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ISO45001:2018

ISO14001:2015

ISO9001:2015

HANGCHA trucks conform to the European Safety Requirements.

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LI-ION TECHNOLOGY

INNOVATIVE LITHIUM-ION

XH SERIES HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

with capacity of 4,000 to 5,000kg



The World of Hangcha

HANGCHA

XH SERIES HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

Independently developed by Hangcha on the basis of decades of deep understanding of electric forklifts and internal combustion forklifts, the dedicated XC series heavy-duty lithium battery forklifts are a new series of electric counterweight forklifts with a new energy vehicle voltage platform and a pioneered special structure that represents a breakthrough over the traditional design concept. Representing a redefinition of electric forklifts in terms of efficiency, power, reliability, etc., this series of electric forklift models will supersede the internal combustion forklifts.

THE *Plus* FOR YOUR BUSINESS

VOLTAGE
309 V

SPEED MODELS
3

WATER RESISTANCE
IPX4

PROTECTION RATE
IP67

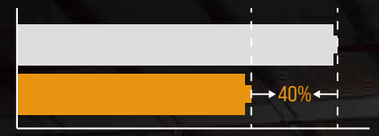
Exterior

/ With the inherited exterior design of the dedicated XC lithium battery forklift and a smooth and sturdy profile, the whole vehicle is impact, elegant, stylish, sturdy and powerful.

FASTER & MORE EFFICIENCY.

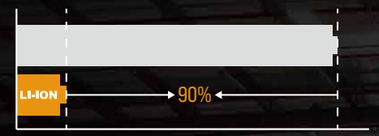
Compared with low-voltage lithium battery forklifts, high-voltage lithium battery technology can save about 40% of the overall cost during the service cycle.

40%



Compared with fuel forklifts, high-voltage lithium battery technology can save about 90% of the overall cost during the service cycle.

90%



LI-ION TECHNOLOGY | 6 YEARS WARRANTY

HANGCHA provides Li-ion battery (LiFePO4) with 6 years or 12000 hours warranty.

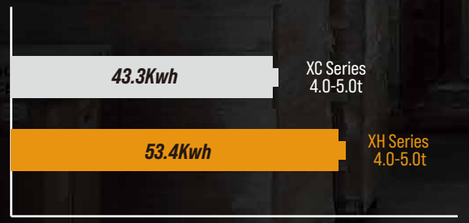
POWER PERFORMANCE COMPARISON

	High Voltage Lithium Electric Forklift	Fuel Forklift
Travel speed, laden/unladen	24/25km/h	20-23km/h
Lift speed, laden/unladen	480/560mm/s	380/410mm/s
Max. gradeability, S2=5min, laden/unladen	25/23%	15%-20%

Through disruptive battery and fast charging technology, the charging time is greatly shortened.

Fast charging makes it possible for the whole vehicle to work continuously, shortening the waiting time and greatly improving efficiency.

Battery capacity



HIGH VOLTAGE LITHIUM ION

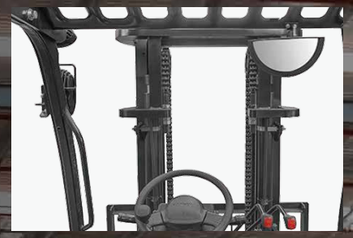
EXCELLENT ERGONOMIC DESIGN

Comfort

/ The enlarged brake pedal and appropriate regenerative braking function can effectively reduce the driver's fatigue.



The multifunctional color-screen instruments are designed to have graphical interfaces and display data clearly. Three speed gears are provided to adapt to different operating environments. The interfaces can be switched to be shown in Chinese and English to meet the needs of customers at home and abroad.



The wide-view mast with optimized design is unlikely to obstruct the operator's line of sight. The enlarged opening size of the fork carriage enables a wider view, a large operation space, and excellent ergonomic design.



COMMITTED TO IMPROVING

Advancement

/ Both the drive and operating systems are vehicle-grade permanent magnet synchronization systems, equipped with a high-speed ratio gearbox with a driving speed, upslope degree and acceleration performance rival that of internal combustion vehicles, and the environmental performance better than that of internal combustion vehicles.
/ The vehicle uses an overall controller, and the drive system and operating system are assembled with motors electronically controlled, to form a highly independent light, efficient, and intelligent drive system.
/ The vehicle's 309V high-voltage platform is equipped with a long-lasting large-capacity lithium battery, which is powerful, efficient and energy-saving, adopts a super-fast charging technology that enables a short charging time.
/ A water-cooling system with a good heat dissipation effect is used on a new energy forklift for the first time, so that the forklift can absolutely carry out long-time and high-intensity operations as internal combustion forklifts.









Safety

/ The cover of the vehicle is designed to be sealed to the water resistance level of IPX4. All the motor, electronic controls and high-voltage components reach the dust and water resistance level of IP67, a high protection level adequate to withstand harsh operating environments and ensure safety and reliability.
/ The electrical system is equipped with high-voltage interlocks, and insulation detection, insulation monitoring and vehicle-grade safety means. The MSD maintenance switch enables one-click power-down and safer maintenance.
/ The standard configuration provides electronic control functions for buffering the fork's descending and ascending to better protect goods.
/ The optional descending lock function can disable the descending function when the driver leaves the seat and enable high safety.
/ The handbrake can be optionally equipped with an alarm buzzer to prompt the driver to pull up the handbrake before leaving the vehicle.

Maintainability

/ Equipped with a lock, the hood designed to be back-flipped open to and facilitate charging, liquid replenishment and maintenance.
/ The water tank lid can be removed quickly and easily without a tool to enable a large operating area for cleaning and maintenance.



Standard Specification

/ Multi-function color-screen combination instrument
/ Large integral rubber pedal pads
/ LED combination headlights, LED rear combination three-color taillights
/ Standard duplex mast, fork, fork carriage and load backrest
/ Stamped iron hood, stamped iron side plates
/ Stamped stainless steel boarding step
/ The gas spring of the hood with a touch-proof mechanism
/ Handbrake with a touch-proof mechanism
/ Integrated fuse box
/ Charging muzzle meeting national standards
/ Reverse buzzer
/ Lithium battery pack
/ Lithium battery pack with low temperature electric heating systems
/ Maintenance-free 12V lead-acid battery
/ Two-in-one permanent magnet AC traction motor controller
/ Two-in-one permanent magnet AC oil pump motor controller
/ Two-in-one DC-DC power supply
/ VCU controller
/ MSD maintenance switch
/ Emergency power off switch
/ Mileage display, operating time display
/ Load sensing steering system
/ Turning deceleration function
/ Fork descending buffering
/ SPE power selection
/ Electronic water pump
/ Electronic fan
/ Heat dissipater
/ Expansion tank
/ Double multi-way valve
/ Silent gear pump
/ Traction pin

Optional battery list

Capacity(Ah)	4.0-5.0t 309V
173	●
228	○

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

Options

/ Solid tire
/ Left and right rear-view mirrors
/ Reversing video
/ Front/rear blue lights
/ Rear operation lights
/ Dedicated lithium battery charger
/ Cold storage vehicle
/ Reverse armrest (with a horn button)
/ OPS seat sensing function
/ Triple multi-way valve
/ Quadruple multi-way valve
/ Quintuple multi-way valve
/ Widened / heightened load backrest
/ Widened fork carriage
/ Forks of other lengths
/ Free duplex mast
/ Free triplex mast
/ Built-in side shifter
/ Accessories for other specifications
/ Grammer MSG531 suspended seat
/ Start with a PIN code or by swiping a card
/ Coloring solid environmentally friendly seamless tire
/ Toolbox, folder
/ Integrated fingertip control system including ergonomic armrests
/ Hangcha cloud intelligent management system



4.0-4.5t Mast Specification

Type	Model	Max. Fork Height	Lowered	Overall height		Free lift		Tilt range		Capacity			
				Without backrest	With backrest	Without backrest	With backrest	F	R	load capacity at 500mm			
										Single tire		Double tire	
				4.0/4.5t	4.0/4.5t	4.0/4.5t	4.0/4.5t			4.0t	4.5t	4.0t	4.5t
		mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg	kg	kg
STD .Duplex	XHP45M250	2500	1995	3330	3670	160	160	6	12	4000	4500	4000	4500
	XHP45M270	2700	2095	3530	3870	160	160	6	12	4000	4500	4000	4500
	XHP45M300	3000	2245	3830	4170	160	160	6	12	4000	4500	4000	4500
	XHP45M330	3300	2395	4130	4470	160	160	6	12	4000	4500	4000	4500
	XHP45M350	3500	2495	4330	4670	160	160	6	12	4000	4500	4000	4500
	XHP45M360	3600	2545	4430	4770	160	160	6	12	4000	4500	4000	4500
	XHP45M370	3700	2595	4530	4870	160	160	6	12	4000	4500	4000	4500
	XHP45M380	3800	2645	4645	4970	160	160	6	12	4000	4500	4000	4500
	XHP45M400	4000	2795	4945	5170	160	160	6	12	4000	4500	4000	4500
	XHP45M430	4300	2960	5210	5470	160	160	6	6	4000	4500	4000	4500
	XHP45M450	4500	3070	5420	5670	160	160	6	6	4000	4500	4000	4500
	XHP45M480	4800	3235	5635	5970	160	160	6	6	4000	4450	4000	4500
	XHP45M500	5000	3345	5845	6170	160	160	6	6	4000	4450	4000	4400
	XHP45M550	5500	3620	6370	6670	160	160	3	6	3700	4000	4000	4200
	XHP45M600	6000	3895	6895	7170	160	160	3	6	3600	3600	3700	3800
Full Free Lift	XHP45U250	2500	1976	3330	3670	1146	806	6	12	4000	4500	4000	4500
	XHP45U275	2750	2100	3580	3920	1270	930	6	12	4000	4500	4000	4500
	XHP45U300	3000	2226	3830	4170	1396	1056	6	12	4000	4500	4000	4500
	XHP45U330	3300	2376	4130	4470	1546	1206	6	12	4000	4500	4000	4500
	XHP45U350	3500	2476	4330	4670	1646	1306	6	12	4000	4500	4000	4500
	XHP45U360	3600	2526	4430	4770	1696	1356	6	12	4000	4500	4000	4500
	XHP45U370	3700	2576	4530	4870	1746	1406	6	12	4000	4500	4000	4500
Triplex	XHP45N400	4000	2080	4850	5170	1229	912	6	6	4000	4500	4000	4500
	XHP45N430	4300	2180	5150	5470	1329	1012	6	6	4000	4500	4000	4500
	XHP45N450	4500	2248	5350	5670	1395	1080	6	6	4000	4400	4000	4500
	XHP45N470	4700	2310	5550	5870	1459	1142	6	6	4000	4300	4000	4400
	XHP45N480	4800	2340	5650	5970	1489	1172	6	6	4000	4300	4000	4400
	XHP45N500	5000	2410	5850	6170	1559	1242	6	6	3800	4250	4000	4300
	XHP45N550	5500	2575	6350	6670	1724	1408	3	6	3700	4200	4000	4250
	XHP45N600	6000	2790	6850	7180	1939	1622	3	6	3600	3800	3700	4000
	XHP45N650	6500	2980	7350	7670	2129	1812	3	6	3400	3600	3600	3800
	XHP45N700	7000	3155	7850	8170	2304	1988	3	6	3000	3200	3400	3400

With sideshifter minus 200kg, with integrated sideshifer minus 100kg.

mini5.0-5.0t Mast Specification

Type	Model	Max. Fork Height	Lowered		Overall height				Free lift				Tilt range		Capacity			
					Without backrest		With backrest		Without backrest		With backrest		F	R	load capacity at 500mm		load capacity at 600mm	
															Single tire	Double tire	Single tire	Double tire
			mini5.0t	5.0t	mini5.0t	5.0t	mini5.0t	5.0t	mini5.0t	5.0t	mini5.0t	5.0t			mini5.0t	mini5.0t	5.0t	5.0t
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	(°)	(°)	kg	kg	kg	kg
STD .Duplex	XHPX50M250	2500	1995	2245	3325	3600	3865	3895	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M270	2700	2095	2345	3525	3800	4065	4095	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M300	3000	2245	2495	3825	4100	4365	4395	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M330	3300	2395	2645	4125	4400	4665	4695	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M350	3500	2495	2745	4325	4600	4865	4895	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M360	3600	2545	2795	4425	4700	4965	4995	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M370	3700	2595	2845	4525	4800	5065	5095	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M380	3800	2645	2895	4645	4900	5165	5195	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M400	4000	2795	2995	4945	5145	5365	5395	160	170	160	170	6	12	5000	5000	5000	5000
	XHPX50M430	4300	2960	3145	5210	5400	5665	5695	160	170	160	170	6	6	5000	5000	5000	5000
	XHPX50M450	4500	3070	3245	5420	5600	5865	5895	160	170	160	170	6	6	5000	5000	5000	5000
	XHPX50M480	4800	3235	3445	5635	5900	6165	6195	160	170	160	170	6	6	5000	5000	5000	5000
	XHPX50M500	5000	3345	3560	5845	6100	6365	6395	160	170	160	170	6	6	4700	5000	4700	5000
	XHPX50M550	5500	3620	3820	6370	6600	6865	6895	160	170	160	170	3	6	4400	4700	4400	4700
	XHPX50M600	6000	3895	4085	6895	7100	7365	7395	160	170	160	170	3	6	4000	4200	4000	4200
Full Free Lift	XHPX50U250	2500	1976	2226	3360	3865	3600	3895	1114	1126	610	831	6	12	5000	5000	5000	5000
	XHPX50U275	2750	2100	2350	3610	4115	3850	4145	1238	1250	735	955	6	12	5000	5000	5000	5000
	XHPX50U300	3000	2226	2476	3860	4365	4100	4395	1364	1376	860	1081	6	12	5000	5000	5000	5000
	XHPX50U330	3300	2376	2626	4160	4665	4400	4695	1514	1526	1010	1231	6	12	5000	5000	5000	5000
	XHPX50U350	3500	2476	2726	4360	4865	4600	4895	1614	1626	1110	1331	6	12	5000	5000	5000	5000
	XHPX50U360	3600	2526	2776	4460	4965	4700	4995	1664	1676	1160	1381	6	12	5000	5000	5000	5000
	XHPX50U370	3700	2576	2826	4560	5065	4800	5095	1714	1726	1210	1431	6	12	5000	5000	5000	5000
Triplex	XHPX50N400	4000	2080	2305	4855	4975	5365	5395	1222	1330	715	910	6	6	5000	5000	5000	5000
	XHPX50N430	4300	2180	2405	5155	5275	5665	5695	1325	1430	815	1010	6	6	5000	5000	5000	5000
	XHPX50N450	4500	2248	2470	5355	5475	5865	5895	1393	1495	883	1075	6	6	4800	5000	4800	5000
	XHPX50N470	4700	2310	2535	5555	5675	6065	6095	1455	1560	945	1140	6	6	4700	4800	4700	4800
	XHPX50N480	4800	2340	2570	5655	5775	6165	6195	1485	1595	975	1175	6	6	4700	4800	4700	4800
	XHPX50N500	5000	2410	2635	5855	5975	6365	6395	1555	1660	1045	1240	6	6	4500	4700	4500	4700
	XHPX50N550	5500	2575	2805	6355	6475	6865	6895	1720	1830	1210	1410	3	6	4400	4500	4400	4500
	XHPX50N600	6000	2790	3020	6855	7020	7365	7395	1935	2045	1425	1625	3	6	4100	4400	4100	4400
	XHPX50N650	6500	2980	3200	7355	7530	7865	7895	2125	2225	1615	1805	3	6	3900	4100	3900	4100
	XHPX50N700	7000	3155	3375	7855	8035	8365	8395	2300	2400	1790	1980	3	6	3500	3800	3500	3800

With sideshifter minus 200kg, with integrated sideshifer minus 100kg.



XH Series 4.0-5.0t High-voltage Lithium Battery Forklift Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturers type designation		CPD40-XHY2G	CPD45-XHY2G	CPD50-XHXY2G	CPD50-XHY2G
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated
	1.5	Load capacity/rated load	Q (kg)	4000	4500	5000	5000
	1.6	Load centre distance	c (mm)	500	500	500	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	545	550	555	585
	1.9	Wheelbase	y (mm)	2000	2000	2000	2000
Weight	2.1	Service Weight	kg	6150	6350	6750	7100
	2.2	Axle loading, laden front/rear	kg	8995/1155	9645/1205	10390/1350	10710/1390
	2.3	Axle loading, unladen front/rear	kg	2585/3565	2670/3680	2870/3880	3020/4080
Tyres, chassis	3.1	Tyres: solid rubber, super elastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		8.25-15-14PR	300-15-18PR	300-15-18PR	300-15-18PR
	3.3	Tyre size, rear		7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR
	3.5	Wheels, number front rear (x = driven wheels)		2x/2	2x/2	2x/2	2x/2
	3.6	Tread, front	b_{10} (mm)	1160	1190	1190	1190
	3.7	Tread, rear	b_{11} (mm)	1130	1130	1130	1130
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	6/12	6/12	6/12	6/12
	4.2	Height, mast lowered	h_1 (mm)	2245	2245	2245	2495
	4.3	Free lift	h_2 (mm)	160	160	160	160
	4.4	Lift	h_3 (mm)	3000	3000	3000	3000
	4.5	Height, mast extended	h_4 (mm)	4170	4170	4170	4400
	4.7	Height of overhead guard STD.	h_6 (mm)	2300	2300	2300	2300
	4.8	Seat height/stand height	h_7 (mm)	1280	1280	1280	1280
	4.12	Coupling height	h_{10} (mm)	660	660	660	660
	4.19	Overall length	l_1 (mm)	4035	4040	4090	4255
	4.20	Length to face of forks	l_2 (mm)	2965	2970	3020	3050
	4.21	Overall width	b_1 (mm)	1420	1490	1490	1490
	4.22	Fork dimensions	s/e/l (mm)	50/150/1070	50/150/1070	55/150/1070	60/150/1220
	4.23	Fork carriage DIN 15 173 --- ISO 2328, class/type A,B		ISO2328 3A	ISO2328 3A	ISO2328 4A	ISO2328 4A
	4.24	Fork-carriage width	b_3 (mm)	1250	1250	1250	1250
	4.25	Distance between fork-arms	b_5 (mm)	310~1200	310~1200	310~1200	310~1200
	4.31	Ground clearance, laden, below mast	m_1 (mm)	170	170	170	170
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	200	200	200	200
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A_{st} (mm)	4435	4435	4485	4485
	4.34.2	Aisle width for pallets 800 x 1200 Lengthways	A_{st} (mm)	4235	4235	4285	4285
	4.35	Turning radius	W_a (mm)	2650	2650	2700	2700
	4.36	Internal turning radius	b_{13} (mm)	750	750	750	750
Performance data	5.1	Travel speed, laden/unladen	km/h	24/25	24/25	24/25	24/25
	5.2	Lift speed, laden/unladen	m/s	0.480/0.560	0.480/0.560	0.460/0.520	0.460/0.520
	5.3	Lowering speed, laden/unladen	m/s	0.410/0.420	0.410/0.420	0.410/0.420	0.410/0.420
	5.5	Drawbar pull, laden/unladen	N	28000/30000	29000/31000	30000/33000	31000/35000
	5.6	Max. Drawbar pull, laden/unladen	N	30000	31000	33000	35000
	5.7	Gradeability, laden/unladen	%	23/25	23/25	23/25	23/25
	5.9	Acceleration time, laden/unladen (0-10m)	s	4.8/4.7	4.9/4.8	4.9/4.8	5.0/4.9
	5.10	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic
	5.11	Parking brake		Mechanical	Mechanical	Mechanical	Mechanical
Electric-engine	6.1	Drive motor rating S2 60 min	kW	30AC	30AC	30AC	30AC
	6.2	Lift motor rating at S3 15%	kW	35AC	35AC	35AC	35AC
	6.3	Battery voltage, Std.	V/Ah	309/173	309/173	309/173	309/173
		Battery voltage, Opt.	V/Ah	309/228	309/228	309/228	309/228
	6.5	Min. battery weight	kg	500	500	500	500
		Max. battery weight	kg	650	650	650	650
	8.1	Type of drive control		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
	9.1	Manufacturer		Enpower	Enpower	Enpower	Enpower
Addition data	10.1	Operating pressure for attachments	bar	185	185	185	185
	10.2	Oil volume for attachments	l/min	36	36	36	36
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	42L	42L	42L	42L
	10.7	Sound level at the driver´s ear according to EN / DIN 12 053	dB (A)	72	72	72	72
	10.8	Towing coupling, type DIN		Φ35 Pin	Φ35 Pin	Φ35 Pin	Φ35 Pin

