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A Series Reach Truck

with capacities of 1,200 to 2,000kg

The World of Hangcha



A Series Reach Truck

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.

**Environment/
Efficiency/
Economy**



Appearance

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

Stability

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

Flexibility

/ The driving system that is located at rear part of chassis uses EPS (Electric Power Steering) technology, features low-speed and large torque. Automatic centering function upon starting up, and the 360-degree steering mode of standard configuration, make the truck flexible and convenient, and allow it turn easily even in confined space.

Comfort

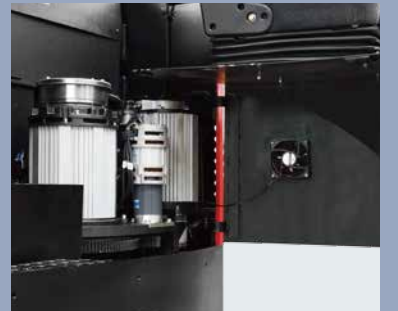
- / Operating levers of ergonomic design, integrated console, all important operating parts are within the reach of your hands.
- / The mast of optimized design with wide view avoids blocking the sight of the operator, and large size of the fork shelf offers wider view.
- / The seat can be adjusted forward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



Advance

- / Three-phase AC technology is applied for driving and steering, both DC and AC technologies are available for lifting. Full AC power system has higher efficiency, and is free maintenance. And the semi-AC power system is highly cost effective.
- / The internationally cutting-edge 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, and the semi-AC truck is equipped with low-noise gear pump of tooth graduation technology.
- / The full AC truck is equipped with stepless speed regulation for lifting operation, descending self-locking in case of power failure, and double protection of hydraulic buffer and electrical deceleration for forward and backward movements. The semi-AC truck is equipped with two-level speed regulation for lifting operation, and protection of hydraulic buffer for forward and backward movements.
- / 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, 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.
- / The mast made with domestic steel channels and broad-view design is cost effective.
- / 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
- / Emergency power off switch
- / 4 spools control valves
- / Stepless speed regulation for lifting operation for C4 model
- / Two level speed regulation for lifting operation for C3 model
- / Protection of hydraulic (for C3 model) and electrical buffer for forward and backward movements for C4 model
- / Arm cushion, and impact-proof head cushion
- / Adjustable seat with OPS switch
- / Full computer control for driving, steering
- / Standard configuration of 360-degree steering mode
- / 3m duplex mast
- / Adjustable steering wheel
- / Front wheel protection hood
- / Safety pedal
- / Descending self-locking in case of power failure
- / CE safety requirements

Options

- / 2.7-5.0m duplex mast, built-in sideshifter, fork tilting
- / 4.3-12.5m full-free triplex mast (C4 model), 4.3-7.0m full-free triplex mast (C3 model), built-in side shifter, fork tilting
- / Various fork lengths
- / Imported high-performance battery
- / Optional large capacity battery 420Ah, 560Ah
- / Full automatic high-frequency charger
- / Other attachments
- / Larger load backrest
- / Load and drive wheels use the Vulkollan material
- / Height monitoring system
- / Lifting height limitation system
- / Alarm lamp, rear headlamp or other lamps
- / Reverse buzzer
- / Descending self-locking in case of power failure for C3 model
- / C3 model: Full free triplex mast is option for lifting height >7m

A Series Reach Truck

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.									
	1.2	Manufacturer's type designation		CQD12-AC3	CQD12-AC4	CQD14-AC3	CQD14-AC4	CQD16-AC3	CQD16-AC4	CQD18-AC3	CQD18-AC4	CQD20-AC3	CQD20-AC4
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		electric	electric	electric	electric	electric	electric	electric	electric	electric	electric
	1.5	Rated capacity/rated load	Q (kg)	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
	1.6	Load centre distance	c (mm)	600	600	600	600	600	600	600	600	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	308	308	308	308	218	218	218	218	288	288
	1.9	Wheelbase	y (mm)	1480	1480	1480	1480	1480	1480	1480	1480	1550	1550
Weight	2.1	Service weight(including battery)	Kg	3110	3110	3110	3110	3300	3300	3310	3310	3320	3320
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		polyurethane									
	3.2	Tyre size, front ×2	mm	285x100	285x100	285x100	285x100	285x100	285x100	343x108	343x108	343x108	343x108
	3.3	Tyre size, rear	mm	343x114	343x114	343x114	343x114	343x114	343x114	343x135	343x135	343x135	343x135
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4
	4.2	Height, mast lowered	h ₁ (mm)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
	4.3	Free lift	h ₂ (mm)	340	340	340	340	340	340	340	340	340	340
	4.4	Lift	h ₃ (mm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	4.7	Height of overhead guard	h ₆ (mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	4.20	Length to face of forks	l ₂ (mm)	1935	1935	1935	1935	1935	1935	1935	1935	2005	2005
	4.21	Overall width	b ₁ (mm)	1270	1270	1270	1270	1270	1270	1286/1270	1286/1270	1286/1270	1286/1270
	4.22	Fork dimensions ISO	s/e/l (mm)	40×122×1070									
	4.25	Distance between fork-arms	b _s (mm)	244-882	244-882	244-882	244-882	244-882	244-882	244-882	244-882	244-882	244-882
	4.28	Reach distance	l ₄ (mm)	525	525	525	525	435	435	435	435	505	505
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm)	2851	2851	2851	2851	2921	2921	2921	2921	2935	2935
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm)	2913	2913	2913	2913	2995	2995	2995	2995	3000	3000
	4.35	Turning radius	W _a (mm)	1735	1735	1735	1735	1735	1735	1735	1735	1804	1804
Performance data	5.1	Travel speed	Km/h	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
	5.2	Lift speed	m/s	0.260	0.280	0.260	0.280	0.260	0.280	0.260	0.280	0.260	0.280
	5.3	Lowering speed	m/s	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
	5.8	Max. gradeability	%	10	10	10	10	10	10	10	10	10	10
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	AC 6.5	AC 6.5	AC 6.5	AC 6.5	AC 6.5
	6.2	Lift motor rating at S3 15%		DC8.6	AC 12.8 AC 14.5★	DC8.6	AC 12.8 AC 14.5★	DC8.6	AC 12.8 AC 14.5★	DC8.6	AC 12.8 AC 14.5★	DC8.6	AC 14.5
		Steering motor	kW	AC 0.67	AC 0.67	AC 0.67	AC 0.67	AC 0.67	AC 0.67	AC 0.67	AC 0.67	AC 0.67	AC 0.67
Addition data	6.4	Battery voltage, nominal capacity K5	V/Ah	48/400	48/400	48/400	48/400	48/500	48/500	48/500	48/500	48/500	48/500
	8.1	Type of drive control		Semi-AC	Full AC	Semi-AC	Full AC	Semi-AC	Full AC	Semi-AC	Full AC	Semi-AC	Full AC
		Manufacturer/Type		CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS
	10.1	Operating pressure for attachments	bar	140	140	140	140	165	165	185	185	210	210
	10.7	Sound level at the driver's ear according to EN / DIN 12 053	dB (A)	<75	<75	<75	<75	<75	<75	<75	<75	<70	<70

Note:★ means mast lift>7m

1.2t-2.0t Mast specification

Type	Model	Lifting height	Overall height		Free lifting height	Tilting range		Load center@600mm									
			Lowered	Without backrest		Forward	Backward	1.2t C3	1.2t C4	1.4t C3	1.4t C4	1.6t C3	1.6t C4	1.8t C3	1.8t C4	2.0t C3	2.0t C4
Wide view duplex mast	QA20B	mm	mm	mm	mm	(°)	(°)	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
		2700	1950	3355	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		3000	2100	3655	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		3300	2250	3955	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		3500	2350	4155	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		3600	2400	4255	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		4000	2650	4655	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		4300	2790	4955	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		4500	2900	5155	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		4800	3095	5495	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		5000	3195	5695	340	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		4300	2085	5030	1365	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		4500	2165	5230	1445	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		4800	2265	5530	1545	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
Full free triplex mast	QA20V	5000	2315	5730	1595	2	4	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000
		5500	2490	6230	1770	2	4	1200	1200	1300	1300	1500	1500	1700	1700	1900	1900
		6000	2665	6730	1945	2	4	1200	1200	1200	1200	1400	1400	1600	1600	1800	1800
		6500	2815	7230	2095	2	4	1100	1100	1100	1100	1300	1300	1500	1500	1700	1700
		7000	2975	7730	2255	2	4	1000	1000	1000	1000	1200	1200	1400	1400	1600	1600
		7500	3230	8190	2540	2	4	\	1000	\	1000	\	1200	\	1400	\	1600
		8000	3400	8670	2730	2	4	\	900	\	900	\	1100	\	1300	\	1500
		8500	3630	9170	2960	2	4	\	800	\	800	\	1000	\	1200	\	1400
	QA20V (imported steel)	9000	3860	9670	3186	2	4	\	700	\	700	\	900	\	1100	\	1300
		9500	4030	10170	3360	2	4	\	\	\	\	\	800	\	1000	\	1200
		10000	4200	10680	3520	2	4	\	\	\	\	\	750	\	900	\	1150
		10500	4350	11170	3680	2	4	\	\	\	\	\	700	\	800	\	1100
		11000	4550	11670	3880	2	4	\	\	\	\	\	\	\	750	\	1050
		11500	4800	12200	4100	2	4	\	\	\	\	\	\	\	700	\	1000
		12000	5050	12690	4360	2	4	\	\	\	\	\	\	\	\	\	900
		12500	5300	13200	4600	2	4	\	\	\	\	\	\	\	\	\	800

