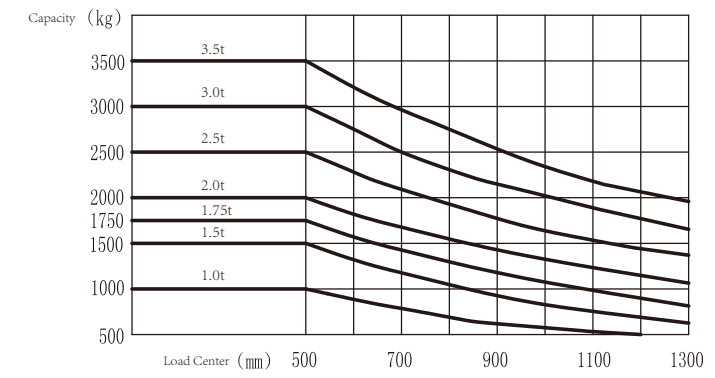


$Ast = l6 + x + Wa + a$ l6: Load Length a: Clearance (200mm)



ZHEJIANG HANGCHA IMP. & EXP. CO., LTD.

Factory site: 666 Xiangfu Road, Hangzhou, Zhejiang, China (311305)

Tel: +86-571-88926735 88926755
Fax: +86-571-88926789 88132890

sales@hcforklift.com
www.hcforklift.com



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.



X Series Electric Forklift Truck

with capacities of 1,000 to 3,500kg

The World of Hangcha



2021 VERSION 3/COPYRIGHT 2021.04

X Series Electric Forklift Truck

The X series 1.0- to 3.5-ton forklift trucks are new-generation products by independent research and development based on former products of HANGCHA, with an overall upgrade in appearance molding, performance efficiency, comfort, safety and maintainability.

**Agile/
Efficient/
Flexible**



Appearance

- / Appearance design methods of new concepts, streamlined surface modeling, flexible and smooth lines, elegant and decent.
- / Compact truck shape, simplified appearance, vigorous and powerful.
- / Optimum energy efficiency.

Stability

- / The traction motors are arranged in parallel, the batteries are fixed at the bottom of the truck frame, and the shaft distance and real-wheel distance have been lengthened, aiming to enhance the swing point of steering axle and shorten front overhang distance for excellent stability.

Efficiency

- / The inner and outer turning angle of steering wheels are enlarged with small turning radius, which can operate in narrow paths.
- / Multi-speed models for selection to adapt various working conditions.
- / A high-power traction motor and high-speed-ratio gearbox have been adopted. The maximum travelling speed and climbing gradient under full load have been increased to 16.5km/h and 20% respectively.
- / High-power pump motor with quiet and large discharge capacity has been adopted to promote lifting speed. For instance, the maximum lifting speed with 1.5-ton full load can reach 420mm/s.
- / Thanks to the stability technologies, such as new mast with shorter load distance, making a great promotion of loading capability and high lifting mast.
- / Compact design, the width of 2- to 2.5-ton truck is only 1180mm.
- / Light weight and low energy consumption. Brake energy regeneration system effectively saves energy and prolongs operation hours for one charge.

Comfort

- / Designed based on ergonomics, the longer wheelbase provides larger space for legs. The diameter of steering wheel has been decreased to 300mm. Seats can be adjusted forward and backward for operators to choose the best driving position.
- / Humanized design. Storing space, USB interface and others have been added.



New designed mast and the large open steel roof provide super visibility, it also can reduce risk of accidents



Fully closed operation plate space, tilting cylinder and flat bottom plate, providing more comfortable and safe operation



Side roll out the battery can provides the fast, simple and safe solution for the operator



Multi-function instrument with color screen, clear human-computer interaction interface for visualized reading



Standard specification

- / 3M duplex mast
- / Soft landing system
- / OHG
- / Storage compartment
- / Emergency power-off switch
- / USB interface
- / Full AC motor and controller
- / Multi-function color screen combination instrument
- / 2nd valve
- / Dynamic load sensing hydraulic steering gear
- / Panoramic rearview mirror
- / Integrated combination switch
- / DC-DC converter
- / LED front light, turning indicator light, LED rear combination tricolor light
- / Traction pin
- / Back-up beeper

Safety

- / LED front lights and combined lights provide better view to operators under any circumstance.
- / The panoramic rearview mirror provides broader rearview for safer driving.
- / Soft landing system: When forks are 100-60mm above the ground, the descending speed decreases automatically, keeping the goods and pallet from hitting the ground and protecting both goods and the ground effectively.
- / Overload protection device for electronics and hydraulics, conforming to safety specifications.

Maintenance

- / The bottom plate under feet can be disassembled without tools, which is convenient to check and repair all walking motors and systems.
- / Brake fluid can be added when the shield cover and oiler cover are opened.
- / Fully opening covers are quite convenient for the maintenance motors and controllers.

Advancement

- / High frequency MOSFET controller provides accurate control of travelling, lifting, and better adjustable performance, and better matches the motor. Regenerative braking, reverse current braking and anti-slide on slope function guarantee the operation safety.
- / AC controllers realize computer control in travelling, turning, lifting, inclining and other movements.
- / Regenerative braking is more energy saving and efficiency during truck's deceleration, direction changing, and driving on downwards slope.



Options

- / 2.0-5.0m duplex mast
- / 2.5-4.0m full free duplex mast
- / 4.3-7.0m full free triplex mast
- / Other length forks
- / Wide fork carriage
- / Wide or higher load backrest
- / Built-in side shifter
- / Accessories of other specifications
- / Front dual tire
- / Super-elastic solid tire
- / Non-marking tyre
- / Suspension seat with armrests
- / Suspension seat with higher OHG
- / Reversing hand grip with horn button
- / Left-right rearview mirror
- / Rear working light
- / Alarm light
- / Battery side removed by forks
- / Battery side roll out by roller
- / High-capacity domestic battery
- / High-performance imported battery
- / Maintenance-free battery
- / Lithium battery
- / Charger
- / OPS system
- / Fingertip system

Lead-acid specification

Battery	Capacity (Ah/5h)	1.0t 48V	1.5-1.75t 48V	mini2t 48V	2t 48V	2.5t 48V	2.5L-3.0t 80V	3.5t 80V
Lead-acid	360	●						
	420		●					
	450			●				
	480	○	○				●	●
	525				●			
	560	○	○	○	○		○	○
	600					●	○	○
700				○	○	○		

● Battery Std. ○ Battery Opt.

Lithium specification

Battery	Capacity (Ah/5h)	1.0t	1.5-1.75t	mini2t	2t	2.5t	2.5L-3.0t	3.5t
Lithium	271	● (51.52V)						
	404	○ (48.30V)	● (48.30V)	● (48.30V)			● (80.5V)	● (80.5V)
	480				● (51.2V)	● (51.2V)		
	542				○ (48.30V)	○ (48.30V)	○ (80.5V)	○ (80.5V)

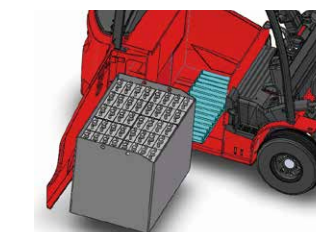
● Battery Std. ○ Battery Opt.



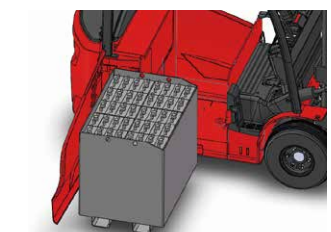
Fingertip system (Opt.)



Lithium battery (Opt.)



Battery side roll out by roller (Opt.)



Battery side removed by forks (Opt.)

X Series 1.0~3.5t Electric Forklift Truck Specification

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.										
			1.2	Manufacturer's type designation	CPD10-XC4(-I)	CPD15-XC4(-I)	CPD18-XC4(-I)	CPD20-XXC4(-I)	CPD20-XC4(-I)	CPD25-XC4(-I)	CPD25-XLC4(-I)	CPD30-XC4(-I)	CPD35-XC4(-I)
					Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)
1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	Lead-acid(Lithium)	
1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	
1.5	Rated capacity/rated load	Q (kg)	1000	1500	1750	2000	2000	2500	2500	3000	3000	3500	
1.6	Load centre distance	c (mm)	500	500	500	500	500	500	500	500	500	500	
1.8	Load distance, centre of drive axle to fork	x (mm)	391	391	396	401	427	427	427	454	469	469	
1.9	Wheelbase	y (mm)	1410	1410	1410	1410	1520	1520	1520	1660	1660	1660	
Weight	2.1	Service Weight	kg	2760(2375)	2950(2750)	3110(2970)	3310(3150)	3650(3430)	4100(3723)	4230(3850)	4710(4370)	5300(4965)	
	2.2	Axle loading, laden front/rear	kg	3050/710(2685/690)	3910/540(3720/530)	4330/530(4260/510)	4500/810(4350/800)	4950/700(4750/680)	5815/785(5453/770)	5995/735(5630/720)	6880/830(6555/815)	7855/945(7535/930)	
	2.3	Axle loading, unladen front/rear	kg	1340/1420(975/1400)	1515/1435(1330/1420)	1460/1650(1340/1630)	1500/1810(1360/1790)	1720/1930(1530/1900)	1815/2285(1473/2250)	2080/2150(1720/2130)	2175/2535(1855/2515)	2215/3085(1915/3050)	
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Superelastic		
	3.2	Tyre size, front		6.00-9-10PR	6.00-9-10PR	21×8-9-16PR	21×8-9-16PR	23×9-10-18PR	23×9-10-18PR	23×9-10-20PR	23×10-12		
	3.3	Tyre size, rear		5.00-8-10PR	5.00-8-10PR	5.00-8-10PR	5.00-8-10PR	18×7-8-14PR	18×7-8-14PR	18×7-8-14PR	200/50-10		
	3.5	Wheels, number front / rear (x = driven wheels)		2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2		
	3.6	Tread, front	b10 (mm)	885	885	925	925	960	960	1010	1010	1012	
	3.7	Tread, rear	b11 (mm)	905.5	905.5	905.5	905.5	980	980	980	980	980	
	Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	6/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10	
4.2		Height, mast lowered	h1 (mm)	1992	1992	1992	1992	2011	2011	2011	2011	2161	
4.3		Free lift	h2 (mm)	155	155	155	160	140	140	140	135	135	
4.4		Lift	h3 (mm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	
4.5		Height, mast extended	h4 (mm)	3955	3955	3955	3955	4046	4046	4046	4145	4145	
4.7		Height of overhead guard	h5 (mm)	2070	2070	2070	2070	2160	2160	2160	2160	2160	
4.8		Seat height/stand height	h7 (mm)	1010	1010	1010	1010	1070	1070	1070	1070	1070	
4.12		Coupling height	h10 (mm)	289	289	289	289	311	311	311	311	311	
4.19		Overall length	l1 (mm)	3000	3000	3005	3034	3365	3417	3505	3557	3647	
4.20		Length to face of forks	l2 (mm)	2080	2080	2085	2114	2295	2347	2435	2487	2577	
4.21		Overall width	b1 (mm)	1060	1060	1125	1125	1180	1180	1235	1235	1260	
4.22		Fork dimensions	s/e/l (mm)	35*100*920	35*100*920	35*100*920	40*100*920	40*122*1070	40*122*1070	40*122*1070	45*125*1070	50*125*1070	
4.23		Fork carriage DIN 15 173 --- ISO 2328, class/type A,B		ISO 2328 2A	ISO 2328 2A	ISO 2328 2A	ISO 2328 2A	ISO 2328 2A	ISO 2328 2A	ISO 2328 2A	ISO 2328 3A	ISO 2328 3A	
4.24		Fork-carriage width	b3 (mm)	1000	1000	1000	1000	1008	1008	1008	1082	1082	
4.25		Distance between fork-arms	b5 (mm)	240-1000	240-1000	240-1000	240-1000	226-1008	226-1008	226-1008	252-1082	252-1082	
4.31		Ground clearance, laden, below mast	m1 (mm)	100	100	100	100	110	110	110	106	106	
4.32		Ground clearance, centre of wheelbase	m2 (mm)	85	85	85	85	120	120	120	120	125	
4.34.1		Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	3436	3436	3471	3511	3617	3682	3775	3849	3899	
4.34.2		Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	3636	3636	3671	3711	3817	3882	3975	4049	4099	
4.35		Turning radius	Wa (mm)	1845	1845	1845	1860	1990	2055	2148	2195	2230	
Performance data	5.1	Travel speed, laden/unladen	km/h	16.5/17.5	16/17	16/17	14/15	17/18	16.5/17.5	16.5/17.5	16.5/17.5	14/15	
	5.2	Lift speed, laden/unladen	m/s	0.45/0.65	0.42/0.65	0.37/0.65	0.36/0.63	0.36/0.60	0.34/0.60	0.35/0.55	0.32/0.55	0.30/0.45	
	5.3	Lowering speed, laden/unladen	m/s	0.45/0.50	0.45/0.50	0.45/0.50	0.45/0.50	0.45/0.50	0.45/0.50	0.45/0.50	0.47/0.47	0.47/0.47	
	5.6	Max. Drawbar pull, laden/unladen	N	11600/8600	11600/8600	11600/8580	11600/9000	14600/10600	14600/11530	20800/16500	20800/17400	20800/18400	
	5.8	Max. gradeability, laden/unladen	%	20/20	20/20	19/20	17/19	20/20	19/20	20/20	20/20	17/19	
	5.10	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	
	Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical		
Electric engine	6.1	Drive motor rating S2 60 min	kw	11.3	11.3	11.3	11.3	18	18	18	18		
	6.2	Lift motor rating at S3 15%	kw	13.8	13.8	13.8	13.8	18	18	18	18		
	6.3	Battery acc. to DIN 43531/35/36 A,B,C, no		no	no	no	no	no	no	no	no		
	6.4	Lead-acid(Lithium)Battery voltage, nominal capacity K5	V/Ah	48/360(48/271)	48/420(48/404)	48/420(48/404)	48/460(48/404)	48/525(48/480)	48/600(48/480)	80/480(80/404)	80/480(80/404)	80/480(80/404)	
	6.5	Lead-acid(Lithium)Battery weight	kg	631(200)	675(315)	675(315)	735(315)	837(443)	916(443)	1235(502)	1235(502)	1235(502)	
		Battery dimensions	l/b/h(mm)	980×465×780	980×465×780	980×465×780	980×465×780	1028×571×784	1028×571×784	1028×711×784	1028×711×784	1028×711×784	
	Min. Lead-acid(Lithium)Battery weight	kg	631(200)	675(315)	675(315)	735(315)	837(443)	916(443)	1235(502)	1235(502)	1235(502)		
	Max. Lead-acid(Lithium)Battery weight	kg	957(210)	912(330)	912(330)	957(330)	1113(465)	1118(465)	1508(527)	1508(527)	1508(527)		
	Type of drive unit		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC		
Addition data	10.1	Operating pressure for attachments	bar	145	145	160	160	160	160	160	160		
	10.2	Oil volume for attachments	l/min	65	65	65	65	65	65	65	65		
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	27	27	27	27	30	30	30	30		
	10.7	Sound pressure level at the driver's seat	dB (A)	70	70	70	70	70	70	70	70		
	10.8	Towing coupling, type DIN 15170		φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin		

1. (-I) means lithium battery 2. CPD20-XXC4 means mini 2.0t 3. CPD25-XLC4 means long wheelbase

1.0~2.0t X Series Mast Specification

Type	Model	Lifting height	Lowered overall height	Overall height		Free lifting height		Tilting range		Capacity							
				With backrest	Without backrest	With backrest	Without backrest	FWD	BWD	Load center#500mm Single PneumaticTire			Load center#500mm single solid Tire				
				mm	mm	mm	mm	mm	mm	(°)	(°)	1.0t	1.5t	1.75t	2.0t	1.0t	1.5t
Duplex wide view mast	M250	2500	1742	3455	3048	155	155	6	6	1000	1500	1750	2000	1000	1500	1750	2000
	M270	2700	1842	3655	3248	155	155	6	6	1000	1500	1750	2000	1000	1500	1750	2000
	M300	3000	1992	3955	3548	155	155	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	M330	3300	2142	4255	3848	155	155	6	10	1000	1500	1750	1850	1000	1500	1750	1850
	M350	3500	2242	4455	4048	155	155	6	10	1000	1500	1750	1750	1000	1500	1750	1750
	M360	3600	2342	4555	4148	155	155	6	10	1000	1500	1700	1700	1000	1500	1700	1700
Duplex full-free lifting mast	M400	4000	2592	4955	4548	155	155	6	10	1000	1500	1650	1650	1000	1500	1650	1650
	M430	4300	2742	5255	4848	155	155	6	6	1000	1450	1600	1600	1000	1450	1600	1600
	M450	4500	2842	5455	5048	155	155	6	6	1000	1450	1550	1550	1000	1450	1550	1550
	U250	2500	1742	3445	3060	797	1182	6	6	1000	1500	1750	2000	1000	1500	1750	2000
	U270	2700	1842	3645	3260	897	1282	6	6	1000	1500	1750	2000	1000	1500	1750	2000
	U300	3000	1992	3945	3560	1047	1432	6	10	1000	1500	1750	2000	1000	1500	1750	2000
Triplex full-free lifting mast	U330	3300	2142	4245	3860	1197	1582	6	10	1000	1500	1750	1850	1000	1500	1750	1850
	U360	3600	2292	4545	4160	1347	1732	6	10	1000	1500	1750	1700	1000	1500	1750	1700
	U400	4000	2542	4845	4560	1597	1982	6	10	1000	1500	1650	1600	1000	1500	1650	1600
	N430	4300	1992	5255	4872	1047	1430	6	6	900	1400	1550	1650	900	1400	1550	1650
	N450	4500	2042	5455	5072	1097	1480	6	6	900	1350	1500	1550	900	1350	1500	1550
	N480	4800	2142	5755	5372	1197	1580	6	6	900	1350	1500	1500	900	1350	1500	1500
Triplex full-free lifting mast	N500	5000	2242	5955	5572	1297	1680	6	6	850	1250	1400	1400	850	1250	1400	1400
	N550	5500	2412	6455	6062	1467	1850	3									