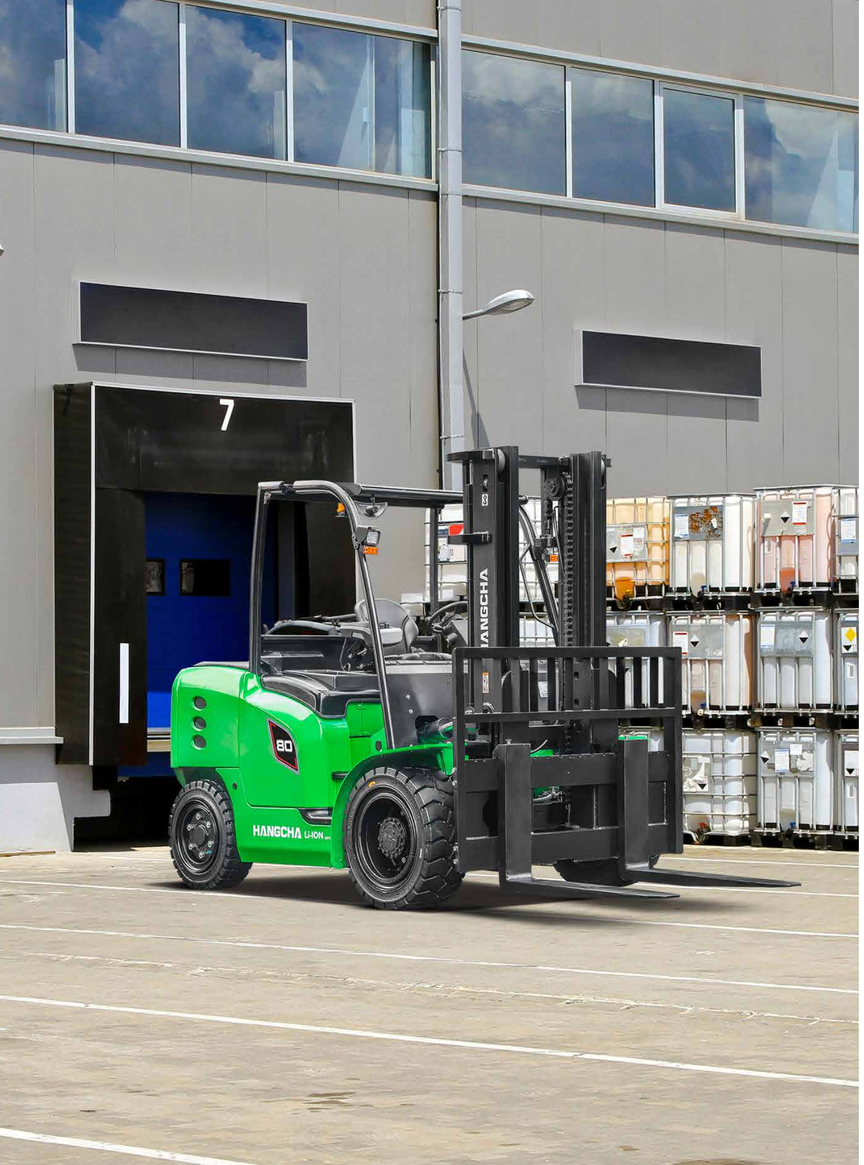


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ISO14001
ISO14001:2015

ISO9001
ISO9001:2015

HANGCHA trucks conform to the European Safety Requirements.

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X Series Electric Forklift Truck

with capacities of 6,000 to 10,000kg

The World of Hangcha

HANGCHA

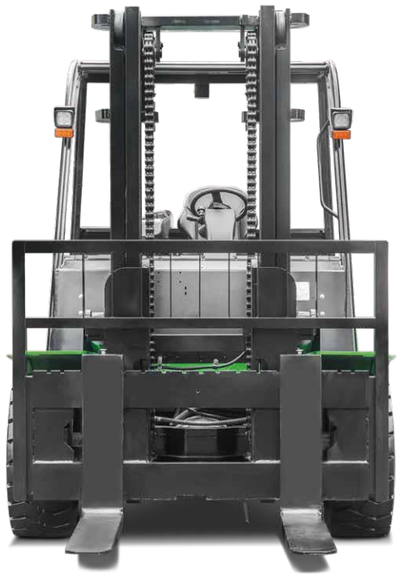


Exterior

/ A new exterior design method is used to form a stylish and elegant exterior with streamlined curved surfaces and smooth ethereal lines.
/ The vehicle is compact, simple and sturdy in appearance.
/ A fully enclosed console space.

Stability

/ Small-diameter solid tires, front and rear battery sets and other technologies are used to enable excellent stability of the vehicle.



Comfort

/ The inclination angle of the ergonomically designed hand wheel is adjustable and the seat can be adjusted 150mm forwards and backwards, so that the operator can choose the best driving position.
/ Two independent hydraulic systems for steering braking and hydraulic lifting respectively are used to ensure the steering braking performance and the combined operations to be carried out.
/ The dashboard, tilt cylinder and flat bottom panel are designed to be fully enclosed to enable more comfortable and safer operations.
/ The multifunctional color-screen instruments have clear human-computer interfaces displaying clear readings.
/ Personalized design: overlarge storage bin, USB port, etc.

Safety

/ The optimized design of the wide-view mast, wide-view overhead guard and low dashboard enables a broader view of the operator and higher safety.
/ The LED headlights and combination lights enable the operator to have a good view in various circumstances.
/ The all-round vision rearview mirror provides a broader rear view and higher driving safety.
/ The intelligent sensing enables buffered descending. When the fork is 100 - 60mm away from the ground, the descending will automatically slow down, so that the goods and pallet will not hit the ground and the goods and ground can be protected effectively.
/ The electronic and hydraulic overload protection devices comply with safety regulations.
/ An optional OPS safety system is provided.

Maintainability

/ The fully open front and rear battery lids easily facilitate battery maintenance.
/ The innovative two-door structure with one door, respectively, on the left and right sides of the forklift easily facilitates the maintenance of the motor, oil pump and electric control of the forklift and enables good resistance to dust and water.
/ The foot panel can be dismounted without a tool and facilitates the overhaul and maintenance of the driving motor and various systems.
/ The brake fluid can be added after the shroud cap and the oil tank cap are opened.
/ An optional laterally-dismounted battery is provided to enable quick replacement of the battery.













Advancement

/ The high-frequency MOSFET integrated controller ensures smooth and accurate driving and lifting control, and has excellent speed regulation performance, good performance of electronic control matching the motor, functions of regenerative braking, reverse braking and anti-sliding on ramps, etc. and high safety and reliability.
/ The branded multifunctional color-screen instruments have the functions of battery display, timer and fault diagnosis and can accurately display information under harsh environments.
/ The branded AC controller enables the forklift's driving, steering, lifting, tilting and other actions to be controlled by a computer.
/ Regenerative braking (when stopping, slowing down, reversing or driving down a ramp, etc., being energy-saving and efficient, the forklift can have its drive motor working as a power generator to charge the battery through the controller.)
/ The main electrical components such as the motor controller, contactor, power plug and emergency cut-off switch are all branded high-quality products.

High speed, high efficiency

/ With several speed gears, the vehicle is adapted to different operating environments.
/ With a high-power driving motor and a high speed ratio gearbox, an 8t vehicle, for example, can have its maximum full-load driving speed increased to 14.5km/h and maximum full-load upslope degree increased by up to 14%.
/ A high-power oil pump motor and a large-displacement silent pump are used to significantly improve the lifting speed. An 8t vehicle, for example, can have its maximum full-load lifting speed increased to 300mm/s.
/ A new compact design concept is adopted to reduce the width of the vehicle.
/ Light weight and low driving power consumption. The brake kinetic energy regeneration system effectively saves on electric power and improves the use time after a single charge.



Battery Specification

Battery	Capacity (Ah/5h)	6t	7t	8t	8t Long wheelbase	9t	10t
Lead-acid	720	●					
	810	○	●				
	945	○	○	●	●		
	1035		○	○			
	1104				○	●	
	1260				○	○	●
	1380				○	○	○
Lithium	542	●	●	●			
	606	○	○	○	●	●	●
	813	○	○	○	○	○	○

Note: ● Battery Std; ○ Battery Opt;

Options

/ Seamless solid tire
/ Triple and quadruple multiway valves
/ Alarm light
/ Rear LED operation light
/ Blue light
/ Rear reversing armrest horn button
/ Large-capacity battery
/ PVC ceiling
/ Battery charger
/ Chair sensing system
/ Electro-hydraulic proportional valve, thumb switch
/ Video monitoring system
/ Fully-suspended seat
/ Fully enclosed cab
/ Left and right rear view mirrors
/ Free duplex mast
/ Free triplex mast
/ Forks of other lengths
/ Heightened or widened fork carriage
/ Other attachments
/ Double front wheels
/ Battery removed sideways

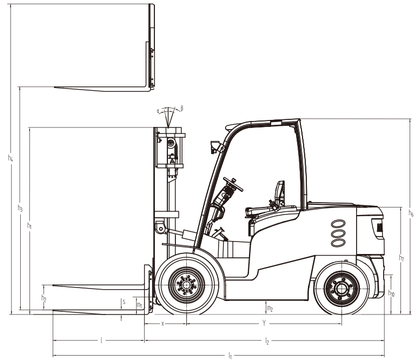
Standard specification

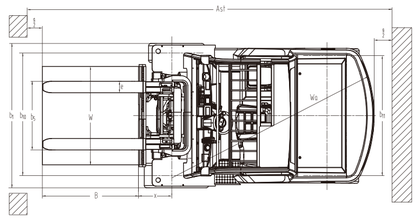
/ AC electric control motor
/ Emergency power off switch
/ Multifunctional color-screen instruments
/ Super-elastic solid tire
/ Two-way multi-way valve
/ Rubber pedal pads of all sizes
/ 3 m duplex wide-field-of-view mast
/ Vehicle LED lights
/ Panoramic rear view mirror
/ Fully hydraulic power steering
/ Angle-adjustable steering column
/ Horn, reversing buzzer
/ Large tool box, folder
/ Intelligent descending buffering device
/ Traction pin
/ Silent gear pump



X Series 6.0-10t Electric Forklift Specification

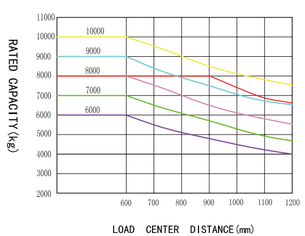
Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.												
	1.2	Manufacturer's type designation		CPD60-XC4	CPD70-XC4	CPD80-XC4	CPD80-XLC4	CPD90-XC4	CPD100-XC4	CPD60-XC4-I	CPD70-XC4-I	CPD80-XC4-I	CPD80-XLC4-I	CPD90-XC4-I	CPD100-XC4-I
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	Electric	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	Seated	Seated	Seated	Seated
	1.5	Rated capacity/rated load	Q (kg)	6000	7000	8000	8000	9000	10000	6000	7000	8000	8000	9000	10000
	1.6	Load centre distance	c (mm)	600	600	600	900	600	600	600	600	600	900	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	598.5	603.5	623.5	640	630	640	598.5	603.5	623.5	640	630	640
	1.9	Wheelbase	y (mm)	2030	2030	2030	2500	2500	2500	2030	2030	2030	2500	2500	2500
Weight	2.1	Service Weight	kg	9600	10280	12180	13530	12960	13780	9030	9400	11230	12480	11750	13180
	2.2	Axle loading, laden front/rear	kg	13600/2000	15180/2100	17710/2470	19130/2400	19560/2400	21230/2550	13190/1840	14550/1850	17270/1970	18080/2400	18620/2130	20630/2550
	2.3	Axle loading, unladen front/rear	kg	4000/5600	3950/6300	4890/7290	6030/7500	5910/7050	6080/7700	3650/5380	3400/6000	4450/6780	4980/7500	4980/6770	5480/7700
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
	3.2	Tyre size, front		355/65-15	355/65-15	355/50-20	8.25-15	8.25-15	300-15	355/65-15	355/65-15	355/50-20	8.25-15	8.25-15	300-15
	3.3	Tyre size, rear		250-15	250-15	250-15	250-15	250-15	250-15	250-15	250-15	250-15	250-15	250-15	250-15
	3.5	Wheels, number front / rear (x = driven wheels)		2x/2	2x/2	2x/2	4x/2	4x/2	4x/2	2x/2	2x/2	2x/2	4x/2	4x/2	4x/2
	3.6	Tread, front	b_{10} (mm)	1574	1574	1623	1489	1489	1493	1574	1574	1623	1489	1489	1493
	3.7	Tread, rear	b_{11} (mm)	1536.5	1536.5	1536.5	1536.5	1536.5	1536.5	1536.5	1536.5	1536.5	1536.5	1536.5	1536.5
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	5/10	5/10	5/10	5/10	5/10	5/10	5/10	5/10	5/10	5/10	5/10	5/10
	4.2	Height, mast lowered	h_1 (mm)	2500	2500	2650	2700	2700	2700	2500	2500	2650	2700	2700	2700
	4.3	Free lift	h_2 (mm)	160	160	175	200	190	200	160	160	175	200	190	200
	4.4	Lift	h_3 (mm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	4.5	Height, mast extended	h_4 (mm)	4407	4407	4407	4530	4530	4530	4407	4407	4407	4530	4530	4530
	4.7	Height of overhead guard (cabin)	h_6 (mm)	2565	2565	2565	2565	2565	2565	2565	2565	2565	2565	2565	2565
	4.8	Seat height/stand height	h_7 (mm)	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430
	4.12	Coupling height	h_{10} (mm)	423	423	423	423	423	423	423	423	423	423	423	423
	4.19	Overall length	l_1 (mm)	4395	4400	4420	5505	4895	4905	4395	4400	4420	5505	4895	4905
	4.20	Length to face of forks	l_2 (mm)	3195	3200	3220	3705	3695	3705	3195	3200	3220	3705	3695	3705
	4.21	Overall width	b_1 (mm)	1870	1870	1945	1970	1970	2040	1870	1870	1945	1970	1970	2040
	4.22	Fork dimensions	s/e/l (mm)	60/150/1200	65/150/1200	65/200/1200	80/200/1800	70/200/1200	80/170/1200	60/150/1200	65/150/1200	65/200/1200	80/200/1800	70/200/1200	80/170/1200
	4.23	Fork carriage DIN 15 173 --- ISO 2328, class/type A,B		ISO 2328 4A	ISO 2328 4A	ISO 2328 4A	ISO 2328 4A	ISO 2328 4A	ISO 2328 5A	ISO 2328 5A	ISO 2328 4A	ISO 2328 4A	ISO 2328 4A	ISO 2328 4A	ISO 2328 5A	ISO 2328 5A
	4.24	Fork-carriage width	b_3 (mm)	1700	1700	1700	1800	1800	1800	1700	1700	1700	1800	1800	1800
	4.25	Distance between fork-arms	b_5 (mm)	300-1700	300-1700	300-1700	400-1800	400-1800	340-1800	300-1700	300-1700	300-1700	400-1800	400-1800	340-1800
	4.31	Ground clearance, laden, below mast	m_1 (mm)	200	200	200	200	200	200	200	200	200	200	200	200
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	183	183	183	183	183	183	183	183	183	183	183	183
	4.34.1	Aisle width for pallets 1000 x 1220 crossways	A_{st} (mm)	4848.5	4853.5	4873.5	5190	5180	5190	4848.5	4853.5	4873.5	5190	5180	5190
	4.34.2	Aisle width for pallets 1200 x 1000 lengthways	A_{st} (mm)	5048.5	5053.5	5073.5	5390	5380	5390	5048.5	5053.5	5073.5	5390	5380	5390
	4.35	Turning radius	W_a (mm)	3050	3050	3050	3350	3350	3350	3050	3050	3050	3350	3350	3350
Performance data	5.1	Travel speed, laden/unladen	km/h	15/15.5	15/15.5	14.5/15.5	14.5/15.5	13.5/15.5	13.5/15.5	15/15.5	15/15.5	14.5/15.5	14.5/15.5	13.5/15.5	13.5/15.5
	5.2	Lift speed, laden/unladen	m/s	0.34/0.39	0.32/0.39	0.3/0.39	0.3/0.44	0.28/0.4	0.25/0.4	0.34/0.39	0.32/0.39	0.3/0.39	0.3/0.44	0.28/0.4	0.25/0.4
	5.3	Lowering speed, laden/unladen	m/s	0.45/0.4	0.5/0.34	0.545/0.345	0.545/0.345	0.545/0.345	0.545/0.345	0.45/0.4	0.5/0.34	0.545/0.345	0.545/0.345	0.545/0.345	0.545/0.345
	5.6	Max. Drawbar pull	N	36000	36000	36000	36000	36000	36000	36000	36000	36000	36000	36000	36000
	5.8	Max. gradeability, laden	%	16	15	14	13	12	12	16	15	14	13	12	12
	5.10	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
		Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Electric-engine	6.1	Drive motor rating S2 60 min	kW	35	35	35	35	35	35	35	35	35	35	35	35
	6.2	Lift motor rating at S3 15%	kW	40	40	40	52	52	52	40	40	40	52	52	52
	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
	6.4	Battery voltage, nominal capacity K5	V/Ah	96/720	96/810	96/945	96/945	96/1104	96/1260	96/542	96/542	96/542	96/606	96/606	96/606
	6.5	Battery weight	kg	2310	2510	2820	2880	3430	3880	580	580	580	638	638	638
		Battery dimensions	l/b/h(mm)	1420×610×570	1420×610×570	1420×610×570	1420×825×570	1420×825×570	1420×825×570	1420×610×580	1420×610×580	1420×610×580	1500×610×625	1500×610×625	1500×610×625
		Max. battery weight	kg	2970	3500	3500	4720	4720	4720	780	780	780	780	780	780
		Min. battery weight	kg	2310	2510	2820	2880	3430	3880	580	580	580	638	638	638
	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
	9.1	Manufacturer/Type		CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS	CURTIS
Addition data	10.1	Operating pressure for attachments	bar	190	190	190	190	190	190	190	190	190	190	190	190
	10.2	Oil volume for attachments	l/min	120	120	120	120	180	180	120	120	120	120	180	180
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	98	98	98	153	153	153	98	98	98	153	153	153
	10.8	Towing coupling, type DIN 15170		Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin	Φ40 Pin





A_{st}=B_{st}+W_a+s B_{st} Length of load or forks which is longer s=200mm safety clearance

RATED CAPACITY AND LOAD DIAGRAM



Mast Specification

Type	Max. fork height	Lowered	Overall height		Free lift		Tilt range		Capacity
			With backrest	Without backrest	With backrest	Without backrest	F	R	load capacity at 600mm
									6t / 7t
	mm	mm	mm	mm	mm	mm	(°)	(°)	kg / kg
STD ,Duplex	2500	2250	3907	3495/3667	160	160	5	10	6000 / 7000
	2700	2350	4107	3695/3867	160	160	5	10	6000 / 7000
	3000	2500	4407	3995/4167	160	160	5	10	6000 / 7000
	3300	2650	4707	4295/4467	160	160	5	10	6000 / 7000
	3600	2800	5007	4595/4767	160	160	5	10	6000 / 7000
	4000	3000	5407	4995/5167	160	160	5	10	6000 / 7000
	4300	3200	5707	5300/5467	160	160	5	8	6000 / 7000
	4500	3300	5907	5500/5667	160	160	5	8	6000 / 7000
	4800	3450	6207	5800/5967	160	160	5	8	5800 / 6700
	5000	3550	6407	6000/6167	160	160	5	8	5700 / 6500
	5500	3850	6907	6550/6667	160	160	5	8	5400 / 6200
	6000	4100	7407	7050/7167	160	160	5	8	5000 / 5900
Full Free Lift	2500	2185	3637	3455/3615	1048	1230/1070	5	10	6000 / 7000
	2700	2300	3837	3655/3815	1163	1345/1185	5	10	6000 / 7000
	3000	2450	4137	3955/4115	1313	1495/1335	5	10	6000 / 7000
	3300	2600	4437	4255/4415	1463	1645/1485	5	10	6000 / 7000
	3600	2750	4737	4555/4715	1613	1795/1635	5	10	5800 / 6800
	4000	2950	5137	4955/5115	1813	1995/1835	5	10	5800 / 6800
Triplex	4500	2725	5907	5735	1328	1500	5	8	5700 / 6700
	4800	2825	6207	6035	1428	1600	5	8	5600 / 6600
	5000	2875	6407	6213	1478	1672	5	8	5500 / 6400
	5500	3075	6907	6785	1678	1800	5	8	5300 / 6200
	6000	3225	7407	7235	1828	2000	5	8	5200 / 5800

Mast Specification

Type	Max. fork height	Lowered	Overall height		Free lift		Tilt range		Capacity		
			With backrest	Without backrest	With backrest	Without backrest	F	R	load capacity at 600mm	load capacity at 900mm	
									9t	10t	8t
	mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg	kg
STD ,Duplex	2500	2450	4030	3900	190/200/200	190/200/200	5	8	9000	10000	8000
	2700	2550	4230	4100	190/200/200	190/200/200	5	8	9000	10000	8000
	3000	2700	4530	4400	190/200/200	190/200/200	5	10	9000	10000	8000
	3300	2850	4830	4700	190/200/200	190/200/200	5	10	9000	10000	8000
	3600	3000	5130	5000	190/200/200	190/200/200	5	10	9000	10000	8000
	4000	3200	5530	5400	190/200/200	190/200/200	5	10	9000	10000	8000
	4300	3400	5830	5700	190/200/200	190/200/200	5	8	9000	10000	8000
	4500	3500	6030	5900	190/200/200	190/200/200	5	8	8500	9500	7800
	4800	3650	6330	6200	190/200/200	190/200/200	5	8	8400	9400	7600
	5000	3750	6530	6440	190/200/200	190/200/200	5	8	8300	9300	7400
	5500	4050	7030	6900	190/200/200	190/200/200	5	8	8100	9100	7200
	6000	4300	7530	7400	190/200/200	190/200/200	5	8	7700	8700	6900
Full Free Lift	3000	2700	4530	4400	1180	1310	5	10	9000	10000	8000
	3300	2850	4830	4700	1330	1460	5	10	9000	10000	8000
	3600	3000	5130	5000	1480	1610	5	10	8900	9900	8000
	4000	3200	5530	5400	1680	1810	5	10	8700	9700	7800
Triplex	4500	2850	6055	6055	1305	1305	5	8	8600	9600	7600
	4800	2950	6355	6355	1405	1405	5	8	8200	9200	7500
	5000	3050	6555	6555	1505	1505	5	8	8000	9000	7400
	5500	3200	7055	7055	1655	1655	5	8	7900	8900	7200
	6000	3350	7555	7555	1805	1805	5	8	7500	8500	6800

Mast Specification

Type	Max. fork height	Lowered	Overall height		Free lift		Tilt range		Capacity
			With backrest	Without backrest	With backrest	Without backrest	F	R	load capacity at 600mm
									8t
	mm	mm	mm	mm	mm	mm	(°)	(°)	kg
STD ,Duplex	2500	2400	3907	3817	175	175	5	10	8000
	2700	2500	4107	4017	175	175	5	10	8000
	3000	2650	4407	4317	175	175	5	10	8000
	3300	2800	4707	4617	175	175	5	10	8000
	3600	3000	5007	4917	175	175	5	10	8000
	4000	3200	5407	5317	175	175	5	10	8000
	4300	3300	5707	5617	175	175	5	8	8000
	4500	3450	5907	5817	175	175	5	8	8000
	4800	3550	6207	6117	175	175	5	8	7700
	5000	3850	6407	6317	175	175	5	8	7500
	5500	4100	6907	6817	175	175	5	8	7200
	6000	4350	7407	7317	175	175	5	8	6900
Full Free Lift	3000	2600	4265	4265	1335	1335	5	10	8000
	3300	2750	4565	4565	1485	1485	5	10	8000
	3600	2900	4865	4865	1635	1635	5	10	7800
	4000	3100	5265	5265	1835	1835	5	10	7800
Triplex	4500	2725	5907	5862	1328	1373	5	8	7600
	4800	2825	6207	6162	1428	1473	5	8	7500
	5000	2875	6407	6362	1478	1523	5	8	7400
	5500	3075	6907	6862	1678	1723	5	8	7200
	6000	3225	7407	7362	1828	1873	5	8	6800

Note:With load backrest:6-9t Height of standard load backrest is 1270 mm,10t Height of standard load backrest is 1420 mm.