X Series Diesel / Gasoline / LPG Counterbalanced Forklift Trucks

with capacities of 1,500 to 3,800kg
The X series is the new series of internal combustion counterbalance forklift truck developed by Hangcha independently, adopting the world advanced technologies based on the original products. Through the comprehensive upgrading of appearance molding, energy conservation, environmental friendly, comfort, security and reliability, it will become the world-class forklift truck which can meet your overall demands.

Strong appearance and visual impact
The appearance of full truck is developed under the cooperation with professional industrial design company by adopting the appearance design methods of brand-new concept. The streamlined surface modeling design brings smooth lines, elegant appearance, vigorous and steady surface as well as the outstanding inherence, possessing the powerful visual impact.

The truck is small, exquisite and concise, which adopting the newly designed parts with opening mould at large area, the appearance of full vehicle will be more humanized.

Innovation design
- The new designed mast increase forward visibility 15%
- Floating structure decrease the vibration by 10%
- Exhaust emission ↓ 35% (Common rail engine)
- Grade-speed ability ↑ 10% (Common rail engine)
- High pressure common rail electronic-controlled engine provide lower failure rate (Common rail engine)
- Aluminous plate-fin radiator provides stronger structure
- Prolong the service life of steering axle 20%
- Fuel consumption ↓ 10% (Common rail engine)
- Better cold starting performance (Common rail engine)
- Water temp ↓ 10°C, oil temp ↓ 10°C
Energy conservation and Environmental friendly

The high pressure common rail electronic-controlled engine which adopts high pressure multiple injections technology to ensure the strong power take-off, lower emission and better cold starting performance; saving the 10% of energy consumption.

The whole truck adopts LED lights as shiner and new-type panoramic retroreflector to ensure energy conservation and power saving as well as greatly improve the performance and service life of luminaires at the same time.

The truck all adopt the environmental friendly material to reduce environmental hazards.

Maintenance

Integral locking pin structure on the hood can be opened without tool, which is convenient for daily repair and maintenance.

Adoption of new generation integrated electric box makes maintenance and repair convenient, layout becomes more reasonable and with better water-proof performance.

The enlarged opening angle of hood and increase of left and right hood side plates can provide you with convenient and rapid maintenance mode.

Newly-developed LCD instrument has more comprehensive functions and more stable performance and entirely displays the full truck state, fault code and other important information, which can make the operator more intuitively and conveniently have a better knowledge of truck status and make the maintenance conveniently.

Fully improved reliability And security

1. The radiator adopts aluminous plate-fin radiator with better performance and higher structural strength independent oil radiator, optimized oil and water heat dissipation channel and double ventilation holes on counterweight can greatly improve cooling efficiency and reliability of overloaded operation and ensure reliable operation of the engine.

2. 2.0~3.8t roller bearing on the steering axle king pin adopts large size tapered roller bearing (THB), larger steering cylinder and bumper block assemblies on the top, which can prolong the service life of bearing and highly improve the reliability of steering axle.

3. Overhead guard adopts special shaped steel tube, which can reinforce the strength and improve sealing of the cab.

4. Optimized hydraulic breather structure and integrated with return oil filter can prolong the service life of hydraulic pressure system.

5. Integral locking pin structure on the hood can be opened without tool, which is convenient for daily repair and maintenance.

6. The enlarged opening angle of hood and increase of left and right hood side plates can provide you with convenient and rapid maintenance mode.

7. Adoption of new generation integrated electric box makes maintenance and repair convenient, layout becomes more reasonable and with better water-proof performance.

8. Newly-developed LCD instrument has more comprehensive functions and more stable performance and entirely displays the full truck state, fault code and other important information, which can make the operator more intuitively and conveniently have a better knowledge of truck status and make the maintenance conveniently.
Adopt the new-type of box iron. Increase the inside width of inner mast and the spacing between lifting cylinders. The lowering of instruments in the cabin will greatly increase the forward visibility; The rear visibility will also be greatly improved through the optimization design of counterweight.

Optimized air intake and exhaust system, high-capacity exhaust silencer and high-effect intake muffler will reduce the noise of full truck by 3dB and reduce the vibration by 20%.

The design of steering wheel of small diameter and electro-hydraulic reversing as well as the car-type double-handle combination switch will greatly improve the driving comfort.

The height of overhead guard fore leg will expand the driving space.

Reserved plug of extending function of Intelligent module is on the wire bundles that makes truck management more convenient and rapid.

**Intelligentized management system (option)**

Reserved plug of extending function of Intelligent module is on the wire bundles that makes truck management more convenient and rapid.

**Standard Specification**

- Cover of tilt cylinder
- Traction device
- LED working light
- Hydraulic oil filter
- Electric Flameout
- Seat with belt
- Skidproof pedal
- Air filter
- Hydraulic oil dipstick
- Mast speed limiting valve
- Full hydraulic power steering
- Wide view duplex mast
- Standard forks
- Standard overhead guard
- Rear combination LED light
- Panoramic rearview mirror
- Fill folder
- Adjustable steering column
- Pre-heating indicator
- Engine fuel pressure warning
- Neutral switch
- Engine hood spring
- Dipstick
- Pneumatic tyres
- Standard load backrest
- Horn
- Fuel gauge
- LCD display
- Cable parking brake
- Tilt cylinder self-locking valve
- Fork carriage mounting class III(III)
- Timer
- Load safety valve
- Charging indicator
- Water temperature gauge
- Toolbox
- Reversing buzzer
- Return oil filter
- Hand grip
- Integrated controller
- Oil-water separator
- Engine fault warning
- Rubber pedal
- 2nd hydraulic function
- Transmission oil temperature warning
- Dynamic load sensing system (for diesel engine)

**Optional Mast**

- Duplex wide view full free mast
- Trilex wide view full free mast
- Special duplex wide view mast
- Wider fork carriage
- Special forks

**Options**

- Dual driving wheel
- Cabin
- High-positioned exhaust system
- Customer painting
- Cabin heater
- LED rear working light
- Hood lock
- Double heat insulating pad and leather cover
- Net cover of radiator
- Solid tyre
- Non-mark tyre (white/green)
- Middle-positioned exhaust system
- Sparkle arrester
- Suspension seat
- Purified exhaust system
- Fuel tank lock
- Speed meter
- Auxiliary hydraulic valve
- Extinguisher
- Reversing assist grip with horn button
- Counter weight net
- Height of overhead guard
- Dual air filter
- Mileometer
- Speed limiter (Electronic-Controlled engine)
- Emergency switch
- Fan protector
- Over-speed alarm
- Warning light
- OPS system
- Waterproof cover on the guard

**Optional Attachments**

- Paper roll clamp
- Rotating bale clamp
- Load stabilizer
- Multi-drum clamp
- Bale clamp
- Drum clamp
- Dumping clamp
- Crane arm
- String pole
- Weigher system
- Side-shifter
- Rotating forks
- Fork extensioner
- Load release device
- Carbon clamp
- Push-pull device
- Bucket
- Hook
- Lengthened fork

Reduce the caster angle of instrument stand and adopt the integral hood to greatly increase the space underfoot: The orthodrome of overhead guard fore leg will expand the driving space.

Option of the most advanced full floating structure in the world can minimize the vibration of full truck and support more superior buffer, micro-motion and starting functions at the same time. With several imported engines, they can constitute more perfect engine-transmission system.