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XC Series Electric Pneumatic Tire Forklift With Lithium-ion Technology

with capacity of 4,000 to 7,000lbs



Making Material Handling Easier
SINCE 1956



INNOVATIVE SOLUTIONS NEW POWER NOW

The XC Series are a new series of electric pneumatic forklifts with lithium-ion technology. They have a lifting capacity range from 4,000 to 7,000lbs and feature a new chassis designed around the battery by HANGCHA Group.

- / Lithium-ion technology (Lithium Iron-Phosphate), was developed jointly by HANGCHA and CATL for use in material handling equipment applications. These innovative and reliable battery cells and modules are manufactured to the highest standard by CATL exclusively for HANGCHA's forklift line.
- / Rapid and opportunity charging ensures continuous availability of the material handling equipment.
- / Lightweight design, highly efficient, maintenance-free, and a long service life are all benefits of the the XC series.
- / The newly designed chassis has a low center of gravity allowing the operator to feel stable while turning the forklift.

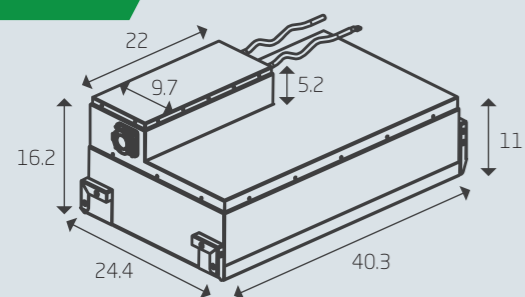


CATL Lithium Iron Phosphate Battery Packs

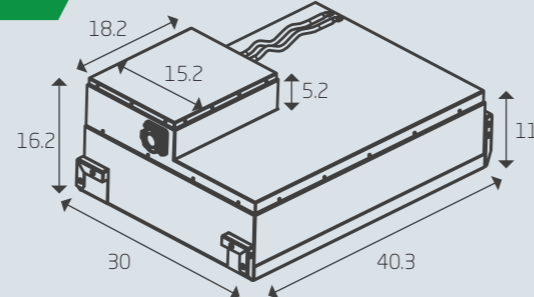
Integrated Battery Management System (BMS) continually monitors energy management and ensures reliable operation. HANGCHA provides Li-Ion battery pack with up to a 10 year or 20,000 hour warranty. See warranty certificate for specific warranty information on the Lithium Iron Phosphate battery packs.

	Battery Capacity (kW·h)
4000-5000lbs: standard	80V*404Ah, 32.32Kwh
6000-7000lbs: standard	80V*542Ah, 43.36Kwh

4000-5000lbs



6000-7000lbs



Excellent Ergonomic Design

- / These forklifts are designed to have an operating space more than **50%** larger than a traditional electric forklift.
- / The 4.33" true color instrument panel in the driver's cab is positioned overhead and can be seen when the driver lifts their head. This also allows for easy access to the function buttons.
- / Both the adjustable steering wheel and that the seat can be adjusted back and forth by 8.3", allows the operator to be able to find their optimal driving position.
- / The newly designed Wide View Mast increases the operator's field of vision by 15%.
- / The large brake pedal and regenerative braking function are designed to help reduce operator fatigue.



Advantages



The rear axle connects to the newly designed chassis via a floating suspension system. The floating suspension system, combined with the MOSFET controller automatically decelerating while turning, improves stability and operator comfort.

The MOSFET integrated control system ensures smooth and accurate driving and lifting control. It also provides excellent speed regulation, regenerative braking, reverse braking, and anti-sliding on ramps. The MOSFET integrated control system adds to the safety and reliability of the XC series forklifts.

The high power AC traction motor bolts to the chassis via a bridge-type structure for increased stability.

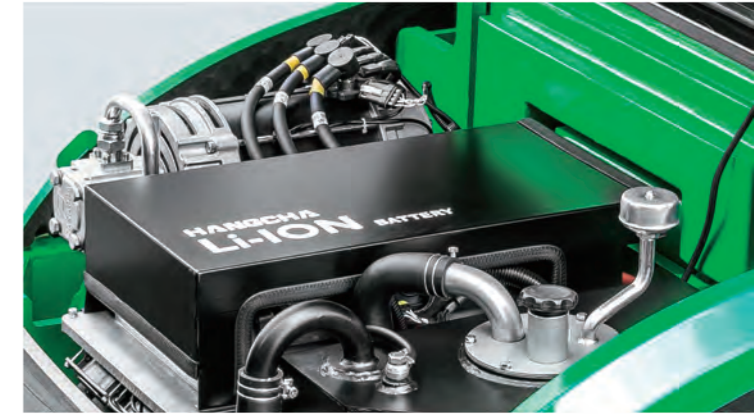
The controller, connectors, battery plug, and emergency switch are all parts from industry known suppliers to ensure reliability, performance, and ease of service.

RELIABLE TRUCKS



Easy to Operate and Maintain

The XC series' internal components are protected from dust and water with a fully-sealed maintenance hatch, controllers, motors, and electrical components.



IPX4 water resistance rating, suitable for outdoor operation



The maintenance hatch can be opened at a large angle to allow for easy access.



HANGCHA PROVIDES UP TO A 10 YEAR OR 20000 HOUR GUARANTEE ON THE LITHIUM-ION BATTERY PACKS.



10 YEAR WARRANTY



Efficiency

Thanks to lithium-ion technology, this forklift features opportunity charging. This means that the forklift can work through several shifts, charging during breaks, without needing to stop for hours to recharge. Combined with regenerative braking during deceleration, the powertrain is designed with efficiency in mind. The forklift also comes standard with a high-power pump motor and low noise gear pump. The high power AC hydraulic system is extremely efficient. It has protection functions and built-in speed and temperature sensors to increase the hydraulic system's reliability and life span.



The XC Series forklifts can have up to three horn buttons. The driver's steering wheel (standard), Grammer fingertip control armrest (optional) and rear reverse grip horn button (optional) are all used for alerting and protecting people in the surrounding area.



The XC series forklifts have a PIN code system for safety and security. 99 sets of PIN codes are available for the administrator to assign to keep irrelevant personnel from starting the forklift.



Grammer Fingertip Controls (Optional)



IP67 Protection Rating



Able to quick charge in less than 2 hours.



Safety

This forklift was designed to meet both the ANSI and ITSDF safety standards. This means that the following all come standard on this forklift:

- / An emergency cut off switch.
- / An overloading protection system is integrated into the electronics and hydraulic systems.
- / The controller automatically reduces the forklift's speed while cornering.
- / The standard configuration provides a soft landing system.

In addition, an optional lift buffering system can be equipped to protect goods from falling off the lift and damaging the ground.

As an option, the handbrake can be equipped with an alarm buzzer to prompt the driver to pull up the handbrake before leaving the truck.

The optional OPS system disables the fork from lowering when the operator leaves the seat.



TÜV Rheinland Certified

The XC Series Electric Lithium-ion Pneumatic Tire Forklift has been tested and certified to UL 583:2012 R10.20 standards by TÜV Rheinland. TÜV Rheinland is a globally recognized company that specializes in certifying products to specific safety and quality standards. By passing this certification, TÜV Rheinland ensures that this model of electric forklift is safe and meets the same fire and shock requirements found in UL 583:2012 R10.20.

In addition, TÜV Rheinland certified the XC Series Electric Lithium-ion Pneumatic Tire Forklift to the following certifications.

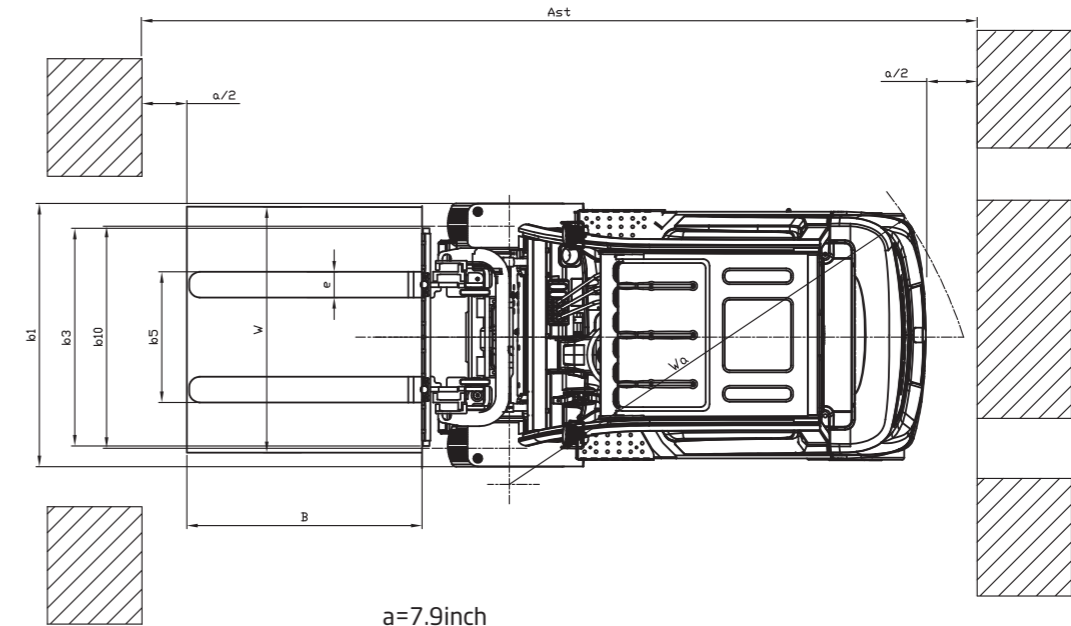
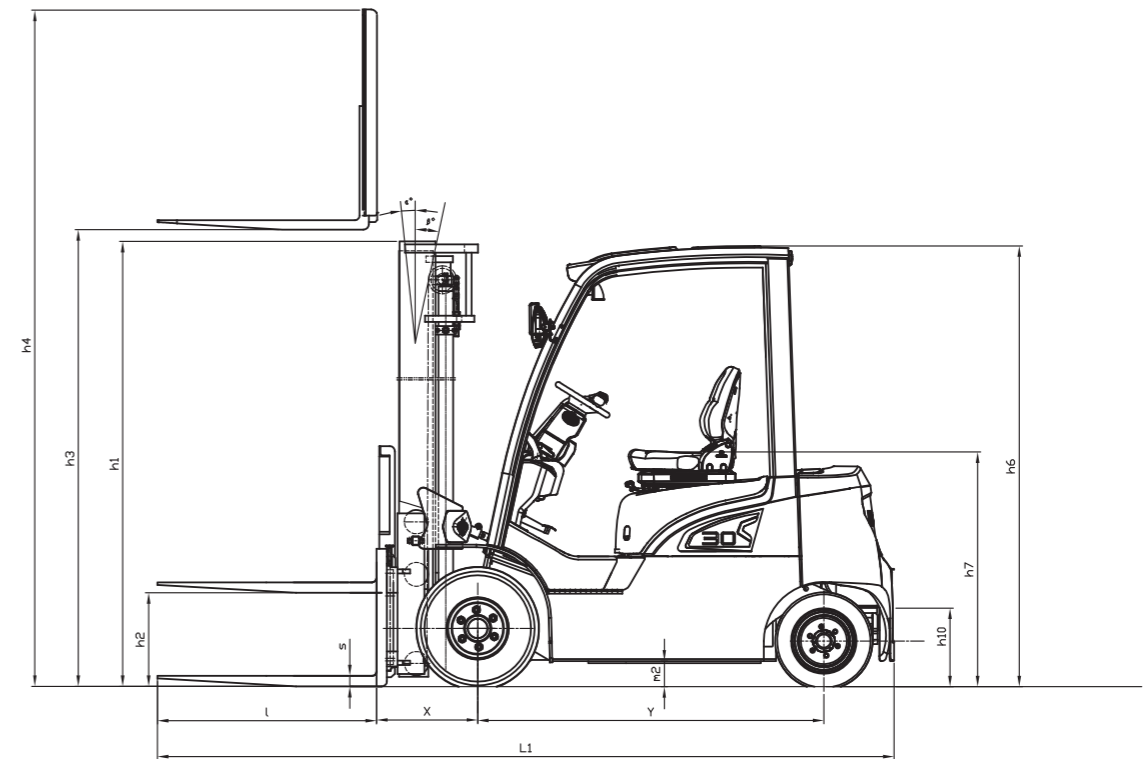
- / UL 583:2012 R10.20
- / ANSI/ITSDF B56.1-2016
- / ANSI/ITSDF B56.1a-2018
- / 29 CFR 1910.178:2015+App A



US

XC Series Electric Pneumatic Tire Forklift with Lithium-ion Technology

				HANGCHA GROUP CO.,LTD.				
Distinguishing Parts	1.1	Manufacturer		FB20Li	FB25Li	FB30Li	FB35Li	
		HCFA Model		CPD20-XD4-SI26NU	CPD25-XD4-SI26NU	CPD30-XD4-SI26NU	CPD35-XD4-SI26NU	
	1.2	Manufacturers Type Designation		Electric	Electric	Electric	Electric	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Seated	Seated	Seated	Seated	
	1.4	Operator Type: hand, pedestrian, standing, seated, order-picker		4000 (1810)	5000 (2270)	6000 (2720)	7000 (3170)	
	1.5	Load Capacity/Rated Load	Q	lb (kg)	24 (600)	24 (600)	24 (600)	24 (600)
	1.6	Load Centre Distance	c	in (mm)	17.5 (444)	17.5 (444)	19 (482)	19 (482)
	1.8	Load Distance, centre of drive axle to fork	x	in (mm)	59.8 (1520)	59.8 (1520)	65 (1650)	65 (1650)
	1.9	Wheelbase	y	in (mm)	8440 (4010)	9500 (4310)	11530 (5230)	12100 (5490)
Weight	2.1	Service Weight		lb (kg)	"11772/1698(5340/770)"	13607/1742(6120/790)	15531/2612(7045/1185)	17857/2138(8100/970)
	2.2	Axle Loading, laden front/rear		lb (kg)	"4376/5346(1985/2425)"	4090/4552(1855/2065)	5070/5269(2300/2930)	5203/6900(2360/3130)
	2.3	Axle Loading, unladen front/rear		lb (kg)				
Tires & Chassis	3.1	Tires: solid rubber, superelastic, pneumatic, polyurethane			Pneumatic	Pneumatic	Pneumatic	Super elastic
	3.2	Tire Size, front			23×9-10	23×9-10	23×9-10	23×10-12
	3.3	Tire Size, rear			18×7-8	18×7-8	18×7-8	200/50-10
	3.5	Wheels, number front rear (x = driven wheels)			2x/2	2x/2	2x/2	2x/2
	3.6	Tread, front	b10 (mm)	in (mm)	42(1068)	42(1068)	42(1068)	42(1068)
	3.7	Tread, rear	b11 (mm)	in (mm)	37.8(960)	37.8(960)	37.8(960)	37.8(960)
	Dimensions	4.1	Tilt of Mast/Fork Carriage Forward/Backward	α / β	(°)	6/6	6/6	6/6
4.2		Height, mast lowered	h1	in (mm)	83.7(2126)	83.7(2126)	88.6(2251)	88.6(2251)
4.3		Free Lift	h2	in (mm)	57.3(1455)	57.3(1455)	59.6(1513)	59.6(1513)
4.4		Lift	h3	in (mm)	185(4700)	185(4700)	185(4700)	185(4700)
4.5		Height, mast extended	h4	in (mm)	211.7(5378)	211.7(5378)	214.1(5438)	214.1(5438)
4.7		Height of Overhead Guard STD.	h6	in (mm)	82.6(2100)	82.6(2100)	82.6(2100)	82.6(2100)
4.8		Seat Height/Stand Height	h7	in (mm)	44(1120)	44(1120)	44(1120)	44(1120)
4.12		Coupling Height	h10	in (mm)	16.9(430)	16.9(430)	16.9(430)	16.9(430)
4.19		Overall Length	l1	in (mm)	132.6(3370)	132.6(3370)	132.6(3370)	132.6(3370)
4.20		Length to Face of Forks	l2	in (mm)	90.5(2300)	90.5(2300)	98(2490)	98(2490)
4.21		Overall Width	b1	in (mm)	49.3(1252)	49.3(1252)	49.3(1252)	51.1(1298)
4.22		Fork Dimensions	s/e/l	in (mm)	1.6×4.8×42 (40/122/1070)	1.6×4.8×42 (40/122/1070)	1.8×4.8×42 (45/122/1070)	1.8×4.8×42 (45/122/1070)
4.23		Fork Carriage DIN 15 173 --- ISO 2328, class/type A,B			ISO2328 2A	ISO2328 2A	ISO2328 3A	ISO2328 3A
4.24		Fork-Carriage Width	b3	in (mm)	43.3(1100)	43.3(1100)	43.3(1100)	43.3(1100)
4.25		Distance Between Fork-Arms	b5	in (mm)	290/1100(11.4/43.3)	290/1100(11.4/43.3)	290/1100(11.4/43.3)	290/1100(11.4/43.3)
4.31		Ground Clearance, laden, below mast	m1	in (mm)	3.9(100)	3.9(100)	3.9(100)	3.9(100)
4.32		Ground Clearance, centre of wheelbase	m2	in (mm)	4.9(125)	4.9(125)	4.9(125)	4.9(125)
4.34.1		Aisle Width for Pallets 39" x 47" Crossways	Ast	in (mm)	147(3734)	147(3734)	156.1(3965)	156.1(3965)
4.34.2	Aisle Width for Pallets 31.5" x 47" Lengthways	Ast	in (mm)	154.8(3934)	154.8(3934)	163.9(4165)	163.9(4165)	
4.35	Turning Radius	Wa	in (mm)	82.2(2090)	82.2(2090)	89.3(2270)	89.3(2270)	
4.36	Internal Turning Radius	b13	in (mm)	25.7(655)	25.7(655)	28.7(730)	28.7(730)	
Performance Data	5.1	Travel Speed, laden/unladen		mph (km/h)	11.1/11.8(18/19)	11.1/11.8(18/19)	11.1/11.8(18/19)	11.1/11.8(18/19)
	5.2	Lift Speed, laden/unladen		fpm (m/s)	88.5/110(0.450/0.560)	85/110(0.430/0.560)	76.7/106(0.390/0.540)	72.8/106(0.370/0.540)
	5.3	Lowering Speed, laden/unladen		fpm (m/s)	88.5/82.6(0.450/0.420)	92.5/82.6(0.470/0.420)	88.5/82.6(0.450/0.420)	92.5/82.6(0.470/0.420)
	5.5	Drawbar Pull, laden/unladen		lbf (N)	2925/3150(13000/14000)	3825/4050(17000/18000)	4500/4725(20000/21000)	4612/4725(20500/21000)
	5.6	Max. Drawbar Pull, laden/unladen		lbf (N)	3375(15000)	4275(19000)	4950(22000)	5175(23000)
	5.7	Gradeability, laden/unladen		%	20/20	20/20	20/20	20/20
	5.8	Max. Gradeability, laden/unladen		%	20/20	20/20	20/20	20/20
	5.9	Acceleration Time, laden/unladen (0-10m)		s	4.9/4.8	5.0/4.9	5.3/5.1	5.4/5.2
	5.10	Service Brake			Hydraulic	Hydraulic	Hydraulic	Hydraulic
	5.11	Parking Brake			Mechanical	Mechanical	Mechanical	Mechanical
	Electric Motor	6.1	Drive Motor Rating at S2 60 min		HP (kW)	22.3(16.6)AC	22.3(16.6)AC	22.3(16.6)AC
6.2		Lift Motor Rating at S3 15%		HP (kW)	34.2(25.5)AC	34.2(25.5)AC	34.2(25.5)AC	34.2(25.5)AC
6.3		Battery Voltage, Std.		V/Ah	80/404	80/404	80/542	80/542
6.5		Min. Battery Weight		lb (kg)	485(220)	485(220)	485(220)	485(220)
		Max. Battery Weight		lb (kg)	617(280)	617(280)	617(280)	617(280)
8.1		Type of Drive Control			MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
9.1		Manufacturer			INMOTION	INMOTION	INMOTION	INMOTION
Additional Data	10.1	Operating Pressure for Attachments		psi (bar)	2538(175)	2538(175)	2538(175)	2538(175)
	10.2	Oil Volume for Attachments		l/min	65	65	65	65
	10.3	Hydraulic Tank - capacity (drain & refill)		liter	28	28	28	28
	10.7	Sound Level at the Driver's Ear According to EN / DIN 12 053		dB (A)	75	75	75	75
	10.8	Towing Coupling, type DIN			Φ25 Pin	Φ25 Pin	Φ25 Pin	Φ25 Pin



$a = 7.9 \text{ inch}$
 $Ast = a + Wa + X + B$

