

## 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	
	mm	mm	mm	mm	1.2t	1.6t
Wide view mast	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	5955	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	
	mm	mm	mm	mm	2.0t	kg
Wide view mast	2000	1685	2955	115	2000	2000
	2500	1935	3455	115	2000	2000
	2700	2035	3655	115	2000	2000
	3000	2185	3955	115	1900	1900
	3300	2335	4255	115	1820	1820
	3500	2435	4455	115	1750	1750
	3600	2485	4555	115	1750	1750
	3700	2535	4655	115	1700	1700
	3800	2585	4755	115	1700	1700
	4000	2785	4955	115	1650	1650
Wide view full free triplex mast	4300	2935	5255	115	1600	1600
	4500	3035	5455	115	1550	1550
	3500	1975	4455	1020	1750	1750
	3700	2040	4655	1085	1700	1700
	4000	2140	4955	1185	1650	1650
	4300	2240	5255	1285	1600	1600
	4500	2290	5455	1335	1550	1550
	4700	2390	5655	1435	1480	1480
	5000	2485	5955	1530	1400	1400
	5200	2540	6155	1585	1330	1330
5500	2640	6455	1685	1250	1250	



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ISO14001  
ISO14001:2015



ISO9001  
ISO9001:2015



HANGCHA trucks conform  
to the European Safety  
Requirements.

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

with capacities of 1,200 to 2,000kg

The World of Hangcha



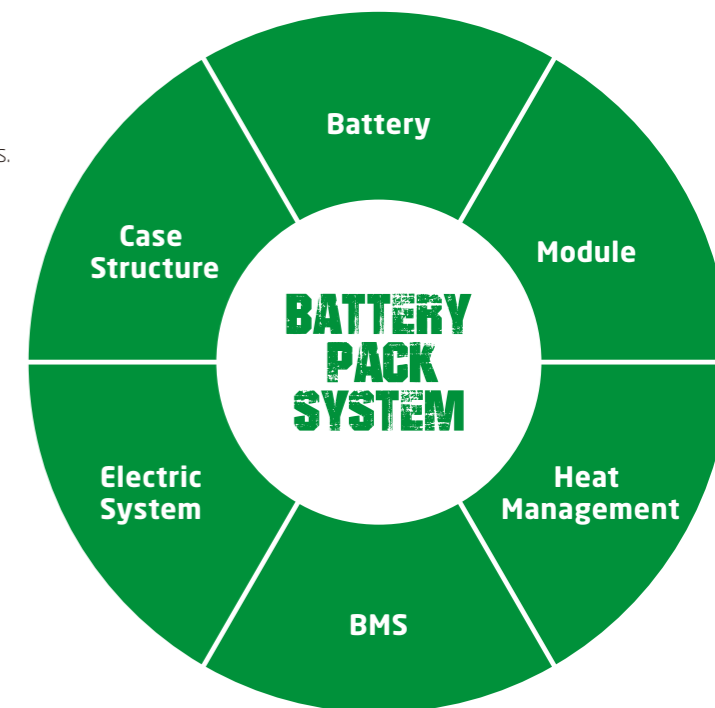
# LET THE LITHIUM POWER TAKE OVER



## INNOVATIVE SOLUTIONS NEW POWER NOW

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

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



Li-Ion  
2 hours  
100%

Lead-acid batteries  
8-10 hours 100%

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

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

### Li-Ion Battery Pack specification

Type		CQDB12-AC1S-I	CQDB16-AC1S-I	CQDB20-AC1S-I
Li-Ion battery	V/Ah	24/120	24/120	24/120
Li-Ion battery,Optional	V/Ah	24/202	24/202	24/202
Titans charger		SPC-24100	SPC-24100	SPC-24100



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



**5 YEARS  
WARRANTY**

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

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

**Easy/  
Efficiency/  
Economy**



## 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.



Fork tilt F/R: 3° / 5°



EPS (Electric Power Steering) is standard specification

## 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.



BUCHER hydraulic unit

## 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.



Multi-function tiller

## 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  $\pm 100$ mm



## 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
- / 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 1.6/2.0t model
- / The electronic limitation to be acted when mast move forward

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

			HANGCHA GROUP CO.,LTD.			
			CQDB12-AC1S CQDB12-AZ3S	CQDB16-AC1S CQDB16-AZ3S	CQDB20-AC1S CQDB20-AZ3S	
Distinguishing marks	1.1	Manufacturer				
	1.2	Manufacturer's type designation				
	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
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane
	3.2	Tyre size, front	mm	$\phi 250 \times 80$	$\phi 250 \times 80$	$\phi 250 \times 80$
	3.3	Tyre size, rear	mm	$\phi 210 \times 85$	$\phi 210 \times 85$	$\phi 210 \times 85$
	3.5	Wheels, number front/rear (x=driven wheels)		1x/2	1x/2	1x/2
	3.7	Tread, rear	b <sub>11</sub> (mm)	981	981	981
Dimensions	4.1	Tilt of fork carriage forward/backward	$\alpha/\beta(^{\circ})$	3/5	3/5	3/5
	4.2	Height, mast lowered	h <sub>1</sub> (mm)	1930	1930	2035
	4.4	Lift	h <sub>3</sub> (mm)	2700	2700	2700
	4.5	Height, mast extended	h <sub>4</sub> (mm)	3655	3655	3655
	4.8	Stand height	h <sub>7</sub> (mm)	170	170	170
	4.10	Height of wheel arms	h <sub>8</sub> (mm)	226	226	226
	4.19	Overall length	l <sub>1</sub> (mm)	2202	2202	2412
	4.20	Length to face of forks	l <sub>2</sub> (mm)	1132	1132	1342
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (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	b <sub>3</sub> (mm)	902	902	902
	4.25	Distance between fork-arms	b <sub>5</sub> (mm)	200-750	200-750	200-750
	4.26	Distance between wheel arms	b <sub>4</sub> (mm)	772	772	772
	4.28	Reach distance	l <sub>4</sub> (mm)	590	590	590
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (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	W <sub>a</sub> (mm)	1600	1600	1800
	4.37	Length across wheel arms	l <sub>7</sub> (mm)	1704	1704	1904
	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	0.140/0.200	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
10.5		Steering design		EPS	EPS	EPS

