



X Series Internal Combustion Forklift

with capacities of 38,000 to 48,000kg



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ISO45001:2018	ISO14001:2015	ISO9001:2015	HANGCHA trucks conform to the European Safety Requirements.

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Appearance

- / The exterior has a family appearance and a compact and smooth style showing modern industrial aesthetics.
- / With modular and standardized design taking full advantage of the X series platform, the main parts are verified step by step in advance, so that the vehicle is highly mature.
- / The key parts of renowned brands have been verified reliable and durable by the market for many years while being used by the old products.

Maintenance

- / The tiltable cab and wide-opened hood enable easy access to the oil and water, and make maintenance more convenient.



Efficient

- / With the hydraulic load-sensing system to enable on-demand supply, less continuous load of the engine and less energy consumption and emissions, the work efficiency is improved significantly, and the average operation efficiency has been greatly improved.



Ergonomic Design

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



Intelligent

- / The high-definition LCD bus instruments have bus architecture and several built-in diagnosis and management functions to enable central fault alarm, simplified operations, easy diagnosis and flexible configuration of electrical functions.
- / The compact integral joystick enables easy and accurate remote control. The optimized hydraulic braking curve enables smooth easy-to-control braking.



Comfort

- / The adjustable suspended seat, inclinable telescopic steering column, and multidirectional adjustable console can meet the needs of different operators to the greatest extent and bring a comfortable control experience.
- / Ergonomic steering wheel and control platform make driving a pleasure.



Intelligentized management system (option)

- / An optional cloud intelligent forklift management system FIMS and intelligent remote monitoring are provided to better facilitate equipment management and logistics management.



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.



Fully-suspended all-round vision cab

- / The new fully-suspended all-round vision cab (HCCS) and optimized vehicle outline enable all-round sight and view.
- / The molded interior parts enable a more comfortable feel.
- / The integral frame constituted by profiled steel pipes has higher strength and better enclosure.
- / A wide view reduces hidden safety hazards caused by blind corners when the vehicle is driving.



Features

Transmission	Standard	Options
Pneumatic tyre	●	
Solid tyre		○
Steering system		
Fully hydraulic power steering	●	
Centralized lubrication system (machine)		○
Power system		
Extended exhaust pipe	●	
Lockable fuel cap	●	
Spark arrester		○
Pre-cleaner air filter	●	
Truck		
Tow pin	●	
Electrostatic discharge chain		○
Rear-view mirror on right & left mudguards	●	
Separate brake oil tank	●	
Operating system		
Integrated joystick	●	
Adjustable steering column	●	
Adjustable armrest	●	
Hydraulic system		
Variable hydraulic pump system	●	
Four-way hydraulic valve	●	
Operation proportion control	●	
Cab		
Cabin	●	
Climate control system (air-conditioning and heater)	●	
Manual tilting cabin	●	
Electric tilting cabin		○
Radio	●	
Sunshade	●	
USB charging interface	●	
Clothes hanger hook	●	
Reading light	●	
1 x 24V power supply		○
1 x 12V power supply		○
License plate frame		○
Fan	●	
Lifting components		
Duplex mast	●	
Standard lifting height	●	
Optional lifting height		○
Standard fork	●	
Other fork specifications		○
Fork hook on type		○
Hydraulic Fork Positioning	●	
Independently-adjustable fork		○
Built in Sideshift	●	
Other		
Standard color	●	
User defined colour		○
Fire extinguisher (2kg/4kg)		○
Vehicle toolkit	●	

Electrical System	Standard	Options
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	●	
2 x Working light on both sides of mast	●	
Reverse sensor	●	
Rearview camera system	●	
Rearview camera system with memory		○
Front & rearview camera system		○
Front & rearview camera system with memory		○
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		○
Flashing warning light (non rotating) with control switch	●	
Tyre pressure monitoring		○
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	●	

X Series 38-48t Internal Combustion Forklift Specification

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.				
	1.2	Manufacturer's type designation	CPCD380-XRH17	CPCD400-XRH17	CPCD460-XRH17	CPCD480-XRH17	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Diesel	Diesel	Diesel	Diesel	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Seated	Seated	Seated	Seated	
	1.5	Rated capacity/rated load	Q (kg)	38000	40000	46000	48000
	1.6	Load centre distance	c (mm)	1200	1200	1200	1200
	1.8	Load distance, centre of drive axle to fork	x (mm)	1290	1290	1300	1300
	1.9	Wheelbase	y (mm)	5500	5500	5500	5500
	Weight	2.1	Service Weight	kg	55000	56000	61500
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	Pneumatic	Pneumatic	Pneumatic	Pneumatic	
	3.2	Tyre size, front	18.00-25-40PR	18.00-25-40PR	18.00-25-40PR	18.00-25-40PR	
	3.3	Tyre size, rear	18.00-25-40PR	18.00-25-40PR	18.00-25-40PR	18.00-25-40PR	
	3.5	Wheels, number front / rear (x = driven wheels)	4×/2	4×/2	4×/2	4×/2	
	3.6	Tread, front	b10 (mm)	3050	3050	3050	3050
	3.7	Tread, rear	b11 (mm)	2790	2790	2790	2790
	Dimensions	4.1	Tilt of mast/fork carriage forward/backward	$\alpha/\beta(^{\circ})$	6/10	6/10	6/10
4.2		Height, mast lowered	h1 (mm)	4600	4600	5000	5000
4.3		Free lift	h2 (mm)	125	125	140	140
4.4		Lift	h3 (mm)	4000	4000	4000	4000
4.5		Height, mast extended	h4 (mm)	6570	6570	6970	6970
4.7		Height of overhead cabin	h6 (mm)	4120	4120	4120	4120
4.8		Seat height relating to SIP	h7 (mm)	2790	2790	2790	2790
4.12		Coupling height	h10 (mm)	810	810	810	810
4.19		Overall length	l1 (mm)	10470	10470	10480	10480
4.20		Length to face of forks	l2 (mm)	8030	8030	8040	8040
4.21		Overall width	b1/b2(mm)	4215/3235	4215/3235	4215/3235	4215/3235
4.22		Fork dimensions	s/e/l (mm)	125×300×2440	125×300×2440	140×300×2440	140×300×2440
4.24		Fork-carriage width	b3 (mm)	3500	3500	3500	3500
4.25		Distance between fork-arms	b5 (mm)	1050/3000	1050/3000	1050/3000	1050/3000
4.31		Ground clearance, laden, below mast	m1 (mm)	300	300	300	300
4.32		Ground clearance, centre of wheelbase	m2 (mm)	390	390	390	390
4.34.1		Aisle width with load length 1800mm	Ast (mm)	11500	11500	11500	11500
4.34.2		Aisle width with load length 2400mm	Ast (mm)	11500	11500	11500	11500
4.35		Turning radius	Wa (mm)	7500	7500	7500	7500
4.36		Minimum pivoting point distance	b13 (mm)	2560	2560	2560	2560
Performance data	5.1	Travel speed, laden/unladen	km/h	24/28	23/28	23/27	22/27
	5.2	Lift speed, laden/unladen	m/s	0.31/0.36	0.30/0.35	0.27/0.30	0.26/0.30
	5.3	Lowering speed, laden/unladen	m/s	0.44/0.39	0.44/0.39	0.44/0.39	0.44/0.39
	5.5	Drawbar pull, laden/unladen	N	370000	370000	370000	370000
	5.7	Gradeability, laden/unladen	%	25	25	25	22
	5.10	Service brake		Wet disc brake	Wet disc brake	Wet disc brake	Wet disc brake
		Parking brake		spring applied, hydraulic release multi-disc brake			
Engine	7.1	Engine manufacturer/type		VOLVO TAD1181VE	VOLVO TAD1181VE	VOLVO TAD1181VE	VOLVO TAD1181VE
	7.2	Engine power	kW	265	265	265	265
	7.3	Rated speed	r/min	2100	2100	2100	2100
	7.4	Number of cylinders/displacement	(-)/(cm³)	6/10840	6/10840	6/10840	6/10840
		Emission Std.		Stage V	Stage V	Stage V	Stage V
	7.9	Vehicle electrical system voltage	V	24	24	24	24
	7.10	Battery voltage/nominal capacity	V/Ah	2×12/180	2×12/180	2×12/180	2×12/180
		Rated torque	N·m/r/min	1795/1400	1795/1400	1795/1400	1795/1400
		Transmissions Manufacturer		DANA	DANA	DANA	DANA
		Transmissions Type		TE-30	TE-30	TE-30	TE-30
	Stage FWD/RVS		4/3	4/3	4/3	4/3	
Addition data	10.1	Operating pressure for attachments	Mpa	27	27	27	27
	10.2	Oil volume for attachments	l/min	510	510	510	510
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	600	600	600	600
	10.4	Fuel tank capacity	liter	600	600	600	600
	10.7	Sound pressure level at the driver's seat	dB (A)	75	75	75	75

38-40t Mast Specification:(Pneumatic)

Type	Model	Max. fork height	Overall height		Tilt range
			Lowered	Extended	F/R
			mm	mm	(°)
Wide view mast	GM400M400	4000	4600	6570	6/10
	GM400M430	4300	4750	6870	6/10
	GM400M450	4500	4850	7070	6/10
	GM400M480	4800	5000	7370	6/10
	GM400M500	5000	5100	7570	6/10
	GM400M550	5500	5350	8070	3/6
	GM400M600	6000	5600	8570	3/6
	GM400M650	6500	5850	9070	3/6
GM400M700	7000	6100	9570	3/6	

46-48t Mast Specification:(Pneumatic)

Type	Model	Max. fork height	Overall height		Tilt range
			Lowered	Extended	F/R
			mm	mm	(°)
Wide view mast	G480M360	3600	4800	6570	6/10
	G480M400	4000	5000	6970	6/10
	G480M430	4300	5150	7270	6/10
	G480M450	4500	5250	7470	6/10
	G480M480	4800	5400	7770	6/10
	G480M500	5000	5500	7970	6/10
	G480M550	5500	5750	8470	3/6
	G480M600	6000	6000	8970	3/6
	G480M650	6500	6250	9470	3/6
	G480M700	7000	6500	9970	3/6



