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ISO45001:2018



ISO14001:2015



ISO9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

X SERIES

SIT-DOWN NARROW AISLE REACH TRUCK

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SIT-DOWN NARROW AISLE REACH TRUCK

Suitable for operations in narrow aisles and confined spaces, featuring high lift capacity, high load-bearing capability, small turning radius, advanced performance, ergonomic operation, and reliable safety. Ideal for loading, unloading, and stacking operations in warehouses, supermarkets, and workshops.

Exterior Design

Streamlined curvilinear styling with smooth, flowing body lines-elegant and aesthetically pleasing.



Stability

- Battery recessed into chassis base for enhanced overall stability.
- Four-point support structure ensures excellent stability at maximum lift heights.



EFFICIENCY

- High-power hydraulic pump motor with large-displacement quiet gear pump for enhanced fork lifting/lowering speeds and improved operational efficiency.
- Multiple speed modes selectable to accommodate various operating conditions.
- Regenerative braking system extends single-charge operating time.



Turning radius

1,912mm | 2,039mm

Single Reach

Double Reach

Compact turning radius enables operation in narrow aisles.

SERVICEABILITY

- Maintenance-free AC brushless motors significantly reduce operating costs.
- Full-opening access panels facilitate convenient maintenance, servicing, and troubleshooting.
- Side-extraction battery design enables easy battery maintenance and servicing.
- Electrical control components centrally located for high integration.



ERGONOMICS & COMFORT

- Standard side-extraction battery compartment facilitates convenient battery replacement and maintenance, suitable for continuous-duty operations.
- Low step height for easy and comfortable entry/exit.
- Suspended foot platform significantly improves standing comfort and reduces operator fatigue during extended operation.

Optimized mast system design provides panoramic visibility and excellent operator sightlines.



New integrated combination instrument cluster with comprehensive functionality and intuitive readability.



Ergonomically positioned control handle, backrest, instrumentation, and switches for comfortable and flexible operation.



Backrest adjustable to individual operator preferences.

Put the seat down

Lift the seat

The backrest is height adjustable

ADVANCED TECHNOLOGY

- High fork lifting/lowering speeds for maximum operational efficiency.
- Large-screen LCD display with self-diagnostic fault codes for accurate indication in harsh environments.
- New AC control system provides efficient, precise adjustment performance, extending runtime per charge.



Electromagnetic brake system replaces conventional handbrake, achieving intelligent parking brake control.



Elastic suspension system and floating foot platform enhance operator comfort.

Integrated electro-hydraulic control system with stepless speed regulation for travel and fork movements, ensuring precise and smooth control.

RELIABILITY & SAFETY

- Four-point low-center-of-gravity design with high-strength frame and primary load-bearing components to meet heavy-duty requirements.
- Safety pedal prevents inadvertent operation hazards.

- Major electrical components including motor controller, contactors, power plugs, and emergency disconnect switch utilize internationally renowned brands.
- AC power system with high efficiency, comprehensive protection functions, significantly enhanced reliability and service life.
- Correlated control of steering angle, lift height, and travel speed for enhanced operational safety.
- Optimized panoramic mast design maximizes operator visibility, improving operational safety.



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 75% 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.



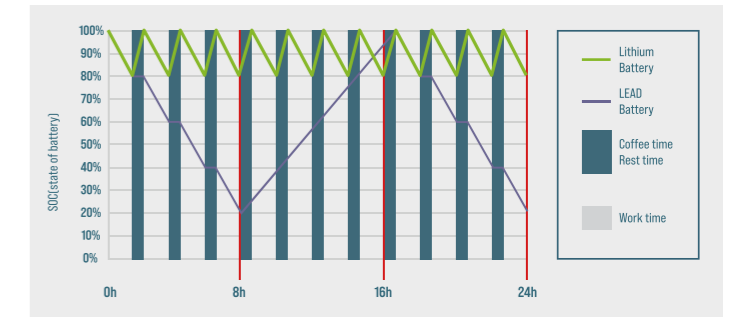
Opportunity charging

Full performance during several shifts thanks to effective interim charging.

FEATURES & BENEFITS THE HANGCHA DIFFERENCE

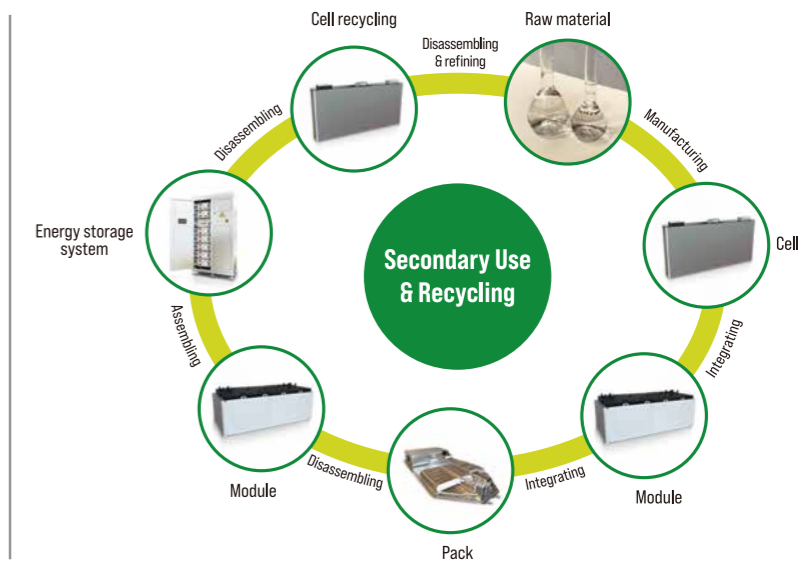
Efficiency

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: -30 C - 65 C
Discharge temperature: -30 C - 65 C
Storage environment temperature: -30 C - 65 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 monitor the cells at all times. 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

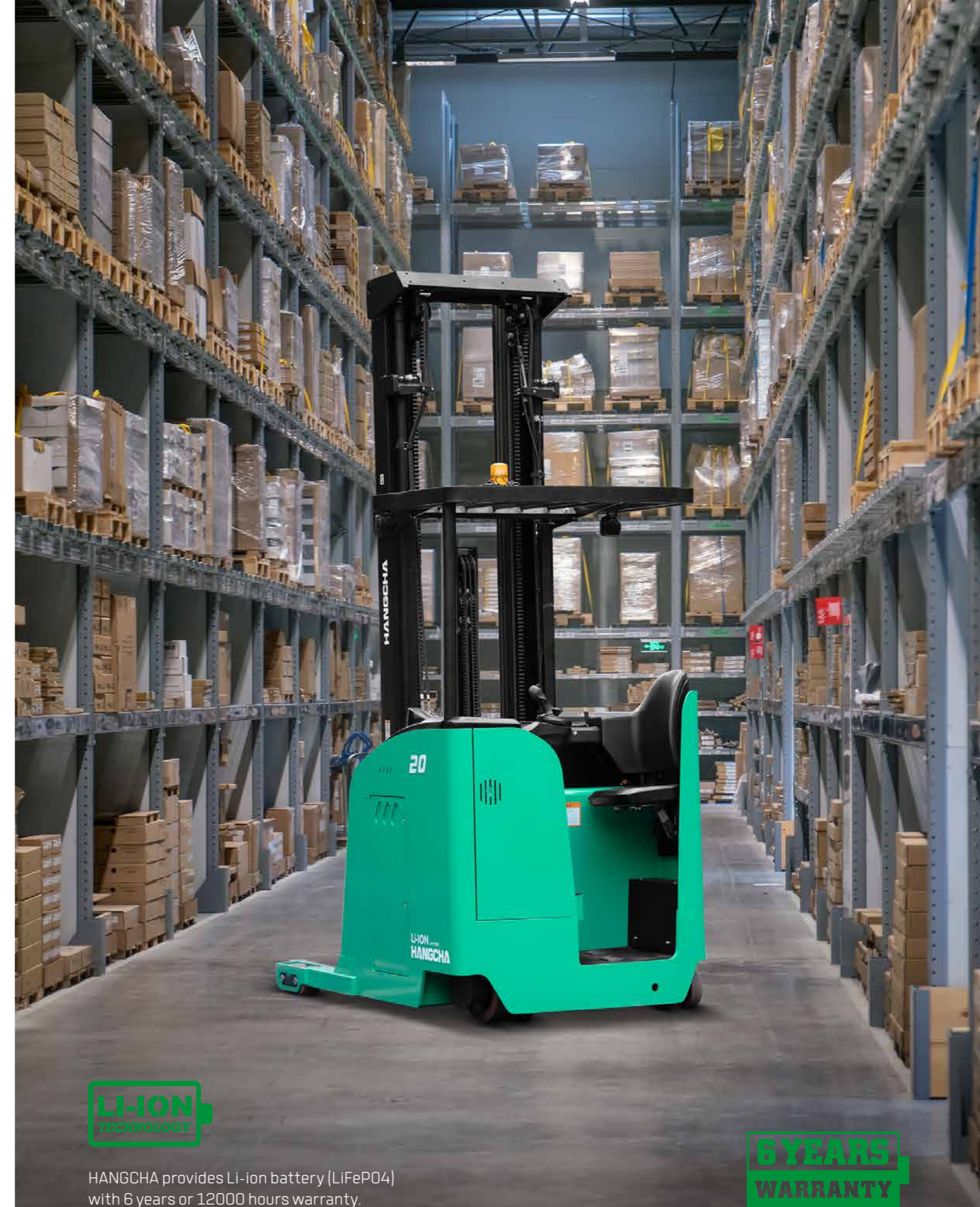


Other Features:

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

Features

Truck	Standard	Options
AC Electric Power Steering (EPS)	●	
5.03m High visibility Triplex Mast	●	
Fork Tilt (Forward/Backward) & Sideshift	●	
Standard Load Backrest	●	
Standard Forks	●	
Standard Overhead Guard (OHG)	●	
Fork lift speed reductions at maximum lift	●	
OPS	●	
USB Interface	●	
Automatic Speed Reduction on Cornering	●	
Automatic Travel Speed Reduction at High Lift	●	
Shock-Absorbing Platform	●	
Adjustable Backrest & Control Handle	●	
Antistatic Strip	●	
Side-Extraction Battery	●	
Electro-Hydraulic Proportional Valve System	●	
Tool Box & Document Holder	●	
Key Switch	●	
Electronic Parking Brake (EPB)	●	
Charger		○
High-Capacity Battery		○
Alternative Fork Lengths		○
Alternative Height Masts		○
Mast Protection Mesh		○
Extended/Heightened Load Backrest		○
Operator Compartment Fan		○
24V Power Outlet		○
Height Level Selector		○
Head Protection Guard		○
Controls and instruments		
Full AC Motor & Controller	●	
Multi-Function Combination Instrument Panel	●	
Multi-Function Integrated Control Handle	●	
Fork Vision Monitoring System		○
Load Backrest video monitoring		○
Safety		
Emergency Disconnect Switch	●	
Horn	●	
Wireless Fork video monitoring		○
Fire Extinguisher		○
Light		
Headlights	●	
Warning light		○
Blue Safety Light		○
Rear Working Lights		○
Tires		
Polyurethane Tyres	●	
Cushion Tyres		○



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

**6 YEARS
WARRANTY**