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ISO14001
ISO14001:2015



ISO9001
ISO9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

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XC SERIES REACH TRUCK WITH LITHIUM POWER

with capacity of 1,400 to 2,500kg



The World of Hangcha
SINCE 1956



A NEW DIMENSION OF PERFORMANCE

XC SERIES REACH TRUCK WITH LITHIUM POWER

- / The XC series reach truck with lithium power fully utilize the advantages of lithium battery and achieve disruptive innovations in vehicle structure, functional configuration, performance parameters, ergonomics, and operating vision.
- / We cater for a wide range of applications whilst ensuring optimum energy efficiency. Regardless of your special requirements – whether confined spaces or lifting height reaches 13m, load capacity of up to 2,500 kg or individual customisation with various options – we have the truck you need.
- / Compact size of the lithium battery pack and breaking through the traditional structure design, makes the truck style more novel and more efficient.

MAXIMUM TRAVELLING SPEED

14km/h

MAXIMUM LIFTING SPEED

0.81m/s

HIGH RESIDUAL CAPACITY

6,500mm

MAXIMUM LOAD CAPACITY

2,500kg

MAXIMUM LIFT HEIGHT

13,000mm





BEING ENVIRONMENTALLY FRIENDLY, EFFICIENT AND DURABLE


- / CATL lithium battery is standard for all series, adopting 80V voltage system which can provides fast charging and long service life and less energy loss.
- / The special-shaped lithium battery pack design provides a large operating space in the cab and a broad view.



Charging port



Battery removal

 Working time **> 10h**

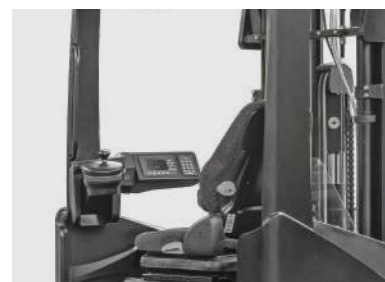
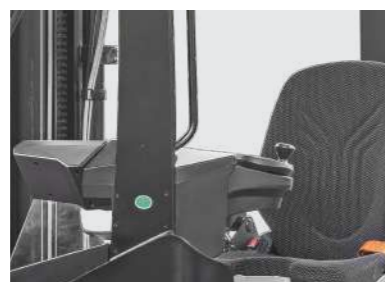
 Fast charging time **≤ 2h**

Lithium battery capacity		
1.4 t	Std.	80V/250Ah
1.6 t		80V/404Ah
1.8 t	Opt.	80V/404Ah
2.0 t	Std.	80V/404Ah
2.5 t		80V/404Ah



A NOVEL PROFILE STYLE AND COMPACT INTERIOR DESIGN

With fewer exposed fasteners of the inside covers, the interior is compact and stylish.



Thanks to the special-shaped design of the battery pack and the breakthrough in the body structure, which can provide a wider view.



The improved mast structure and piping arrangement enables a broader vision for stacking operations

/ The hydraulic tubing and the wires are on both sides of the mast, overlapping with the chain, making full use of the space and reducing the line of sight.



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

The middle cylinder is arranged eccentrically to enable the driver to have a wider view around the inside of the mast.

EXCELLENT ERGONOMIC DESIGN

Dashboard angle adjustment

Control with a fingertip switch



Steering wheel position can also be adjusted



The pedal height can be adjusted electrically

Integral suspended seat

MULTIFUNCTIONAL INTERACTIVE COLOR-SCREEN INSTRUMENTS

The new multifunctional 4.3 inch color-screen instruments developed for the XC series reach truck have easier human-machine interfaces.



More status indication



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 signs and warning signs are displayed in a queue according to actual needs

More convenient shortcut button

Thanks to the integrated design of the instrument function buttons, the truck console saves a lot of physical buttons, making it more concise and efficient.



5

- Height selection

6

- Height limit

7

- Lighting control

8

- Battery removal

9

- Optional function switching screen

10

- ↑ Button Driving mode switching

11

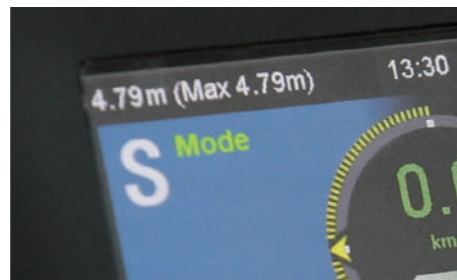
- ↓ Button Turtle speed mode

COMPREHENSIVELY IMPROVED FUNCTION CONFIGURATION



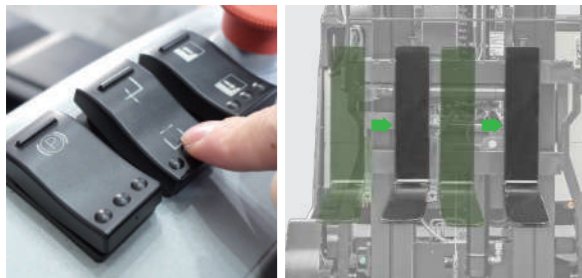
Height selection

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



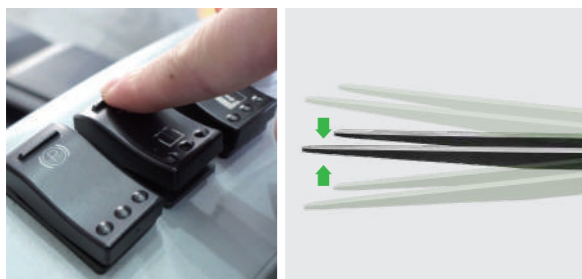
Height limit

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



Central sideshift

Simple, reliable and fast: The central positioning of the sideshift occurs automatically, eliminating the time-consuming, cautious approach of the required position. (Only for fingertip system)

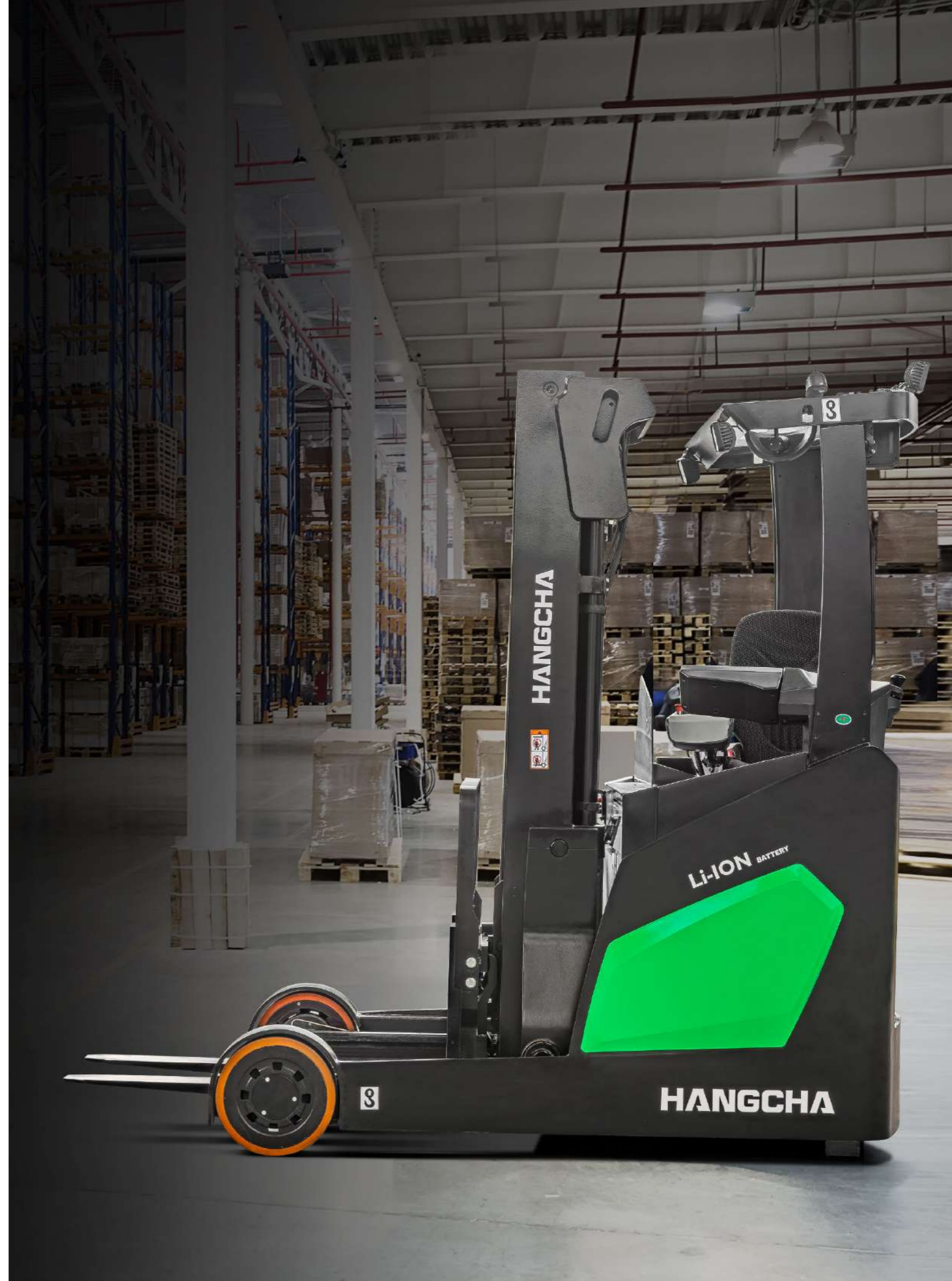


Horizontal fork

Particularly at high lift heights, the forks' tilt position is often very hard to detect. The automatic horizontal positioning significantly simplifies and accelerates pallet entry. (Only for fingertip system)



Faster, easier and safer stacking and retrieval operations

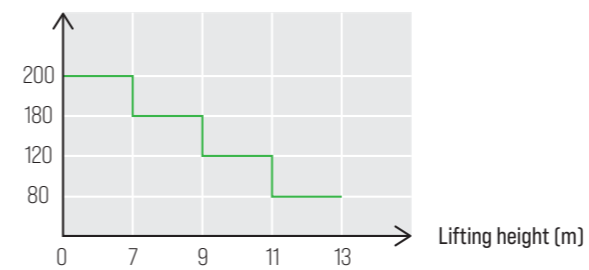


SAFETY FROM EVERY ANGLE

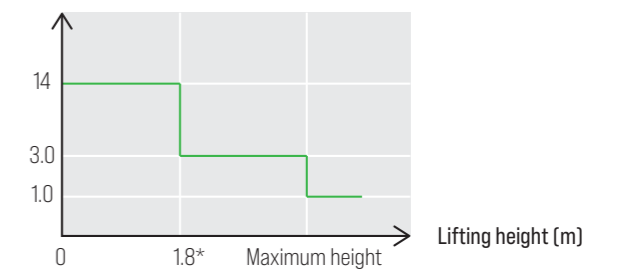
Drive control limit

Drive control limits the travelling speed and traverse speed as soon as the forks are raised. This increases the safety when manoeuvring with a raised pallet in front of the storage rack, while still ensuring more sensitive manoeuvring during the work cycle.

Traverse speeds (mm/s)



Travelling speed (km/h)



Note: The above table is only for 2.0/2.5t, the parameters of other models are not the same.

*: 1.8m is only for the fingertip system. The parameter of mechanical control system is the height of free lift.



The battery is in an inappropriate position and the indicator light is lit

Battery lock with creep speed interlock

Installed on the battery latch in the motor compartment. Monitors the locking of the battery pack. If the battery pack is not retracted or not locked, travel is restricted to creep speed.



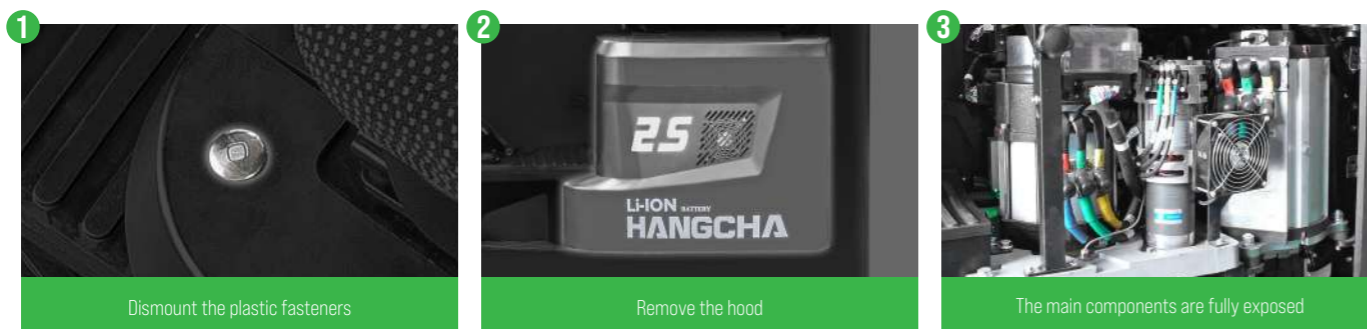
EASY MAINTENANCE

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

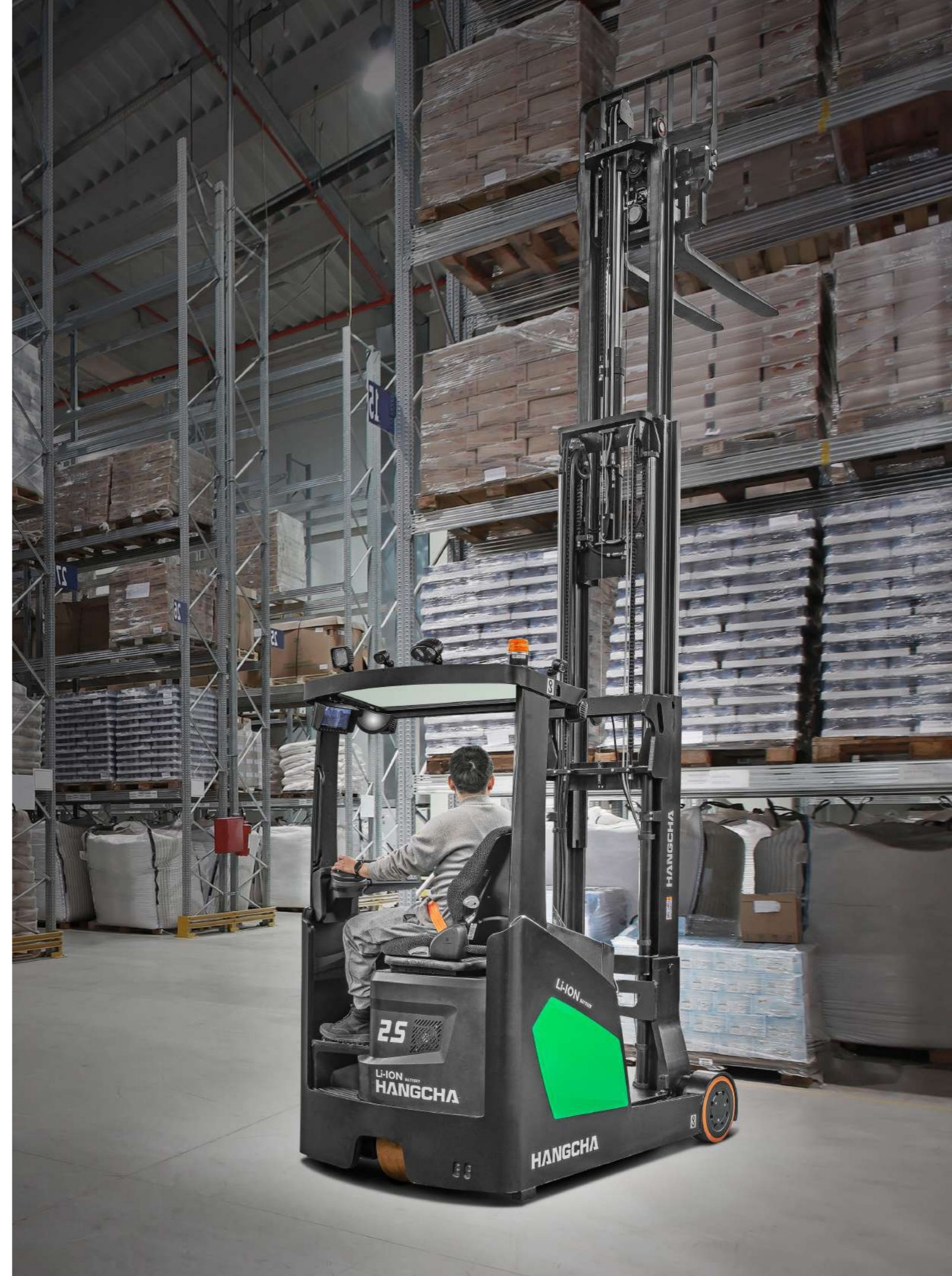
Remove battery pack step



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



The seat can be turned open at a large angle, which is convenient for maintenance work.

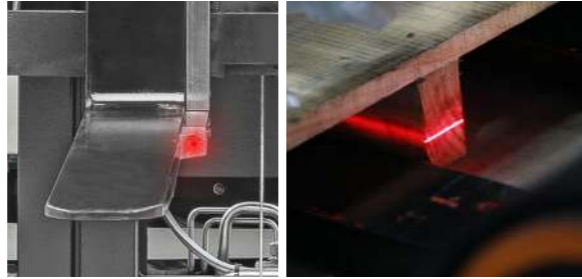


WE GIVE YOU ALL THE OPTIONS



Stacking and retrieval via video monitoring

Our video camera allows for the precise and quick access of extremely high locations. The position of the camera on the forks enables operators to efficiently and reliably control stacking and retrieval operations from their seating position/viewpoint. They no longer have to look up, which noticeably reduces the strain on their shoulders and neck. Also, information on the pallets is easily visible, even at great heights.



Easier stacking and retrieval with positioning laser

Our positioning lasers significantly simplify the stacking and retrieval process and increase the safety for load and rack. The laser sources are integrated into the fork tips, projecting a red line on the area ahead. This allows the operator to adjust the fork more accurately to be able to drive effortlessly into the pallet.



Easy access

Easy access protects the reach truck against unauthorised use. Authorisation management is directly controlled via the truck's display. Customised to your requirements and company size – you can choose between the key(Std.), PIN code and transponder.



Safety at any blind spots with Floor Spot

Floor Spot projects a blue dot on the floor around the truck. Especially at blind intersections or at the end of rack aisles, the Floor Spot alerts an approaching truck in time to respond.



100% clear view thanks to panorama roof panel

Maximum visibility: The panorama roof panel without cross beams provides maximum visibility of the goods and forks.



Optimum traction via traction control system

Optimum traction is ensured with braking of the drive wheel, which would otherwise spin on wet or dusty floors.



XC Series Reach Truck With Lithium Power Specification

Distinguishing mark	HANGCHA GROUP CO.,LTD.								
			CQD14-XC4-SI CQD14-XC4D-SI	CQD16-XC4-SI CQD16-XC4D-SI	CQD18-XC4-SI CQD18-XC4D-SI	CQD20-XC4-SI CQD20-XC4D-SI	CQD25-XC4-SI CQD25-XC4D-SI		
1.1	Manufacturer		HANGCHA GROUP CO.,LTD.						
1.2	Model		CQD14-XC4-SI CQD14-XC4D-SI	CQD16-XC4-SI CQD16-XC4D-SI	CQD18-XC4-SI CQD18-XC4D-SI	CQD20-XC4-SI CQD20-XC4D-SI	CQD25-XC4-SI CQD25-XC4D-SI		
1.3	Power unit		Li-ION battery	Li-ION battery	Li-ION battery	Li-ION battery	Li-ION battery		
1.4	Manual		Seated	Seated	Seated	Seated	Seated		
1.5	Rated capacity/rated load	Q(t)	1.4	1.6	1.8	2	2.5		
1.6	Load centre distance	c(mm)	600	600	600	600	600		
1.8	Load distance	x(mm)	360 ^{[7][10]}	410 ^{[7][11]}	385 ^[8]	362 ^[20]	484 ^[20]		
1.8.1	Load distance, mast reached forward	x1(mm)	211 ^[2]	211 ^[2]	203	232	232		
1.9	Wheelbase	y(mm)	1355	1405	1405	1471	1601		
Weight	2.1	Net weight incl. battery (see row 6.5)	(kg)	3300	3440	3820	4120	4200	
Tyres, chassis	3.1	Tyres		PU	PU	PU	PU	PU	
	3.2	Tyre size, front		φ343×140	φ343×140	φ343×140	φ343×140	φ400×160	
	3.3	Tyre size, rear		φ285×100	φ285×100	φ285×100	φ343×108	φ343×108	
	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(mm)	1174	1174	1174	1162	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(mm)	2300	2300	2315	2315	2315	
	4.3	Free lift	h2(mm)	1419	1419	1529	1529	1529	
	4.4	Lift	h3(mm)	5000	5000	5000	5000	5000	
	4.5	Height, mast extended	h4(mm)	5746	5746	5746	5746	5746	
	4.7	Height of overhead guard	h6(mm)	2263	2263	2263	2263	2263	
	4.8	Seat height	h7(mm)	1159	1159	1159	1159	1159	
	4.10	Height of support arms	h8(mm)	308	308	308	365.5	365.5	
	4.19	Overall length	h(mm)	2400 ^{[3][12]}	2400 ^{[3][12]}	2425 ^[1]	2514 ^[21]	2542 ^[21]	
	4.20	Length to face of forks	l2(mm)	1250 ^{[3][12]}	1250 ^{[3][12]}	1275 ^[1]	1364 ^[21]	1392 ^[21]	
	4.21	Overall width	b1/b2(mm)	1270/1270	1270/1270	1270/1270	1270/1270	1270/1270	
	4.22	Fork dimensions	s/e/l(mm)	35×120×1150	35×120×1150	40×122×1150	40×122×1150	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(mm)	830	830	830	830	830	
	4.25	Distance between fork-arms	b5(mm)	750	750	750	750	750	
	4.26	Distance between wheel arms	b4(mm)	940	940	940	940	940	
	4.28	Reach distance	l4(mm)	571 ^{[4][13]}	621 ^{[4][13]}	588 ^[8]	594 ^[20]	716 ^[20]	
	4.32	Ground clearance, centre of wheelbase	m2(mm)	80	80	80	80	80	
	4.33	Aisle width for pallets 1000 × 1200 sideways	A31(mm)	2687 ^{[5][14]}	2701 ^{[5][14]}	2719 ^[8]	2802 ^[21]	2867 ^[24]	
	4.34	Aisle width for pallets 800 × 1200 lengthways	A31(mm)	2740 ^{[6][15]}	2745 ^{[6][15]}	2768 ^[8]	2855 ^[21]	2896 ^[25]	
4.35	Turning radius	Wa(mm)	1610	1660	1660	1726	1876		
4.37	Length over the support arms	l1(mm)	1775	1825	1825	1920	2070		
Performance data	5.1	Travel speed, laden/unladen	(km/h)	14/14	14/14	14/14	14/14	14/14	
	5.2	Lift speed, laden/unladen	(m/s)	0.61/0.81	0.59/0.81	0.5/0.7	0.48/0.7	0.45/0.7	
	5.3	Lowering speed, laden/unladen	(m/s)	0.56/0.56	0.56/0.56	0.56/0.56	0.56/0.56	0.56/0.56	
	5.4	Traverse speed w. / w.o. load	(m/s)	0.24/0.24	0.24/0.24	0.2/0.2	0.2/0.2	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		Electromagnetic	Electromagnetic+Mech.	Electromagnetic+Mech.	Electromagnetic+Mech.	Electromagnetic+Mech.	
Electric-engine	6.1	Drive motor rating S2 60 min.	(kW)	8.1	8.1	8.1	8.1	8.1	
	6.2	Lift motor rating at S3 15%	(kW)	20	20	20	20	20	
	6.3	Battery as per DIN 43531 /35/36 A, B, C, no		no	no	no	no	no	
	6.4	Battery voltage, nominal capacity K5	(V/Ah)	80/250	80/250	80/250	80/404	80/404	
	6.4.1	Battery voltage, rated capacity K5, Optional	(V/Ah)	80/404	80/404	80/404	-	-	
6.5	Battery weight (+5%)	(kg)	275	275	275	360	360		
Addition 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 LpAZ (at the driver's seat)	(db(A))	68	68	68	68	68	

Note: 1) h3>7000mm:-25mm. 2) h3>7000mm:-8mm. 3) h3>7000mm:+25mm. 4) h3>7000mm:-33mm. 5) h3>7000mm:+19mm. 6) h3>7000mm:+23mm. 7) With optional battery 80V/404Ah, h3>7000mm:-90mm.
 8) With optional battery 80V/404Ah, h3>7000mm: +90mm. 9) With optional battery 80V/404Ah, h3>7000mm: +68mm. 10) With optional battery 80V/404Ah, h3>7000mm: +82mm. 11) With optional battery 80V/404Ah, h3>7000mm:-115mm.
 12) With optional battery 80V/404Ah, h3>7000mm: +115mm. 13) With optional battery 80V/404Ah, h3>7000mm: -123mm. 14) With optional battery 80V/404Ah, h3>7000mm: +87mm. 15) With optional battery 80V/404Ah, h3>7000mm: +105mm.
 16) With optional battery 80V/404Ah:-90mm. 17) With optional battery 80V/404Ah: +90mm. 18) With optional battery 80V/404Ah: +67mm. 19) With optional battery 80V/404Ah: +81m. 20) h3>12000mm:-80mm. 21) h3>12000mm:+80mm.
 22) h3>12000mm:+60mm. 23) h3>12000mm:+72mm. 24) h3>12000mm:+55mm. 25) h3>12000mm:+71mm.

Features

NO.	System	Features	CQD14/16/18/20/25-XC4-SI	CQD14/16/18/20/25-XC4D-SI
1	Control	Control with a mechanical control lever	●	/
2		Control with a fingertip switch	/	●
3		Height display	○ (Excluding the free lift range)	● (Including the free lift range)
4		Height selection	○ (Excluding the free lift range)	● (Including the free lift range)
5		Height limit	○ (Excluding the free lift range)	● (Including the free lift range)
6		Central sideshift	/	●
7		Horizontal fork alignment	/	●
8		Mast reach damping system	●	●
9		Electric lowering limit - Stop forks above outriggers if mast is retracted	○	●
10		Soft landing system	/	●
11		Lifting damping system	●	●
12		Drive control limit	●	●
13		Drive wheel skid control system	○	○
14		Battery lock with creep speed interlock	●	●
15		Travelling speed control at corner	●	●
16		180° steering mode	●	●
17		360° steering mode	○	○
18	Transmission system	ZF transmission	●	●
19	Electronic accessories	USB power socket	●	●
20		Fork positioning laser	○	○
21		Video monitoring	○	○
22		Keyed start	●	●
23		Start with a PIN code or by a card	○	○
24		Beep	○	○
25		Operating light (in the direction of the fork)	●	●
26		Operating light (in the reverse direction of the fork)	○	○
27		Alarm light	●	●
28		Blue light	○	○
29	Three-sided one line laser projection light	○	○	
30	Ergonomic design	Electrical adjustment of pedal height	○	●
31		Adjustable steering wheel	●	●
32	Instrument angle adjustment	●	●	
33	Fault Diagnosis	Suctioned oil filter clogging alarm	○	●
34		Backflow oil filter clogging alarm	○	●
35	Seat	Sequential Seat Belt Interlock System	●	●
36		BF6-3 suspension seat	●	/
37		MS665/522 suspension seat	○	●
38	Other	Panorama roof	○	○
39		PVC ceiling	○	○
40		Curved rearview mirror	○	○
41		Left and right rear view mirrors	○	○
42		Cold storage	○	○
43		Load backrest	●	●
44		Fire extinguisher	○	○
45		Electric fan	○	○
46		OPS system	●	●

Note: ● Standard; ○ Optional

1.4/1.6t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range
Free triplex wide-view mast	mm	mm	mm	mm	(°)
	4000	2030	4965	1065	2/5
	4500	2150	5465	1185	2/5
	5000	2300	5965	1335	2/5
	5500	2450	6465	1485	2/5
	6000	2625	6965	1660	2/5
	6500	2800	7465	1835	2/5
	7000	3000	7965	2035	2/5
	7500	3060	8465	2095	2/5
	8000	3250	8965	2285	2/5
	8500	3420	9465	2455	2/5
	9000	3580	9965	2615	2/5
	9500	3760	10465	2795	2/5
	10000	3920	10965	2955	2/5
	10500	4100	11465	3135	2/5
11000	4300	11965	3335	2/5	

1.8t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range
Free triplex wide-view mast	mm	mm	mm	mm	(°)
	4000	2085	4965	1120	2/5
	4500	2165	5465	1200	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4250	11465	3285	2/5
11000	4450	11965	3485	2/5	
11500	4700	12465	3735	2/5	

2.0t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range
Free triplex wide-view mast	mm	mm	mm	mm	(°)
	4000	2085	4965	1120	2/5
	4500	2165	5465	1200	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4250	11465	3285	2/5
	11000	4450	11965	3485	2/5
	11500	4700	12465	3735	2/5
	12000	4900	12965	3935	2/5
	12500	5150	13465	4185	2/5
13000	5400	13965	4435	2/5	

2.5t Mast Specification

Type	Lifting height h3	Mast lowered h1	Mast extended h4	Free lifting height h2	Tilting range
Free triplex wide-view mast	mm	mm	mm	mm	(°)
	4000	2085	4965	1120	2/5
	4500	2165	5465	1200	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4300	11465	3335	2/5
	11000	4500	11965	3535	2/5
	11500	4800	12465	3835	2/5
	12000	5000	12965	4035	2/5
	12500	5300	13465	4335	2/5
13000	5600	13965	4635	2/5	

1.4t Residual Load Capacity Chart

Capacity(kg)	Load center distance(mm)							
	600	700	800	900	1000	1100	1200	
≤6500	1400	1210	1070	920	780	660	550	
7000	1350	1170	1030	880	750	630	520	
7500	1300	1120	990	840	710	600	490	
8000	1250	1080	950	810	680	570	460	
8500	1200	1030	910	770	650	530	430	
9000	1100	940	830	700	580	470	370	
9500	1000	850	750	620	510	410	320	
10000	900	770	670	550	450	350	280	
10500	750	630	550	440	350	260	170	
11000	600	500	430	330	250	160	90	

1.6t Residual Load Capacity Chart

Capacity(kg)	Load center distance(mm)							
	600	700	800	900	1000	1100	1200	
≤6500	1600	1390	1230	1060	920	780	660	
7000	1550	1340	1190	1030	880	750	640	
7500	1500	1300	1150	990	850	720	600	
8000	1450	1250	1110	950	810	690	570	
8500	1400	1210	1070	910	780	660	550	
9000	1300	1120	990	840	710	600	490	
9500	1200	1030	910	770	650	530	430	
10000	1100	940	830	700	580	470	370	
10500	950	810	710	590	480	380	290	
11000	800	680	590	480	380	290	200	

1.8t Residual Load Capacity Chart

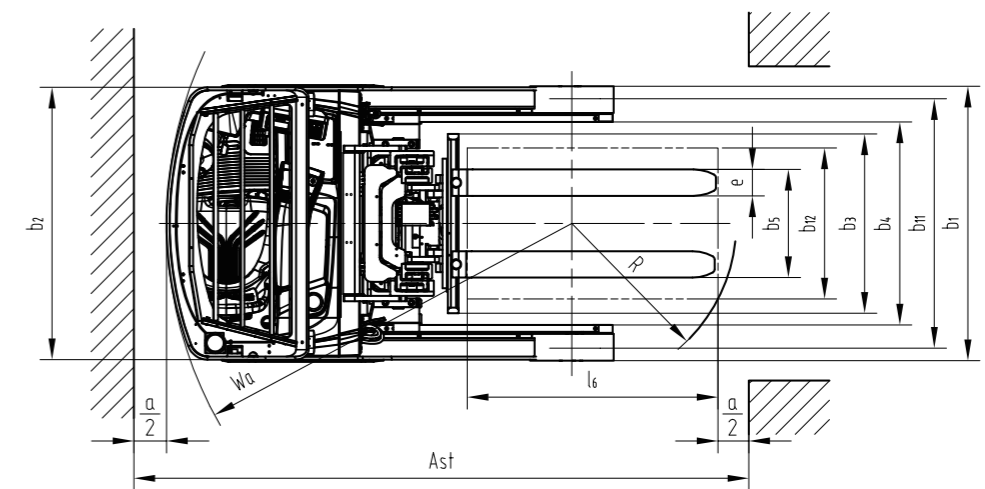
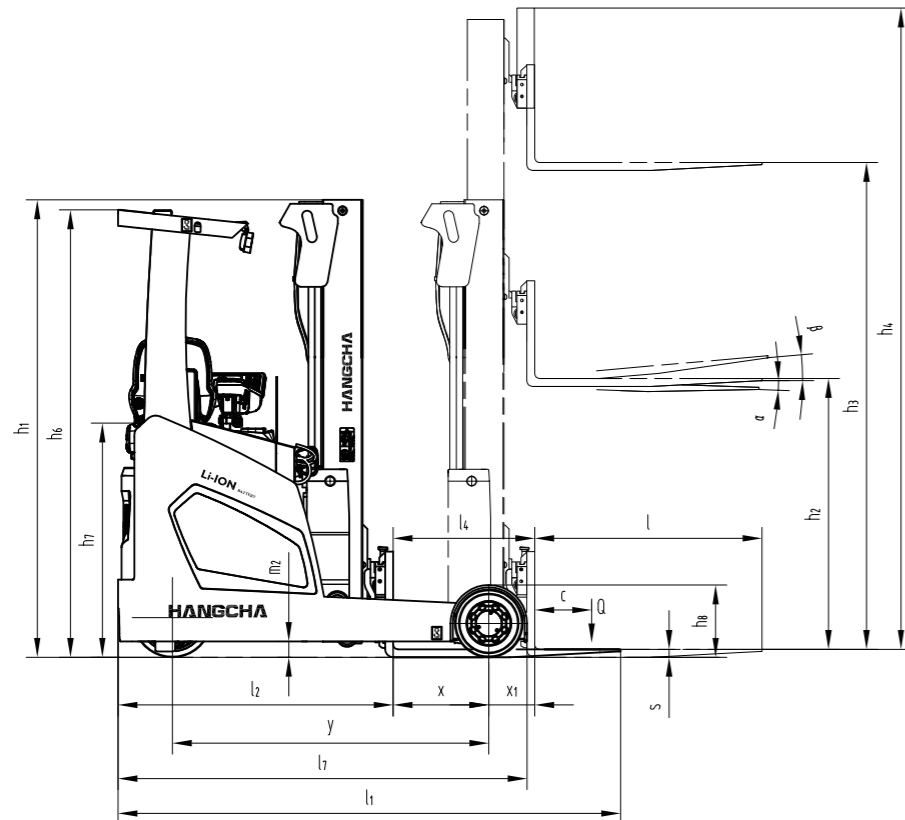
Capacity(kg)	Load center distance(mm)							
	600	700	800	900	1000	1100	1200	
≤6500	1800	1570	1390	1210	1050	900	780	
7000	1750	1520	1350	1170	1010	870	750	
7500	1700	1480	1310	1130	980	840	720	
8000	1650	1430	1270	1100	950	810	690	
8500	1600	1390	1230	1060	910	780	660	
9000	1500	1300	1150	990	850	720	600	
9500	1400	1210	1070	910	780	660	550	
10000	1300	1120	990	840	710	600	490	
10500	1150	990	870	730	610	500	400	
11000	1000	850	750	620	510	410	320	
11500	850	720	630	510	410	320	230	

2.0t Residual Load Capacity Chart

Capacity(kg)	Load center distance(mm)							
	600	700	800	900	1000	1100	1200	
≤6500	2000	1750	1560	1360	1200	1040	910	
7000	1950	1710	1520	1330	1160	1010	880	
7500	1900	1660	1480	1290	1130	980	850	
8000	1850	1620	1440	1250	1090	950	820	
8500	1800	1570	1400	1220	1060	920	790	
9000	1700	1480	1320	1140	990	860	730	
9500	1600	1390	1230	1070	930	790	670	
10000	1500	1300	1150	1000	860	730	620	
10500	1350	1170	1030	890	760	640	530	
11000	1200	1040	910	780	660	540	440	
11500	1050	900	790	670	550	450	360	
12000	900	770	670	560	450	360	270	
12500	700	590	510	410	320	230	150	
13000	500	410	350	260	180	110	40	

2.5t Residual Load Capacity Chart

Capacity(kg)	Load center distance(mm)							
	600	700	800	900	1000	1100	1200	
≤6500	2500	2200	1960	1730	1530	1360	1200	
7000	2450	2150	1920	1700	1500	1330	1170	
7500	2400	2110	1880	1660	1470	1290	1140	
8000	2350	2060	1840	1620	1430	1260	1110	
8500	2300	2020	1800	1590	1400	1230	1080	
9000	2200	1930	1720	1510	1330	1170	1020	
9500	2100	1840	1640	1440	1260	1110	970	
10000	2000	1750	1560	1360	1200	1040	910	
10500	1850	1620	1440	1250	1090	950	820	
11000	1700	1480	1320	1140	990	860	730	
11500	1550	1350	1190	1030	890	760	650	
12000	1400	1210	1070	920	790	670	560	
12500	1200	1040	910	780	660	540	440	
13000	1000	860	750	630	520	420	330	



$$A_{st} = W_a + R + a = W_a + \sqrt{(l_6 - x)^2 + \left(\frac{b_{12}}{2}\right)^2} + a$$