

LI-ION
TECHNOLOGY

INNOVATIVE LITHIUM-ION

REACH
THE SKY

XH SERIES HIGH-VOLTAGE LITHIUM BATTERY EMPTY CONTAINER HANDLER

with capacity of 9,000kg



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HANGCHA



The World of Hangcha

XH SERIES HIGH-VOLTAGE LITHIUM BATTERY EMPTY CONTAINER HANDLER

Independently developed by Hangcha on the basis of decades of deep understanding of electric products and internal combustion products, XH series high-voltage counterweight lithium battery empty container handlers are a new series of high-voltage lithium battery empty container handlers that first use a new energy vehicle voltage platform and represent a breakthrough over the traditional design concept. With improved efficiency, power, reliability, etc., XH series forklift models have performance and operating condition completely superseding that of the internal combustion forklifts.

VOLTAGE

579 V

100% CHARGE FOR

1 Hour

WATER RESISTANCE

IPX4

Appearance

/ With the inherited exterior design of X series internal combustion empty container handlers and a smooth and sturdy profile, the whole vehicle is stylish, sturdy and powerful, showing modern industrial aesthetics.

SPEED MODELS

3

PROTECTION RATE

IP67

THE **Plus**
FOR YOUR
BUSINESS



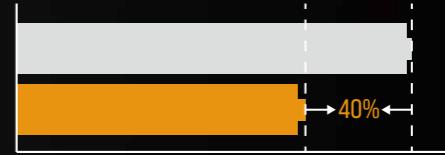
FASTER & MORE EFFICIENCY.



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



4000 CYCLES OF CHARGING

» **75% LI-ION**

Through disruptive battery and fast charging technology, the charging time is greatly shortened.

Get the battery fully charge:

1h

10h

Hangcha High Voltage Electric Forklift

Electric Forklift

Under normal charging and discharging conditions, the lithium battery of Hangcha products has a capacity retention rate of more than 75% and a life span of up to 10 years after 4000 cycles of charging and discharging.

Fast charging makes it possible for the whole vehicle to work continuously, shortening the waiting time and greatly improving efficiency.

HIGH-VOLTAGE

350.1Kwh

Battery capacity

EFFICIENT AND DURABLE

Advancement

- / A high-torque permanent magnet synchronous motor provides strong power for the vehicle with performance indicators benchmarked against that of internal combustion forklifts.
- / A 579V high-voltage platform with low system loss and a standard chilled water tank for heavy-duty truck to achieve good heat dissipation.
- / The vehicle has independently developed VCU program along with PDU+MCU+BMS+DC/DC to form a reliable and efficient drive system with flexible function configuration.
- / With motor, electric control and battery adopting liquid-cooling heat dissipation, the forklift can absolutely carry out long-time and high-intensity operations as internal combustion forklifts.

Ultra long battery life

- / A large-capacity lithium battery for the standard configuration can meet the long battery life need.
- / Both the drive and operating systems are efficient and energy-saving vehicle-grade permanent magnet synchronization systems.
- / High-voltage platform, less vehicle current and minimal system heat loss.
- / Braking energy and potential energy recovery effectively prolongs operating time.

Reliable

- / The novel spreader has a higher reliability, a longer service life, a lower failure rate and a lower maintenance cost.



Safety

- / The cover of the vehicle is designed to be sealed to the water resistance level of IPX4.
- / The electrical system has high-voltage interlocking, insulation monitoring and potential balancing functions to offer vehicle-grade safety.
- / Both the battery and junction box have MSD maintenance switches to enable one-click power-down and safer maintenance.
- / Key structural parts have been verified highly reliable by the market for many years while being used by internal combustion forklifts.



All the motor and electronic controls reach the dust and water resistance level of IP67, a high protection level adequate to withstand harsh operating environments.



A turning deceleration function effectively reduces risk of tipping over.



The high-voltage lithium battery is equipped with an automatic fire extinguisher for the standard configuration. The vehicle is equipped with a pipe network automatic fire extinguisher for the standard configuration.

- / The spreader twist-lock equipped with mechanical and electrical protection devices, lifting interruption control, OPS system, travel speed limiting and other functions ensure safe operations.
- / The LED lighting system ensures the brightness of the lighting within the operating range.
- / A visual reversing radar is provided for the standard configuration and other options such as an tire pressure monitoring, overload protection, etc. can be provided.



Fully-suspended all-round vision cab

- / The large-stroke bodily-movable fully-suspended cab can be repaired and maintained easily, can easily switch to the manual movement mode, and easily move.
- / With the vehicle frame damper connected and the tight sound and heat insulation design, most vibration and noise are shielded.
- / The largely-curved front and rear windows, all-glass left and right doors and large glass ceiling enable a broad view.
- / An inclinable telescopic steering column and fully-suspended adjustable seat with a high backrest and safety belt, with seat sensing and driving position sensing functions.
- / A high-power cooling and heating air conditioner, two ventilation modes - internal and external circulation, sunshades, speedadjustable wipers and defrosting function make driving more comfortable.



SMART AND CONVENIENT

Maintainability

- / The overturnable cab and electric tipping cylinder make tipping easier and more labor-saving.
- / The wide-opened hood and removable cover better facilitate repair and maintenance of electrical components.

Intelligence

- / An optional intelligent management system is provided to enable intelligent remote monitoring and easier equipment management and logistics management.
- / A vehicle central controller is provided, which has bus architecture, several built-in diagnosis and management functions and a central fault alarm function.





Single handling container spreader Vertical Twistlocks.



Improved design with built-in cabling and larger bending radius for hydraulic hose between pocket and end-post.



INNOVATION head.

Suitable for:

- / 20' or 40' ISO containers of 8' [2.44 m] width.
- / Approx. 2.45-2.50 m wide "pallet-wide" 20' or 40' containers, with ISO-like 'chamfered' corner castings.
- / With speed limitation for laden/unladen.

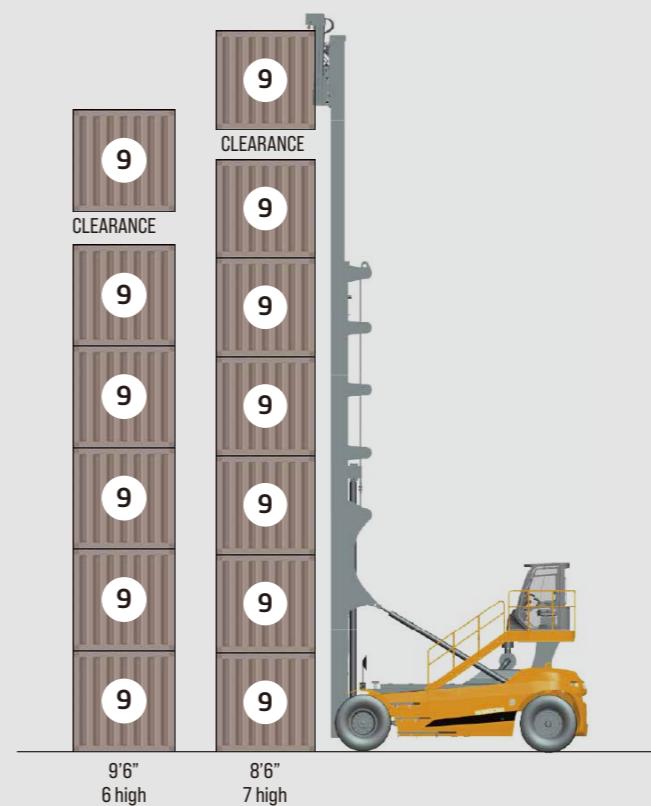
Not suitable for:

- / Approx. 2.45 - 2.60 m wide "CPC" containers (Cellular Pallet-wide Containers) with non-ISO corner castings.
- / Approx. 2.45 - 2.50 m wide "pallet-wide" 20' or 40' containers, with ISO-like 'chamfered' corner castings.

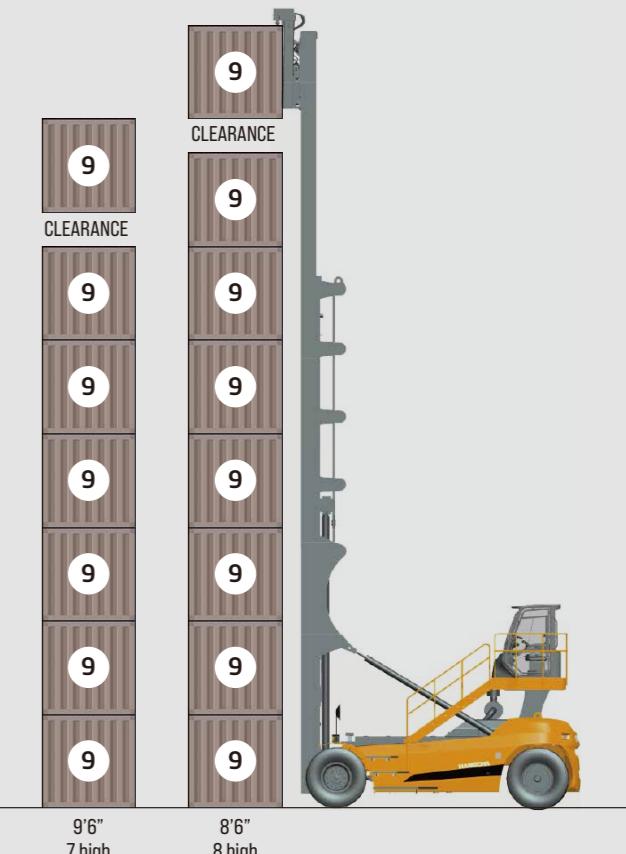
TECHNICAL SPECIFICATIONS

Type of lifting system	Two vertical twistlocks
Type of stacking	Normal and block stacking
Spreader weight (TW)	3 600 kgs
Carriage weight (MPS)	1050 kgs
Lifting capacity (SWL)	9 tonnes
Telescopic positions	20 and 40ft
Telescoping speed, 20-40ft	< 12 sec.*
Telescoping speed, 40-20ft	< 14 sec.*
Sideshift	± 600 optional ± 400 mm
Mechanical pile slope (MPS), vertical floating end-posts	At 20ft position: approx. 200 mm At 40ft position: approx. 200 mm
Hydraulics, operating pressure up to	140 bar
Hydraulics, flow	40-60 L/min
Electric - control voltage	24 VDC
Communication	CAN 2.0B
Colour	Black grey RAL 7021

* Calculated speed at 60 L/min



H90EC-7-XHJG



H90EC-8-XHJG



Standard Specification

- / Cab
- / Multi-direction adjustable armrest
- / Emergency descending
- / LCD bus instrument
- / Hydraulic oil filter alarm
- / Snail horn
- / Multifunctional color-screen instruments
- / Maintenance-free 24V lead-acid battery
- / Standard seat
- / Fully hydraulic power steering
- / Steering wheel adjusting device
- / Visual reversing radar
- / Accumulator low pressure alarm
- / Alarm light
- / Neutral gear switch
- / Water chilling unit for lithium battery
- / Automatic fire extinguisher for lithium battery
- / Mast LED light
- / Cooling and heating air conditioner
- / Chair sensing system
- / Traction device
- / Neutral indicator
- / Vehicle LED lights
- / Oil-resistant tread tire
- / Standard lithium battery box
- / Emergency shut-off switch
- / VCU controller
- / Electrically-controlled joystick
- / Spreader twist-lock double protection
- / Rearview mirror
- / Pneumatic tire
- / Reversing buzzer
- / MSD maintenance switch
- / Maintenance reminding

Options

- / User specified color
- / Reverse voice buzzer
- / Weighing system
- / Blue light
- / Twist-lock counter
- / Fire extinguisher (2kg/4kg)
- / Speed limit alarm
- / Tire pressure monitoring
- / Solid tire
- / Acoustic and optical alarm light
- / Driving record system
- / Central lubrication system
- / Front view system (optionally with a memory)
- / Vehicle intercom
- / Turning deceleration
- / Cloud intelligent management system
- / Vehicle toolkit

