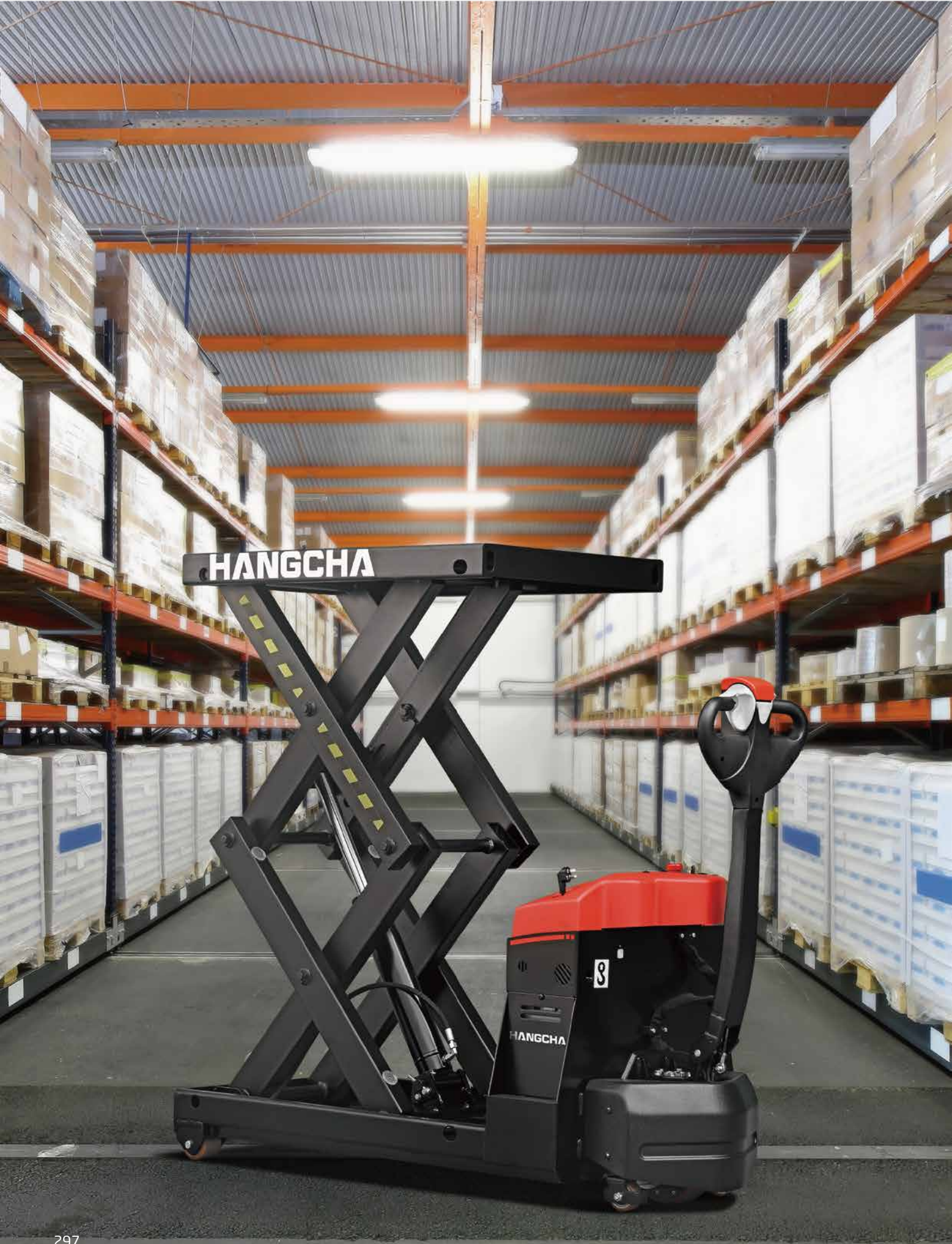
The batteries can be removed conveniently, for easier maintenance and disassembly



Integrated hydraulic unit, compact structure, less space

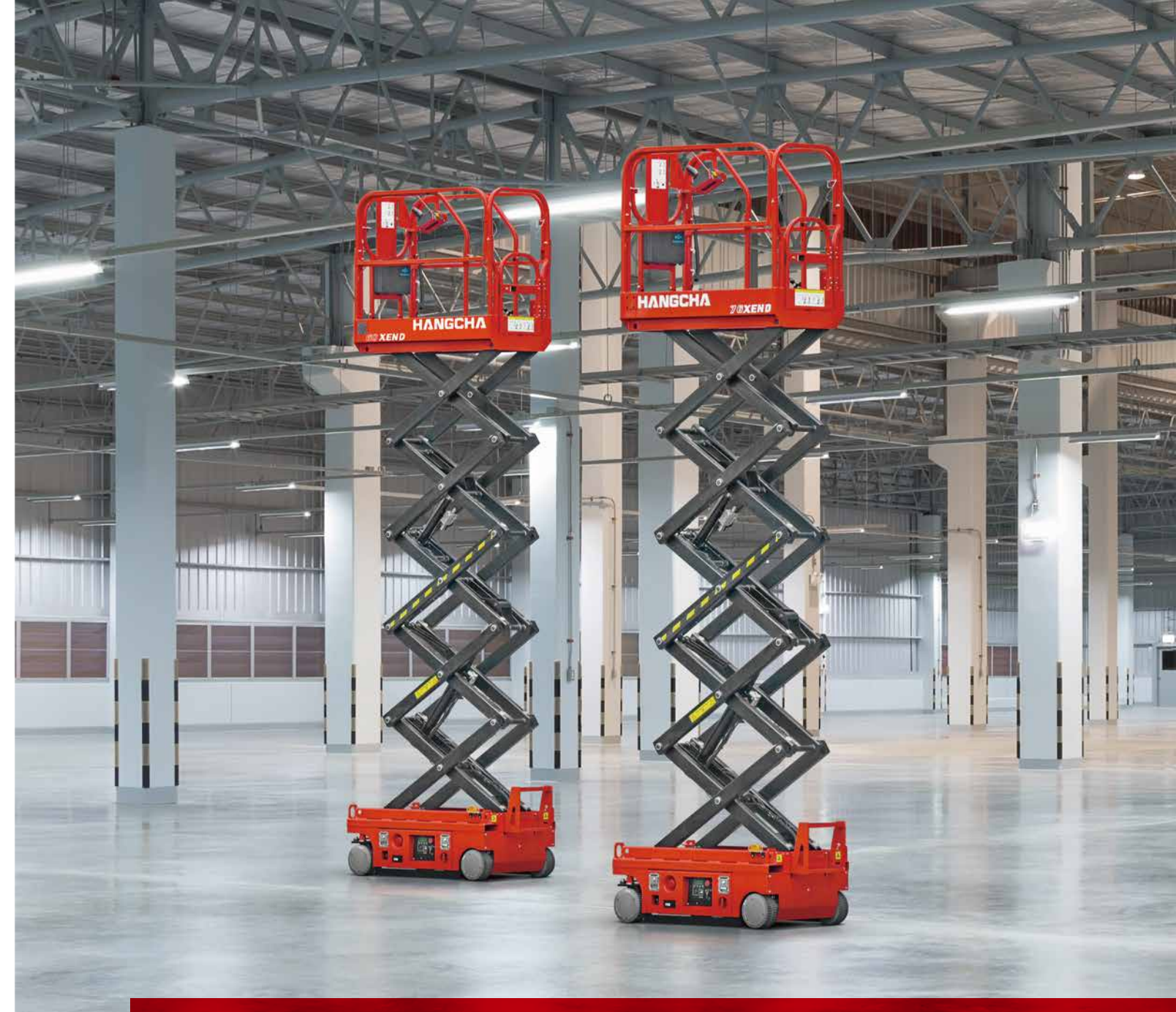
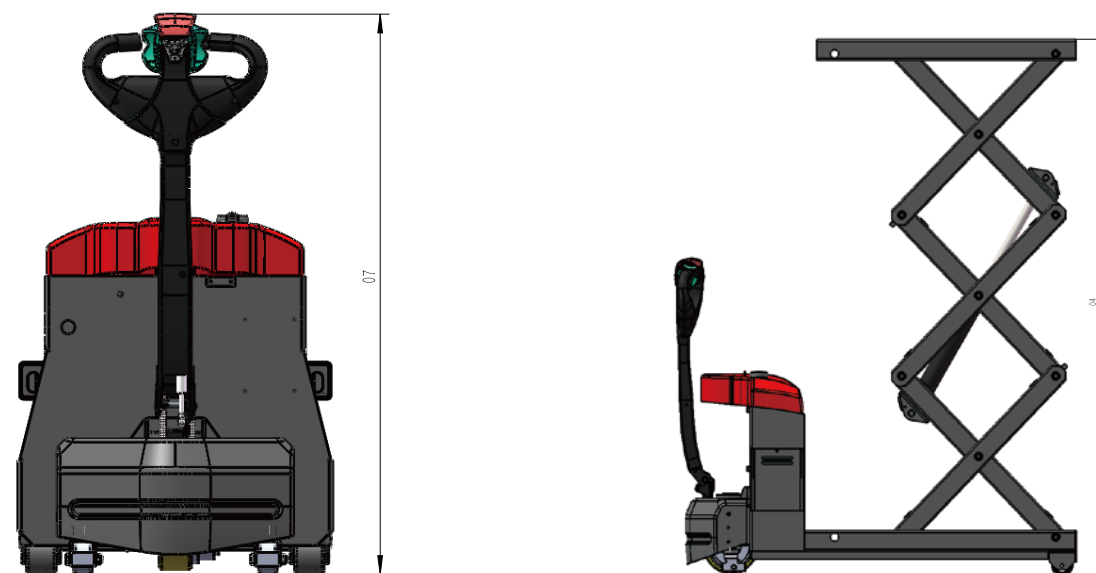
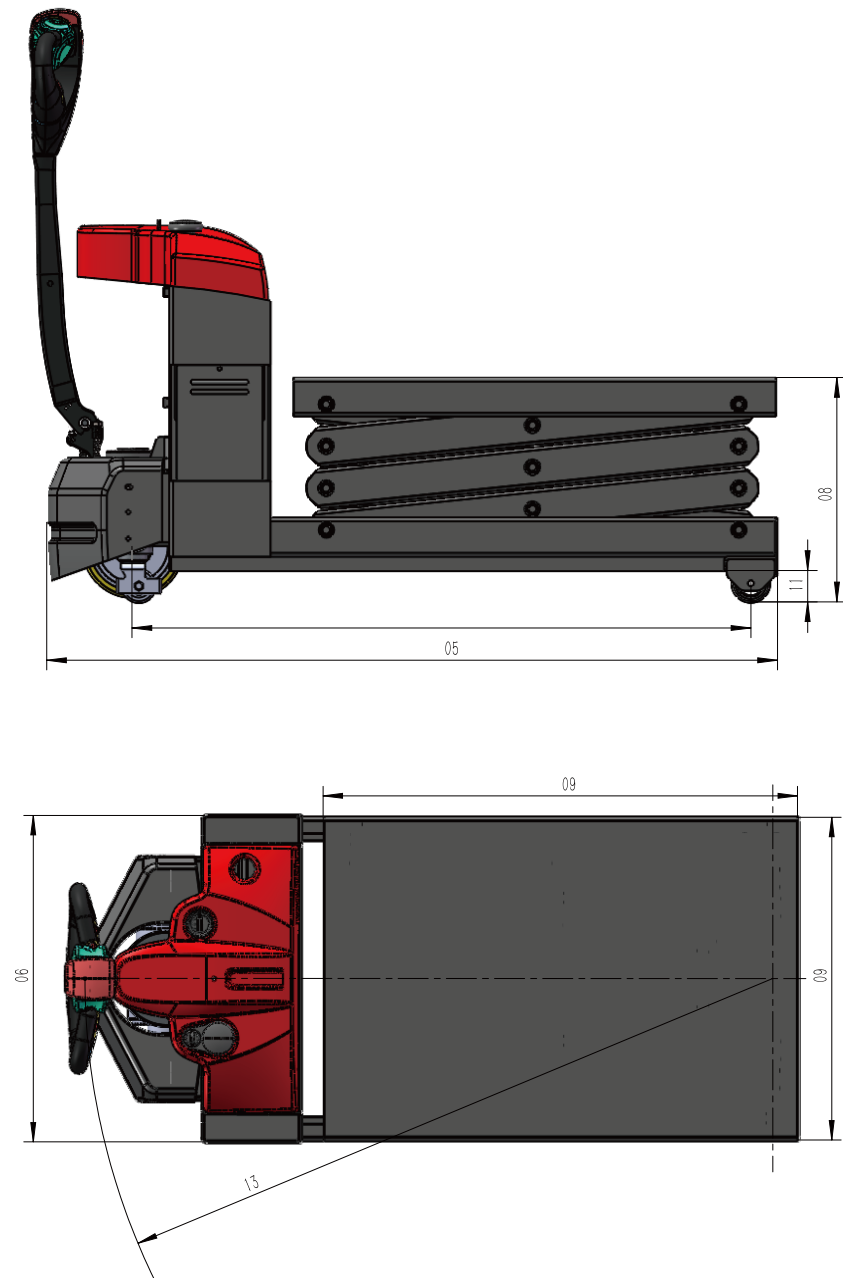


Multi-function handle, reliable, beautiful and simple, all functions can be completed with one hand.



XB Series Pallet Truck With Scissor Lift Specification

01	Manufacturer		HANGCHA GROUP CO.,LTD.		
02	Model		2005XB	1510XB	1020XB
03	Rated load	(kg/lb)	500/1100	1000/2200	2000/4400
04	Platform lift height	(m/in)	2/78.7	1.5/59	1/39.4
05	Overall length	(m/in)	1.51/59.4	1.51/59.4	2.07/81.5
06	Overall width	(m/in)	0.68/26.8	0.68/26.8	0.8/31.5
07	Overall height	(m/in)	1.2/47.2	1.2/47.2	1.2/47.2
08	Height with rails folded	(m/in)	0.46/18.1	0.43/16.9	0.45/17.7
09	Platform size	(m/in)	1×0.68/39.4×26.8	1×0.68/39.4×26.8	1.5×0.8/59×31.5
10	Ground clearance	(m/in)	0.06/2.4	0.06/2.4	0.06/2.4
11	Turning radius inside	(m/in)	0	0	0
12	Turning radius outside	(m/in)	1.45/57	1.45/57	2.04/80.3
13	Batteries	(V,AH)	24,70	24,70	24,100
14	Weight ±30	(kg/lb)	340/750	340/750	490/1080
15	Travel speed km/h	(mph)	0~2.8(0~1.74)	0~2.8(0~1.74)	0~2.8(0~1.74)
16	Gradeability		6%	6%	6%



Mini Self-propelled Scissor Lifts (Electric Motor Drive)

Aerial work platform



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



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



LCD screen, used to display fault code and adjust parameters



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

Designed to be used in buildings

/ The working height can perfectly adapt to the needs of building working.

Mini Size

/ The compact size makes the machine gets into the elevator with free access.

Light Weight

/ The weight is very light, which can meet the load limit of elevator and better protect the ground.

Large Capacity

/ Though the self-weight is light, it has a large capacity, the machine can allow two peoples working together.

High Efficiency

/ Equipped with efficient fully electrified DC drive system, more durable.

Low Failure Rate

/ Simple and clear system, drawer structure, easier maintenance, lower use cost.

High Rewarding

/ Transport and procurement costs are lower, and rental prices are comparable to regular models.

Green Environment Protection

/ Electric drive walking system, zero emission, low noise, more suitable for indoor use.



Control system



Motor and brake



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



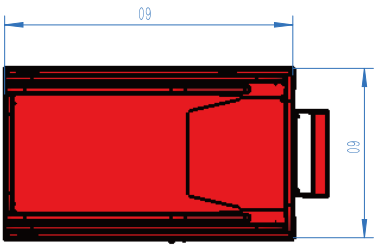
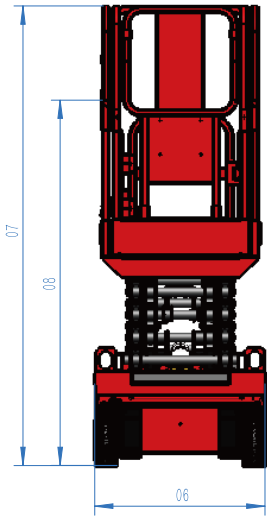
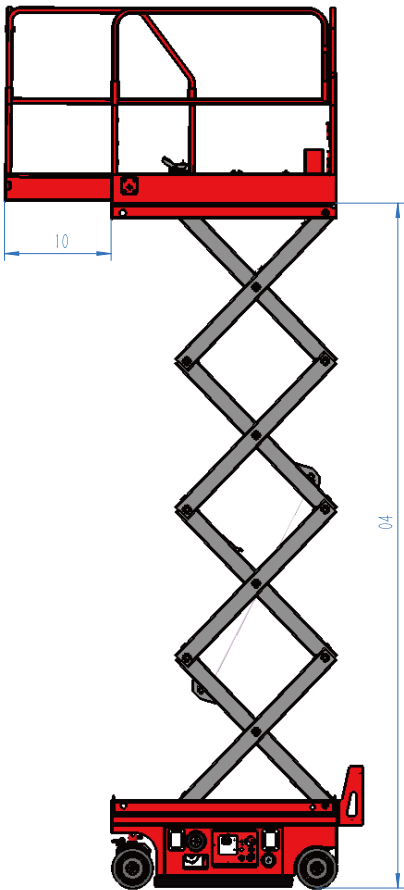
Extension platform



The parts are well located

Mini Self-propelled Scissor Lifts (Electric Motor Drive) Specification

01	Manufacturer		HANGCHA GROUP CO.,LTD.	
02	Model		60XEND	76XEND
03	Working height	(m/in)	5.9/233	7.6/300
04	Platform height	(m/in)	3.9/153	5.6/220
05	Overall length	(m/in)	1.44/57	1.52/60
06	Overall width	(m/in)	0.76/30	0.81/32
07	Overall height	(m/in)	2.08/81.8	2.18/85.8
08	Height with rails folded	(m/in)	1.71/67.3	1.81/71.3
09	Platform size	(m/in)	1.29×0.7/50.8×27.5	1.37×0.7/54×27.5
10	Platform extension size	(m/in)	0.6/23.6	0.6/23.6
11	Ground clearance	(m/in)	0.06/2.4	0.06/2.4
12	Turning radius inside	(m/in)	0.4/15.7	0.45/17.7
13	Turning radius outside	(m/in)	1.55/61	1.6/63
14	Rated load	(kg/lb)	250/551	230/507
15	Load on extension	(kg/lb)	113/250	113/250
16	Batteries	(V,AH)	24,80	24,80
17	Weight ±30	(kg/lb)	900/1984	1270/2910
18	Travel speed km/h	(mph)	0~4(0~2.48)	0~4(0~2.48)
19	Lift time	(s)	32	26
20	Lowered time	(s)	27	21
21	Tyre		Non-mark Tyres	Non-mark Tyres
22	Maximum slope		2°/3°	1.5°/3°
23	Gradeability		30%	30%
24	Working area		"indoor 0km/h(0mph) outdoor 12.5km/h(7.77mph)"	"indoor 0km/h(0mph) outdoor 12.5km/h(7.77mph)"



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°(horizontal direction)/ 3°(vertical 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 transmis- sion system technology.

Application

- / Locomotive maintenance station, airport, power station, gym, big company ect.

Standard Equipment

- / The lifting system
- / The proportional control
- / Anti-overturning system
- / Control box
- / Internal Charger
- / Hour meter
- / Alarm light
- / Maintenance free battery(Lead-acid)

Options

- / Working lights(two lights)
- / Socket device on the basket
- / Leakage protector for socket
- / Beeper
- / Warning tape
- / Anti-overload system(Required by CE)
- / Imported brand control system
- / Air pipe to basket
- / Anti-explosion modification
- / Special color customization



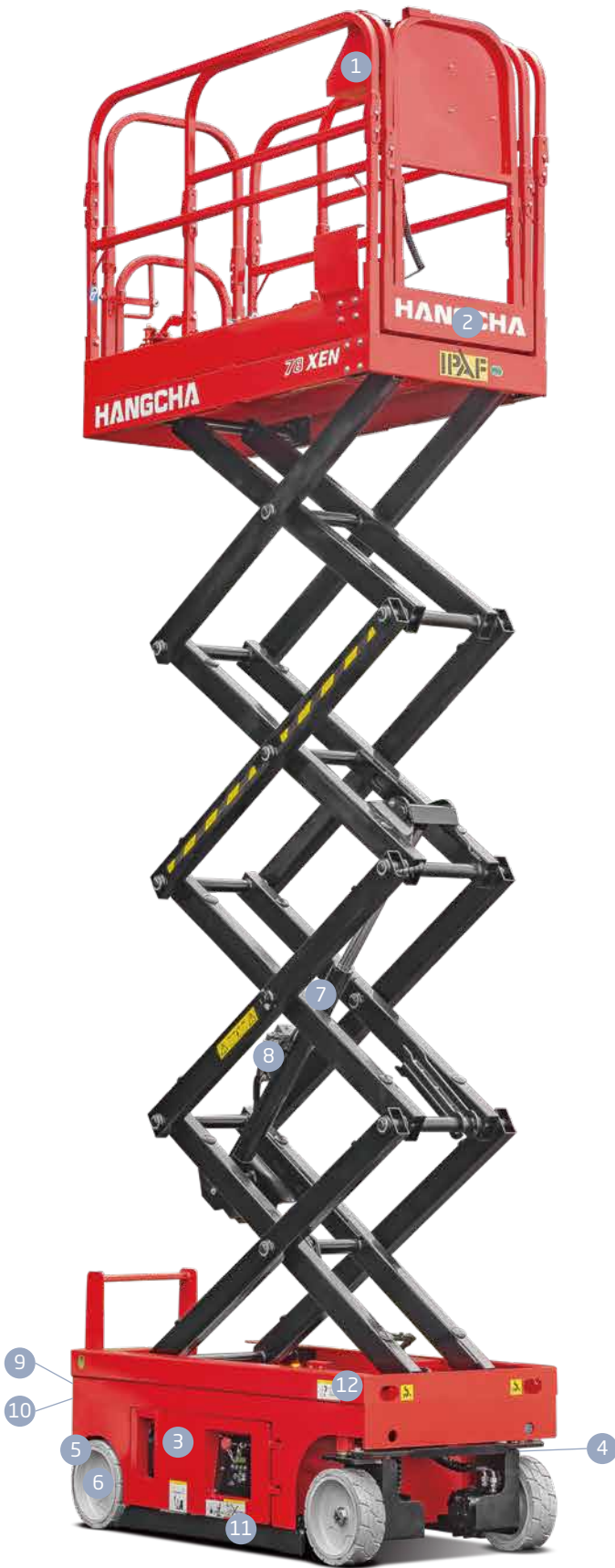
78XEN



100XEN



160XEN



Joystick(HANGCHA)



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 6.5ft, this system will work automatically, to protect the machine from overturning while walking at un-leveling ground.



Angle sensor: when it is lifting and walking on the slope, the sensor will automatically judge the status of the machine, if the angle is larger than the rated angle, it will alarm to remind the operator.

Battery



Standard: Maintenance free battery (lead acid)				
	65XEN	78XEN	80XENS	100XENS
Battery(4x6v)	24V,200Ah	24V,200Ah	24V,200Ah	24V,200Ah

Standard: Maintenance free battery (lead acid)						
	80XEN	100XEN	120XEN	140XEN	160XEN	160XENS
Battery(4x12v)	24V,200Ah	24V,200Ah	24V,200Ah	24V,200Ah	24V,200Ah	24V,200Ah



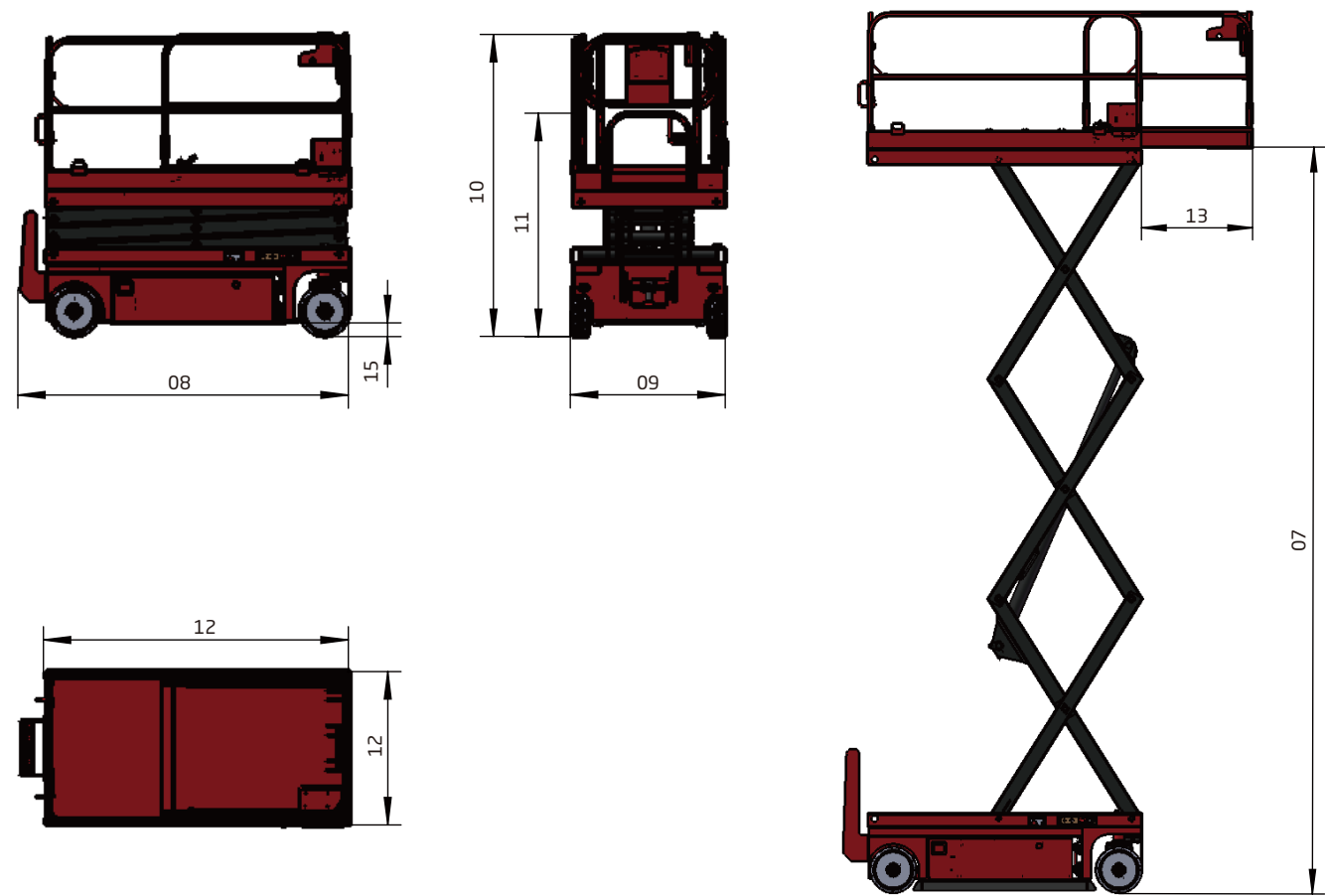
Option: Lithium battery				
	HS0608HI(65XEN)	HS0708HI(78XEN)	HS0808HI(80XENS)	HS1008HI(100XENS)
Battery(CATL)	24V,150ah	24V,150ah	24V,150ah	24V,150ah

Option: Lithium battery						
	HS0812HI (80XEN)	HS1012HI (100XEN)	HS1212HI (120XEN)	HS1412HI (140XEN)	HS1614HI (160XEN)	HS1612HI (160XENS)
Battery (CATL)	24V,200ah	24V,200ah	24V,200ah	24V,200ah	24V,200ah	24V,200ah



Self-propelled Electric Scissor Lifts

01	Manufacturer	HANGCHA GROUP CO.,LTD.									
02	Model	65XEN	78XEN	80XENS	100XENS	80XEN	100XEN	120XEN	140XEN	160XEN	160XENS
03	Maximum load capacity(outdoor/indoor)	kg 320	230	380	230	450	450	320	320	230	230
04	Maximum load capacity of extended platform	kg 113	113	113	113	113	113	113	113	113	113
05	Maximum number of workers	Indoor 2/outdoor 1	Indoor 2/outdoor 1	Indoor 2	Indoor 2	Indoor 2/outdoor 1	Indoor 2/outdoor 1	Indoor 2/outdoor 1	Indoor 2	Indoor 2	Indoor 2
06	Height,working	m 6.5	7.8	8	10	8	10	12	13.8	15.7	15.7
07	Height, platform	m 4.5	5.8	6	8	6	8	10	11.8	13.7	13.7
08	Length	m 1.89	1.89	2.48	2.48	2.48	2.48	2.48	2.48	2.84	2.84
09	Width	m 0.81	0.81	0.81	0.81	1.15	1.15	1.15	1.15	1.4	1.25
10	Height(Guardrail Unfolded)	m 2.07	2.19	2.23	2.37	2.23	2.37	2.5	2.64	2.64	2.64
11	Height(Guardrail Folded)	m 1.72	1.84	1.88	2.02	1.63	1.77	1.9	2.04	2.04	2.04
12	Working dimensions	m 1.68*0.78	1.68*0.78	2.27*0.81	2.27*0.81	2.27*1.14	2.27*1.14	2.27*1.14	2.27*1.14	2.64*1.14	2.64*1.14
13	Length, extended maximum	m 0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
14	Wheel base	m 1.36	1.36	1.87	1.87	1.87	1.87	1.87	1.87	2.22	2.22
15	Ground distance	cm 7.7(fold) 1.6(lift)	10(fold) 1.6(lift)			10(fold) 2(lift)					
16	Turning radius(inside)	m 0	0	0	0	0	0	0	0	0	0
17	Turning radius(outside)	m 1.64	1.64	2.1	2.1	2.2	2.2	2.2	2.2	2.7	2.65
18	Drive speeds	km/h 0-3.5	0-3.5	0-3.5	0-3.5	0-3.5	0-3.5	0-3.5	0-3.5	0-3	0-3
19	Up time	s 12±2	16±2	20±2	28±2	25±3	34±3	53±3	63±5	65±5	65±5
20	Down time	s 26±4	36±4	37±4	50±5	37±5	50±5	50±5	60±7	70±7	70±7
21	Lifting speed (unladen)	m/s 0.3	0.3	0.24	0.24	0.2	0.2	0.16	0.16	0.19	0.19
22	Descending speed (unladen)	m/s 0.14	0.14	0.13	0.13	0.14	0.14	0.17	0.17	0.18	0.18
23	Motor model	XQD-4.5HP-2	XQD-4.5HP-2	XQD-4.5HP-2	XQD-4.5HP-2	XQD-4.5HP-2	XQD-4.5HP-2	XQD-4.5HP-2	XQD-4.5HP-2	XQD-4.5-9	XQD-4.5-9
24	Motor rated power	kw 3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	4.5	4.5
25	Battery	V/Ah 24V/200	24V/200	24V/200	24V/200	24V/200	24V/200	24V/200	24V/200	24V/200	24V/200
26	Charger	V/A 24/30	24/30	24/30	24/30	24/30	24/30	24/30	24/30	24/30	24/30
27	Maximum slope rating	% 25	25	25	25	25	25	25	25	25	25
28	Maximum allowable inclination	° 3°	3°	3°	3°	3°	3°	3°	3°	3°	3°
29	Tire size	mm Φ 305×100mm	Φ 305×100mm	Φ 381×127mm	Φ 381×127mm	Φ 381×127mm	Φ 381×127mm	Φ 381×127mm	Φ 381×127mm	Φ 381×127mm	Φ 381×127mm
30	Weight	kg 1315	1435	2085	2180	2230	2370	2810	3040	3240	3280



Vertical Mast Lift

The HANGCHA HV110D is a jib machine that offers outreach capability to get virtually any job done. A 130° rotating jib and 345° non-continuous hydraulic turntable allows for exceptional range of motion and precise positioning. These capabilities combined with the efficient electric drive motors and a low machine weight make the HANGCHA HV110D lift the solution for hard-to-reach jobsite needs. It has the characteristics of compact body size, small turning radius, good handling performance and strong endurance. It is mainly used in warehouse, exhibition hall, aircraft maintenance, mechanical equipment installation, equipment maintenance and other fields.

Anti-overturning system

/ When the machine raises, this system will open automatically, to protect the machine from overturning while walking at un-leveling ground.

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.

The working scope

/ It can go to the working area rapidly trough lifting, lowering, travelling forward and backward, turret turning, etc.

Self-leveling sensor

/ When the degree is more than 2.5°, it will alarm.

The proportional control system

/ Control the speed of traveling, lifting and turret turning as you need.

The turning radius

/ It can work in a very compact area.

LED display

/ Easy for troubleshooting.



CAN BUS control system

/ The machine is equipped with CAN BUS control system, it makes the electrical system simple, reliable, easy maintenance and troubleshooting.



Options

- / Basket socket device
- / Work lamp
- / Anti-collision sensor

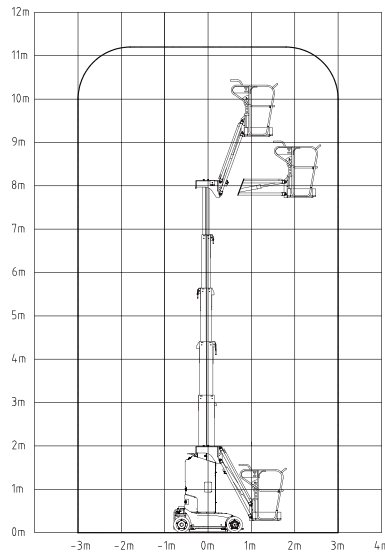
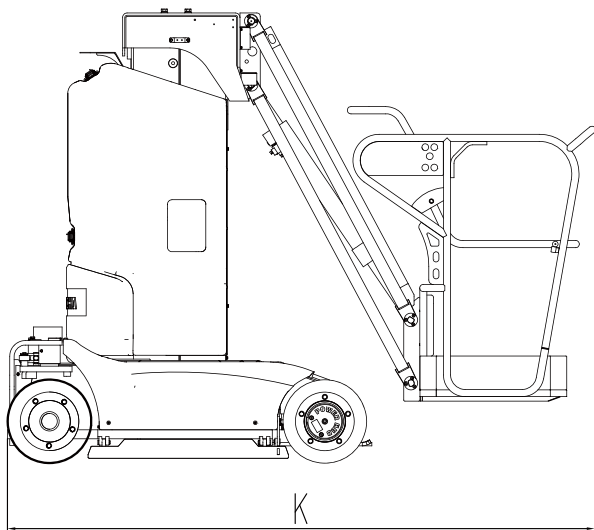
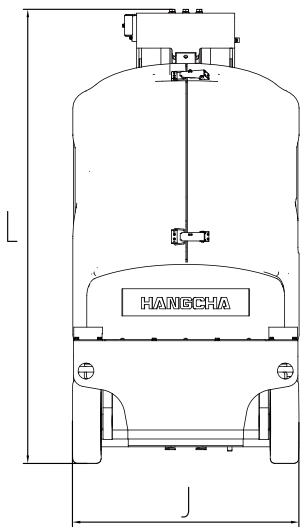
Standard Specification

- / The proportional joystick
- / The anti-overturning system
- / Easy access
- / Self-propelled
- / No marking tyre
- / 4X2 drive
- / Automatic break
- / Emergency lower system
- / Flashing light
- / Emergency stop system
- / Explosion proof valve
- / Fault diagnosis
- / Self-leveling sensor
- / 345°non-continuous turret turning
- / Buzzar
- / Horn
- / Swing cover



Vertical Mast Lift Specification

01	Manufacturer		HANGCHA GROUP CO.,LTD.
02	Model		HV110D
03	Maxi.working height	m	11.22
04	Maxi.platform height	m	9.22
05	Up and over height	m	7.89
06	Horizontal height	m	3
07	Jib movement	°	+70 /-60
08	Turret rotation	°	345
09	Capacity	kg	210
10	Maximum number of workers	m	2/1
11	Platform dimensions	m	0.93×0.65
12	Width	m	1
13	Length	m	2.65
14	Height	m	2
15	Turning radius(inside)	m	0.23
16	Turning radius(outside)	m	1.65
17	Ground distance	m	0.06
18	Wheelbase	m	1.22
19	Maxi. Travelling speed	km/h	4.5
20	Mini. Travelling speed	km/h	0.5
21	Maxi slop rating	%	25
22	Maximum allowable inclination	°	2.5
23	Tyre	mm	381×127
24	Weight	kg	2930
25	Charger	V/A	24/30
26	Battery	V/ah	24/240



Articulating Booms

GTHZ120 / GTHZ170 / GTHZ170C / HZ210AI

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.

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.

Standard specification

- / Electrical battery traction
- / Negative brakes
- / Lifting brake
- / 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

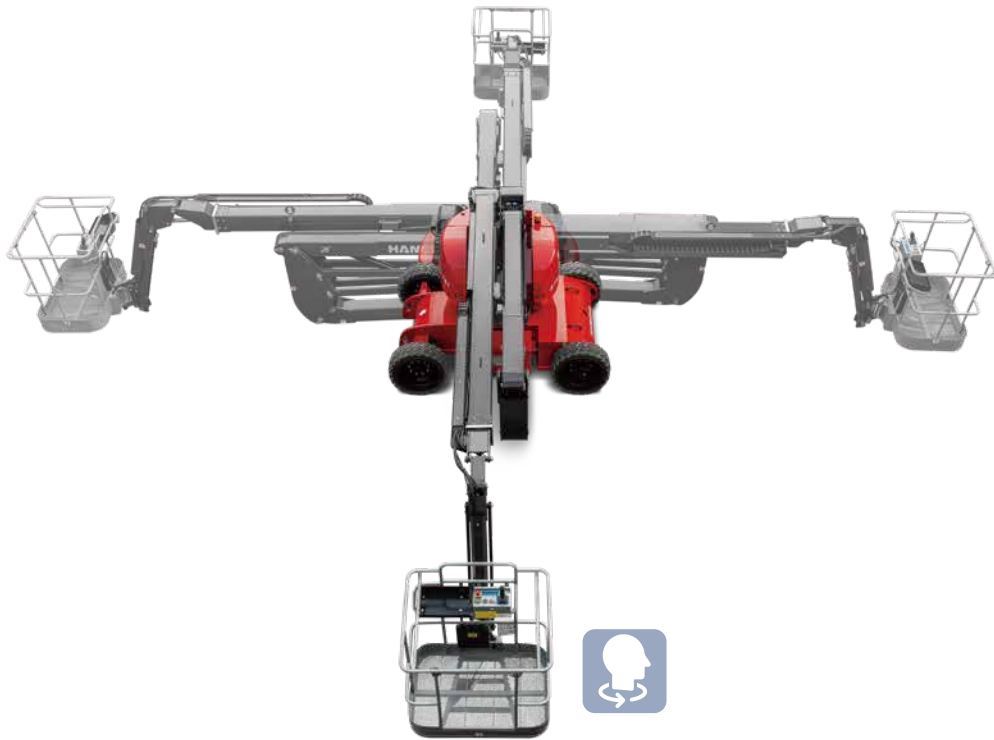
- / Working lights
- / Flashing light(all motion alarm)
- / Buzzer
- / Air predisposal
- / Electrical plug 220V
- / Over-load sensor system



GTHZ170C

GTHZ170

GTHZ120



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



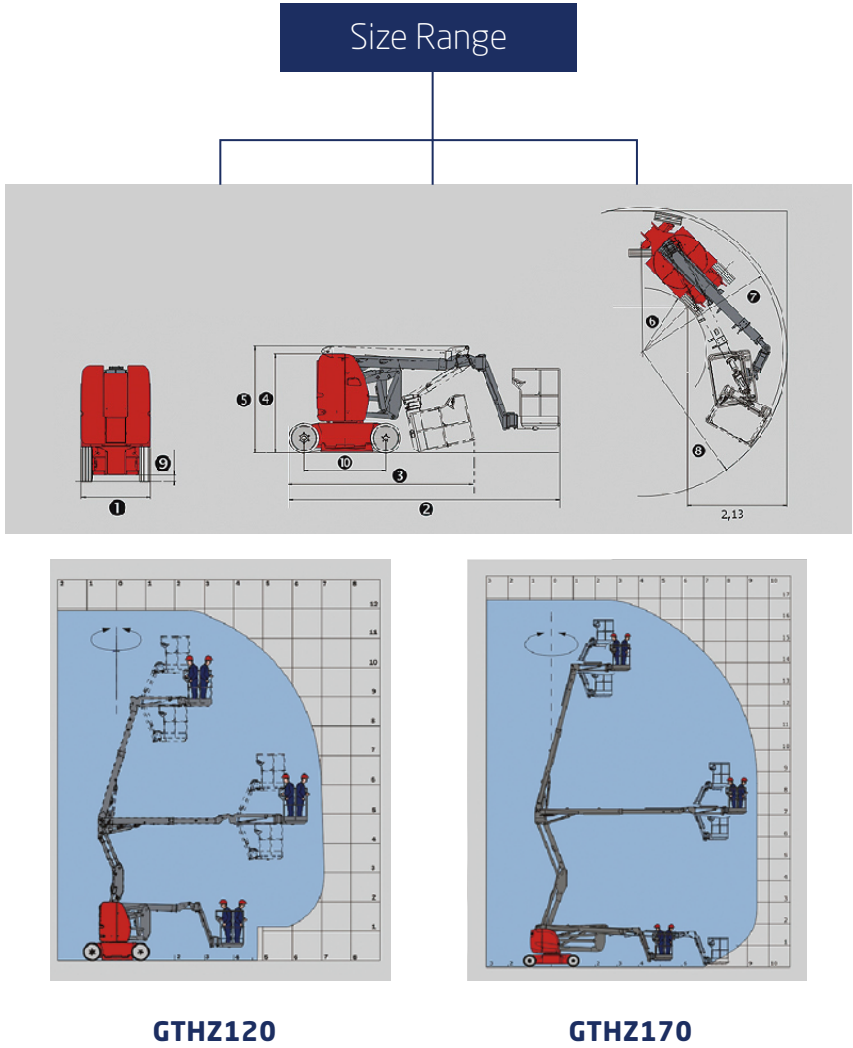
Basket control box: each action of the device can be controlled through the control box to quickly reach the working area, and the control is simple and easy to understand



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

Articulating Booms

1	Manufacturer		HANGCHA GROUP CO.,LTD.		
2	Model		GTHZ120	GTHZ170	GTHZ170C
3	Working height	m	11.95	16.75	16.95
4	Platform height	m	9.95	14.75	14.95
5	Horizontal height	m	7.00	9.43	9.43
6	Up and over height	m	4.77	7.16	7.3
7	Length	m	5.48	6.84	6.9
8	Length (storage)	m	3.74	5.4	5.4
9	Wheel base	m	1.65	2	2
10	Width	m	1.22	1.75	1.75
11	Height	m	1.99	2.09	2.15
12	Height (storage)	m	2.16	2.09	2.15
13	Basket size	m	1.20x0.77	1.20x0.77	1.80x0.77
14	Turning radius inside	m	1.55	2.0	2.0
15	Turning radius outside	m	3.25	4.30	4.30
16	Turning radius outside (basket)	m	3.34	5.6	5.6
17	Ground Clearance	m	0.10	0.15	0.20
18	Capacity	kg	200	200	230
19	Jib movement		±70°	±70°	±70°
20	Basket rotation		140°	140°	140°
21	Turret rotation		350°	355°	355°
22	Drive speed	km/h	6.00	4.50	6.10
23	Working speed	km/h	0.60	0.60	0.60
24	Gradeability	%	25%	22%	30%
25	Maxi slope acceptable	%	3° or 5%	3° or 5%	3° or 5%
26	Tires	m	0.60x0.19	0.60x0.19	0.73x0.225
27	Wheel steer		2	2	2
28	Wheel drive		2	2	2
29	Batteries (C5)	V/Ah	240Ah,2x24V	300Ah,2x24V	300Ah,2x24V
30	Weight	kg	6550	7030	7130



Your reliable partner for outdoor construction and industrial applications, the Hangcha first rough terrain articulating boom lift with capabilities provides lifting versatility with a combination of up, out and over positioning capabilities.

Safe and reliable

- / Swing shaft design, good off-road performance, keep stable when crossing potholes;
- / Middle arm frame, compact structure, safe and stable.
- / Control system redundancy design, cylinder to the top buffer design, the boom movement is smooth, comfortable operation;
- / All key parts adopt well-known brands in the industry, with high reliability;
- / Four-wheel electromagnetic braking;

Energy saving and efficient

- / Standard lithium iron phosphate battery, energy saving and environmental protection, short charging time, long life;
- / Gravity drop hydraulic system, energy saving, strong endurance;
- / The whole vehicle with ac system, high efficiency;
- / Using proportional valve, stepless speed regulation, fast response, stable operation;
- / Equipped with large size platform and three doors design.

Intelligent

- / Cloud intelligent module, which can realize the remote management of vehicles.

Storage

- / Can be transported by container.



HZ210AI

HZ210AI Specification

1	Manufacturer	HANGCHA GROUP CO.,LTD.
2	Max. platform height	18.80m
3	Max. working height	20.80m
4	Max. up and over height	8.28m
5	Max.horizontal height	11.45m
6	Max.horizontal working height	11.95m
7	Overall length	8.63m
8	Overall width	2.49m
9	Width (storage, change the tyres for container)	2.3m
10	Overall height	2.43m
11	Wheel base	2.5m
12	Grand clearance	0.31m
13	Platform size	2.2m×0.8m×1.1m
14	Tire	315/55 D20
15	Capacity	255kg(350kg)
16	Operators	2
17	Max. Manual force	400N
18	Max.driving speed (transport mode)	6.1km/h
19	Max. driving speed (working mode)	0.8km/h
20	Mini. turnig radius inside	2.05m
21	Gradeability/Slope (transport mode)	40% / 22°
22	Max. slope angle (working mode)	5°
23	Turret rotation	360°continually
24	Tail swing	0.31m
25	Max. wind speed	12.5m/s
26	Basket rotation	180°
27	Jib movement	70°/-60°
28	Wheel drive	4WD×2WS
29	Drive motor	6kW
30	Hydraulic motor	3.3kW
31	Oil tank	60L
32	Lithium battery	48V, 375Ah
33	Electrical system voltage	48V
34	Control system voltage	12V
35	Weight	9300kg
36	Tire load	5000kg



320



*Full Line of Lithium-Ion Equipment
Hangcha- Make handling easier*