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ISO45001:2018



ISO14001:2015



ISO9001:2015



HANGCHA trucks conform  
to the European Safety  
Requirements.

# XA SERIES

PALLET TRUCK

With capacity of 2,000 to 3,000kg

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# EFFORTLESSLY MAXIMISING PERFORMANCE

- The advanced AC control system ensures precise and stable control with high efficiency.
- The CANBUS bus structure makes the whole truck communication faster and more reliable.
- Equipped with an AC driving motor, it has excellent acceleration performance, good climbing ability, low heat generation, no brushes, and is maintenance-free.



Standard equipment with EPS makes the operation more convenient and flexible.



# XA SERIES PALLET TRUCK

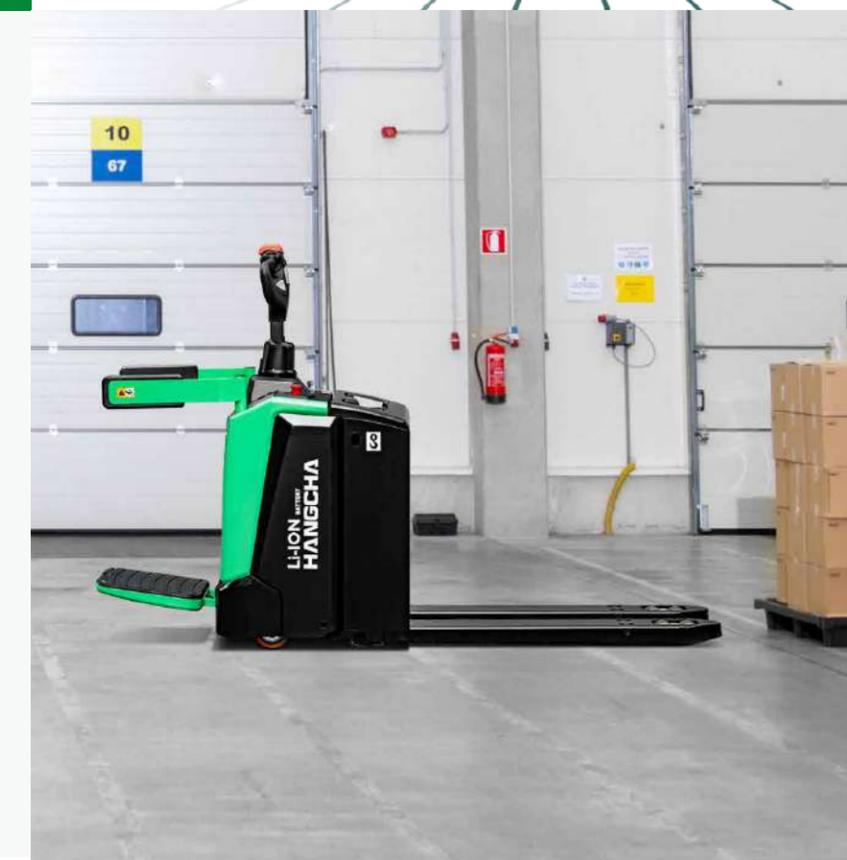
XA series pallet truck are a new generation of products developed by Hangcha specifically for warehouse logistics applications. They feature the latest **AC drive control system**, which is advanced in performance, comfortable to operate, safe and reliable, and has low cost for use and maintenance. They are an ideal tool for loading and unloading and moving palletized goods in warehouses, supermarkets, workshops.



## APPEARANCE

The XA series pallet truck adopt a professional appearance design with a family and series consideration, with smooth lines and a dynamic look; they fully consider ergonomics and comply with the latest design trends.

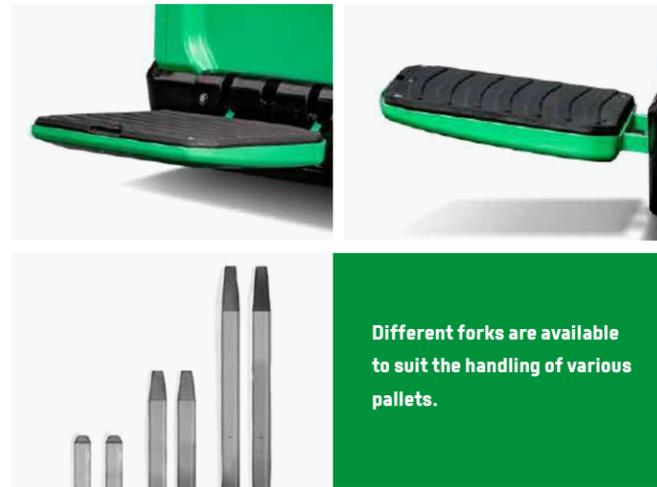
The whole truck is surrounded by stamped steel plates, which are strong, sturdy, durable, high-grade, and meet environmental protection requirements.





# ENJOY YOUR WORK

- The shock absorbing suspension system makes the pallet travel more smoothly and operate more comfortably.
- The standing pedal is designed with shock absorption, greatly improving the comfort of standing and reducing fatigue from long-term driving.



Different forks are available to suit the handling of various pallets.

The optimized truck structure ensures that the truck has an excellent operating view, making it more convenient to enter and exit pallets.



The compact body and large corner design make the truck suitable for work in narrow spaces, and the chassis is designed with a wedge shape, greatly improving passability.

*The control handle is beauty and simple, with all operating functions easily completed with one hand.*

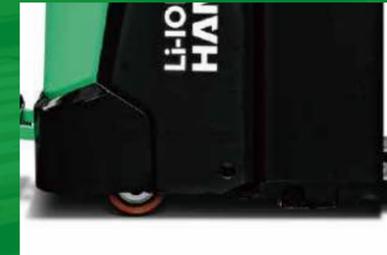


The unique turtle speed function with a red light display makes it more convenient to move the truck slowly, and even in very narrow spaces, goods can be placed.



# GET READY FOR MORE

- The stamped fork has higher strength and impact resistance, and the fork tip guide further improves work efficiency.
- The overall metal rear cover can resist external impacts.
- The low center of gravity design, with a high-strength steel frame structure, has a large residual load capacity and a long service life.



The unique shock absorbing floating suspension system of the stand-on ensures that the driving wheels are always in contact with the ground, ensuring the stability of the truck.



## RELIABILITY

- The lifting rod system has been optimized for stable and reliable performance with minimal force.
- The whole series uses waterproof connectors, and all wires and cables have reliable protection, greatly improving the reliability of the electrical system.
- The hydraulic power unit is low noise, low vibration, and the lifting and lowering are stable and reliable.
- The interlocking switch uses a non-contact proximity switch, which is highly reliable.
- The power plug is fixed on the truck body to prevent damage to the plug when lifting the battery.
- The battery is securely fixed, and the battery cover is supported by soft materials, reducing the vibration and noise generated during operation.

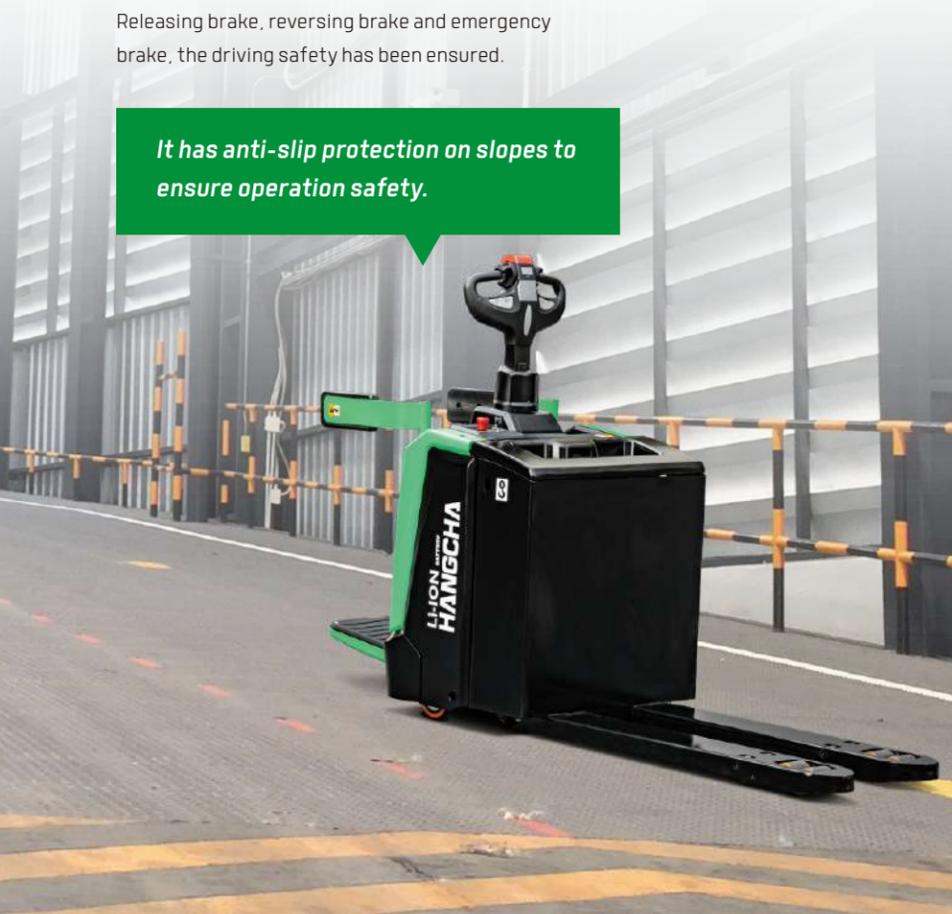


# PROTECT YOUR INVESTMENT

## WITH THREE BRAKING TYPES:

Releasing brake, reversing brake and emergency brake, the driving safety has been ensured.

*It has anti-slip protection on slopes to ensure operation safety.*



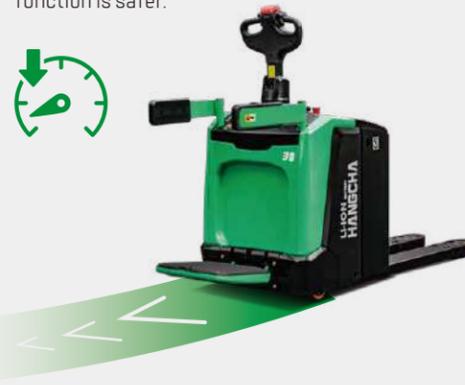
The standard electronic lifting limit and the dual protection of the intelligent limit of the controller avoid impact when lifting to the top, effectively protecting the motor and the safety of the goods.



The emergency reverse button at the head of the handle can effectively prevent the operator from being injured when encountering an emergency while driving backward.



The standard cornering deceleration function is safer.



# MORE UPTIME LESS UPKEEP



## MAINTENANCE

- The AC motor is brushless and maintenance-free, saving usage costs.
- All shafts are equipped with lubricated bushings and oil cups, making maintenance convenient and extending the service life.



The integrated power display, timing, and fault self-diagnosis table are convenient for maintenance.



The rear cover can be completely opened, and the components are clear at a glance, making the maintenance of the truck very convenient.



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

**6 YEARS  
WARRANTY**

# 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.



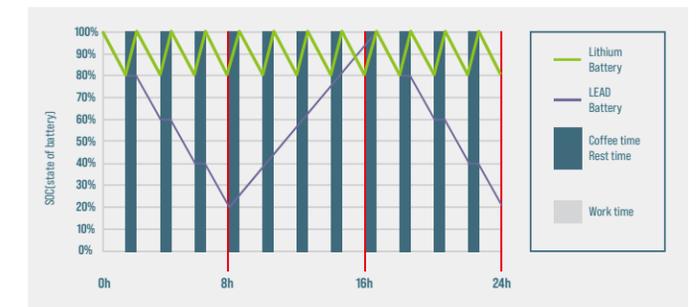
### Opportunity charging

Full performance during several shifts thanks to effective interim charging.

## FEATURES & BENEFITS THE HANGCHA DIFFERENCE

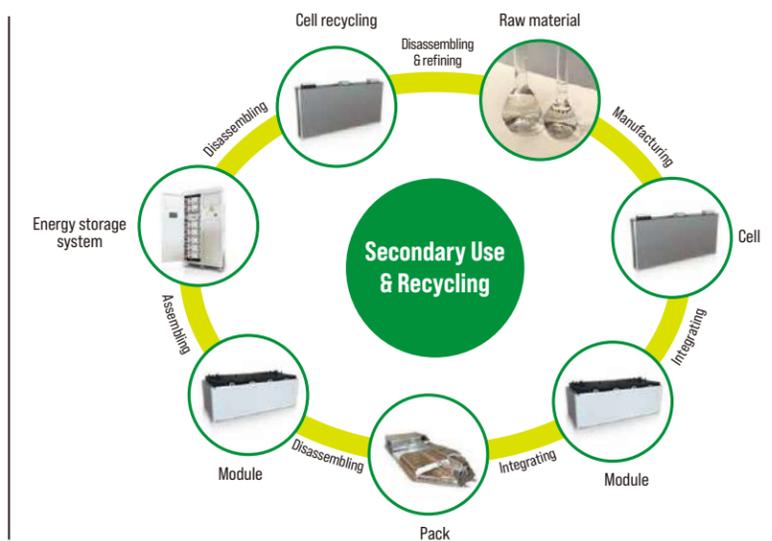
### Efficiency

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 - 55 C  
Discharge temperature: -28 C - 65 C  
Storage environment temperature: -28 C - 55 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

		HANGCHA GROUP CO.,LTD.					
Distinguishing mark	1.1	Manufacturer (abbreviation)					
	1.2	Manufacturer's type designation	CBD20-XAJ1S-I/01S-I/C1S-I	CBD20-XAJ1S/01S/C1S	CBD30-XAJ1S-I/01S-I/C1S-I	CBD30-XAJ1S/01S/C1S	
	1.3	Drive: electric (battery type, mains, ...), diesel, petrol, fuel gas	Electric	Electric	Electric	Electric	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Standing	Standing	Standing	Standing	
	1.5	Rated capacity/rated load	kg	2000	2000	3000	3000
Weight	1.6	Load centre distance	c (mm)	600	600	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	912/980	912/980	912/980	912/980
	1.9	Wheelbase	y (mm)	1392/1458	1392/1458	1392/1458	1392/1458
	2.1	Service weight	kg	560	685	560	715
	2.2	Axle loading, laden front/rear	kg	1030/1530	1125/1560	1300/2260	1420/2295
Tyres, chassis	2.3	Axle loading, unladen front/rear	kg	460/100	555/130	460/100	580/135
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		PU	PU	PU	PU
	3.2	Tyre size, front		Φ230.75	Φ230.75	Φ230.75	Φ230.75
	3.3	Tyre size, rear		Φ83.80	Φ83.80	Φ83.80	Φ83.80
	3.4	Additional wheels (dimensions)		Φ125.50	Φ125.50	Φ125.50	Φ125.50
	3.5	Wheels, number front/rear (* = driven wheels)		1x*2/4	1x*2/4	1x*2/4	1x*2/4
	3.6	Tread, front	b10 (mm)	535	535	535	535
Dimensions	3.7	Tread, rear	b11 (mm)	370	370	370	370
	4.4	Lift	h3 (mm)	125	125	125	125
	4.9	Height drawbar in driving position min./max.	h14 (mm)	1180/1400	1180/1400	1180/1400	1180/1400
	4.15	Height, lowered	h13 (mm)	85	85	85	85
	4.19	Overall length	l1 (mm)	1867	1867	1867	1867
	4.20	Length to face of forks	l2 (mm)	717	717	717	717
	4.21	Overall width	b1 (mm)	770	770	770	770
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	60/170/1150	60/170/1150	60/170/1150	60/170/1150
	4.25	Fork spread	b5 (mm)	540	540	540	540
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	23	23	23	23
Performance data	4.34.1	Aisle width for pallets 1000 - 1200 crossways	Ast (mm)	2091 <sup>[2529]1</sup>	2091 <sup>[2529]1</sup>	2091 <sup>[2529]1</sup>	2091 <sup>[2529]1</sup>
	4.34.2	Aisle width for pallets 800 - 1200 lengthways	Ast (mm)	2141 <sup>[2579]2</sup>	2141 <sup>[2579]2</sup>	2141 <sup>[2579]2</sup>	2141 <sup>[2579]2</sup>
	4.35	Turning radius	Wa (mm)	1654/1721	1654/1721	1654/1721	1654/1721
	5.1	Travel speed, laden/unladen	km/h	6/7	6/7	6/7	6/7
Electric-engine	5.2	Lift speed, laden/unladen	m/s	0.046/0.060	0.046/0.060	0.031/0.050	0.031/0.050
	5.3	Lowering speed, lade/unladen	m/s	0.050/0.040	0.050/0.040	0.047/0.038	0.047/0.038
	5.8	Max. gradeability, laden/unladen	%	8/16	8/16	6/16	6/16
	5.10	Service brake		Regenerative	Regenerative	Regenerative	Regenerative
Electric-engine	6.1	Drive motor rating S2 60 min	kW	1.6	1.6	1.6	1.6
	6.2	Lift motor rating at S3 15 %	kW	1.2	1.2	1.2	1.2
	6.4	Battery voltage/nominal capacity	V/Ah	24/150	24/210	24/150	24/240
6.5	Battery weight	kg	70	195	70	225	

Note: 1) According to VDI2198 standard+430mm. 2)According to VDI2198 standard+236mm.

## Features

Truck	Standard	Options
24V AC asynchronous drive motor	●	
Hydraulic power unit	●	
Polyurethane drive wheel	●	
Fork length: 1150mm	●	
Distance between fork-arms: 540mm	●	
Fork surface from the ground: 85mm	●	
Electronic lifting limit	●	
Additional wheel	●	
Dual load wheels	●	
A full range of fork lengths		○
A full range of distance between fork-arms		○
Single load wheel		○
Turning deceleration	●	
<b>Controls and instruments</b>		
EPS [Electric Power Steering] system	●	
AC controller	●	
Multifunctional instruments	●	
Key switch	●	
Non-contact interlock switch	●	
Multi-functional handle	●	
Stepless lifting/lowering speed control	●	
USB Power Supply		○
<b>Safety</b>		
Emergency shut-off switch	●	
Horn	●	
Turning deceleration	●	
<b>Other</b>		
Automatic charger		○

### Optional Lead Acid Battery List

Capacity(Ah)
24V/210/240/280/340Ah

### Optional Lithium Battery List

Capacity(Ah)		
EVE	● 24V/150Ah	○ 24V/230Ah

Note: ● Battery; ○ Battery Opt;

