

FORX

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A Series Stand-on Reach Truck

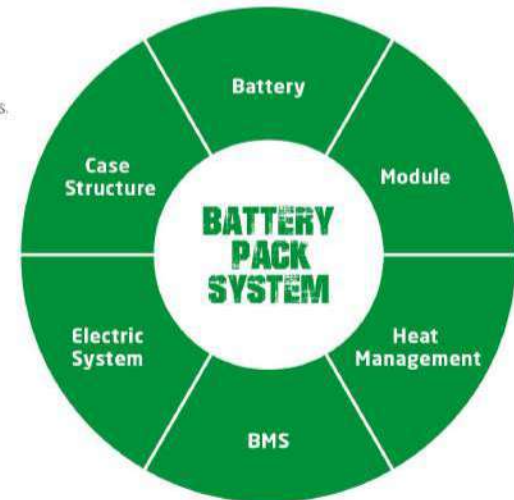
with capacities of 1,500 to 1,800kg

FORX



INNOVATIVE SOLUTIONS NEW POWER NOW

- / 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 75%.
- / 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.



**6 YEARS
WARRANTY**

Li-Ion Battery Specification

Type	CQ015-ACSS-I* / CQ015-ACSS-IF2		CQ018-ACSS-I* / CQ018-ACSS-IF2
Battery voltage, capacity	V/Ah	48/228*	
Option capacity	V/Ah	48/302*, 48/230(EVE), 48/304(EVE)	

Note: * Available for cold storage

*CE model

*F2: Means the cold storage truck model F2 are suitable for use in cold storage environments down to -30 °C.

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.
- / Adopting a brand-new layout, the operating space is larger, and the boarding step is lower, making it easier for the driver to get in and out frequently.
- / Standard equipment side charging port for the battery, making charging more convenient.

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 brake interlock switch, when the brake is released, triggers the interlock switch, which prohibits movement and can only be operated hydraulically.

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.
- / Standard equipment includes a battery position switch to ensure that the battery is properly installed, enhancing the safety of the entire truck.
- / Equipped with a proven mechanical disc brake system, it allows for emergency stopping as well as parking brake application, offering high reliability.

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, travelling 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.
- / The standard equipment includes a DC brushless motor for electric power steering, no need for maintenance costs.
- / 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

- / The reach truck, while meeting the strength requirements, is reasonably laid out to reduce energy consumption by reducing the truck's weight.
- / 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 + AC lifting
- / EPS (Electric Power Steering) system
- / Soft landing (duplex mast)
- / Suspension control system
- / Speed control at corner
- / Mechanical brakes
- / Regenerative braking (reverse, neutral, brake)
- / USB charge port
- / Warning light
- / Side charging
- / Emergency power-off switch
- / Interlock switch
- / Battery position switch
- / Lift damping system

Options

- / Straight projection lamp
- / Quadruple and quintuplet
- / Anti-rollback system
- / Fork camera
- / Altimeter
- / Password lock
- / Reflector
- / Fire extinguisher(Excluding model F2)
- / Height level selection
- / Lowering lock valve
- / Cold storage
- / Integral sideshifter
- / Cigarette lighter

CQD15-AC55/CQD18-AC55/CQD15-AC55-F2/CQD18-AC55-F2					
	Tianneng	Zibo	Xunqi	Hawker	FAAM
280Ah	●	○	○		
325Ah	● / ○	○	○	○	○
375Ah	○	○		○	○
450Ah	○				

● 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
- 1 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-AC55* CQD15-AC55-F2	CQD18-AC55* CQD18-AC55-F2
	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	x1 (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		superelastic(driving)/polyurethane	superelastic(driving)/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	b11(mm)	986	986
	3.7	Tread width, rear	b12(mm)	645	645
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	3/5	3/5
	4.2	Height, mast lowered	h1 (mm)	1995	1995
	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)	2240	2240
	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)	2146	2146
	4.10	Length to face of forks	l2 (mm)	1226	1226
	4.11	Overall width	b1/b2(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	ba/bb (mm)	230-720	230-720
	4.14	Reach distance	l4 (mm)	550	700
	4.15	Aisle width for pallets 1100 x 1100 , clearance 200	Ast (mm)	2710	2745
	4.16	Aisle width for pallets 1000 x 1200 crossways, clearance 200	Ast (mm)	2666	2715
	4.17	Turning radius	Wa (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
Addition data	7.1	Type of drive control		CURTIS Full AC	CURTIS Full AC
	7.3	Sound level at the driver's ear according to EN / DIN 12 053	dB (A)	<75	<75

* CE model
* F2: Means the cold storage truck model F2 are suitable for use in cold storage environments down to -30 °C.

1.5~1.8t Mast Specification

Type	Model	Lifting height h ₁	Mast lowered h ₁	Mast extended h ₁	Free lifting height h ₂	Tilting range		Load capacity at 500mm	
				With backrest	Without backrest	Forward	Backward	1.5t	1.8t
		mm	mm	mm	mm	(°)	(°)	kg	kg
Wide view duplex mast	QAZ18M	2500	1745	3376	105	3	5	1500	1800
		2700	1845	3576	105	3	5	1500	1800
		3000	1995	3876	105	3	5	1500	1800
		3500	2245	4376	105	3	5	1500	1800
		4000	2595	4876	105	3	5	1500	1800
		4500	2845	5376	105	3	5	1500	1800
		5000	3095	5876	105	3	5	1250	1550
		4500	2055	5376	1179	3	5	1500	1800
Full free triplex mast	QAZ18N	5000	2215	5876	1399	3	5	1250	1550
		5500	2395	6376	1519	3	5	1150	1450
		6000	2565	6876	1689	3	5	900	1200
		6500	2800	7376	1924	3	5	850	1150
		7000	3020	7876	2144	3	5	700	1050

With sideshifter minus 200kg

