



A Series Stand-on Reach Truck

with capacities of 1,500 to 1,800kg

The World of Hangcha
SINCE 1956



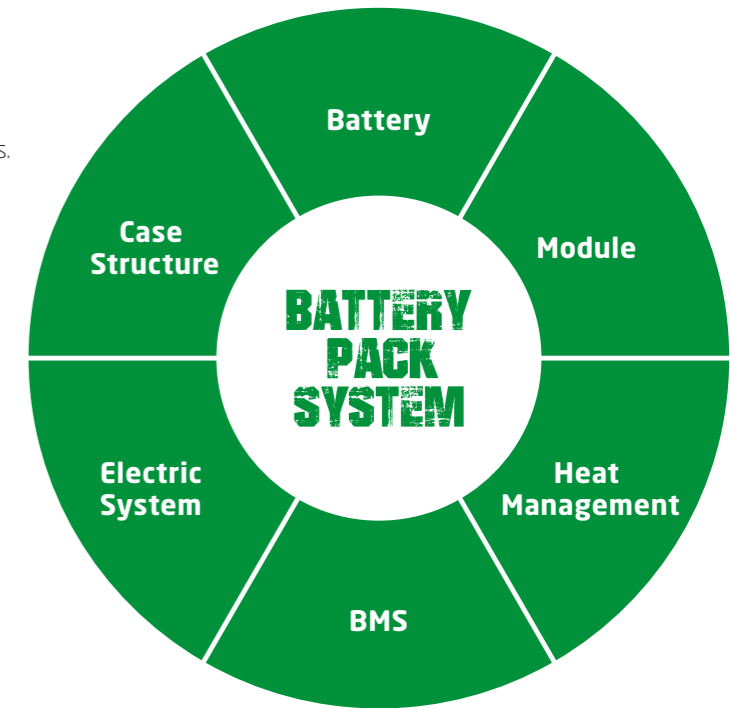
LET THE LITHIUM POWER TAKE OVER



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.
- / 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.



**5 YEARS
WARRANTY**

Li-Ion Battery Specification

Type		CQD15-AC2S-I	CPD18-AC2S-I
Battery voltage, capacity	V/Ah	48/202*	48/202*
Option capacity	V/Ah	48/271	48/271
Titans charger		SLC-48100	SLC-48100

★ Available for cold storage

A Series Stand-on Reach Truck

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.

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



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

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

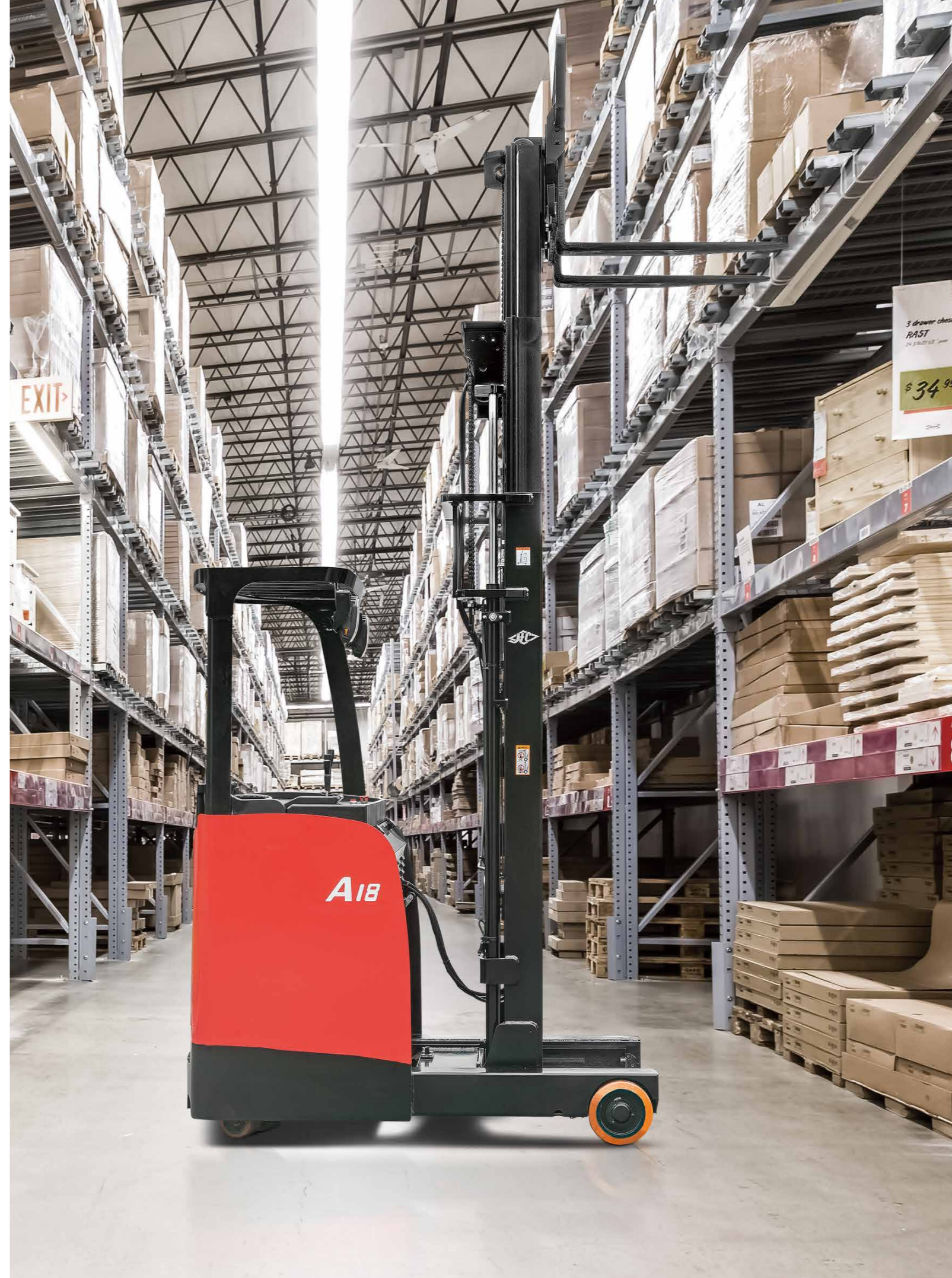
- / Headlights (LED) + turn signals (LED)
- / Shimadzu triple valves
- / AC driving (4kw) + AC lifting (9kw)
- / EPS (Electric Power Steering) system
- / Soft landing
- / Suspension control system
- / Speed control at corner
- / Mechanical brakes
- / Regenerative braking (reverse, neutral, brake)
- / 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.



COMFORTABLE DESIGN

It's convenient for getting on/off.



Floor height: 280mm.

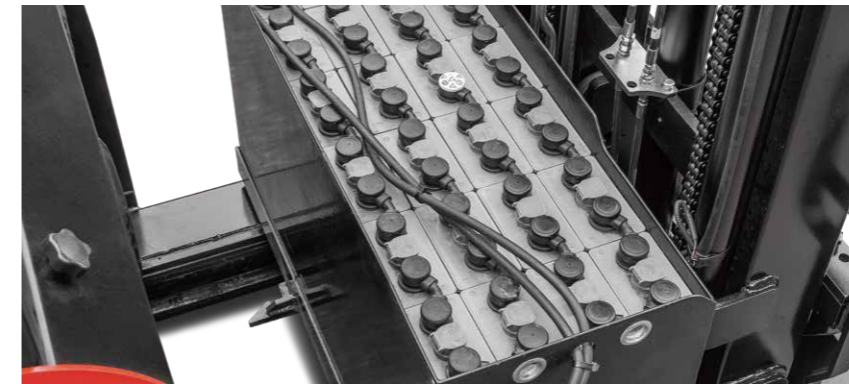
Optimal lifting system

- / 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.



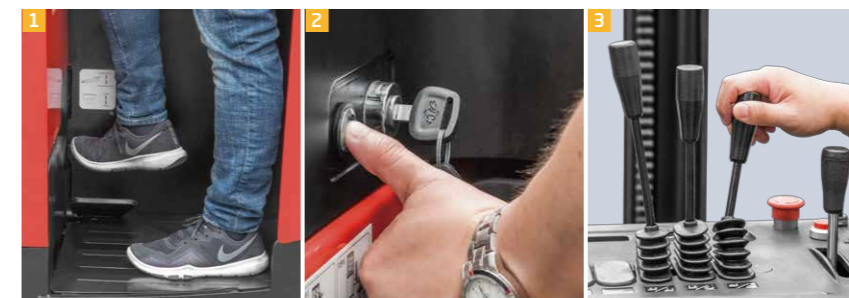
Battery removal

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

BATTERY REPLACEMENT OPERATION PROCESS

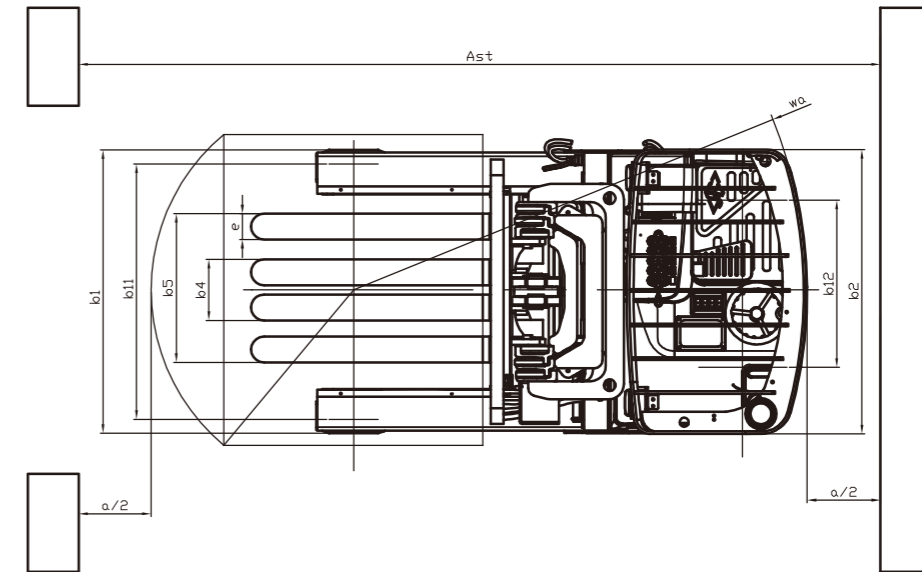
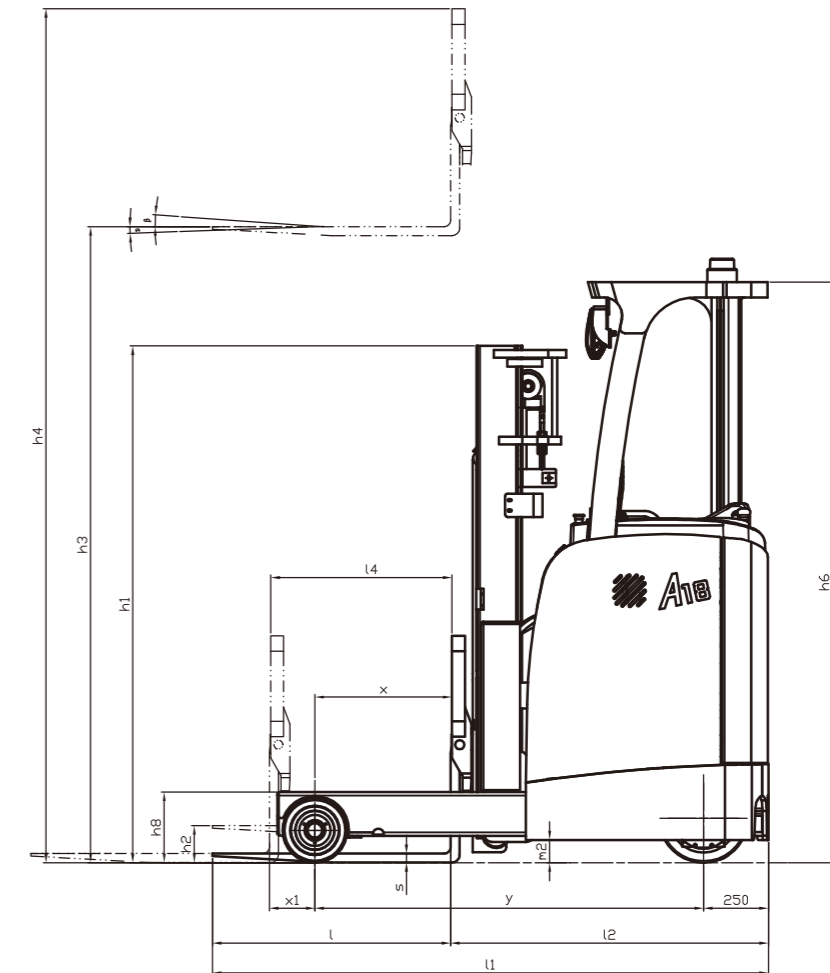
Battery insertion

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



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

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation	CQD15-AC2S	CQD18-AC2S	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	
	1.4	Operator Position	Stand On	Stand On	
	1.5	Rated capacity/rated load	Q (kg)	1500	1800
	1.6	Load centre distance	c (mm)	500	500
	1.7	Load distance, centre of drive axle to fork	x (mm)	375	525
	1.8	Load distance, centre of drive axle to fork,mast reached forward	x 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



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	Without backrest	With backrest	Without backrest	Forward	Backward	1.5t	1.8t
		mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg
Wide view duplex mast	QAZ18M	2500	1745	3386	100	3	5	1500	1800	1500	1800
		2700	1845	3586	100	3	5	1500	1800	1500	1800
		3000	1995	3886	100	3	5	1500	1800	1500	1800
		3500	2245	4386	100	3	5	1500	1800	1500	1800
		4000	2595	4886	100	3	5	1500	1800	1500	1800
		4500	2845	5386	100	3	5	1500	1800	1500	1800
Full free triplex mast	QAZ18N	5000	3095	5886	100	3	5	1250	1550	1250	1550
		4500	2165	5376	1179	3	5	1500	1800	1500	1800
		5000	2315	5876	1339	3	5	1250	1550	1250	1550
		5500	2490	6376	1519	3	5	1150	1450	1150	1450
		6000	2665	6876	1689	3	5	900	1200	900	1200

