



# XH SERIES HEAVY-DUTY HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

Independently developed by Hangcha on the basis of decades of a deep understanding of electric forklifts and internal combustion forklifts, the dedicated XH series heavy-duty high-voltage lithium battery forklifts are a new series of products with a new energy vehicle voltage platform, a water-cooling lithium battery, as well as a pioneered special structure that represents a breakthrough over the traditional design concept. Breaking through the perception of drive electric forklift, the series of products supersede the internal combustion forklifts and redefine the new generation of electric forklifts in terms of efficiency, power, reliability, etc.

VOLTAGE

**309 V**

SPEED MODELS

**3**

100% CHARGE FOR

**1 Hour**

PROTECTION RATE

**IP67**

WATER RESISTANCE

**IPX4**

## Stylish appearance

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

THE *Plus*  
FOR YOUR  
BUSINESS



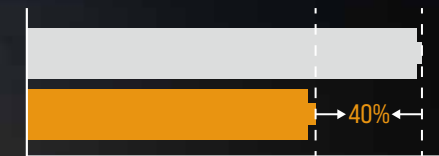


# FASTER & MORE EFFICIENCY.

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%

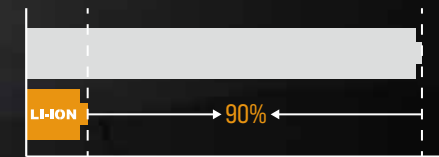
Low Voltage Lithium Battery Forklift  
Hangcha High Voltage Lithium Electric Forklift



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



## POWER PERFORMANCE COMPARISON

	High Voltage Lithium Electric Forklift	Fuel Forklift
Travel speed, laden/unladen	23/32km/h	23-25km/h
Lift speed, laden/unladen	560/580mm/s	380/410mm/s
Max. gradeability, S2-5min, laden/unladen	34/30%	15%-25%



HANGCHA provides Li-ion battery (LiFeP04) with 6 years or 12000 hours warranty.

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:



Hangcha High Voltage Electric Forklift



Electric Forklift

HIGH-VOLTAGE

# 70.4Kwh

Battery capacity





# STRONG ADAPTABILITY



The drive axle, steering axle and tires of internal combustion forklifts can meet the demand of high-intensity operating conditions of internal combustion forklifts.



Both the drive and operating systems are vehicle-grade permanent magnet synchronization systems. Equipped with a high speed ratio gearbox, the driving speed, lifting speed, upslope degree and acceleration performance surpass that of internal combustion vehicles.

It meets all-weather operating conditions and is usable under severe operating conditions such as cold storage, heavy rains and waterlogged roads.



# ULTRA-LONG BATTERY LIFE



- / With a 309V high-voltage platform and vehicle-grade permanent magnet synchronization system, the vehicle boasts of a smaller current, very low heat loss and more energy-efficient;
- / The vehicle uses an overall controller to control the traction motor controller assembly to form a highly independent, user-friendly and intelligent drive system.

# SAFE AND RELIABLE



The cover of the vehicle is designed to be sealed to the water resistance level of IPX4 for the body. 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;

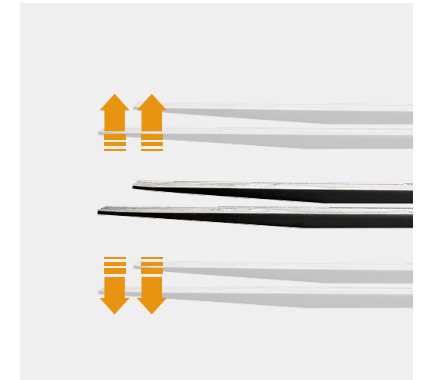
- / All CATL lithium batteries are equipped with standard automatic battery fire extinguishing devices, allowing higher safety in use;
- / The electrical system is equipped with high-voltage interlocks, insulation detection and monitoring, offering vehicle-grade safety measures. The MSD maintenance switch enables one-click power-down and safer maintenance;
- / The steering axle with standard configuration of turning and deceleration functions reduces the overturning risk effectively.



Automatic battery fire extinguishing devices



The MSD maintenance switch



The standard configuration provides a fork descending buffering function. In addition, an optional control function for buffering the fork's ascending is provided to protect the goods and guarantee safety when working;

# SUPER CHARGING



The standard IC super-fast charging technology allows the water cooling system to work during charging and high current charging, thus only 1h is required for fully charging;



Optional 0.5C charger (fully charged in 2h), economical and convenient.



Charging port



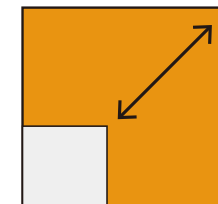
# DUAL WATER COOLING SYSTEMS



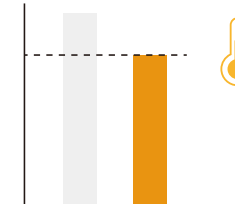
It is the first time that the motor-battery dual water cooling systems and full suspension damping system are used on new energy forklifts, which can be fully applicable to various severe operating conditions such as high temperature and strong load.

The most integrated large volume hydraulic oil tank boasts of good hydraulic heat dissipation and low oil temperature, further ensuring long-term and reliable operation of hydraulic parts and prolonging service life.

The volume of the hydraulic oil tank and the heat dissipation area are 2.5 times that of ordinary high-voltage electric truck. The hydraulic oil temperature is lowered by more than 20% compared with ordinary high-voltage electric truck.



**2.5x**  
INCREASE



**20%**  
REDUCE



The water cooling system keeps the battery at the best working temperature of about **30°C**, with high efficiency, slow decay and long life.



The **large ventilation opening** designed for internal combustion forklifts allows better heat dissipation of the battery and the motor.



The heat dissipation area of the air outlet is **7.5 times** that of ordinary high-voltage electric truck. The working temperature of the motor/electric control + battery is lower than that of ordinary high-voltage electric truck by more than **10%**.

# CONVENIENT MAINTENANCE

- / The vehicle with ergonomic design, a wide view and a large operating space makes it easier for drivers to operate;
- / The multi-functional color screen instrument is designed to have graphic interfaces; three SPE speed gears are selectable to adapt to different operating conditions; interfaces can be switched between English and Chinese to meet the demands of customers at home and abroad;
- / Reasonable arrangement of battery and motor radiator allows more convenient liquid replenishment and maintenance;
- / The water tank cover and the left and right side plates of the hood can be dismantled without a tool, so that the operable surface is large during cleaning and maintenance, convenient and fast.



Battery and motor radiator



Multi-functional color screen instrument

## Standard Specification

- / Multi-function color-screen combination instrument
- / 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 meets national standards
- / Reverse buzzer
- / Standard box of lithium battery
- / Water chilling unit for lithium battery
- / 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
- / Power DC-DC two-in-one
- / 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
- / Load-sensitive multiway valve
- / Silent gear pump
- / Toolbox, folder
- / Traction pin
- / Hangcha cloud intelligent management system
- / Left and right rear view mirrors
- / Standard box of lithium battery with low temperature electric heating systems
- / Standard box of lithium battery with battery heat management systems

## Options

- / Solid tire
- / Reversing video
- / Front/Rear blue light
- / Rear LED operation light
- / Dedicated lithium battery charger
- / Right rear armrest with horn button
- / OPS seat sensing function
- / Triple multi-way valve
- / Quadruple multi-way valve
- / Quintuple multi-way valve
- / Heightened load backrest
- / Widened fork carriage
- / Forks of other lengths
- / Free duplex mast
- / Free triplex mast
- / Built-in side mast
- / Accessories for other specifications
- / Fully-suspended seat
- / Start with a PIN code or by swiping a card
- / Double front wheels
- / Cab
- / Lockable hood
- / Fire extinguisher
- / High and low overhead guards
- / Alarm light
- / Colored solid environmentally friendly seamless tire

