



**HANGCHA GROUP CO., LTD.**

Factory site: 666 Xiangfu Road,  
Hangzhou, Zhejiang, China (311305)

Tel: +86-571-88926735 88926755  
Fax: +86-571-88926789 88132890

[sales@hcforklift.com](mailto:sales@hcforklift.com) [www.hcforklift.com](http://www.hcforklift.com)



Follow us on  
Facebook



Follow us on  
YouTube



Follow us on  
WeChat



Download "Hangcha  
Forklift" App



ISO45001:2018



ISO14001:2015



ISO9001:2015



HANGCHA trucks conform  
to the European Safety  
Requirements.

# XE SERIES

ELECTRIC FORKLIFT TRUCK WITH  
LITHIUM POWER

With capacity of 4,000 to 5,000kg

HANGCHA GROUP CO., LTD. reserves the right to make any changes without notice concerning colors, equipment, or specifications detailed in this brochure, or to discontinue individual models. The colors of trucks, delivered may differ slightly from those in brochures.



**XE**  
SERIES





# XE SERIES ELECTRIC FORKLIFT TRUCK WITH LITHIUM POWER

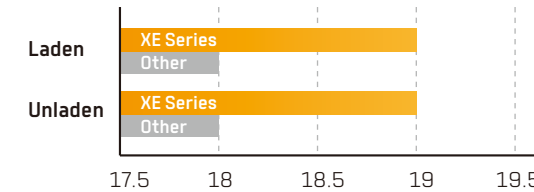
XE series standard lithium battery forklifts are quality products that are developed on the basis of the advantages of the dedicated lithium battery forklift structure and the permanent magnet synchronous motor technology. Inheriting the family design of electric forklifts, some key parts can also be used for internal combustion forklifts.



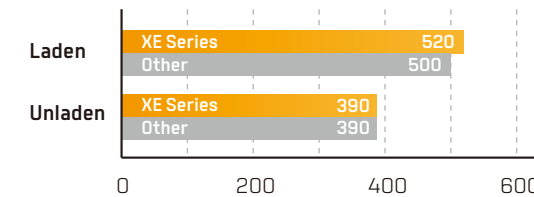
## HIGH EFFICIENCY AND ENERGY SAVING

- With the efficient high-torque motor and high speed ratio speed reducer, upslope degree and acceleration performance are significantly improved.
- The walking motor and lifting motor are both equipped with air coolers to offer better heat dissipation and performance.
- An oil pump reducer is used in the oil pump for the first time to enable the lifting motor to have higher operation efficiency and less energy consumption.

5t load maximum travel speed [km/h]



5t load maximum lift speed [mm/s]



## STYLISH EXTERIOR

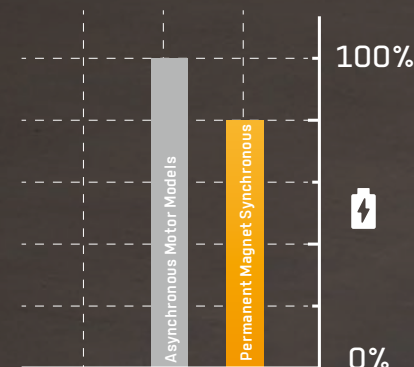
- Inherit the family design of dedicated XH and XC series lithium battery forklifts.
- With a smooth and sturdy profile, the vehicle is compact, elegant, stylish and robust.



## TAKE ADVANTAGE OF MORE POWER

With the **80V dual permanent magnet synchronous motor system** with higher power density, as well the highly fitted speed reducer, motors and electrical control, under the same operating conditions, compared with the traditional asynchronous motor model, the energy consumption is reduced by 15%-20%.

**15-20% ENERGY SAVING**



## ADAPTABILITY TO DIFFERENT SCENARIOS



**1** Smooth driving: Increased distance from the ground enables the forklift to adapt to rugged roads outdoors.



Turning radius 2680-2740mm

**2** Flexible turning: With a small turning radius, the forklift can flexibly move in indoor environments such as cold stores (optional), etc.



**3** Adaptability to cold weather: For the standard configuration, the battery is equipped with an electric heating module to ensure normal operation in cold weather.



**4** Adaptability to rain: The protection level of the vehicle reaches level IPX4, so it can easily resist rainstorms.



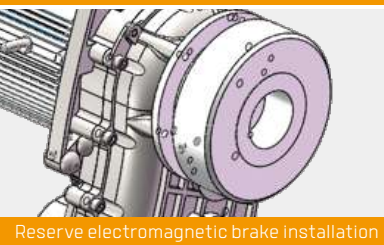


## EXCELLENT VISION

Inheriting the advantages of lithium battery forklifts—wide view, large operation space and excellent ergonomic design.

## EPB (Electric Parking Brake) (optional)

The gearbox reserves an installation position for electromagnetic brakes, which can be optionally equipped with an electronic handbrake for more comfortable use.



Reserve electromagnetic brake installation



Electronic hand brake



## COMFORTABLE EXPERIENCE



Large diameter steering wheel for flexible steering and more effortless operation.



Increase the lever ratio to the control lever, resulting in less control force and more comfort.



The color-screen instruments are designed to have graphical interfaces and display data clearly.

## RELIABILITY AND DURABILITY

Having passed the standard verification for both electric forklifts and internal combustion forklifts where the test stringency is higher than that for internal combustion forklifts, the forklift is reliable and durable.



- The enhanced drive axle, speed reducer and internal combustion forklift mast, steering axle and large tires can meet the needs for use of internal combustion forklifts.
- The design of low center of gravity and high load allowance enables more stable operation.



Low center



Tires

## EASY MAINTENANCE

Maintenance of the entire vehicle is convenient. The side door and front and rear bottom door can be removed without tools, and all maintenance parts are within easy reach.



Battery roll out easily



Open the cover at a wide angle



## KEEP AN EYE ON EVERYTHING

Hangcha FIMS is a system that provides you with real-time information about forklift truck and driver. Whether you have dozens or hundreds of forklift trucks across multiple sites, you can get access to collecting, monitoring and evaluating all the fleet data at anytime and anywhere.

### » Features

- ▶ Access Control
- ▶ GPS Tracking
- ▶ Remote Monitoring
- ▶ Vibration Monitoring
- ▶ Pre-shift Check (Optional)
- ▶ Shift Management (Optional)
- ▶ Maintenance Reminder
- ▶ Vehicle Management
- ▶ OpenAPI (Optional)





### Optional battery list

Capacity(Ah)	XE 4-5t	
80V/460Ah	●	EVE
80V/604Ah	☆	CATL
80V/560Ah	○	EVE
80V/608Ah	○	EVE
80V/840Ah	○	EVE
80V/906Ah	☆	CATL

Note: ● Battery; ○ Battery Opt; ☆ Same as XC series



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





# LITHIUM POWERED

EMPOWER YOURSELF  
WITH THE BEST



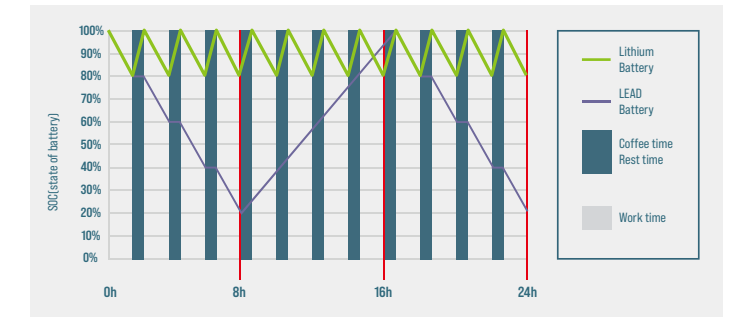
Li  
Lithium

POWER THE POSSIBILITIES  
RELIABLE LITHIUM-ION TECHNOLOGY

## FEATURES & BENEFITS THE HANGCHA DIFFERENCE

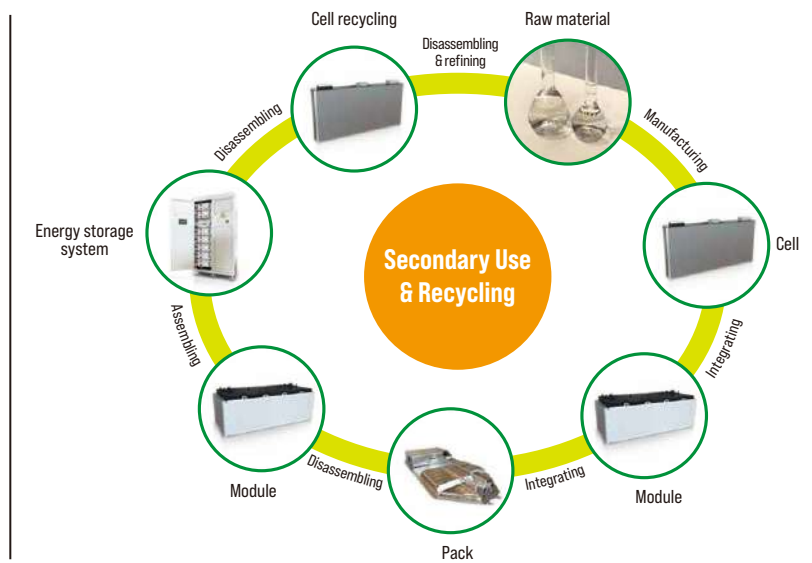
### Efficiency

By quick opportunity charging any downtime, such as a lunch break, can be efficiently used and the battery is recharged in a very short period of time. Interim charging does not affect the battery service life.



### Safety

- / Intelligent battery management monitoring every important function.
- / Higher user safety, thanks to acid-free use.
- / User friendly due to avoided battery change.
- / No emission of battery gasses.



## LITHIUM BATTERY ADVANTAGES



#### Long service life

4000 full charging cycles with at least 80% residual capacity.



#### Return on investment

Add flexibility to your operation, cost-saving in the long term, increased efficiencies.



#### Maintenance free

No topping up of water or checking acid levels.



#### High energy density

The high energy density of the Li-Ion battery ensures long working times and increases the high availability.



#### Cold area application

Li-Ion batteries maintain high performance at temperatures below freezing.



#### High safety and reliability

Intelligent battery management monitoring every important function, no emission of battery gasses.



#### Opportunity charging

Full performance during several shifts thanks to effective interim charging.

### QUESTION 1

Q: What are the characteristics of lithium batteries, especially when used in high and low temperature environments?

Charging temperature: 0°C - 65°C  
Discharge temperature: -30°C - 65°C  
Storage environment temperature: -30°C - 60°C

After the truck key switch is closed, the instrument battery condition needs to be checked:

1. Confirm that there is no battery system alarm message on the instrument panel.
2. Please check the remaining power before use. It is recommended to use the SOC between 50% and 100%.
3. If the SOC is lower than 20%, it is not recommended to continue using it. Please charge it as soon as possible.

### QUESTION 2

Q: What is the charging time and usage time calculation of forklift lithium battery?

1. Available power of lithium battery (kWh) = rated voltage × rated power × 90% (To avoid over-discharge damaging the battery, the forklift is equipped with low power protection [less than 10%]).
  2. Charging time (h) = rated capacity of lithium battery (Ah) × 90% ÷ charger output current (A).
  3. The power consumed for charging (kWh) = the available power of the lithium battery × 93% (the charging efficiency of the charger is calculated as 93%).
  4. Usage time (h) = available power of lithium battery ÷ energy consumption data.
- For specific energy consumption values, please refer to the technical table on the sharing platform.

### QUESTION 3

Q: How does Hangcha BMS work to ensure the safety of the lithium battery?

HANGCHA BMS (battery management system) can monitors the cells at all time. As a result, hangcha lithium power is the reliable solution.



#### Battery Safety Management:

- Overcharge/over discharge protection
- Overcurrent/over-temperature/low-temperature protection
- Multi-level fault diagnosis protection
- Double fault monitoring



#### Battery Parameter Detection:

- Battery voltage detection and analysis
- Battery current detection and analysis
- Battery temperature detection and analysis



#### Equilibrium Management:

- Equalization based on voltage mode
- Equalization based on time mode
- Equalization based on battery cell SOC
- Active/passive equalization optional



#### Other Features:

- Low cost, low power consumption
- Historical data record
- Flexible cascade expansion
- CRC data validation

# Features

Color	Standard	Options
Yellow-black	●	
Other customized color		○
Particular market		
CE Standard		○
Cold storage environment		
-18°C/-30°C		○
Mast		
Standard duplex mast	●	
Configuration Table of the Mast		○
Fork and attachment		
Standard fork	●	
Fork arm carrier	●	
Load backrest	●	
Non-standard series fork		○
Various attachments		○
Tires		
Pneumatic tire (single)	●	
Pneumatic tire (dual)		○
Solid tire (single)		○
Solid tire (dual)		○
Multiway valve		
Double multi-way valve	●	
3rd valve		○
4th valve		○
5th valve (4.0-5.0t)		○
Tiller		
Lifting and tilting level	●	
Fingertip system		○
Battery		
Standard lithium battery	●	
Large-capacity lithium battery		○
Quick-change lithium battery		○
Light		
LED head lamp	●	
Turn signal lamp	●	
LED rear combination lamp	●	
Common alarm lamp		○
Acoustic and optical alarm lamp		○
LED rear lamp		○
Blue light		○
Straight projection lamp		○
Horn		
Electric horn	●	
Reverse buzzer	●	
Right rear armrest with horn button		○
Smart module		
FIMS(Fleet intelligent management system)		○

Safety configuration	Standard	Options
Emergency power-off switch	●	
Fuse box	●	
Soft landing	●	
Reversing radar		○
OPS system		○
Fire extinguisher		○
Ascending buffering		○
Parking brake		
Mechanical handbrake	●	
EPB(Electric Parking Brake)		○
Service braking		
Hydraulic assisted braking	●	
Instrument rack space		
Smart color-screen instrument (speed mode selection)	●	
Combination switch	●	
Cigarette lighter		○
USB port		○
Electronic code lock (start by swiping a card)		○
Driving space		
Standard overhead guard	●	
Central rear view mirror	●	
Front windshield		○
PVC ceiling		○
Cab		○
Electric fan		○
Left and right rear view mirrors		○
Seat		
Standard seat	●	
Fully-suspended seat		○
Semi-suspended seat		○
Other standard configuration		
Drive and lifting controllers	●	
Driving and lifting motors	●	
Oil pump reducer	●	
Silent gear pump	●	
DC-DC converter	●	
Pedal pad	●	
Traction pin	●	
Integral stamped side panel and hood	●	