

STAGE V
CERTIFIED



X Series IC Forklift Truck

with capacities of 12,000 to 16,000kg



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ISO 45001
ISO 45001:2018



ISO 14001
ISO 14001:2015



ISO 9001
ISO 9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

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The World of Hangcha



X SERIES IC FORKLIFT TRUCK

Professional industrial exterior design, high product recognition, compact and smooth modelling, modern industrial aesthetics. The concealed arrangement of exposed parts makes the exterior cleaner and neater.

The key parts of the old products have been verified to be reliable and durable by the market for many years, and with modular and standardized design, the main parts are verified step by step in advance, so that the vehicle is highly mature. Structural parts such as the frame, mast, etc. are upgraded and optimized on the basis of existing products, and are verified through CAE analysis and testing.

The degree of digitization is improved. With bus architecture and several built-in diagnosis and management functions, a central controller is added to the vehicle to enable a central fault alarm, simplified operations, easy diagnosis and flexible configuration of electrical functions.

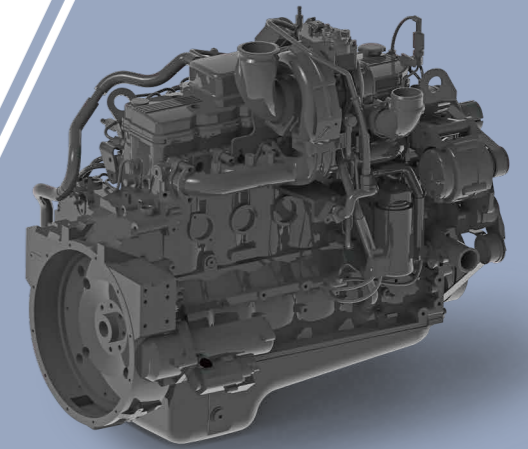


STAGE V & TIER 4F

HANGCHA with you at every stage

Efficient, reliable solutions for your demands

With Hangcha you can meet all Stage V/Tier 4f emissions standards which provides customer demands for value, innovation and performance. The technologies include common rail fuel systems, Turbocharged Inter-cooled selective catalytic reduction (SCR), diesel oxidation catalysts (DOC) and diesel particulate filters (DPF). Designed and optimised to every engine model, our forklift truck maximises efficiency and reliability.



CUMMINS B6.7



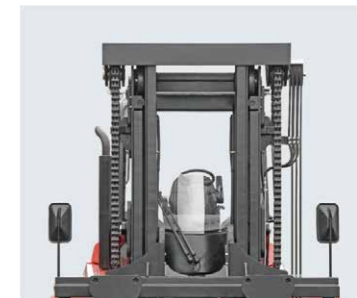
OKAMURA gear box with micro-electronic control provides for two-shift power shifting, travelling is stable and accurate.



Optional imaging system with front and rear camera, increasing the safety greatly.



Thanks to the unique design, cab can be tilt without any tools, major service items can be reached easily by tilting the cabin, maximized access is possible.



Excellent all round visibility is achieved by the overall design.



Battery compartment is easy to open for easy maintenance.



The newly designed LCD instrument has more comprehensive functions and more stable performance. It can display the important information such as truck status and engine faults... So that the operator can understand the truck status more intuitively and facilitate maintenance.



Suspended seat with fingertip system that can be easily adjusted to suit each customer.



Heavy-duty traction axle, two-stage deceleration; Wet brake, maintenance-free; Hydraulic release spring action parking brake, safe and reliable.



Fully-suspended all-round vision cab

The new fully-suspended all-round vision cab (HPC) and optimized vehicle outline enable all-round sight and view. Performance of the air conditioner is improved to enable uniform conditioned air blowing from the air outlet and a strong cooling effect. The waterproof, dust-proof, heatproof, soundproof, noise-reducing sealing design improves driving comfort. The molded interior parts enable a more comfortable feel. The integral frame is constituted by profiled steel pipes. The structural parts have higher strength.



Comfort

The compact integral joystick enables accurate remote control. The optimized hydraulic braking curve enables smooth easy-to-control braking. The suspended seat and ergonomically-movable multidirectional adjustable console enable comfortable control.

High Performance

The configuration is improved. A new cab, wet braking drive axle, hydraulic adjustable fork, LCD bus instruments, cooling and heating air conditioner, vehicle LED lights, snail horn and reversing radar and other equipment are provided for the standard configuration. With reserved design, the optional equipment is greatly increased.

Performance is improved and the average operation efficiency is increased by more than 10%.

The overturnable cab, wide-opened hood, devices enable easy access to the oil and water, and the easy-to-dismount large electric control cover plate, make maintenance more convenient.



Comfort

The fully-suspended seat, ergonomic steering wheel and control platform make driving a pleasure.



Safety

A wide view reduces hidden safety hazards caused by blind corners when the vehicle is driving. A spindle and a hydraulic self-locking mechanism are used to connect the cab and the vehicle frame. When the electric or manual hydraulic pump is started, the hydraulic lock is automatically opened and at the same time, the hydraulic cylinder at the bottom of the cab sticks out so that the cab is flipped sideways over the center of gravity, improving the dimension. Safety and convenience of maintenance are improved.



Ergonomic Design

The steering wheel, joystick, control buttons, pedals and seat are all ergonomically designed for easier operation.



Overall Effect

The fully enclosed suspended cab has a curved front window that enables a large viewing angle and has its sides cut in a way different from that for the prior window. The cab doors are all glass, which increases the overall visual range. The exterior design of the whole vehicle is at the forefront of the development of forklift design. Being sturdy and elegant in appearance, the vehicle is practical and stylish. The integrated interior design is simple and comfortable, presenting visual enjoyment to the driver.



Standard Specification

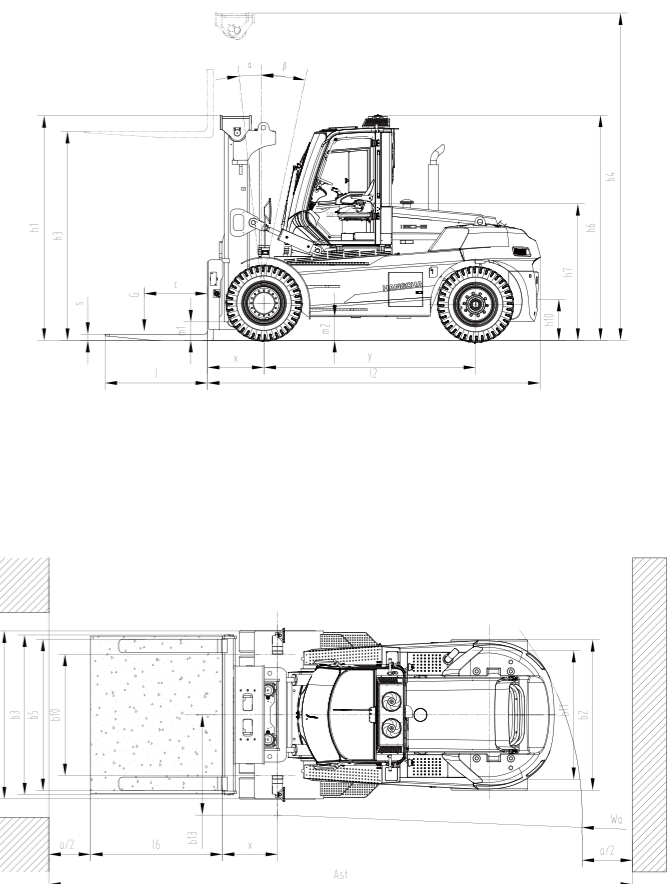
- / Duplex mast
- / Standard lifting height
- / Standard fork
- / Hydraulic Fork Positioning
- / Independently-adjustable fork
- / Standard color
- / Vehicle toolkit
- / Pneumatic tyre
- / Fully hydraulic power steering
- / Extended exhaust pipe
- / Tow pin
- / Rear-view mirror on right & left mudguards
- / Integrated joystick
- / Adjustable steering column
- / Adjustable armrest
- / Four-way hydraulic valve
- / Operator Presense System (OPS) with buzzer
- / LCD display screen
- / Main power switch
- / Emergency power off switch
- / Maintenance-free 24V lead acid battery
- / Reverse buzzer
- / High decible horn
- / LED lights (entire vehicle)
- / 2 x Working light on front mudguard
- / 2 x Front working light on top of cabin
- / 2 x Rear working light on top of cabin
- / Reverse sensor
- / Rearview camera system
- / Flashing warning light (non rotating) with control switch
- / On-board diagnostics system
- / Engine fault alarm
- / Engine oil pressure alarm indicator
- / Air filter warning indicator
- / Water temperature indicator
- / Hour meter
- / Battery charge indicator
- / Low hydraulic pressure alarm indicator
- / Hydraulic oil filter warning indicator
- / Oil gauge
- / Fuel-water separator warning indicator
- / Oil temperature gauge
- / Pre-heat indicator
- / Drive mode indicator
- / Parking brake indicator
- / Service indicator
- / Cabin
- / Climate control system (air-conditioning and heater)
- / Manual tilting cabin
- / Radio
- / Sunshade
- / USB charging interface
- / Clothes hanger hook
- / Reading light
- / Fan

Options

- / Optional lifting height
- / Other fork specifications
- / Fork hook on type
- / Built in Sideshift
- / Integrated sideshift
- / User defined colour
- / Fire extinguisher (2kg/4kg)
- / Solid tyre
- / Centralized lubrication system (machine)
- / Lockable fuel cap
- / Spark arrester
- / Electrostatic discharge chain
- / 2 x Working light on both sides of mast
- / Rearview camera system with memory
- / Front & rearview camera system
- / Front & rearview camera system with memory
- / License plate frame
- / 4 directions camera system with single display
- / 4 directions camera recording system with single display
- / In cabin CCTV
- / Rear blue safety light
- / Front and rear blue safety light
- / Three sided blue danger zone light
- / Overspeed alarm
- / Voice reverse alarm
- / Automatic fire suppression system
- / Two-way radio
- / Weight indicator in display
- / Tyre pressure monitoring
- / Electric tilting cabin
- / 1 x 24V power supply
- / 1 x 12V power supply

X Series IC Forklift Truck 12-16t Specification

| Distinguishing mark | HANGCHA GROUP CO.,LTD. | | | | | | | | | | | | |
|---------------------|--|------------------------|--|----------------|----------------|--|----------------|-------------------|--|-----------------|-------------------|--|--|
| | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.8 | 1.9 | 2.1 | 3.1 | 3.2 | 3.3 | |
| 1.1 | Manufacturer | HANGCHA GROUP CO.,LTD. | | | | | | | | | | | |
| 1.2 | Manufacturer's type designation | CPCD120-XXw25B | CPCD120-XXH13B | CPCD120-XXH13B | CPCD140-XXw25B | CPCD140-XXH13B | CPCD160-XXw25B | CPCD160-XXw79B | CPCD160-XXH13B | CPCD160-XXMw25B | CPCD160-XXMH13B | | |
| 1.3 | Drive: electric (battery or mains), diesel, petrol, fuel gas | Diesel | Diesel | Diesel | Diesel | Diesel | Diesel | Diesel | Diesel | Diesel | Diesel | | |
| 1.4 | Operator type: hand, pedestrian, standing, seated, order-pickier | Seated | Seated | Seated | Seated | Seated | Seated | Seated | Seated | Seated | Seated | | |
| 1.5 | Rated capacity/rated load | Q (kg) | 12000 | 12000 | 12000 | 14000 | 14000 | 16000 | 16000 | 16000 | 16000 | | |
| 1.6 | Load centre distance | c (mm) | 600 | 600 | 900 | 600 | 600 | 600 | 600 | 750 | 750 | | |
| 1.8 | Load distance, centre of drive axle to fork | x (mm) | 745 | 745 | 835 | 825 | 825 | 825 | 825 | 880 | 880 | | |
| 1.9 | Wheelbase | y (mm) | 3100 | 3100 | 3100 | 3100 | 3100 | 3100 | 3100 | 3300 | 3300 | | |
| 2.1 | Service Weight | kg | 16000 | 16000 | 16900 | 18200 | 18200 | 19200 | 19200 | 19200 | 20300 | | |
| 3.1 | Tyres: solid rubber, superelastic, pneumatic, polyurethane | | Pneumatic | Pneumatic | Pneumatic | Pneumatic | Pneumatic | Pneumatic | Pneumatic | Pneumatic | Pneumatic | | |
| 3.2 | Tyre size, front | | 10.00-20-14PR | 10.00-20-14PR | 10.00-20-14PR | 11.00-20-18PR | 11.00-20-18PR | 12.00-20-20PR | 12.00-20-20PR | 12.00-20-20PR | 12.00-20-20PR | | |
| 3.3 | Tyre size, rear | | 10.00-20-14PR | 10.00-20-14PR | 10.00-20-14PR | 11.00-20-18PR | 11.00-20-18PR | 12.00-20-20PR | 12.00-20-20PR | 12.00-20-20PR | 12.00-20-20PR | | |
| 3.5 | Wheels, number front / rear (x = driven wheels) | | 4x/2 | 4x/2 | 4x/2 | 4x/2 | 4x/2 | 4x/2 | 4x/2 | 4x/2 | 4x/2 | | |
| 3.6 | Tread, front | b10 (mm) | 1780 | 1780 | 1780 | 1780 | 1780 | 1780 | 1780 | 1780 | 1780 | | |
| 3.7 | Tread, rear | b11 (mm) | 1890 | 1890 | 1890 | 1890 | 1890 | 1890 | 1890 | 1890 | 1890 | | |
| 4.1 | Tilt of mast/fork carriage forward/backward | α/β(°) | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | | |
| 4.2 | Height, mast lowered | h1 (mm) | 3180 | 3180 | 3270 | 3270 | 3270 | 3290 | 3290 | 3290 | 3290 | | |
| 4.3 | Free lift | h2 (mm) | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 0 | 0 | | |
| 4.4 | Lift | h3 (mm) | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | | |
| 4.5 | Height, mast extended | h4 (mm) | 4695 | 4695 | 4790 | 4790 | 4790 | 4790 | 4790 | 4790 | 4790 | | |
| 4.7 | Height of overhead cabin | h6 (mm) | 3265 | 3265 | 3300 | 3280 | 3280 | 3300 | 3300 | 3300 | 3300 | | |
| 4.8 | Seat height relating to SIP | h7 (mm) | 1930 | 1930 | 1930 | 1945 | 1945 | 1965 | 1965 | 1965 | 1965 | | |
| 4.12 | Coupling height | h10 (mm) | 600 | 600 | 600 | 615 | 615 | 635 | 635 | 635 | 635 | | |
| 4.19 | Overall length | l1 (mm) | 6190 | 6190 | 6580 | 6260 | 6260 | 6380 | 6380 | 6380 | 6380 | | |
| 4.20 | Length to face of forks | l2 (mm) | 4690 | 4690 | 4780 | 4760 | 4760 | 4880 | 4880 | 4880 | 4880 | | |
| 4.21 | Overall width | b1/b2(mm) | 2460/2200 | 2460/2200 | 2460/2200 | 2460/2200 | 2460/2200 | 2460/2200 | 2460/2200 | 2460/2200 | 2460/2200 | | |
| 4.22 | Fork dimensions | s/e/l (mm) | 80×200×1500 | 80×200×1500 | 100×200×1800 | 90×200×1500 | 90×200×1500 | 90×200×1500 | 85×200×1500 | 90×200×1500 | 100×200×1800 | | |
| 4.24 | Fork-carriage width | b3 (mm) | 2370 | 2370 | 2370 | 2370 | 2370 | 2370 | 2370 | 2370 | 2370 | | |
| 4.25 | Distance between fork-arms | b5 (mm) | 520/2200 | 520/2200 | 520/2200 | 520/2200 | 520/2200 | 520/2200 | 520/2200 | 520/2200 | 520/2200 | | |
| 4.31 | Ground clearance, laden, below mast | m1 (mm) | 250 | 250 | 250 | 250 | 250 | 270 | 270 | 270 | 270 | | |
| 4.32 | Ground clearance, centre of wheelbase | m2 (mm) | 310 | 310 | 310 | 325 | 325 | 345 | 345 | 345 | 345 | | |
| 4.34.1 | Aisle width with load length 1500mm | Ast (mm) | 6800 | 6800 | 7190 | 6875 | 6875 | 6975 | 6975 | 6975 | 7630 | | |
| 4.34.2 | Aisle width with load length 1800mm | Ast (mm) | 7100 | 7100 | 7190 | 7175 | 7175 | 7275 | 7275 | 7275 | 7630 | | |
| 4.35 | Turning radius | Ws (mm) | 4350 | 4350 | 4350 | 4350 | 4350 | 4450 | 4450 | 4450 | 4750 | | |
| 4.36 | Minimum pivoting point distance | b13 (mm) | 1480 | 1480 | 1480 | 1480 | 1480 | 1480 | 1480 | 1480 | 1480 | | |
| 5.1 | Travel speed, laden/unladen | km/h | 24/28 | 24/28 | 24/28 | 25/29 | 25/29 | 25/29 | 22/27 | 25/29 | 25/29 | | |
| 5.2 | Lift speed, laden/unladen | m/s | 0.34/0.36 | 0.34/0.36 | 0.34/0.36 | 0.35/0.38 | 0.35/0.38 | 0.35/0.38 | 0.32/0.35 | 0.35/0.38 | 0.35/0.38 | | |
| 5.3 | Lowering speed, laden/unladen | m/s | 0.45/0.40 | 0.45/0.40 | 0.45/0.40 | 0.45/0.40 | 0.45/0.40 | 0.45/0.40 | 0.45/0.35 | 0.45/0.40 | 0.45/0.40 | | |
| 5.5 | Drawbar pull, laden/unladen | N | 115000 | 115000 | 115000 | 115000 | 115000 | 115000 | 100000 | 115000 | 115000 | | |
| 5.7 | Gradeability, laden/unladen | % | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | |
| 5.10 | Service brake | | Wet disc brake | Wet disc brake | Wet disc brake | Wet disc brake | Wet disc brake | Wet disc brake | Wet disc brake | Wet disc brake | Wet disc brake | | |
| | Parking brake | | spring applied, hydraulic release multi-disc brake | | | spring applied, hydraulic release multi-disc brake | | | spring applied, hydraulic release multi-disc brake | | | spring applied, hydraulic release multi-disc brake | |
| 7.1 | Engine manufacturer/type | | QSB 6.7-C160 | B6.7 | B6.7 | QSB 6.7-C160 | B6.7 | QSB 6.7-C160 | QSB6.7 | B6.7 | QSB 6.7-C160 | | |
| 7.2 | Engine power | kW | 119 | 116 | 116 | 119 | 116 | 119 | 118 | 116 | 119 | | |
| 7.3 | Rated speed | r/min | 2300 | 2200 | 2200 | 2300 | 2200 | 2300 | 2100 | 2200 | 2300 | | |
| 7.4 | Number of cylinders/displacement | (-)/(cm³) | 6/6700 | 6/6700 | 6/6700 | 6/6700 | 6/6700 | 6/6700 | 6/6700 | 6/6700 | 6/6700 | | |
| | Emission Std. | | Stage IIIA/Tier 3 | Stage V/Tier 4 | Stage V/Tier 4 | Stage IIIA/Tier 3 | Stage V/Tier 4 | Stage IIIA/Tier 3 | Stage IV/Tier 4F | Stage V/Tier 4 | Stage IIIA/Tier 3 | | |
| 7.9 | Vehicle electrical system voltage | V | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | |
| 7.10 | Battery voltage/nominal capacity | V/Ah | 2×12/120 | 2×12/120 | 2×12/120 | 2×12/120 | 2×12/120 | 2×12/120 | 2×12/120 | 2×12/120 | 2×12/120 | | |
| | Rated torque | Nm/r/min | 731/1500 | 746/1300 | 746/1300 | 731/1500 | 746/1300 | 731/1500 | 746/1300 | 746/1300 | 731/1500 | | |
| | Transmissions Manufacturer | | Okamura | Okamura | Okamura | Okamura | Okamura | Okamura | Okamura | Okamura | Okamura | | |
| | Transmissions Type | | Y63270X | Y63270X | Y63270X | Y63270X | Y63270X | Y63270X | Y63270X | Y63270X | Y63270X | | |
| | Stage FWD/RVS | | 2/1 | 2/1 | 2/1 | 2/1 | 2/1 | 2/1 | 2/1 | 2/1 | 2/1 | | |
| 10.1 | Operating pressure for attachments | Mpa | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | |
| 10.2 | Oil volume for attachments | l/min | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | | |
| 10.3 | Hydraulic Tank - capacity (drain & refill) | liter | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 350 | | |
| 10.4 | Fuel tank capacity | liter | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 370 | | |
| 10.7 | Sound pressure level at the driver's seat | dB (A) | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | | |



X Series IC Forklift Truck 12-16t Mast:(Pneumatic)

| Type | Model | Max. fork height | Overall height | | | | Tilt Range | Capacity | | | |
|--------------------|--------------------|------------------|----------------|---------|----------|---------|------------|------------------------|-------|------------------------|-------|
| | | | Lowered | | Extended | | | Load capacity at 600mm | | Load capacity at 750mm | |
| | | | 12t | 14t/16t | 12t | 14t/16t | | 12t | 14t | 16t | 16t |
| Wide view mast | GXX120/160/161M300 | 3000 | 3180 | 3290 | 4695 | 4790 | 6/12 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M330 | 3300 | 3330 | 3440 | 4995 | 5090 | 6/12 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M360 | 3600 | 3480 | 3590 | 5295 | 5390 | 6/12 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M400 | 4000 | 3680 | 3790 | 5695 | 5790 | 6/12 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M430 | 4300 | 3880 | 3990 | 6030 | 6140 | 6/12 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M450 | 4500 | 3980 | 4090 | 6230 | 6340 | 6/12 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M480 | 4800 | 4130 | 4240 | 6530 | 6640 | 6/6 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M500 | 5000 | 4230 | 4340 | 6730 | 6840 | 6/6 | 12000 | 14000 | 16000 | 16000 |
| | GXX120/160/161M550 | 5500 | 4530 | 4640 | 7280 | 7390 | 3/6 | 10500 | 12500 | 14500 | 14500 |
| | GXX120/160/161M600 | 6000 | 4780 | 4890 | 7780 | 7890 | 3/6 | 9000 | 11000 | 13000 | 13000 |
| GXX120/160/161M650 | 6500 | 5080 | 5190 | 8330 | 8440 | 3/6 | 7500 | 9500 | 11500 | 11500 | |

