



ZHEJIANG HANGCHA IMP. & EXP. CO., LTD.

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

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

sales@hcforklift.com  
www.hcforklift.com



Follow us on  
Facebook



Follow us on  
YouTube



Follow us on  
WeChat



Download "Hangcha  
Forklift" App



ISO14001  
ISO14001:2015



ISO9001  
ISO9001:2015



HANGCHA trucks conform  
to the European Safety  
Requirements.



2022 VERSION 5/COPYRIGHT 2022/06

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.

# XF2 Series IC Counterbalanced Trucks

with capacity of 1,500 to 3,500kg

**STAGE V**  
CERTIFIED



*The World of Hangcha*  
SINCE 1956



# FOR HIGH PERFORMANCE DURING WORKING



## Appearance

A vivid and sturdy exterior inheriting the classic design, embodying innovative ideas, and bringing a strong high-tech impact.



## Safe

- / The vehicle has a low center of gravity design and optimized operating vision. (small counterweight design, backward tilting counterweight design, optimized triplex mast design).
- / DPS system is provided for the standard configuration and optionally an adjustable speed limit range of several segments is provided.



## Mast

Can be easily installed with J-hooks through a simple process.





***MORE VISION  
MORE CONTROL  
MORE GUARANTEE***

**All-round visibility**

Optimized design provides outstanding visibility in all directions.

# COMFORTABLE

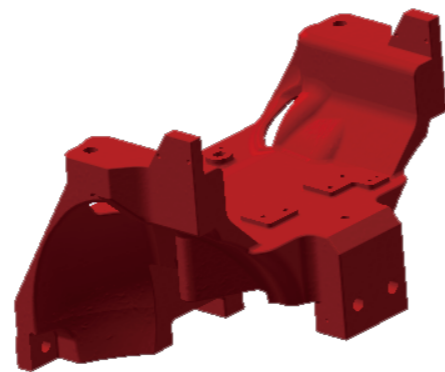
- / The fully-suspended gearbox, fully-suspended overhead guard, and fully-suspended seat realize three-stage vibration reduction to reduce vibration of the vehicle.
- / Noise control: Special sound-absorbing cotton is attached to certain parts and so on to decrease the vehicle's noise.
- / Optimized ergonomic design, enlarged cab space, an optional new-generation fingertip operating system.



The fully-suspended gearbox



Fully-suspended overhead guard



Cast steering axle mounts

## Truck Construction

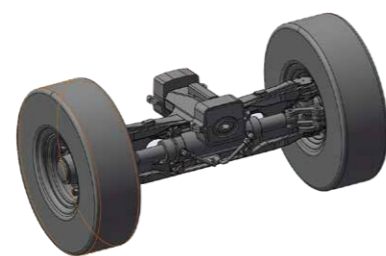
With the novel designed cast steering axle mounts, the center of gravity is lowered, and the vehicle's noise radiation is reduced. An integrated fully-suspended overhead guard is provided for the standard configuration, and customers can choose cab. Large plate stamping and molding processes and automatic welding technology are used to enable a stylish exterior.

## Control system

- / Breaking through the limitation of the traditional steering axle structure, the newly developed cast open steering axle has the maximum internal turning angle increased from 77° to 82°, it can help customers work in narrow space.
- / With the cast open steering axle, the oil cylinder can be replaced easily, and the vehicle has a low center of gravity and good stability.
- / The steering axle is installed with pads, which effectively improve the operation comfort and reliability.
- / Parking brake: A central brake requiring less operating force.



An optional pedal parking brake

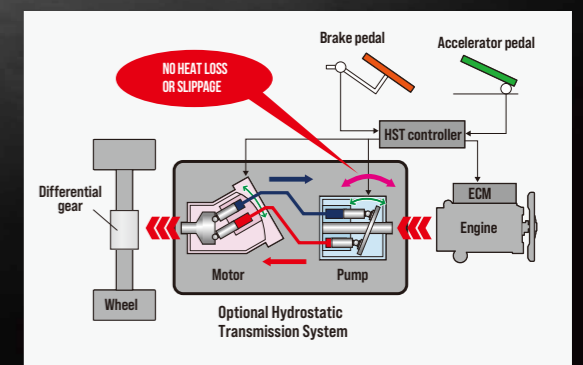


Cast steering axle



## Optional hydrostatic transmission system

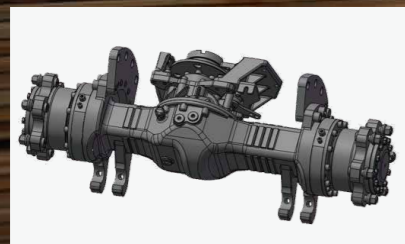
- / In this system, the engine drives a hydraulic pump and the pressure is transferred to a hydraulic motor mounted on the drive axle, then the motor outputs traction to the drive wheels via a gear reducer and a differential.
- / As this system has no clutch to be used by the hydraulic transmission forklift truck, it does not cause heat loss and wear from inching operation, minimizing transmission losses and reducing fuel consumption.
- / The hydrostatic drive system will automatically brake when the accelerator is released, leading to less wear and tear on the brake and tyres, and longer service life.
- / Equipped with the adjustable speed setting and turning deceleration function, driving safety can be ensured from all aspects.
- / Three operating modes [E, N, S] are freely selectable, providing simple and precise control and allowing optimal working efficiency in a wide range of operating conditions.



# THE POWER TO PERFORM

## Reliable

- / A wet axle is developed and used to significantly improve the reliability of the braking system and force transmission structural parts. (Wet brake, custom high-strength bolts, wheel side planetary reducer).
- / Wet brake drive axle + enhanced SHAOCHI/OKAMURA enhanced gearbox. Both the drive axle and the gearbox are expected to have a service life of far longer than 10 years, and the wet brake 10 years. Enhanced four-piece rims are used.



Wet brake drive axle

## Hydraulic

A high-pressure hydraulic system and load-sensing steering-priority-ensured multiway valves are used to improve system efficiency. A low-noise Shimadzu gear pump can improve reliability and reduce noise. All joints are 24° conic joints and each high-pressure pipe joint has a pressure measuring port, to enable better sealing and maintainability.



**E SERIES** engines and an enhanced gearbox are developed and used to significantly improve the reliability of the power train. (E series engines match the enhanced F gearbox and new Okamura gearbox).



High Power



Heat Dissipation

## Power

- / The highly cost-effective Xinchai 3E22 diesel engine meets EU V emission requirements.
- / The engine has been tested for 10000h in total for reliability validation in several round, the reliability has been fully verified. It is worth mentioning that the diesel engine has been tested in Jinan testing center and Bosch Wuxi test bench for 3000h. The diesel engine has excellent reliability, and is rated as Bosch off-road project 'BES' award.
- / A plate-fin heat dissipater with less air resistance is developed, which has a heat dissipation efficiency increased by 15%.



0.44%

Very low dilution ratio of engine oil, the oil dilution ratio after single regeneration is only 0.44%, much lower than the value of 20% specified in the national standard, the oil change interval of E series diesel engine up to 500h.



5,000h

DPF has a long maintenance interval. Based on excellent engine raw emission level and regeneration strategy, the ash cleaning interval up to 5000h.



DPF



E series engine

# FULLY AUTOMATED

## Electrical system

- / Streamer LED taillights are developed and used to make the vehicle more ethereal with a strong high-tech impact.
- / The new-generation high-efficiency energy-saving novel combination LED lighting system is energy-saving, while the performance and service life of the lights are significantly improved.
- / In order to improve the protection level, all key connectors and connectors are all waterproof.



Streamer LED taillights

## Intelligent

- / Interactive instruments are provided for the standard configuration, to display the operating status of the vehicle, and realize the information interaction of the vehicle.
- / An intelligent controller can realize the functions of OPS system, and flameout for idle speed time out, and can have other optional functions of speed control, speed limiting for faults, lifting at a high idle speed, automatic fork leveling, etc.



New interactive instruments



# Standards

Truck	Transmission	Steering	Power	Body
<ul style="list-style-type: none"> <li>/ High-performance tire</li> <li>/ Fully-suspended seat</li> </ul>	<ul style="list-style-type: none"> <li>/ Wet braking drive axle</li> <li>/ Fully-suspended gearbox</li> <li>/ Oil filter</li> <li>/ Oil cooler</li> <li>/ Four-piece rim</li> <li>/ Electro-hydraulic steering</li> <li>/ Gearbox dipstick</li> </ul>	<ul style="list-style-type: none"> <li>/ Open cast steering axle</li> <li>/ Pad-equipped steering axle</li> <li>/ Fully hydraulic power steering gear</li> <li>/ Small-diameter steering wheel</li> <li>/ Steering wheel adjusting device</li> </ul>	<ul style="list-style-type: none"> <li>/ EU V engine</li> <li>/ Plate-fin heat dissipater</li> <li>/ Auxiliary water tank for heat dissipater</li> <li>/ High-efficiency air filter</li> <li>/ Safety filter cartridge</li> <li>/ High-efficiency air intake silencer</li> <li>/ High-efficiency exhaust silencer</li> <li>/ High-position air intake device</li> <li>/ Low-position exhauster</li> <li>/ Fan protection device</li> <li>/ Engine operation safety protection</li> <li>/ DPF system</li> </ul>	<ul style="list-style-type: none"> <li>/ Special sound-absorbing cotton</li> <li>/ Traction device</li> <li>/ Engine hood gas spring</li> <li>/ Anti-skid boarding step</li> <li>/ Large rubber pedal pad</li> <li>/ Counterweight grille cover</li> <li>/ Lockable hood</li> <li>/ Double-layer soundproof hood padding</li> <li>/ Water tank lid bolt with retaining ring</li> <li>/ Piston rod sleeve</li> <li>/ Traction pin locking pin</li> </ul>

Control	Hydraulic	Electrical	Portal	Overhead Guard
<ul style="list-style-type: none"> <li>/ Cable-type stop brake (with safety lock)</li> <li>/ Hanging control pedal</li> </ul>	<ul style="list-style-type: none"> <li>/ Low-noise gear pump</li> <li>/ Load-sensing steering-priority-ensured multiway valve</li> <li>/ 24° conic joint</li> <li>/ High-pressure hydraulic system</li> <li>/ Hydraulic oil recycling filter cartridge</li> <li>/ Self-locking valve in the tilting fuel circuit</li> <li>/ Hydraulic dipstick</li> <li>/ Double valve</li> <li>/ Hydraulic oil suction filter cartridge</li> </ul>	<ul style="list-style-type: none"> <li>/ Multifunctional interactive instruments</li> <li>/ Chair sensing system</li> <li>/ Combination LED lighting system</li> <li>/ Intelligent controller</li> <li>/ Gear shifting switch formed by in-mold injection</li> <li>/ Waterproof connector</li> <li>/ Electric horn</li> <li>/ Reverse buzzer</li> <li>/ Integrated combination switch</li> <li>/ Neutral gear safety switch</li> <li>/ Engine oil pressure alarm</li> <li>/ Gearbox oil temperature alarm</li> <li>/ Engine hour counter</li> <li>/ Oil gauge</li> <li>/ Water temperature meter</li> <li>/ Preheating indicator</li> <li>/ Charge indicator</li> <li>/ Main power switch</li> <li>/ Electronic alarm light</li> </ul>	<ul style="list-style-type: none"> <li>/ Duplex wide-view large-lifting-capacity mast</li> <li>/ Standard fork</li> <li>/ Standard fork carriage</li> <li>/ Standard load backrest</li> <li>/ Speed limiting valve of the mast</li> <li>/ Load safety valve</li> <li>/ Mast descending buffering device</li> </ul>	<ul style="list-style-type: none"> <li>/ Fully-suspended overhead guard</li> <li>/ Boarding handle</li> <li>/ Right rear armrest with horn button</li> <li>/ PVC ceiling</li> <li>/ Wide-view rearview mirror</li> </ul>

# Options

Truck	Power	Hydraulic	Electrical	Portal
<ul style="list-style-type: none"> <li>/ New-generation fingertip operating system</li> <li>/ Combined cab</li> <li>/ Cab heater</li> <li>/ Windshield and wiper</li> <li>/ User specified color</li> <li>/ Solid tire</li> <li>/ Clean tire</li> <li>/ Swinging LPG cylinder stand</li> <li>/ Buckling LPG cylinder stand</li> <li>/ Fan</li> <li>/ License plate frame</li> <li>/ Labels in foreign languages</li> <li>/ Vehicle toolkit</li> </ul>	<ul style="list-style-type: none"> <li>/ Water tank grille cover</li> <li>/ Basin-shaped double air filter</li> <li>/ High-position exhauster</li> <li>/ High-position exhaust fire protection device</li> </ul>	<ul style="list-style-type: none"> <li>/ Hydraulic oil heat dissipater</li> <li>/ Electric proportional control valve</li> <li>/ Triple valve</li> <li>/ Quadruple valve</li> <li>/ Quintuple valve</li> </ul>	<ul style="list-style-type: none"> <li>/ Multi-segment adjustable speed limit</li> <li>/ Battery for start in cold weather</li> <li>/ Lifting at a high idle speed</li> <li>/ Oil-water separation alarm</li> <li>/ Acoustic and optical alarm light</li> <li>/ Start with a PIN code or by swiping a card</li> <li>/ Rear lamp</li> <li>/ Blue light</li> </ul>	<ul style="list-style-type: none"> <li>/ Free duplex wide-view mast</li> <li>/ Four-cylinder free triplex wide-view mast</li> <li>/ Free triplex wide-view mast</li> <li>/ Special fork</li> <li>/ Widened fork carriage</li> <li>/ Heightened load backrest</li> </ul>

Transmission	Steering	Body	Overhead Guard	Control
<ul style="list-style-type: none"> <li>/ Double front wheels</li> </ul>	<ul style="list-style-type: none"> <li>/ Synchronous steering</li> </ul>	<ul style="list-style-type: none"> <li>/ Rotating handle of water tank lid</li> <li>/ Fuel tank cap with lock</li> </ul>	<ul style="list-style-type: none"> <li>/ Heightened overhead guard</li> <li>/ Additional left and right rearview mirrors</li> <li>/ Fire extinguisher (1kg)</li> </ul>	<ul style="list-style-type: none"> <li>/ Pedal parking brake</li> </ul>

# Optional Attachments

- |                              |                    |                          |                   |
|------------------------------|--------------------|--------------------------|-------------------|
| / Paper roll clamp           | / Oil barrel clamp | / Rotating fork          | / Bucket          |
| / Rotatable roll clamp       | / Tipping clamp    | / Lengthened fork sleeve | / Hook            |
| / Load stabilizer            | / Boom             | / Load ejector           | / Lengthened fork |
| / Multi-purpose barrel clamp | / Tie rod          | / Cardboard box clamp    | / Weighing system |
| / Soft package clamp         | / Side shift fork  | / Push-puller            |                   |