



# XC SERIES MOVING MAST REACH TRUCK WITH LITHIUM-ION TECHNOLOGY

with capacity of 3,000 to 5,500lbs



2021 VERSION 1/COPYRIGHT 2021

HANGCHA GROUP CO., LTD. reserves the right to make any changes without notice concerning colors, equipment, or specifications detailed in this brochure, or to discontinue individual models. The colors of trucks, delivered may differ slightly from those in brochures.



HC FORKLIFT AMERICA CORPORATION

Company address:  
10405-A Granite Street  
Charlotte, NC 28273

Toll Free: (888) 652-8395  
Phone: (980) 888-8335  
Fax: (980) 888-8336

america@hcforklift.com  
www.hcforkliftamerica.com

*Making Material Handling Easier*  
SINCE 1956



# A NEW DIMENSION OF PERFORMANCE

## XC SERIES MOVING MAST REACH TRUCK WITH LITHIUM POWER

- / The lithium-ion powered XC Series Moving Mast Reach Truck fully utilizes the advantages of Lithium Iron Phosphate (LiFePO<sub>4</sub>) technology. This truck also features innovations in vehicle structure, functional configuration, performance, ergonomics, and operating vision.
- / The innovative structure and compact lithium-ion battery pack breakthrough traditional structure design to increase performance in narrow aisle operational environments.
- / This truck caters to a wide range of applications whilst ensuring optimum energy efficiency thanks to its narrow design, high lifting height, load capacity, individual customization, and lithium-ion technology.

MAXIMUM TRAVELING SPEED

**8.7 mph**

MAXIMUM LIFTING SPEED

**159.4 ft/min**

HIGH RESIDUAL CAPACITY

**255.9 in**

MAXIMUM LOAD CAPACITY

**5,500lbs**

MAXIMUM LIFT HEIGHT

**511.8 in**



# ENVIRONMENTALLY FRIENDLY, EFFICIENT, & DURABLE


- / The CATL lithium-ion battery uses an 80V system to fully charge in 2 hours. It also provides a long service life and offers less energy loss.
- / The maintenance-free lithium-ion battery pack is designed to provide a large operating space in the cab, a broad operating view, and a low center of gravity.



Charging Port



Easy Battery Removal

 Operational Time **> 10h**

 Fast Charging Time **≤ 2h**

Lithium-ion Battery Capacity		
3,000lbs	Standard	80V/250Ah
3,500lbs		80V/404Ah
3,900lbs	Optional	80V/404Ah
4,400lbs	Standard	80V/404Ah
5,500lbs		80V/404Ah



# A BREAKTHROUGH IN STYLE AND COMPACT INTERIOR DESIGN

The moving mast reach truck has been designed to provide a comfortable, compact, and stylish interior.



The operator is able to comfortably work thanks to the spacious operator compartment, cloth suspension seat, and fingertip controls. In addition to providing a spacious operator compartment, the unique body structure also allows for a wide view of the operating area. This promotes operational safety for both the operator and workers in the workplace.



**The improved mast structure and piping arrangement enable greater visibility for stacking operations.**

/ The hydraulic tubing and wires run along on both sides of the mast, overlapping with the chain, to make full use of the space and increase visibility for the operator.



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

The middle cylinder is arranged to enable the operator to have greater visibility when looking inside the mast.

# EXCELLENT ERGONOMIC DESIGN

Adjustable Dashboard Angle

Fingertip Controls



Adjustable Steering Wheel Position



Electronic Adjustable Pedal Height

Cloth Suspension Seat



# MULTIFUNCTIONAL INTERACTIVE LCD INSTRUMENT DISPLAY

Developed for the XC Series Moving Mast Reach Truck, the new multifunctional 4.3" color instrument display offers easy-to-read truck status, convenient function buttons, and ultimately provides an intuitive operator-machine interface.



Lorem ipsum  
Lorem ipsum

## Easy-to-Read Truck Status



- 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 and Warning Signs

## Convenient Function Buttons

The function buttons allow for operators to quickly select mast height, change settings, remove the battery, and select drive modes. By integrating the buttons into the display, engineers simplified the console and made operating the truck more concise and efficient.



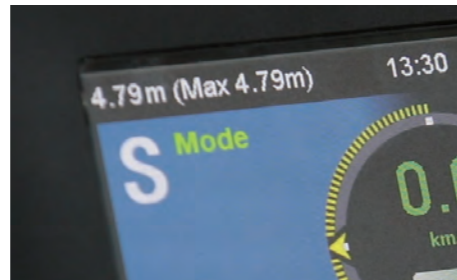
- 5**  
 Height Selection
- 6**  
 Height Limit
- 7**  
 Lighting Control
- 8**  
 Battery Removal
- 9**  
 Optional Function Switching Screen
- 10**  
 ↑ Drive Mode Switching
- 11**  
 ↓ Turtle Speed Mode

# COMPREHENSIVELY IMPROVED FUNCTION CONFIGURATION



## Height Selection

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



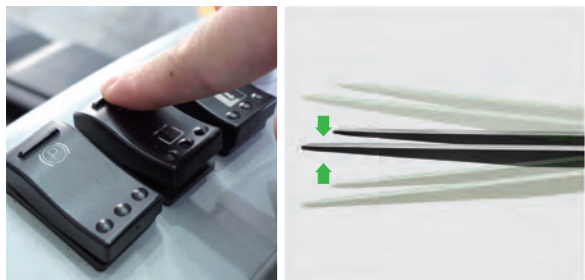
## Height Limit Control

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



## Fork Positioning

Simple, Reliable, & Fast: When the button is pressed, fork positioning occurs automatically. This eliminates the time-consuming, cautious approach needed when entering a pallet.

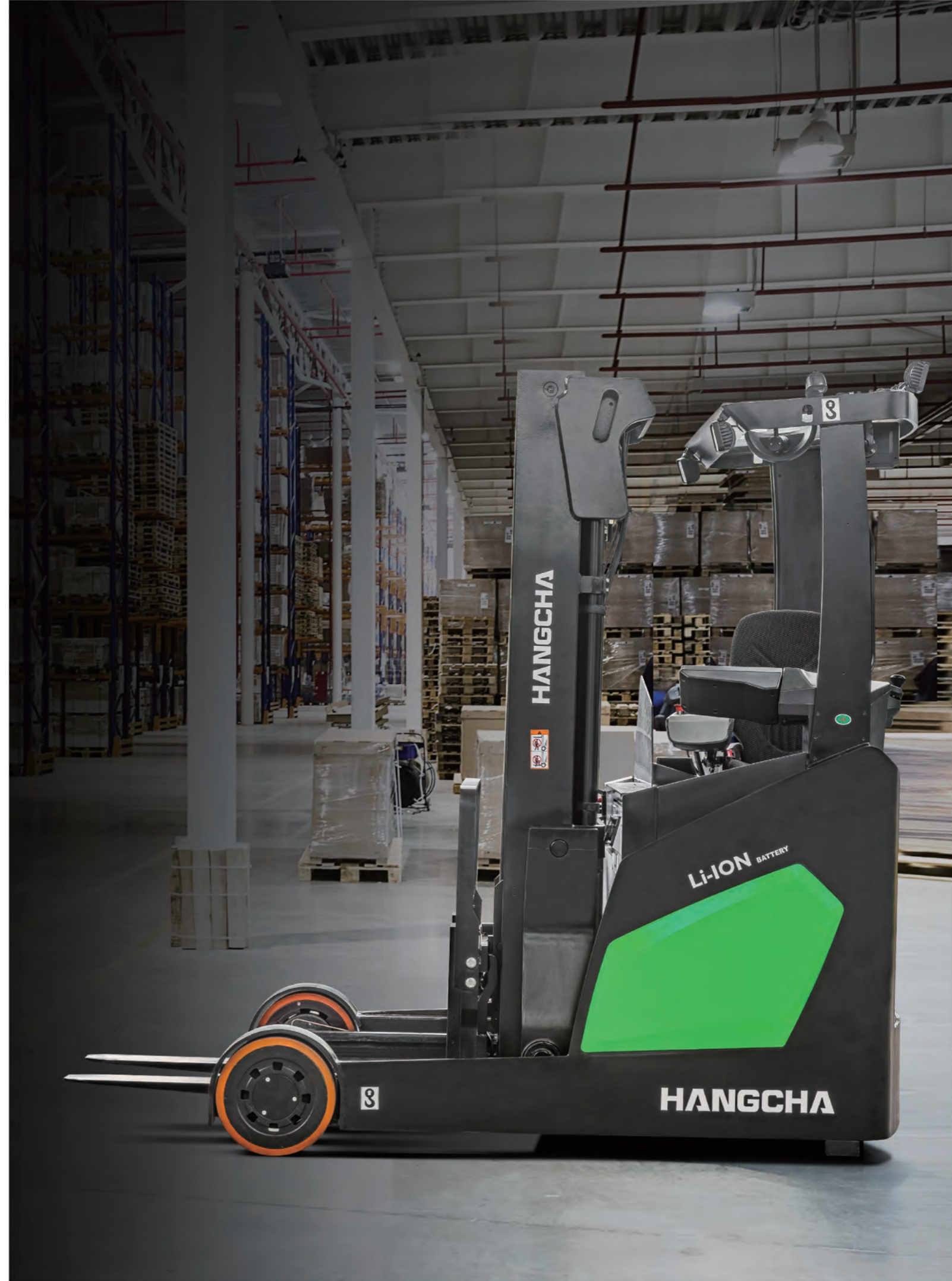


## Fork Leveling

Particularly at high lift heights, the forks' tilt position is often very hard to detect. The automatic fork leveling feature significantly simplifies and accelerates pallet entry.



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

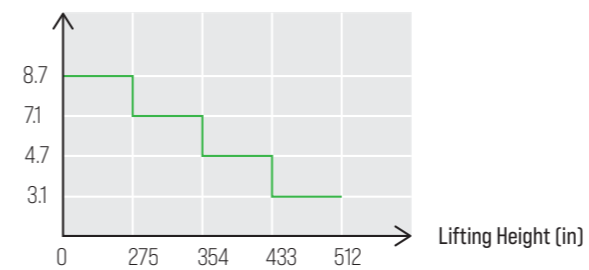


# SAFETY FROM EVERY ANGLE

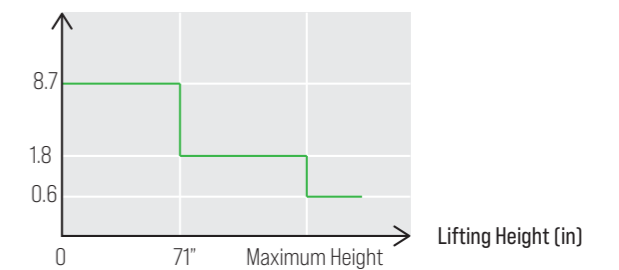
## Drive Control Limit

The drive control limits the traveling speed and traverse speed as soon as the forks are raised. This increases operational safety when maneuvering with a raised pallet in front of the storage rack. It also allows for more sensitive maneuvering while operating the moving mast reach truck.

Lifting Speed (in/s)



Traveling Speed (mph)



**Note:** The above table is only for 4,400/5,500lbs. The parameters for other models are not the same.



This warning light indicates when the battery is in an inappropriate position.

## Battery Lock with Creep Speed Interlock

A sensor installed on the battery latch monitors if the battery pack is locked in the correct position. If the battery pack is not locked or retracted then travel is restricted to creep speed.





# EASY MAINTENANCE

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



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



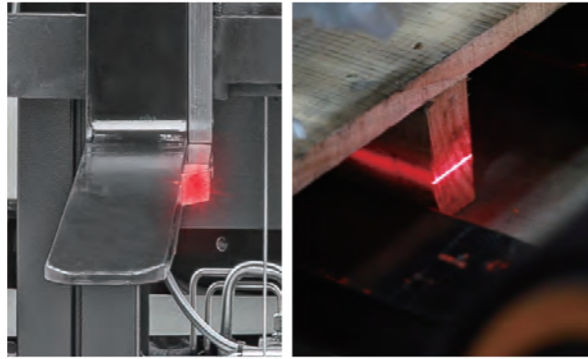
The seat swings open at a large angle, which is convenient for maintenance work.



# WE PROVIDE ALL THE DIFFERENT OPTIONS



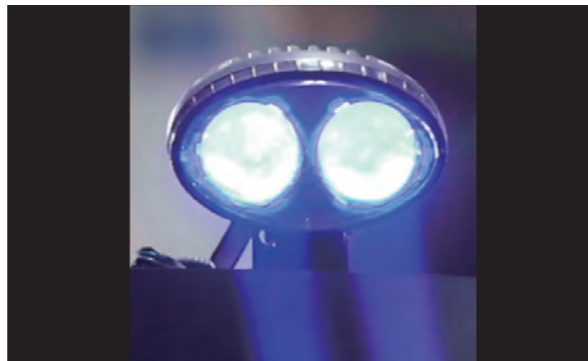
Video Camera Monitoring



Laser Positioning



3 Sided Red Zone Warning Light



Safety Blue Light



Clear Roof



Pin Code Access



# XC Series Moving Mast Reach Truck With Lithium-ion Technology Specification

			HANGCHA GROUP CO.,LTD.					
			MR14Li	MR16Li	MR18Li	MR20Li	MR25Li	
Distinguishing Marks	1.1	Manufacturer						
		HCFA Model	MR14Li	MR16Li	MR18Li	MR20Li	MR25Li	
	1.2	Model	CQD14-XC4D-SI	CQD16-XC4D-SI	CQD18-XC4D-SI	CQD20-XC4D-SI	CQD25-XC4D-SI	
	1.3	Power Unit	Lithium-ion Battery	Lithium-ion Battery	Lithium-ion Battery	Lithium-ion Battery	Lithium-ion Battery	
	1.4	Manual	Seated	Seated	Seated	Seated	Seated	
	1.5	Rated Capacity/Rated Load	Q(lb)	3000	3500	3900	4400	5500
	1.6	Load Centre Distance	c(in/mm)	24/600	24/600	24/600	24/600	24/600
	1.8	Load Distance	x(in/mm)	14.2 <sup>(17)</sup> /360 <sup>(1770)</sup>	16.1 <sup>(1770)</sup> /410 <sup>(1770)</sup>	15.2 <sup>(8)</sup> /385 <sup>(8)</sup>	14.3 <sup>(20)</sup> /362 <sup>(20)</sup>	19.1 <sup>(20)</sup> /484 <sup>(20)</sup>
	1.8.1	Load Distance, mast reached forward	xi(in/mm)	8.3 <sup>(7)</sup> /211 <sup>(7)</sup>	8.3 <sup>(7)</sup> /211 <sup>(7)</sup>	8.0/203	9.1/232	9.1/232
1.9	Wheelbase	y(in/mm)	53.3/1355	55.3/1405	55.3/1405	57.9/1471	63.0/1601	
Weight	2.1	Net Weight Including the Battery (see row 6.5)	(lb/kg)	7275.3/3300	7583.9/3440	8421.7/3820	9083.0/4120	9259.4/4200
Tires & Chassis	3.1	Tires	PU	PU	PU	PU	PU	
	3.2	Tire Size, front	Ø343×140/Ø13.5×5.5	Ø343×140/Ø13.5×5.5	Ø343×140/Ø13.5×5.5	Ø343×140/Ø13.5×5.5	Ø400×160/Ø15.7×6.3	
	3.3	Tire Size, rear	Ø285×100/Ø11.2×3.9	Ø285×100/Ø11.2×3.9	Ø285×100/Ø11.2×3.9	Ø343×108/Ø13.5×4.3	Ø343×108/Ø13.5×4.3	
	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(in/mm)	46.2/1174	46.2/1174	46.2/1174	45.7/1162	45.7/1162
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(in/mm)	90.6/2300	90.6/2300	91.1/2315	91.1/2315	91.1/2315
	4.3	Free Lift	h2(in/mm)	55.9/1419	55.9/1419	60.2/1529	60.2/1529	60.2/1529
	4.4	Lift	h3(in/mm)	196.9/5000	196.9/5000	196.9/5000	196.9/5000	196.9/5000
	4.5	Height, mast extended	h4(in/mm)	226.2/5746	226.2/5746	226.2/5746	226.2/5746	226.2/5746
	4.7	Height of Overhead Guard	h5(in/mm)	89.1/2263	89.1/2263	89.1/2263	89.1/2263	89.1/2263
	4.8	Seat Height	h7(in/mm)	45.6/1159	45.6/1159	45.6/1159	45.6/1159	45.6/1159
	4.10	Height of Support Arms	h8(in/mm)	12.1/308	12.1/308	12.1/308	14.4/365.5	14.4/365.5
	4.19	Overall Length	h(in/mm)	94.5 <sup>(38)(2)</sup> /2400 <sup>(38)(2)</sup>	94.5 <sup>(38)(2)</sup> /2400 <sup>(38)(2)</sup>	95.5 <sup>(7)</sup> /2425 <sup>(7)</sup>	99.0 <sup>(2)</sup> /2514 <sup>(2)</sup>	100.1 <sup>(2)</sup> /2542 <sup>(2)</sup>
	4.20	Length to Face of Forks	l2(in/mm)	49.2 <sup>(38)(2)</sup> /1250 <sup>(38)(2)</sup>	49.2 <sup>(38)(2)</sup> /1250 <sup>(38)(2)</sup>	50.2 <sup>(7)</sup> /1275 <sup>(7)</sup>	53.7 <sup>(2)</sup> /1364 <sup>(2)</sup>	54.8 <sup>(2)</sup> /1392 <sup>(2)</sup>
	4.21	Overall Width	b1/b2(in/mm)	50.0/50.0 (1270/1270)	50.0/50.0 (1270/1270)	50.0/50.0 (1270/1270)	50.0/50.0 (1270/1270)	50.0/50.0 (1270/1270)
	4.22	Fork Dimensions	s/e/l(in/mm)	1.4×4.7×45.3 (35×120×1150)	1.4×4.7×45.3 (35×120×1150)	1.6×4.8×45.3 (40×122×1150)	1.6×4.8×45.3 (40×122×1150)	1.6×4.8×45.3 (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(in/mm)	32.7/830	32.7/830	32.7/830	32.7/830	32.7/830
	4.25	Distance between Fork-Arms	b5(in/mm)	29.5/750	29.5/750	29.5/750	29.5/750	29.5/750
	4.26	Distance between Wheel Arms	b4(in/mm)	37.0/940	37.0/940	37.0/940	37.0/940	37.0/940
	4.28	Reach Distance	l4(in/mm)	22.5 <sup>(47)(8)</sup> /571 <sup>(47)(8)</sup>	24.4 <sup>(47)(8)</sup> /621 <sup>(47)(8)</sup>	23.1 <sup>(8)</sup> /588 <sup>(8)</sup>	23.4 <sup>(20)</sup> /594 <sup>(20)</sup>	28.2 <sup>(20)</sup> /716 <sup>(20)</sup>
	4.32	Ground Clearance, centre of wheelbase	m2(in/mm)	31/80	31/80	31/80	31/80	31/80
	4.33	Aisle Width for Pallets 1000 × 1200 sideways	As1(in/mm)	105.8 <sup>(38)(14)</sup> /2687 <sup>(38)(14)</sup>	106.3 <sup>(38)(14)</sup> /2701 <sup>(38)(14)</sup>	107.0 <sup>(8)</sup> /2719 <sup>(8)</sup>	110.3 <sup>(22)</sup> /2802 <sup>(22)</sup>	112.9 <sup>(24)</sup> /2867 <sup>(24)</sup>
	4.34	Aisle Width for Pallets 800 × 1200 lengthways	As2(in/mm)	107.9 <sup>(38)(15)</sup> /2740 <sup>(38)(15)</sup>	108.1 <sup>(38)(15)</sup> /2745 <sup>(38)(15)</sup>	2768 <sup>(8)</sup> /109.0 <sup>(8)</sup>	112.4 <sup>(23)</sup> /2855 <sup>(23)</sup>	114.0 <sup>(25)</sup> /2896 <sup>(25)</sup>
4.35	Turning Radius	Wa(in/mm)	63.4/1610	65.4/1660	65.4/1660	68.0/1726	73.9/1876	
4.37	Length over the Support Arms	l(in/mm)	69.9/1775	71.9/1825	71.9/1825	75.6/1920	81.5/2070	
Performance Data	5.1	Travel Speed, laden/unladen	mph(km/h)	8.7/8.7 (14/14)	8.7/8.7 (14/14)	8.7/8.7 (14/14)	8.7/8.7 (14/14)	8.7/8.7 (14/14)
	5.2	Lift Speed, laden/unladen	ft/min(m/s)	120.1/159.4 (0.61/0.81)	116.1/159.4 (0.59/0.81)	98.4/137.8 (0.5/0.7)	94.5/137.8 (0.48/0.7)	88.6/137.8 (0.45/0.7)
	5.3	Lowering Speed, laden/unladen	ft/min(m/s)	110.2/110.2 (0.56/0.56)	110.2/110.2 (0.56/0.56)	110.2/110.2 (0.56/0.56)	110.2/110.2 (0.56/0.56)	110.2/110.2 (0.56/0.56)
	5.4	Traverse Speed w. / w.o. load	ft/min(m/s)	47.2/47.2 (0.24/0.24)	47.2/47.2 (0.24/0.24)	39.8/39.8 (0.2/0.2)	39.8/39.8 (0.2/0.2)	39.8/39.8 (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
	5.10	Service Brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Electric Motor	6.1	Drive Motor Rating S2 60 min.	hp/kW	10.9/8.1	10.9/8.1	10.9/8.1	10.9/8.1	10.9/8.1
	6.2	Lift Motor Rating at S3 15%	hp/kW	26.8/20	26.8/20	26.8/20	26.8/20	26.8/20
	6.4	Battery Voltage, nominal capacity	(V/Ah)	80/250	80/250	80/250	80/404	80/404
	6.4.1	Battery Voltage, rated capacity, Optional	(V/Ah)	80/404	80/404	80/404	-	-
	6.5	Battery Weight (+5%)	(lb/kg)	606.3/275	606.3/275	606.3/275	793.7/360	793.7/360
Additional Data	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 at the Driver's Seat	dB(A)	68	68	68	68	68

Note: 1) h3>275.6in~0.98in ( h3>7000mm~25mm) 2) h3>275.6in~0.31in ( h3>7000mm~8mm) 3) h3>275.6in~0.98in (h3>7000mm~25mm) 4) h3>275.6in~1.30in (h3>7000mm~33mm) 5) h3>275.6in~0.75in (h3>7000mm~19mm)  
 6) h3>275.6in~0.91in (h3>7000mm~23mm) 7) With optional battery 80V/404Ah, h3>275.6in~3.54in (h3>7000mm~90mm) 8) With optional battery 80V/404Ah, h3>275.6in~3.54in (h3>7000mm~90mm)  
 9) With optional battery 80V/404Ah, h3>275.6in~2.68in (h3>7000mm~68mm) 10) With optional battery 80V/404Ah, h3>275.6in~3.23in (h3>7000mm~82mm) 11) With optional battery 80V/404Ah, h3>275.6in~4.53in (h3>7000mm~115mm)  
 12) With optional battery 80V/404Ah, h3>275.6in~4.53in (h3>7000mm~115mm) 13) With optional battery 80V/404Ah, h3>275.6in~4.84in (h3>7000mm~123mm) 14) With optional battery 80V/404Ah, h3>275.6in~3.43in (h3>7000mm~87mm)  
 15) With optional battery 80V/404Ah, h3>275.6in~4.13in (h3>7000mm~105mm) 16) With optional battery 80V/404Ah~3.54in (-90mm) 17) With optional battery 80V/404Ah~3.54in (+90mm) 18) With optional battery 80V/404Ah~+2.64in (+67mm)  
 19) With optional battery 80V/404Ah~+3.19in (+81mm) 20) h3>472.4in~3.15in (h3>12000mm~80mm) 21) h3>472.4in~+3.15in (h3>12000mm~80mm)  
 22) h3>472.4in~+2.35in (h3>12000mm~60mm) 23) h3>472.4in~+2.83in (h3>12000mm~72mm) 24) h3>472.4in~+2.17in (h3>12000mm~55mm) 25) h3>472.4in~+2.80in (h3>12000mm~71mm)

# Features

NO.	System	Feature	CQD14/16/18/20/25-XC4D-SI
1	Control	Fingertip Control	●
2		Height Display	●
3		Height Selection	●
4		Height Limit	●
5		Central Sideshift	○
6		Horizontal Fork Alignment	○
7		Mast Reach Damping System	●
8		Electronic Lowering Limit - Stops forks above outriggers if mast is retracted.	○
9		Soft Landing System	○
10		Lifting Damping System	●
11		Drive Control Limit	●
12		Drive Wheel Skid Control System	○
13		Battery Lock with Creep Speed Interlock	●
14		Traveling Speed Control while Cornering	●
15		180° Steering Mode	●
16		360° Steering Mode	○
17	Transmission System	ZF Transmission	●
18	Electronic accessories	USB Power Outlet	●
19		Fork Positioning Laser	○
20		Video Camera	○
21		Key Start	●
22		Keyless Start	○
23		Beeper	○
24		Working Light (in the direction of the fork)	●
25		Working Light (in the reverse direction of the fork)	○
26		Strobe Light	●
27		Blue light	○
28	Red Zone Warning Light (3 sided)	○	
29	Ergonomic design	Electronic Adjustable Pedal Height	○
30		Adjustable Steering Wheel	●
31		Instrument Angle Adjustment	●
32	Fault Diagnosis	Suctioned Oil Filter Clogging Alarm	●
33		Backflow Oil Filter Clogging Alarm	●
34	Seat	Seat Interlock System	●
35		MS665/522 Suspension Seat	●
36	Other	Panoramic Roof	○
37		PVC Clear Roof	○
38		Panoramic Rearview Mirror	○
39		Left and Right Rearview Mirrors	○
40		Cold Storage	○
41		Load Backrest	●
42		Fire Extinguisher	○
43		Compartment Operator Fan	○
44	Operator Presence Sensing (OPS) System	●	

Note: ● Standard; ○ Optional

### 3,000-3,500lb Mast Specification

Type	Lifting Height	Mast Lowered	Mast Extended	Free Lifting Height	Tilting Range
	h3	h1	h4	h2	
	in/mm	in/mm	in/mm	in/mm	
Full Free Lift 3 Stage Mast	157.5/4000	79.9/2030	195.5/4965	41.9/1065	2/5
	172/4500	84.6/2150	215.2/5465	46.7/1185	2/5
	196.9/5000	90.6/2300	234.8/5965	52.6/1335	2/5
	216.5/5500	96.5/2450	254.5/6465	58.5/1485	2/5
	236.2/6000	103.3/2625	274.2/6965	65.4/1660	2/5
	255.9/6500	110.2/2800	293.9/7465	72.2/1835	2/5
	275.6/7000	118.1/3000	313.6/7965	80.1/2035	2/5
	295.3/7500	120.5/3060	333.3/8465	82.5/2095	2/5
	315.0/8000	128.0/3250	353.0/8965	90.0/2285	2/5
	334.6/8500	134.6/3420	372.6/9465	96.7/2455	2/5
	354.3/9000	140.9/3580	392.3/9965	103.0/2615	2/5
	374.0/9500	148.0/3760	412.0/10465	110.0/2795	2/5
	393.7/10000	154.3/3920	431.7/10965	116.3/2955	2/5
	413.4/10500	161.4/4100	451.4/11465	123.4/3135	2/5
	433.1/11000	169.3/4300	471.1/11965	131.3/3335	2/5

### 3,900lb Mast Specification

Type	Lifting Height	Mast Lowered	Mast Extended	Free Lifting Height	Tilting Range
	h3	h1	h4	h2	
	in/mm	in/mm	in/mm	in/mm	
Full Free Lift 3 Stage Mast	157.5/4000	82.1/2085	195.5/4965	44.1/1120	2/5
	172/4500	85.2/2165	215.2/5465	47.2/1200	2/5
	196.9/5000	91.1/2315	234.8/5965	53.1/1350	2/5
	216.5/5500	98.0/2490	254.5/6465	60.0/1525	2/5
	236.2/6000	104.9/2665	274.2/6965	66.9/1700	2/5
	255.9/6500	111.6/2835	293.9/7465	73.6/1870	2/5
	275.6/7000	118.9/3020	313.6/7965	80.9/2055	2/5
	295.3/7500	125.2/3180	333.3/8465	87.2/2215	2/5
	315.0/8000	131.9/3350	353.0/8965	93.9/2385	2/5
	334.6/8500	140.9/3580	372.6/9465	103.0/2615	2/5
	354.3/9000	149.6/3800	392.3/9965	111.6/2835	2/5
	374.0/9500	156.3/3970	412.0/10465	118.3/3005	2/5
	393.7/10000	161.4/4100	431.7/10965	123.4/3135	2/5
	413.4/10500	167.3/4250	451.4/11465	129.3/3285	2/5
	433.1/11000	175.2/4450	471.1/11965	137.2/3485	2/5
452.8/11500	185.0/4700	490.7/12465	147.0/3735	2/5	

### 4,400lb Mast Specification

Type	Lifting Height	Mast Lowered	Mast Extended	Free Lifting Height	Tilting Range
	h3	h1	h4	h2	
	in/mm	in/mm	in/mm	in/mm	
Full Free Lift 3 Stage Mast	157.5/4000	82.1/2085	195.5/4965	44.1/1120	2/5
	172/4500	85.2/2165	215.2/5465	47.2/1200	2/5
	196.9/5000	91.1/2315	234.8/5965	53.1/1350	2/5
	216.5/5500	98.0/2490	254.5/6465	60.0/1525	2/5
	236.2/6000	104.9/2665	274.2/6965	66.9/1700	2/5
	255.9/6500	111.6/2835	293.9/7465	73.6/1870	2/5
	275.6/7000	118.9/3020	313.6/7965	80.9/2055	2/5
	295.3/7500	125.2/3180	333.3/8465	87.2/2215	2/5
	315.0/8000	131.9/3350	353.0/8965	93.9/2385	2/5
	334.6/8500	140.9/3580	372.6/9465	103.0/2615	2/5
	354.3/9000	149.6/3800	392.3/9965	111.6/2835	2/5
	374.0/9500	156.3/3970	412.0/10465	118.3/3005	2/5
	393.7/10000	161.4/4100	431.7/10965	123.4/3135	2/5
	413.4/10500	167.3/4250	451.4/11465	129.3/3285	2/5
	433.1/11000	175.2/4450	471.1/11965	137.2/3485	2/5
452.8/11500	185.0/4700	490.7/12465	147.0/3735	2/5	
472.4/12000	192.9/4900	510.4/12965	158.9/4035	2/5	
492.1/12500	202.8/5150	530.1/13465	170.7/4335	2/5	
511.8/13000	212.6/5400	549.8/13965	182.5/4635	2/5	

### 5,500lb Mast Specification

Type	Lifting Height	Mast Lowered	Mast Extended	Free Lifting Height	Tilting Range
	h3	h1	h4	h2	
	in/mm	in/mm	in/mm	in/mm	
Full Free Lift 3 Stage Mast	157.5/4000	82.1/2085	195.5/4965	44.1/1120	2/5
	172/4500	85.2/2165	215.2/5465	47.2/1200	2/5
	196.9/5000	91.1/2315	234.8/5965	53.1/1350	2/5
	216.5/5500	98.0/2490	254.5/6465	60.0/1525	2/5
	236.2/6000	104.9/2665	274.2/6965	66.9/1700	2/5
	255.9/6500	111.6/2835	293.9/7465	73.6/1870	2/5
	275.6/7000	118.9/3020	313.6/7965	80.9/2055	2/5
	295.3/7500	125.2/3180	333.3/8465	87.2/2215	2/5
	315.0/8000	131.9/3350	353.0/8965	93.9/2385	2/5
	334.6/8500	140.9/3580	372.6/9465	103.0/2615	2/5
	354.3/9000	149.6/3800	392.3/9965	111.6/2835	2/5
	374.0/9500	156.3/3970	412.0/10465	118.3/3005	2/5
	393.7/10000	161.4/4100	431.7/10965	123.4/3135	2/5
	413.4/10500	167.3/4250	451.4/11465	129.3/3285	2/5
	433.1/11000	177.2/4500	471.1/11965	139.2/3535	2/5
452.8/11500	189.0/4800	490.7/12465	151.0/3835	2/5	
472.4/12000	196.9/5000	510.4/12965	168.9/4035	2/5	
492.1/12500	208.7/5300	530.1/13465	170.7/4335	2/5	
511.8/13000	220.5/5600	549.8/13965	182.5/4635	2/5	

### 3,000lb Residual Load Capacity Chart

Capacity (lb/kg)	Load Center Distance (in/mm)							
	24/600	27.6/700	31.5/800	35.4/900	39.4/1000	43.3/1100	47.2/1200	
	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm
Lifting Height (in/mm)	255.9/6500	3086.5/1400	2667.6/1210	2358.9/1070	2028.3/920	1719.6/780	1455.1/660	1212.5/550
	275.6/7000	2976.2/1350	2579.4/1170	2270.8/1030	1940.1/880	1653.5/750	1389.9/630	1146.4/520
	295.3/7500	2866.0/1300	2469.2/1120	2182.6/990	1851.9/840	1565.3/710	1322.8/600	1080.3/490
	315.0/8000	2755.8/1250	2381.0/1080	2094.4/950	1785.7/810	1499.1/680	1256.6/570	1014.1/460
	334.6/8500	2645.5/1200	2270.8/1030	2006.2/910	1697.6/770	1433.0/650	1168.5/530	948.0/430
	354.3/9000	2425.1/1100	2072.3/940	1829.8/830	1543.2/700	1278.7/580	1036.2/470	815.7/370
	374.0/9500	2204.6/1000	1873.9/850	1653.5/750	1366.9/620	1124.4/510	903.9/410	705.5/320
	393.7/10000	1984.2/900	1697.6/770	1477.1/670	1212.5/550	992.1/450	771.6/350	573.2/260
	413.4/10500	1863.5/750	1389.9/630	1212.5/550	970.0/440	771.6/350	573.2/260	374.8/170
	433.1/11000	1322.8/600	1102.3/500	948.0/430	727.5/330	551.2/250	352.7/160	198.4/90

### 3,500lb Residual Load Capacity Chart

Capacity (lb/kg)	Load Center Distance (in/mm)							
	24/600	27.6/700	31.5/800	35.4/900	39.4/1000	43.3/1100	47.2/1200	
	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm
Lifting Height (in/mm)	255.9/6500	3527.4/1600	3064.4/1390	2711.7/1230	2336.9/1060	2028.3/920	1719.6/780	1455.1/660
	275.6/7000	3417.2/1550	2954.2/1340	2623.5/1190	2270.8/1030	1940.1/880	1653.5/750	1411.0/640
	295.3/7500	3307.0/1500	2866.0/1300	2535.3/1150	2182.6/990	1873.9/850	1587.3/720	1322.8/600
	315.0/8000	3196.7/1450	2755.8/1250	2447.1/1110	2094.4/950	1785.7/810	1521.2/690	1256.6/570
	334.6/8500	3086.5/1400	2667.6/1210	2368.9/1070	2006.2/910	1719.6/780	1455.1/660	1212.5/550
	354.3/9000	2866.0/1300	2469.2/1120	2182.6/990	1851.9/840	1565.3/710	1322.8/600	1080.3/490
	374.0/9500	2645.5/1200	2270.8/1030	2006.2/910	1697.6/770	1433.0/650	1168.5/530	948.0/430
	393.7/10000	2425.1/1100	2072.3/940	1829.8/830	1543.2/700	1278.7/580	1036.2/470	815.7/370
	413.4/10500	2094.4/950	1785.7/810	1565.3/710	1300.7/590	1058.2/480	837.8/380	639.3/290
	433.1/11000	1763.7/800	1499.1/680	1300.7/590	1058.2/480	837.8/380	639.3/290	440.9/200

### 3,900lb Residual Load Capacity Chart

Capacity (lb/kg)	Load Center Distance (in/mm)							
	24/600	27.6/700	31.5/800	35.4/900	39.4/1000	43.3/1100	47.2/1200	
	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm
Lifting Height (in/mm)	255.9/6500	3968.3/1800	3461.3/1570	3064.4/1390	2667.6/1210	2314.9/1050	1984.2/900	1719.6/780
	275.6/7000	3858.1/1750	3351.0/1520	2976.2/1350	2579.4/1170	2226.7/1010	1918.0/870	1653.5/750
	295.3/7500	3747.9/1700	3262.8/1480	2888.1/1310	2491.2/1130	2160.5/980	1851.9/840	1587.3/720
	315.0/8000	3637.6/1650	3152.6/1430	2799.9/1270	2425.1/1100	2094.4/950	1785.7/810	1521.2/690
	334.6/8500	3527.4/1600	3064.4/1390	2711.7/1230	2336.9/1060	2006.2/910	1719.6/780	1455.1/660
	354.3/9000	3306.9/1500	2866.0/1300	2535.3/1150	2182.6/990	1873.9/850	1587.3/720	1322.8/600
	374.0/9500	3086.5/1400	2667.6/1210	2368.9/1070	2006.2/910	1719.6/780	1455.1/660	1212.5/550
	393.7/10000	2866.0/1300	2469.2/1120	2182.6/990	1851.9/840	1565.3/710	1322.8/600	1080.3/490
	413.4/10500	2535.3/1150	2182.6/990	1918.0/870	1609.4/730	1344.8/610	1102.3/500	881.8/400
	433.1/11000	2204.6/1000	1873.9/850	1653.5/750	1366.9/620	1124.4/510	903.9/410	705.5/320
	452.8/11500	1873.9/850	1587.3/720	1389.9/630	1124.4/510	903.9/410	705.5/320	507.1/230

### 4,400lb Residual Load Capacity Chart

Capacity (lb/kg)	Load Center Distance (in/mm)							
	24/600	27.6/700	31.5/800	35.4/900	39.4/1000	43.3/1100	47.2/1200	
	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm	in/mm
Lifting Height (in/mm)	255.9/6500	4409.2/2000	3868.1/1750	3439.2/1560	2998.3/1360	2645.5/1200	2292.8/1040	2006.2/910
	275.6/7000	4299.0/1950	3769.9/1710	3351.0/1520	2932.1/1300	2557.4/1160	2226.7/1010	1940.1/880
	295.3/7500	4188.8/1900	3659.7/1660	3262.8/1480	2844.0/1290	2491.2/1130	2160.5/980	1873.9/850
	315.0/8000	4078.6/1850	3571.5/1620	3174.7/1440	2755.8/1250	2403.0/1090	2094.4/950	1807.8/820
	334.6/8500	3968.3/1800	3461.3/1570	3086.5/1400	2689.6/1220	2336.9/1060	2028.3/920	1747.1/790
	354.3/9000	3747.9/1700	3262.8/1480	2910.1/1320	2513.3/1140	2182.6/990	1896.0/860	1609.4/730
	374.0/9500	3527.4/1600	3064.4/1390	2711.7/1230	2368.9/1070	2050.3/930	1747.1/790	1477.1/670
	393.7/10000	3306.9/1500	2866.0/1300	2535.3/1150	2204.6/1000	1896.0/860	1609.4/730	1366.9/620
	413.4							