

LI-ION
TECHNOLOGY

INNOVATIVE LITHIUM-ION

XH SERIES HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

with capacity of 4,000 to 5,000kg



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"Hangcha Forklift"
App herunterladen

2025 VERSION | COPYRIGHT 2025/02



ISO14001:2015



ISO9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

HANGCHA Group Co., LTD behält sich das Recht vor, Änderungen bezgl. Farbe, Spezifikationen, Ausstattung und sonstige Details, dierer Bröschüre ohne Vorankündigung vorzunehm. Fahrzeugfarben können von den Farben in dieser Brochure abweichen.

The World of Hangcha

SHC
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.

VOLTAGE
309 V

100% CHARGE FOR
1 Hour

WATER RESISTANCE
IPX4

SPEED MODELS
3

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.

THE *PLUS*
FOR YOUR
BUSINESS



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%

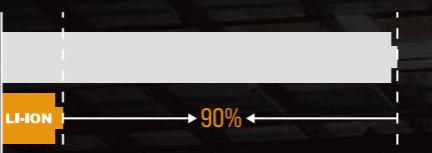
Low Voltage Lithium Battery Forklift
Hangcha High Voltage Lithium Electric Forklift



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

90%

Fuel Forklift
Lithium Electric Forklift



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.

Get the battery fully charge:



1h



10h

Hangcha High Voltage Electric Forklift

Electric Forklift

Battery capacity

43.3Kwh	XC Series 4.0-5.0t
53.4Kwh	XH Series 4.0-5.0t

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

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

Optional battery list

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

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



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		load capacity at 500mm				Double tire	
				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 sideshifter 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		load capacity at 500mm				Double tire	
				mini5.0t	5.0t	mini5.0t	5.0t	mini5.0t	5.0t	mini5.0t	5.0t	5.0t	5.0t	5.0t	5.0t
STD Duplex	XHPX50M250	2500	1995	3325	3600	3865	3895	160	170	160	170	6	12	5000	5000
	XHPX50M270	2700	2095	3525	3800	4065	4095	160	170	160	170	6	12	5000	5000
	XHPX50M300	3000	2245	3825	4100	4365	4395	160	170	160	170	6	12	5000	5000
	XHPX50M330	3300	2395	4245	4400	4665	4695	160	170	160	170	6	12	5000	5000
	XHPX50M350	3500	2495	4325	4600	4865	4895	160	170	160	170	6	12	5000	5000
	XHPX50M360	3600	2545	4425	4700	4965	4995	160	170	160	170	6	12	5000	5000
	XHPX50M370	3700	2595	4245	4525	4800	5065	160	170	160	170	6	12	5000	5000
	XHPX50M380	3800	2645	4645	4900	5165	5195	160	170	160	170	6	12	5000	5000
	XHPX50M400	4000	27												

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

Distinguishing mark	HANGCHA GROUP CO.,LTD.				
	1.1 Manufacturer	CPD40-XHY2G	CPD45-XHY2G	CPD50-XHY2G	CPD50-XHY2G
1.2 Manufacturers type designation					
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
	2.2 Axle loading, laden front/rear	kg	8995/1155	9645/1205	10390/1350
	2.3 Axle loading, unladen front/rear	kg	2585/3565	2670/3680	2870/3880
Tyres, chassis	3.1 Tyres: solid rubber, super elastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic
	3.2 Tyre size, front		8.25-15-14PR	300-15-18PR	300-15-18PR
	3.3 Tyre size, rear		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
	3.6 Tread, front	b10 (mm)	1160	1190	1190
	3.7 Tread, rear	b11 (mm)	1130	1130	1130
	4.1 Tilt of mast/fork carriage forward/backward	α/β°	6/12	6/12	6/12
4.2 Height, mast lowered	h1 (mm)	2245	2245	2245	2495
4.3 Free lift	h2 (mm)	160	160	160	160
4.4 Lift	h3 (mm)	3000	3000	3000	3000
4.5 Height, mast extended	h4 (mm)	4170	4170	4170	4400
4.7 Height of overhead guard STD.	h5 (mm)	2300	2300	2300	2300
4.8 Seat height/stand height	h7 (mm)	1280	1280	1280	1280
4.12 Coupling height	h8 (mm)	660	660	660	660
4.19 Overall length	l1 (mm)	4035	4040	4090	4255
4.20 Length to face of forks	l2 (mm)	2965	2970	3020	3050
4.21 Overall width	b1 (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	b3 (mm)	1250	1250	1250	1250
4.25 Distance between fork-arms	b5 (mm)	310-1200	310-1200	310-1200	310-1200
4.31 Ground clearance, laden, below mast	m1 (mm)	170	170	170	170
4.32 Ground clearance, centre of wheelbase	m2 (mm)	200	200	200	200
4.34.1 Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	4435	4435	4485	4485
4.34.2 Aisle width for pallets 800 x 1200 Lengthways	Ast (mm)	4235	4235	4285	4285
4.35 Turning radius	W _a (mm)	2650	2650	2700	2700
4.36 Internal turning radius	b6 (mm)	750	750	750	750
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
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
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

