

Features

Truck	Standard	Options
48V Permanent Magnet Synchronous Drive Motor	●	
Hydraulic Power Unit	●	
Polyurethane Wheels	●	
Side Charging	●	
Battery Lifting/Side Shift	●	
Adjustable Steering Wheel Height/ Angle	●	
Lithium Battery 48V/ 80Ah (EVE)	●	
Auxiliary Wheel	●	
Dual Load Wheels	●	
Cornering Speed Reduction	●	
Standing Platform Lift (Model: CJD25-XT1-LIT)	●	
Footrest Platform Lift/Lower (Model: CJD25-XT1-LIT)	●	
Side Operation Panel	●	
Various Fork Lengths		○
Various distance between Fork-arms		○
Lithium Battery 48V/105Ah (EVE)		○
Lithium Battery 48V/125Ah (CATL)		○
48V 30A Portable Charger		○
48V 50A Portable Charger		○
Front Multifunctional Bracket		○
Backrest	●	
Multi-Layer Pedal Pad	●	
Multifunctional Steering Wheel	●	
USB Power Supply	●	
Key Switch	●	
Adjustable Height Backrest		○
No logo Handle		○
Controls and instruments		
Electric Steering System	●	
Permanent Magnet Synchronous Motor Controller	●	
Interactive Dashboard	●	
Electronic Lifting Limit	●	
Contactless Interlock Switch	●	
Safety		
Emergency Power Off Switch	●	
Horn	●	
Bumper		○
Lights		
Front LED Light	●	
Turn Signals	●	

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ISO45001:2018



ISO14001:2015



ISO9001:2015



HANGCHA trucks conform to the European Safety Requirements.



X SERIES

LOW-LEVEL ORDER PICKER

With capacity of 2,500kg

X SERIES LOW-LEVEL ORDER PICKER

The X Series low-level order picker features an advanced permanent magnet brushless drive system and a brand new 48V system platform.

It is safe and reliable, offering comfort and efficiency with outstanding performance and low maintenance costs, making it ideal for the selection of large items from the lower shelves in large supermarkets.

48V
VOLTAGE
WITH
PERMANENT MAGNET
SYNCHRONOUS DRIVE MOTOR



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

6 YEARS
WARRANTY

RUGGED ON THE OUTSIDE



APPEARANCE

- **Family Design:** The vehicle has a smooth and dynamic overall line that is in line with the latest design trends.
- **Material:** Made of stamped steel plates, it is strong, robust, durable, and environmentally friendly.



Steering Wheel:

A newly developed multifunctional steering wheel with integrated design, novel and aesthetically pleasing, making operation more convenient.



Adjustability:

The steering wheel can be adjusted in multiple degrees of freedom to suit operators of different heights and arm lengths.



Storage Space:

Ample storage space provides greater convenience for the operator.



TOTAL COMFORT

- **Lifting Mechanism:** All lifting mechanisms are designed with a buffering function to effectively reduce impact and improve the operator's comfort.
- **Pedal Assembly:** The combination of a suspended structure pedal assembly and a thick multi-layer pedal pad can effectively reduce the operator's fatigue.



REVOLUTIONARY PERFORMANCE

- **Control System:** Side control and walking mode functions effectively improve work efficiency.
- **Drive System:** Employs a permanent magnet synchronous drive system with excellent performance and low energy consumption; a new 48V power supply system with low heat generation.
- **Control Unit:** The truck uses a VCU (Vehicle Control Unit) for precise and smooth control, leading to higher efficiency.

9.5 TRAVEL SPEED
Km/h

Equipped with a high-power motor for high travelling speeds.



Working Modes:

The dashboard offers multiple working modes to meet the needs of different working conditions.



Lifting Function:

Comes with a footrest platform that can be lifted, facilitating picking at higher locations.



Charging System:

It features a side charging design, with battery pack that can be lifted and removed from the side, making it convenient and quick.

RELIABILITY

- **Frame:** The truck frame is made of high-strength steel plates, ensuring a long service life.
- **Connectors:** The entire truck uses waterproof connectors, and all electrical wires and cables are well protected, greatly improving the reliability of the electrical system.



MORE PROTECT

SAFETY

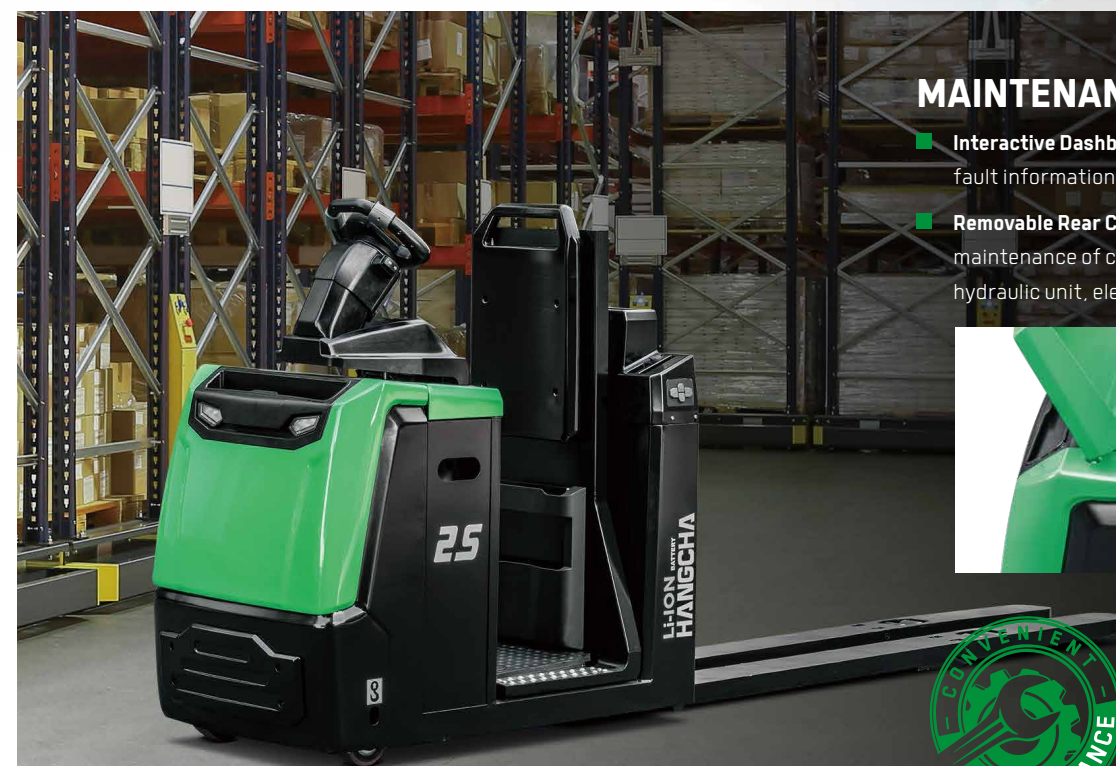
- **Lifting Limit Protection:** Standard electronic lifting limit and intelligent limit protection from the controller prevent impact when lifting to the top, effectively protecting the working motor and the safety of the goods.
- **Anti-Rollback Feature:** The truck has a slope anti-rollback function to ensure operational safety.

Safety Monitoring: Multiple safety monitoring switches such as steering wheel position detection and standing pedal induction work together to effectively ensure the personal safety of the operator.



MAINTENANCE AND SERVICE

- **Interactive Dashboard:** Allows direct viewing of fault information without the need for a manual.
- **Removable Rear Cover:** Facilitates easy maintenance of components such as the hydraulic unit, electronic control, and motor.



Motor: The permanent magnet synchronous motor requires no maintenance.

LITHIUM POWERED

EMPOWER YOURSELF WITH THE BEST



Li
Lithium

POWER THE POSSIBILITIES
RELIABLE LITHIUM-ION TECHNOLOGY

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.



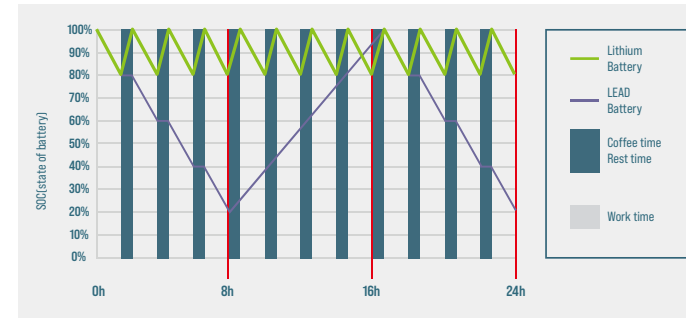
Opportunity charging

Full performance during several shifts thanks to effective interim charging.

FEATURES & BENEFITS THE HANGCHA DIFFERENCE

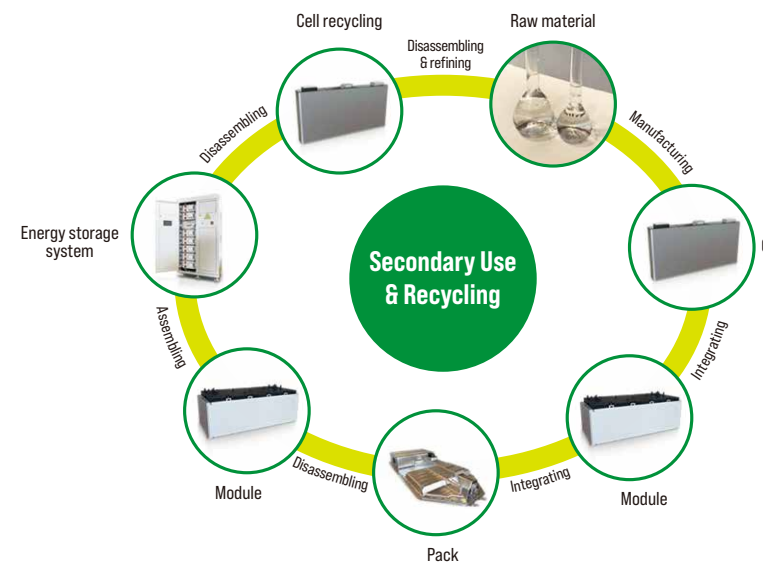
Efficiency

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.



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

Technical data

Distinguishing mark	1.1	Manufacturer [abbreviation]		HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation		CJD25-XT1-LI	CJD25-XT1-LIT
	1.3	Drive: electric (battery type, mains, ...), diesel, petrol, fuel gas		electric	electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		order-picker	order-picker
	1.5	Rated capacity /rated load	kg	2500	2500
Weight	1.6	Load centre distance	c (mm)	1200	1200
	1.8	Load distance, centre of drive axle to fork	x (mm)	1532/1600	1532/1600
	1.9	Wheelbase	y (mm)	2614/2684	2730/2800
	2.1	Service weight	Kg	880	1130
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU
	3.2	Tyre size, front		Ø250-80	Ø250-80
	3.3	Tyre size, rear		Ø83-80	Ø83-80
	3.4	Additional wheels [dimensions]		Ø140-70	Ø140-70
	3.5	Wheels, number front/rear [+ driven wheels]		1x +1/4	1x +1/4
	3.6	Tread, front	b10 (mm)	500	500
Dimensions	3.7	Tread, rear	b11 (mm)	338	338
	4.4	Lift	h3 (mm)	125	125
	4.8	Seat height relating to SIP/stand height	h7 (mm)	150	190
	4.14	Stand height, elevated	h12 (mm)	/	1030
	4.15	Height, lowered	h13 (mm)	85	85
	4.19	Overall length	l1 (mm)	3692	3808
	4.20	Length to face of forks	l2 (mm)	1292	1408
	4.21	Overall width	b1/b2 (mm)	800	800
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	64/172/2400	64/172/2400
	4.25	Fork spread	b5 (mm)	510	510
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	70	70
	4.34.2	Aisle width for pallets 800 * 1200 lengthways	Ast (mm)	3892[3980] ¹⁾	4008[4096] ¹⁾
	4.35	Turning radius	Wa (mm)	2822/2892	2938/3008
Performance	5.1	Travel speed, laden/unladen	km/h	9.5/12.5	9.5/12.5
	5.2	Lift speed, laden/unladen	m/s	0.045/0.07	0.075/0.08
	5.3	Lowering speed, lade/unladen	m/s	0.05/0.04	0.09/0.05
	5.8	Max. gradeability, laden/unladen	%	6/16	6/16
Electric engine	5.10	Service brake		regenerative	regenerative
	6.1	Drive motor rating S2 60 min	kW	2.2	2.2
	6.2	Lift motor rating at S3 15 %	kW	2.2	4.2
	6.4	Battery voltage/nominal capacity	(V)/(Ah)	48/80	48/80
	6.5	Battery weight	kg	60	60

Note: 1) According to VDI2198 standard+88mm.

