



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



Follow us on
Facebook



Follow us on
YouTube



Follow us on
WeChat



Download "Hangcha
Forklift" App



ISO14001
ISO14001:2015



ISO9001
ISO9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

2022 VERSION 2/COPYRIGHT 2022/06

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



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

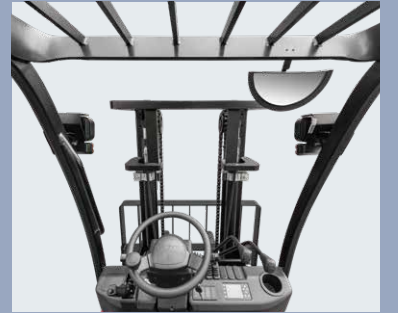
- / The traction motors are arranged in parallel, the batteries are fixed at the bottom of the truck frame, and the shaft distance and real-wheel distance have been lengthened, aiming to enhance the swing point of steering axle and shorten front overhang distance for excellent stability.

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



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 slop 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.



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



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
- / 3T brake for 2-2.5t truck

Lead-acid specification

Battery	Capacity (Ah/5h)	1.0t	1.5-1.75t	mini2t	2.0t	2.5t	2.5Lt	3.0-3.5t
Lead-acid	360	●					●	
	420		●					
	450			●				
	480	○	○				○	●
	525				●			
	560	○	○	○	○		○	○
	600			○	○	●	○	○
	700				○	○		

Note: ● Battery Std. ○ Battery Opt. 2.5Lt:80V

Lithium specification (-J2)

Battery	Capacity (Ah/5h)	1.0-mini2t	2.0-2.5t	2.5Lt	3.0-3.5t
Lithium	202			●	
	271	●		○	●
	346		●		
	404	○		○	○
	500	○	○		
	542		○		○

Note: ● Battery Std. ○ Battery Opt. 2.5Lt:80V

Lithium specification (-J4、C4、D2)

Battery	Capacity (Ah/5h)	1.0t	1.5-mini2t	2.0-2.5t	2.5Lt	3.0-3.5t
Lithium	271	●	○		●	○
	346			○		
	404	○	●		○	●
	500	○	○	●		
	542			○	○	○

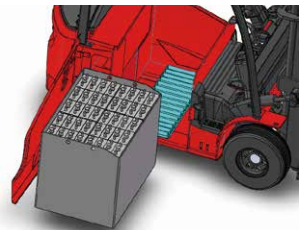
Note: ● Battery Std. ○ Battery Opt. 2.5Lt:80V



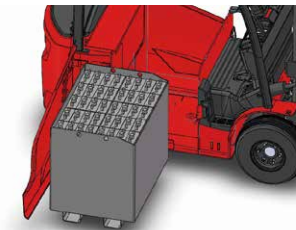
Fingertip system (Opt.)



Lithium battery (Opt.)



Battery side roll out by roller (Opt.)



Battery side removed by forks (Opt.)

X Series Lead-acid Battery Forklift Truck Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.																	
	1.2	Manufacturer's type designation		CPD10-XJ4 CPD10-XJ2	CPD15-XJ4 CPD15-XJ2	CPD18-XJ4 CPD18-XJ2	CPD20-XXJ4 CPD20-XXJ2	CPD20-XJ4 CPD20-XJ2	CPD25-XJ4 CPD25-XJ2	CPD25-XJ4 CPD25-XJ2	CPD30-XJ4 CPD30-XJ2	CPD35-XJ4 CPD35-XJ2	CPD10-XC4 CPD10-XD2	CPD15-XC4 CPD15-XD2	CPD18-XC4 CPD18-XD2	CPD20-XXC4 CPD20-XXD2	CPD20-XC4 CPD20-XD2	CPD25-XC4 CPD25-XD2	CPD25-XLC4 CPD25-XLD2	CPD30-XC4 CPD30-XD2	CPD35-XC4 CPD35-XD2
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid	Lead-acid
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	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	3500	1000	1500	1750	2000	2000	2500	2500	3000	3500
	1.6	Load centre distance	c (mm)	500	500	500	500	500	500	500	500	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	391	391	391	396	401	427	427	454	469
	Weight	1.9	Wheelbase	y (mm)	1410	1410	1410	1410	1520	1520	1660	1660	1660	1410	1410	1410	1410	1520	1520	1660	1660
2.1		Service Weight	kg	2760	2950	3110	3380	3650	4100	4230	4710	5300	2760	2950	3110	3380	3650	4100	4230	4710	5300
2.2		Axle loading, laden front/rear	kg	3050/710	3910/540	4330/530	4760/600	4950/700	5815/785	5995/735	6880/830	7855/945	3050/710	3910/540	4330/530	4760/600	4950/700	5815/785	5995/735	6880/830	7855/945
Tyres, chassis	2.3	Axle loading, unladen front/rear	kg	1340/1420	1515/1435	1460/1650	1500/1880	1720/1930	1815/2285	2080/2150	2175/2535	2215/3085	1340/1420	1515/1435	1460/1650	1500/1880	1720/1930	1815/2285	2080/2150	2175/2535	2215/3085
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Superelastic	Pneumatic	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	23×9-10-18PR	23×9-10-18PR	23×10-12	6.00-9-10PR	6.00-9-10PR	21×8-9-16PR	21×8-9-16PR	23×9-10-18PR	23×9-10-18PR	23×9-10-18PR	23×9-10-18PR	23×10-12
Dimensions	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	18×7-8-14PR	200/50-10	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	18×7-8-14PR	200/50-10
	3.5	Wheels, number front / rear (x = driven wheels)		2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2
	3.6	Tread, front	b10(mm)	885	885	925	925	960/110#	960/110#	1010	1010	1012	885	885	925	925	960/110#	960/110#	1010	1010	1012
	3.7	Tread, rear	b11 (mm)	905.5	905.5	905.5	905.5	980	980	980	980	980	905.5	905.5	905.5	905.5	980	980	980	980	980
	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	6/10	6/10	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	1992	1992	1992	1992	2011	2011	2011	2011	2161
	4.3	Free lift	h2 (mm)	155	155	155	160	140	140	140	135	135	155	155	155	160	140	140	140	135	135
	4.4	Lift	h3 (mm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	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	3955	3955	3955	3955	4046	4046	4046	4145	4145
	4.6	Height of overhead guard	h6 (mm)	2070	2070	2070	2070	2160	2160	2160	2160	2160	2070	2070	2070	2070	2160	2160	2160	2160	2160
	4.7	Height of overhead guard (cabin)	h6 (mm)	2150	2150	2150	2150	2240	2240	2240	2240	2240	2150	2150	2150	2150	2240	2240	2240	2240	2240
	4.8	Seat height/stand height	h7 (mm)	1010	1010	1010	1010	1070	1070	1070	1070	1070	1010	1010	1010	1010	1070	1070	1070	1070	1070
	4.12	Coupling height	h10 (mm)	289	289	289	289	311	311	311	311	311	289	289	289	289	311	311	311	311	311
	4.19	Overall length	l1 (mm)	3000	3000	3005	3069	3365	3390	3505	3557	3647	3000	3000	3005	3069	3365	3390	3505	3557	3647
	4.20	Length to face of forks	l2 (mm)	2080	2080	2085	2149	2295	2320	2435	2487	2576	2080	2080	2085	2149	2295	2320	2435	2487	2576
	4.21	Overall width	b1(mm)	1060	1060	1125	1125	1185/1235#	1185/1235#	1235	1235	1260	1060	1060	1125	1125	1185/1235#	1185/1235#	1235	1235	1260
	4.22	Fork dimensions	s/e/l (mm)	920×100×35	920×100×35	920×100×35	920×100×40	1070×122×40	1070×122×40	1070×125×40	1070×125×45	1070×125×50	920×100×35	920×100×35	920×100×35	920×100×40	1070×122×40	1070×122×40	1070×125×40	1070×125×45	1070×125×50
	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	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	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	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	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	85	85	85	85	120	120	120	120	125
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	3436	3436	3441	3489	3617	3682	3775	3849	3899	3436	3436	3441	3489	3617	3682	3775	3849	3899
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	3636	3636	3641	3689	3817	3882	3975	4049	4099	3636	3636	3641	3689	3817	3882	3975	4049	4099
4.35	Turning radius	Wa (mm)	1845	1845	1845	1888	1990	2055	2148	2195	2230	1845	1845	1845	1888	1990	2055	2148	2195	2230	
Performance data	5.1	Travel speed, laden/unladen	km/h	16.5/17.5(14/15)	16/17(14/15)	16/17(14/15)	14/15(14/15)	17/17.5(14/15)	16.5/17.5(14/15)	16.5/17.5(14/15)	16.5/17.5(14/15)	15/16(14/15)	16.5/17.5	16/17	16/17	14/15	17/17.5	16.5/17.5	16.5/17.5	16.5/17.5	15/16
	5.2	Lift speed, laden/unladen	m/s	450/650(420/550)	420/500(400/550)	370/650(360/550)	360/630(340/500)	380/600(380/500)	350/600(350/500)	370/550(370/500)	350/550(350/500)	330/500(330/500)	450/650	420/650	370/650	360/630	380/600	350/600	370/550	350/550	330/550
	5.3	Lowering speed, laden/unladen	m/s	450/500	420/500	450/500	450/500	450/500	450/500	450/500	470/470	470/470	450/500	420/500	450/500	450/500	450/500	450/500	450/500	470/470	470/470
	5.6	Max. Drawbar pull	N	11600/8600	11600/8600	11600/8580	11600/9000	14600/10600	14600/11530	20800/16500	20800/17400	20800/18400	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	20/20	20/20	20/20	17/19	20/20	20/20	19/20	17/19	20/20	20/20	20/20	20/20	17/19
		Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Electric- engine		Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	
	6.1	Drive motor rating S2 60 min	kW	11.3	11.3	11.3	11.3	18	18	18	18	18	11.3	11.3	11.3	18	18	18	18	18	
	6.2	Lift motor rating at S3 15%	kW	13.8	13.8	13.8	13.8	21	21	21	21	21	13.8	13.8	13.8	21	21	21	21	21	
	6.3	Battery acc. to DIN 43531/35/36 A,B,C, no		no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	
	6.4	Battery voltage, nominal capacity K5	V/Ah	48/360	48/420	48/420	48/450	48/525	48/600	80/360	80/480	80/480	48/360	48/420	48/420	48/450	48/525	48/600	80/360	80/480	80/480
	6.5	Battery weight	kg	580	670	670	730	830	950	990	1230	1230	580	670	670	730	830	950	990	1230	1230
		Battery dimensions	l/b/h(mm)	980×465×780	980×465×780	980×465×780	980×465×780	1028×571×784	1028×571×784	1028×571×784	1028×571×784	1028×571×784	980×465×780	980×465×780	980×465×780	980×465×780	1028×571×784	1028×571×784	1028×571×784	1028×571×784	1028×571×784
		Max. battery weight	kg	900	900	900	1120	1610	1970	1610	1610	1610	900	900	900	970	1120	1120	1610	1610	1610
Addition data		Min. battery weight	kg	560	640	640	700	800	900	940	1170	560	640	640	700	800	900	940	1170	1170	
	8.1	Type of drive unit		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	
	9.1	Manufacturer/Type		JIACHEN	JIACHEN	JIACHEN	JIACHEN	JIACHEN	JIACHEN	JIACHEN	JIACHEN	JIACHEN	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	CURTIS INMOTION	
	10.1	Operating pressure for attachments	bar	145	145	160	160	160	160	160	160	160	145	145	160	160	160	160	160	160	160
	10.2	Oil volume for attachments	l/min	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	27	27	27	27	30	30	30	30	30	27	27	27	30	30	30	30	30	30
	Sound pressure level at the driver's seat	dB (A)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	
	Towing coupling, type DIN 15170		φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	φ24 Pin	

Note: () is the data of the forklift with J2 controller.

#is the data with 3T brake.

Dual Drive Tire Dimensions	1.2	Manufacturer's type designation		CPD10	CPD15	CPD18	CPD20X	CPD20	CPD25	CPD25L	CPD30	CPD35
	3.2	Tyre size, front(Pneumatic)		6.00-9-10PR	6.00-9-10PR	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
		Tyre size, front(Superelastic)		6.00-9	6.00-9	6.00-9	6.00-9	6.50-10	6.50-10	6.50-10	6.50-10	6.50-10
	3.6	Tread, front	b ₁₀ (mm)	1075	1075	1075	1075	1186	1215	1215	1215	1215
	4.21	Overall width(Pneumatic)	b ₁ (mm)	1425	1425	1425	1425	1560	1560	1590	1590	1590
		Overall width(Superelastic)	b ₁ (mm)	1408	1408	1408	1408	1560	1560	1590	1590	1590
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A _{st} (mm)	3491	3491	3521	3556	3677	3760	3855	3935	3956
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	A _{st} (mm)	3691	3691	3721	3756	3877	3960	4055	4135	4156
	4.35	Turning radius	W _a (mm)	1900	1900	1900	1910	2050	2130	2230	2280	2286

X Series Lithium Battery Forklift Truck Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.																	
	1.2	Manufacturer's type designation		CPD10-XJ4-I CPD10-XJ2-I	CPD15-XJ4-I CPD15-XJ2-I	CPD18-XJ4-I CPD18-XJ2-I	CPD20-XXJ4-I CPD20-XXJ2-I	CPD20-XJ4-I CPD20-XJ2-I	CPD25-XJ4-I CPD25-XJ2-I	CPD25-XLJ4-I CPD25-XLJ2-I	CPD30-XJ4-I CPD30-XJ2-I	CPD35-XJ4-I CPD35-XJ2-I	CPD10-XC4-I CPD10-XD2-I	CPD15-XC4-I CPD15-XD2-I	CPD18-XC4-I CPD18-XD2-I	CPD20-XXC4-I CPD20-XXD2-I	CPD20-XC4-I CPD20-XD2-I	CPD25-XC4-I CPD25-XD2-I	CPD25-XLC4-I CPD25-XLD2-I	CPD30-XC4-I CPD30-XD2-I	CPD35-XC4-I CPD35-XD2-I
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	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	3500	1000	1500	1750	2000	2000	2500	2500	3000	3500
	1.6	Load centre distance	c (mm)	500	500	500	500	500	500	500	500	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	391	391	396	401	427	427	427	454	469
	1.9	Wheelbase	y (mm)	1410	1410	1410	1410	1520	1520	1660	1660	1660	1410	1410	1410	1410	1520	1520	1660	1660	1660
	Weight	2.1	Service Weight	kg	2380	2750	2970	3180	3430	3720	3850	4370	4970	2380	2750	2970	3180	3430	3720	3850	4370
2.2		Axle loading, laden front/rear	kg	2690/690	3720/530	4260/510	4580/600	4750/680	5450/770	5630/720	6555/815	7540/930	2690/690	3720/530	4260/510	4580/600	4750/680	5450/770	5630/720	6555/815	7540/930
2.3		Axle loading, unladen front/rear	kg	980/1400	1330/1420	1340/1630	1300/1880	1530/1900	1470/2250	1720/2130	1855/2515	1920/3050	980/1400	1330/1420	1340/1630	1300/1880	1530/1900	1470/2250	1720/2130	1855/2515	1920/3050
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Superelastic	Pneumatic	Pneumatic	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	23×9-10-18PR	23×9-10-18PR	23×10-12	6.00-9-10PR	6.00-9-10PR	21×8-9-16PR	21×8-9-16PR	23×9-10-18PR	23×9-10-18PR	23×9-10-18PR	23×9-10-18PR	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	18×7-8-14PR	200/50-10	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	18×7-8-14PR	200/50-10
	3.5	Wheels, number front / rear (x = driven wheels)		2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2
	3.6	Tread, front	b10(mm)	885	885	925	925	960/110#	960/110#	1010	1010	1012	885	885	925	925	960/110#	960/110#	1010	1010	1012
	3.7	Tread, rear	b11 (mm)	905.5	905.5	905.5	905.5	980	980	980	980	980	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	6/10	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	1992	1992	1992	1992	2011	2011	2011	2011	2161
4.3		Free lift	h2 (mm)	155	155	155	160	140	140	140	135	135	155	155	155	160	140	140	140	135	135
4.4		Lift	h3 (mm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	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	3955	3955	3955	3955	4046	4046	4046	4145	4145
4.6		Height of overhead guard	h6 (mm)	2070	2070	2070	2070	2160	2160	2160	2160	2160	2070	2070	2070	2070	2160	2160	2160	2160	2160
4.7		Height of overhead guard (cabin)	h6 (mm)	2150	2150	2150	2150	2240	2240	2240	2240	2240	2150	2150	2150	2150	2240	2240	2240	2240	2240
4.8		Seat height/stand height	h7 (mm)	1010	1010	1010	1010	1070	1070	1070	1070	1070	1010	1010	1010	1010	1070	1070	1070	1070	1070
4.12		Coupling height	h10 (mm)	289	289	289	289	311	311	311	311	311	289	289	289	289	311	311	311	311	311
4.19		Overall length	l1 (mm)	3000	3000	3064	3069	3390	3390	3530	3631	3667	3000	3000	3064	3069	3390	3390	3530	3631	3667
4.20		Length to face of forks	l2 (mm)	2080	2080	2144	2149	2320	2320	2460	2561	2597	2080	2080	2144	2149	2320	2320	2460	2561	2597
4.21		Overall width	b1(mm)	1060	1060	1125	1125	1185/1235#	1185/1235#	1235	1235	1260	1060	1060	1125	1125	1185/1235#	1185/1235#	1235	1235	1260
4.22		Fork dimensions	s/e/l (mm)	920×100×35	920×100×35	920×100×35	920×100×40	1070×122×40	1070×122×40	1070×125×40	1070×125×45	1070×125×50	920×100×35	920×100×35	920×100×35	920×100×40	1070×122×40	1070×122×40	1070×125×40	1070×125×45	1070×125×50
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	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	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	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	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	85	85	85	85	120	120	120	120	125
4.34.1		Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	3436	3436	3484	3489	3617	3682	3822	3884	3899	3436	3436	3484	3489	3617	3682	3822	3884	3899
4.34.2		Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	3636	3636	3684	3689	3817	3882	4022	4084	4099	3636	3636	3684	3689	3817	3882	4022	4084	4099
4.35		Turning radius	Wa (mm)	1845	1845	1888	1888	1990	2055	2195	2230	2230	1845	1845	1888	1888	1990	2055	2195	2230	2230
Performance data	5.1	Travel speed, laden/unladen	km/h	17/17.5(14/15)	16.5/17(14/15)	16.5/17(14/15)	14.5/16(14/15)	17/17.5(14/15)	17/17.5(14/15)	17/17.5(14/15)	17/17.5(14/15)	15/16(14/15)	17/17.5	16.5/17	16.5/17	14.5/16	17/17.5	17/17.5	17/17.5	17/17.5	15/16
	5.2	Lift speed, laden/unladen	m/s	450/650(420/550)	420/500(400/550)	370/650(360/550)	360/630(340/500)	380/600(380/500)	350/600(350/500)	370/550(370/500)	350/550(350/500)	330/500(330/500)	450/650	420/650	370/650	360/630	380/600	350/600	370/550	350/550	330/550
	5.3	Lowering speed, laden/unladen	m/s	450/500	420/500	450/500	450/500	450/500	450/500	450/500	470/470	470/470	450/500	420/500	450/500	450/500	450/500	450/500	450/5		

1.0~2.0t X Series Mast Specification

Type	Model	Lifting height	Lowered overall height	Overall height		Free lifting height		Tilting range		Load Capacity at 500 mm LC							
				With backrest	Without backrest	With backrest	Without backrest	FWD	BWD	Single Tire, Pneumatic Tire				Single Tire, Pneumatic-Shaped Cushion Tire			
				mm	mm	mm	mm	(°)	(°)	1.0t	1.5t	1.8t	2.0t	1.0t	1.5t	1.8t	2.0t
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	2000	1000	1500	1750	2000
	M350	3500	2242	4455	4048	155	155	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	M370	3700	2392	4655	4248	155	155	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	M400	4000	2592	4955	4548	155	155	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	M430	4300	2742	5255	4848	155	155	6	6	1000	1500	1700	1900	1000	1500	1750	1950
	M450	4500	2842	5455	5048	155	155	6	6	1000	1400	1600	1800	1000	1450	1650	1850
	M500	5000	3092	5955	5548	155	155	6	6	900/*1000	1200/*1400	1350/*1600	1500/*1700	1000	1250/*1400	1450/*1600	1550/*1700
	M550	5500	3342	6455	6048	155	155	3	6	850/*1000	1050/*1300	1150/*1500	1250/*1600	900/*1000	1100/*1300	1200/*1500	1500/*1600
	M600	6000	3592	6955	6548	155	155	3	6	750/*1000	800/*1150	850/*1400	900/*1400	800/*1150	850/*1400	950/*1400	
Duplex full-free lifting mast	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
	U330	3300	2142	4245	3860	1197	1582	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	U350	3500	2242	4445	4060	1297	1682	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	U370	3700	2342	4645	4260	1397	1782	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	U400	4000	2542	4945	4560	1597	1982	6	10	1000	1500	1750	2000	1000	1500	1750	2000
	U400	4000	1892	4955	4572	947	1330	6	6	1000	1500	1650	1900	1000	1500	1650	1950
Triplex full-free lifting mast	N430	4300	1992	5255	4872	1047	1430	6	6	1000	1400	1600	1800	1000	1450	1650	1850
	N450	4500	2042	5455	5072	1097	1480	6	6	1000	1400	1500	1700	1000	1400	1600	1750
	N470	4700	2112	5645	5262	1167	1550	6	6	1000	1350	1550	1600	1000	1350	1550	1650
	N480	4800	2142	5755	5372	1197	1580	6	6	1000	1300	1500	1550	1000	1350	1550	1600
	N500	5000	2242	5955	5572	1297	1680	6	6	900	1200	1250	1400	1000	1300	1450	1500
	N550	5500	2412	6455	6062	1467	1850	3	6	800/*1000	1000/*1250	1050/*1400	1100/*1600	900/*1000	1250	1400	1450/*1600
	N600	6000	2612	6945	6562	1667	2050	3	6	650/*1000	750/*1100	750/*1300	850/*1400	700/*1000	1100/*1100	1150/*1300	1200/*1400
	N650	6500	2867	7455	7072	1922	2305	3	6	550/*1000	600/*1050	650/*1100	750/*1200	600/*1000	800/*1050	1000/*1100	1100/*1200
	N700	7000	3042	7955	7572	2097	2480	3	6	/*900	/*950	/*950	/*1000	/*900	/*950	/*950	/*1000

* refers to rated capacity with dual front tires.

2.0~2.5t X Series Mast Specification

Type	Model	Lifting height	Lowered overall height	Overall height		Free lifting height		Tilting range		Load Capacity at 500 mm LC					
				With backrest	Without backrest	With backrest	Without backrest	FWD	BWD	Single Tire, Pneumatic Tire			Single Tire, Pneumatic-Shaped Cushion Tire		
				mm	mm	mm	mm	(°)	(°)	2.0t	2.5t	2.5t L	2.0t	2.5t	2.5t L
Duplex wide view mast	M250	2500	1761	3546	3143	140	140	6	6	2000	2500	2500	2000	2500	2500
	M270	2700	1861	3746	3343	140	140	6	6	2000	2500	2500	2000	2500	2500
	M300	3000	2011	4046	3643	140	140	6	10	2000	2500	2500	2000	2500	2500
	M330	3300	2161	4346	3943	140	140	6	10	2000	2500	2500	2000	2500	2500
	M350	3500	2261	4546	4143	140	140	6	10	2000	2500	2500	2000	2500	2500
	M370	3700	2411	4746	4343	140	140	6	10	2000	2500	2500	2000	2500	2500
	M400	4000	2611	5046	4643	140	140	6	10	2000	2500	2500	2000	2500	2500
	M430	4300	2761	5346	4943	140	140	6	6	1900	2400	2450	2000	2450	2450
	M450	4500	2861	5546	5143	140	140	6	6	1850	2300	2350	1950	2350	2400
	M500	5000	3111	6046	5643	140	140	6	6	1650/*1800	1800/*2100	1950/*2100	1800	1850/*2100	2000/*2100
	M550	5500	3361	6546	6143	140	140	3	6	1350/*1700	1550/*1950	1700/*1950	1400/*1700	1600/*1950	1750/*1950
	M600	6000	3611	7046	6643	140	140	3	6	900/*1500	1100/*1800	1400/*1800	950/*1500	1150/*1800	1450/*1800
Duplex full-free lifting mast	U250	2500	1761	3546	3163	715	1098	6	6	2000	2500	2500	2000	2500	2500
	U270	2700	1861	3746	3363	815	1198	6	6	2000	2500	2500	2000	2500	2500
	U300	3000	2011	4046	3663	965	1348	6	10	2000	2500	2500	2000	2500	2500
	U330	3300	2161	4346	3963	1115	1498	6	10	2000	2500	2500	2000	2500	2500
	U350	3500	2261	4546	4163	1215	1598	6	10	2000	2500	2500	2000	2500	2500
	U370	3700	2361	4746	4363	1315	1698	6	10	2000	2500	2500	2000	2500	2500
	U400	4000	2561	5046	4663	1515	1898	6	10	2000	2500	2500	2000	2500	2500
	U400	4000	1911	5046	4663	865	1248	6	6	1950	2400	2500	2000	2400	2500
Triplex full-free lifting mast	N430	4300	2011	5346	4963	965	1348	6	6	1900	2300	2500	2000	2400	2400
	N450	4500	2061	5546	5163	1015	1398	6	6	1850	2150	2300	1950	2300	2400
	N470	4700	2136	5746	5363	1090	1473	6	6	1800	2000	2100	1900	2200	2300
	N480	4800	2161	5846	5463	1115	1498	6	6	1750	2050	2050	1800	2100	2150
	N500	5000	2236	6046	5663	1190	1573	6	6	1550	1750	2000	1700	1850	2100
	N550	5500	2411	6546	6163	1365	1748	3	6	1200/*1650	1500/*1950	1650/*2000	1400/*1650	1550/*1950	1700/*2000
	N600	6000	2611	7046	6663	1565	1948	3	6	900/*1500	1050/*1800	1250/*1800	950/*1500	1100/*1800	1300/*1800
	N650	6500	2861	7546	7163	1815	2198	3	6	650/*1400	800/*1600	900/*1600	700/*1400	800/*1600	1000/*1600
	N700	7000	3061	8046	7663	2015	2398	3	6	/*1100	/*1200	/*1400	/*1100	/*1200	/*1400

* refers to rated capacity with dual front tires.

3.0~3.5t X Series Mast Specification

Type	Model	Lifting height	Lowered overall height		Overall height				Free lifting height				Tilting range		Load Capacity at 500 mm LC					
					With backrest		Without backrest		With backrest		Without backrest		FWD	BWD	Single Tire, Pneumatic Tire		Single Tire, Pneumatic-Shaped Cushion Tire			
			3.0t	3.5t	3.0t	3.5t	3.0t	3.5t	3.0t	3.5t	3.0t	3.5t	3.0t	3.5t	/	/	3.0t	3.5t	3.0t	3.5t
			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg	kg
Duplex wide view mast	M250	2500	1767	1917	3645	3645	3177	3277	135	140	135	140	6	6	3000	/	3000	3500		
	M270	2700	1867	2017	3845	3845	3377	3477	135	140	135	140	6	6	3000	/	3000	3500		
	M300	3000	2017	2167	4145	4145	3687	3777	135	140	135	140	6	10	3000	/	3000	3500		
	M330	3300	2167	2317	4445	4445	3977	4077	135	140	135	140	6	10	3000	/	3000	3500		
	M350	3500	2267	2417	4645	4645	4177	4277	135	140	135	140	6	10	3000	/	3000	3500		
	M370	3700	2417	2517	4845	4845	4377	4477	135	140	135	140	6	10	3000	/	3000	3500		
	M400	4000	2617	2767	5145	5145	4677	4777	135	140	135	140	6	10	2950	/	3000	3500		
	M430	4300	2767	2917	5445	5445	4977	5077	135	140	135	140	6	6	2850	/	3000	3400		
	M450	4500	2867	3017	5645	5645	5177	5277	135	140	135	140	6	6	2750	/	3000	3400		
	M500	5000	3117	3267	6145	6145	5677	5777	135	140	135	140	6	6	2400/*2650	/	2900	3100		
Duplex full-free lifting mast	M550	5500	3367	3517	6645	6645	6177	6277	135	140	135	140	3	6	2000/*2450	/	2500	2800		
	M600	6000	3617	3767	7145	7145	6677	6777	135	140	135	140	3	6	1650/*2200	/	1800/*2200	2000/*2400		
	U250	2500	1817	1932	3645	3645	3226	3316	672	787	1091	1116	6	6	3000	/	3000	3500		
	U270	2700	1917	2032	3845	3845	3426	3516	772	887	1191	1216	6	6	3000	/	3000	3500		
	U300	3000	2067	2182	4145	4145	3726	3816	922	1037	1341	1366	6	10	3000	/	3000	3500		
	U330	3300	2217	2332	4445	4445	4026	4116	1072	1187	1491	1516	6	10	3000	/	3000	3500		
	U350	3500	2317	2432	4645	4645	4226	4316	1172	1287	1591	1666	6	10	3000	/	3000	3500		
	U370	3700	2417	2532	4845	4845	4426	4516	1272	1387	1691	1916	6	10	3000	/	3000	3500		
	U400	4000	2617	2732	5145	5145	4726	4816	1472	1587	1891	1916	6	10	3000	/	3000	3500		
	U430	4300	2817	2932	5445	5445	5026	5116	1672	1787	2091	2116	6	6	2900	/	3000	3400		
Triplex full-free lifting mast	N400	4000	2017	2067	5145	5145	4726	4818	872	922	1291	1251	6	6	2900	/	3000	3400		
	N430	4300	2067	2167	5445	5445	5026	5118	922	1022	1341	1351	6	6	2800	/	3000	3300		
	N450	4500	2167	2217	5645	5645	5226	5318	1022	1072	1441	1401	6	6	2700	/	3000	3200		
	N470	4700	2267	2317	5845	5845	5426	5518	1122	1172	1541	1501	6	6	2650	/	3000	3100		
	N480	4800	2317	2367	5945	5945	5526	5618	1172	1222	1591	1551	6	6	2600	/	2900	3000		
	N500	5000	2417	2467	6145	6145	5726	5818	1272	1322	1691	1651	6	6	2350/*2600	/	2800	2800		
	N550	5500	2617	2667	6645	6645	6226	6318	1472	1522	1891	1851	3	6	1900/*2450	/	2250/*2450	2400/*2800		
	N600	6000	2867	2917	7145	7145	6726	6818	1722	1772	2141	2101	3	6	1550/*2200	/	1700/*2200	1900/*2400		
	N650	6500	3017	3167	7645	7645	7226	7318	1872	2022	2291	2351	3	6	1200/*1900	/	1250/*1900	1450/*2000		
	N700	7000	3217	3417	8145	8145	7726	7917	2072	2272	2491	2500	3	6	/*1550	/	/*1550	/*1650		