



# XE Series Electric Forklift Truck With Lithium Power

XE series lithium battery forklifts are high quality products developed by Hangcha on the basis of the advantages of "lithium battery special structure" and "permanent magnet synchronous technology". It has two models, one is standard model and the other is heavy-duty model. Following the family design of electric forklifts, they are provided with some key parts compatible with internal combustion forklifts, and optimized mainly on the overall performance, ergonomics, reliability, maintenance, outdoor operation ability and load capacity in a bid to meet customers' use scenarios of internal combustion forklifts. The heavy-duty model is capable of meeting the application demand of users in heavy-duty working conditions.



## Stylish exterior

- / Following the family exterior design of XH and XC lithium battery forklifts;
- / Boasting smooth and powerful contour lines, and simple and elegant vehicle body, and presenting both fashion and steadiness as a whole.

## Comfortable experience

- / With the advantages of lithium battery forklifts, this ergonomically designed forklift enables a wide view and a large operation space.
- / The color-screen instruments are designed to have clear and intuitive graphic interfaces.
- / The optional electronic handbrake allows more comfortable driving experience.

## Flexible scenarios

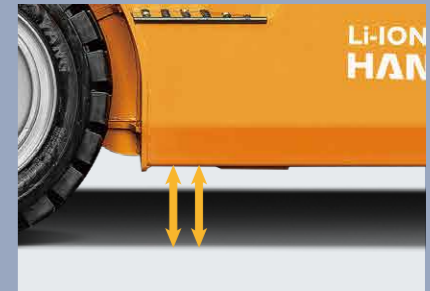
- / Smooth travel: ground clearance increased, to adapt to outdoor rough roads;
- / Flexible turning: turning radius reduced, to allow flexible shuttling in indoor environments such as cold store (optional);
- / No fear of cold: the battery equipped with standard electric heating module, to ensure normal operation in cold weather;
- / No fear of wind and rain: IPX4 for the whole forklift, to easily achieve water resistance of rainstorm level.

## Energy-saving and efficient

- / An efficient high-torque motor together with a high speed ratio gearbox significantly improves the travel speed, gradeability and lifting speed;
- / The air-cooled fan built in the travel and lifting motors allow better heat dissipation and more thorough performance realization;
- / Oil pump reducers are introduced in the oil pump devices for the first time, enabling the lifting motor to work in a more efficient and more energy-saving manner;
- / The 80V double permanent magnet synchronous motor system allows higher power density, and through deep matching of the gearbox, motors and electronic controls, reduces the energy consumption by 15% to 20% than that of the traditional asynchronous motor models in the same working conditions.



Double permanent magnet synchronous motor system



Ground clearance increased



Ergonomically designed forklift enables a wide view



Turning radius reduced

## Reliable and durable

- / The enhanced drive axle and gearbox with the mast, steering axles with tapered roller bearing (for the heavy-duty model) and big tires for internal combustion forklifts can meet the demand of application in heavy-duty working conditions;
- / Low center of gravity and high load margin are designed for more stable working;
- / Verified in accordance with double standards of electric forklifts and internal combustion forklifts, with the enhanced test strength higher than that for the internal combustion standard, this forklift is reliable and durable.

## Optional battery list

Capacity(Ah) Hangcha	2.0/2.5 80V	3.0/3.5/3.8t 80V	3.0/3.5/3.8t H1 80V
160	○	/	/
230	●	●	/
304	○	○	/
460	○	○	●
560	/	/	○
608	/	/	○

Capacity(Ah) CATL	2.0/2.5 80V	3.0/3.5/3.8t 80V	3.0/3.5/3.8t H1 80V
228	○	/	/
302	○	○	/
456	○	○	○
604	/	/	○

Note: ● Standard battery capacity; ○ Optional battery capacity;

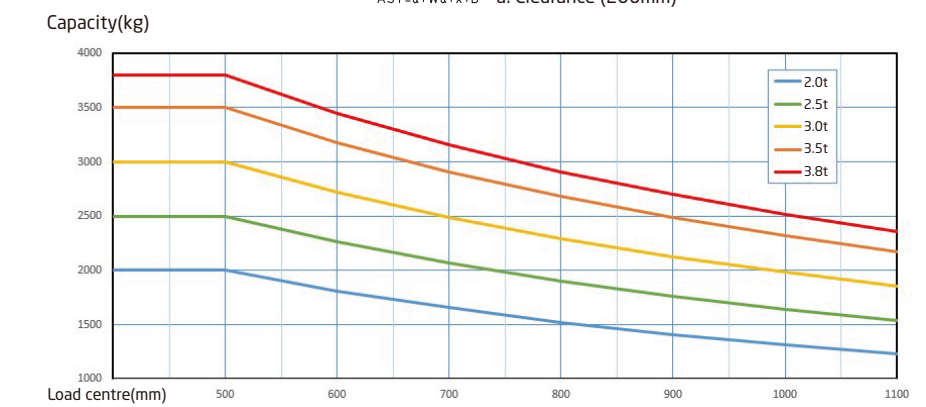
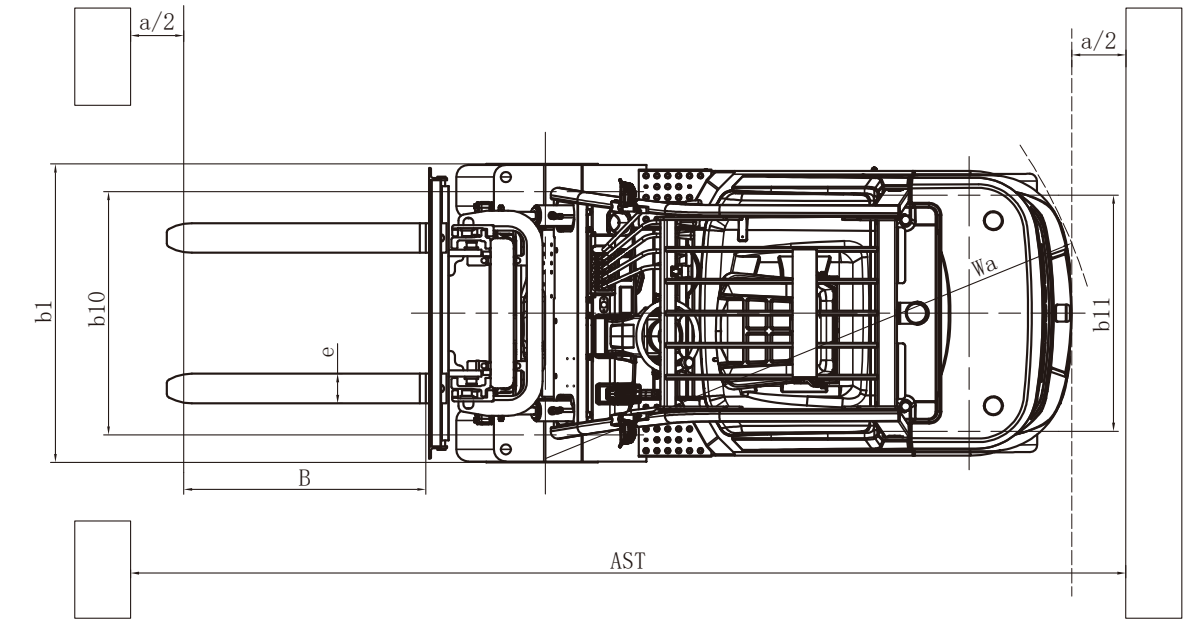
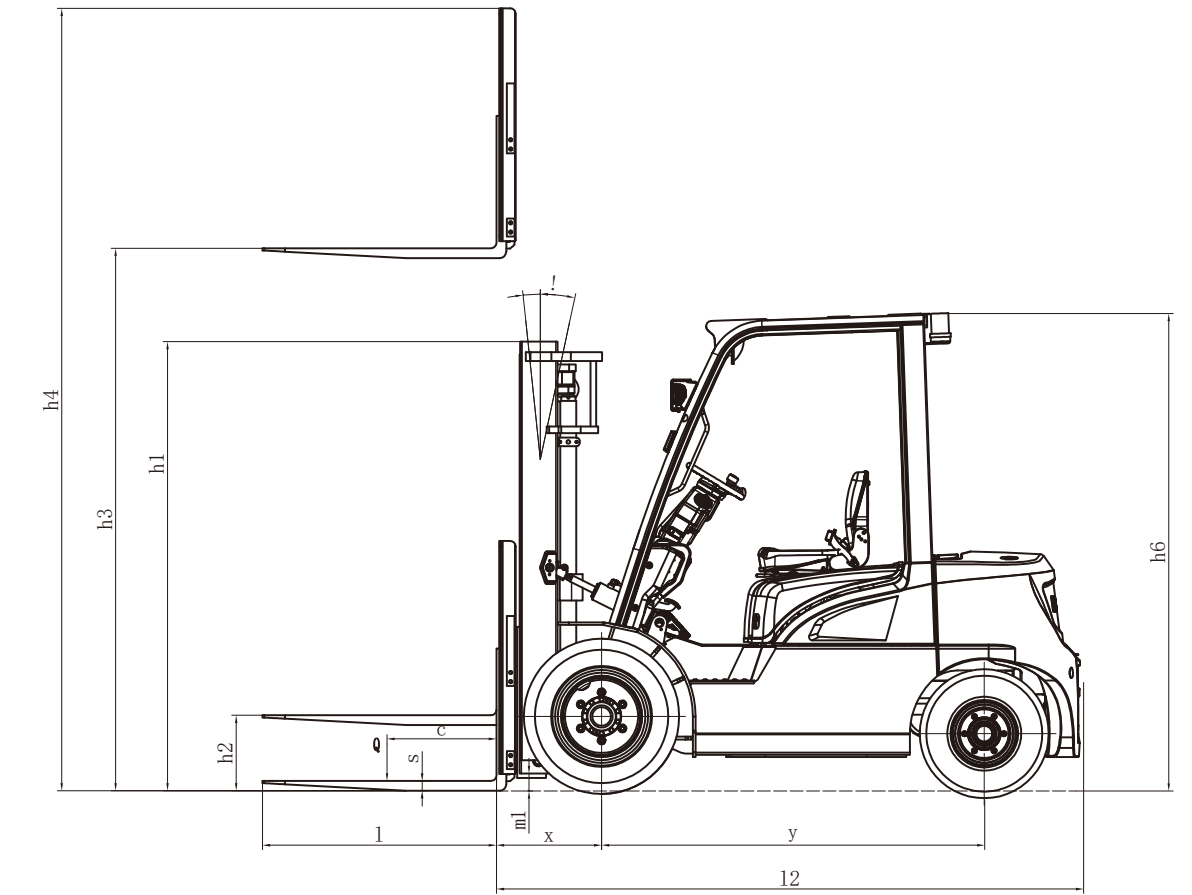
## Configuration

NO.	Configuration	Standard configuration	Optional
1	Color	Yellow-black	Other customized color
2	Particular market	/	CE Standard
3	Cold storage environment	/	-18°C -30°C
4	Mast	Standard duplex mast	Configuration Table of the Mast
5	Fork and attachment	Standard fork Fork arm carrier Load backrest	Non-standard series fork Various attachments
6	Tires	Pneumatic tire (single)	Pneumatic tire (dual) Solid tire (single) Solid tire (dual)
7	Multiway valve	Double multi-way valve	Triple valve Quadruple valve Quintuple valve
8	Tiller	Lifting and tilting joystick	Thumb switch
9	Battery	Standard lithium battery	Large-capacity lithium battery Quick-change lithium battery
10	Light	LED head lamp Turn signal lamp LED rear combination lamp	Common alarm lamp Acoustic and optical alarm lamp LED rear lamp Blue light Straight projection lamp
11	Horn	Electric horn Reverse buzzer	Right rear armrest with horn button
12	Smart module	/	Jiachen smart module Safety management module
13	Safety configuration	Emergency power-off switch Fuse box Descending buffering	Reversing radar OPS sensing system Fire extinguisher Ascending buffering
14	Parking brake	Mechanical handbrake	Electronic handbrake
15	Instrument rack space	Smart color-screen instrument (speed mode selection) Combination switch	Cigarette lighter USB port Electronic code lock (start by swiping a card)
16	Driving space	Standard overhead guard Central rear view mirror	Front windshield PVC ceiling Cab Electric fan Left and right rear view mirrors
17	Chair	Standard seat	Fully-suspended seat Semi-suspended seat
18	Other standard configuration	Drive and lifting controllers Driving and lifting motors Oil pump reducer Silent gear pump DC-DC converter Pedal pad Traction pin Integral stamped side panel and hood	



# XE Series Electric Forklift Truck With Lithium Power Specification

		HANGCHA GROUP CO.,LTD.									
Distinguishing mark	1.1	Manufacturer									
	1.2	Manufacturer's type designation	CPD20-XEY2-SI	CPD25-XEY2-SI	CPD30-XEY2-SI	CPD35-XEY2-SI	CPD38-XEY2-SI	CPD30-XEY2H1-SI	CPD35-XEY2H1-SI	CPD38-XEY2H1-SI	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	
	1.5	Rated capacity/rated load	kg	2000	2500	3000	3500	3800	3000	3500	3800
	1.6	Load centre distance	c (mm)	500	500	500	500	500	500	500	500
Weight	1.8	Load distance, centre of drive axle to fork	x (mm)	462.5	462.5	477.5	482.5	482.5	477.5	482.5	482.5
	1.9	Wheelbase	y (mm)	1650	1650	1750	1750	1750	1750	1750	1750
	2.1	Service Weight	kg	3450	3840	4250	4630	4860	4440	4820	5050
Tyres, chassis	2.2	Axle loading, laden front/rear	kg	4720/730	5510/830	6350/900	7170/960	7650/1010	6480/960	7300/1020	7780/1070
	2.3	Axle loading, unladen front/rear	kg	1550/1900	1580/2260	1730/2520	1760/2870	1780/3080	1775/2665	1815/3005	1830/3220
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		7.00-12-12PR	7.00-12-12PR	28x9-15-14PR	28x9-15-14PR	28x9-15-14PR	28x9-15-14PR	28x9-15-14PR	28x9-15-14PR
	3.3	Tyre size, rear		6.00-9-10PR	6.00-9-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR
	3.5	Wheels, number front / rear (x = driven wheels)		2x/2	2x/2	2x/2	2x/2	2x/2	2x/2	2x/2	2x/2
	3.6	Tread, front	b10 (mm)	965	965	1005	1005	1005	1005	1005	1005
Dimensions	3.7	Tread, rear	b11 (mm)	973	973	975	975	975	975	975	975
	4.1	Tilt of mast/fork carriage forward/backward	a/b (°)	6/12	6/12	6/12	6/12	6/12	6/12	6/12	6/12
	4.2	Height, mast lowered	h1 (mm)	1999	1999	2054	2169	2169	2054	2169	2169
	4.3	Free lift	h2 (mm)	160	160	165	170	170	165	170	170
	4.4	Lift	h3 (mm)	3000	3000	3000	3000	3000	3000	3000	3000
	4.5	Height, mast extended	h4 (mm)	4046	4046	4145	4145	4145	4145	4145	4145
	4.7	Height of overhead guard (cabin)	h6 (mm)	2165	2165	2180	2180	2180	2180	2180	2180
	4.8	Seat height/stand height	h7 (mm)	1111	1111	1126	1126	1126	1144	1144	1144
	4.12	Coupling height	h10 (mm)	500	500	515	515	515	515	515	515
	4.19	Overall length	l1 (mm)	3570	3570	3735	3740	3740	3735	3740	3740
	4.20	Length to face of forks	l2 (mm)	2500	2500	2665	2670	2670	2665	2670	2670
	4.21	Overall width	b1/b2 (mm)	1225	1225	1225	1225	1225	1225	1225	1225
	4.22	Fork dimensions	s / e / l (mm)	40/122/1070	40/122/1070	45/122/1070	50/122/1070	50/122/1070	45/122/1070	50/122/1070	50/122/1070
	Performance data	4.23	Fork carriage ISO 2328, class/type A/B		ISO2328 2A	ISO2328 2A	ISO2328 3A	ISO2328 3A	ISO2328 3A	ISO2328 3A	ISO2328 3A
4.24		Fork-carriage width	b3 (mm)	1038	1038	1100	1100	1100	1100	1100	1100
4.31		Ground clearance, laden, below mast	m1 (mm)	125	125	139	139	139	139	139	139
4.32		Ground clearance, centre of wheelbase	m2 (mm)	140	140	155	155	155	155	155	155
4.34.1		Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	3862.5	3862.5	4027.5	4032.5	4032.5	4097.5	4102.5	4102.5
4.34.2		Aisle width for pallets 800 x 1200 lengthways		4062.5	4062.5	4227.5	4232.5	4232.5	4297.5	4302.5	4302.5
4.35		Turning radius	Wa (mm)	2200	2200	2350	2350	2350	2420	2420	2420
4.36		Internal turning radius	b13 (mm)	/	/	/	/	/	/	/	/
5.1		Travel speed, laden/unladen	km/h	14/15	14/15	14/15	14/15	14/15	17/18	17/18	17/18
5.2		Lift speed, laden/unladen	mm/s	290/400	290/400	290/400	290/350	290/350	400/500	350/440	350/440
Electric-engine	5.3	Lowering speed, laden/unladen	mm/s	440/370	440/370	440/370	440/370	440/370	500/390	500/390	500/390
	5.6	Max. Drawbar pull, laden/unladen	N	11000	11000	11000	11000	11000	13000	13000	13000
	5.8	Max. gradeability, laden/unladen	%	18/25	18/25	18/25	16/25	15/25	20/25	18/25	17/25
	5.9	Acceleration time, laden/unladen (0-10m)	s	/	/	/	/	/	/	/	/
	5.10	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Addition data	5.11	Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
	6.1	Drive motor rating S2 60 min	kW	15AC	15AC	15AC	15AC	15AC	16AC	16AC	16AC
	6.2	Lift motor rating at S3 15%	kW	16AC	16AC	16AC	16AC	16AC	24AC	24AC	24AC
	6.3	Battery acc. to DIN 43531/35/36 A,B,C, no		/	/	/	/	/	/	/	/
	6.4	Battery voltage, nominal capacity K5	(V)(Ah) or kWh	80/230	80/230	80/230	80/230	80/230	80/460	80/460	80/460
Addition data	6.5	Battery weight	kg	180	180	200	200	200	310	310	310
	10.1	Operating pressure for attachments	MPa	18.5	18.5	18.5	18.5	21	18.5	18.5	21
10.2	Oil volume for attachments	ℓ/min	65	65	65	65	65	65	65	65	



AST=a+Wa+x+B a: Clearance (200mm)