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ISO14001
ISO14001:2015



ISO9001
ISO9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

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X Series Diesel / Gasoline / LPG Counterbalanced Forklift Trucks

with capacities of 4,000 to 5,000kg

The World of Hangcha



X Series

Diesel / Gasoline / LPG
Counterbalanced
Forklift Trucks



Innovation design

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



The new designed mast increase forward visibility 15%



Fuel consumption ↓ 10%
(Common rail engine)



Grade-speed ability ↑ 15%



Legroom ↑ 15%



Exhaust emission ↓ 35%
(Common rail engine)



Better cold starting performance
(Common rail engine)



High pressure common rail electronic-controlled engine provide lower failure rate
(Common rail engine)



Aluminous plate-fin radiator provides stronger structure



Water temp ↓ 10 C, oil temp ↓ 10%



Energy conservation and Environmental protection



The standard engine is 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 full vehicles all adopt the environmental protection material to reduce environmental hazards.

Maintenance



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



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



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



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

Easy/
Efficiency/
Economy



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. Anti-slip pedal is convenient to get on/off the truck and also more safe for the driver.

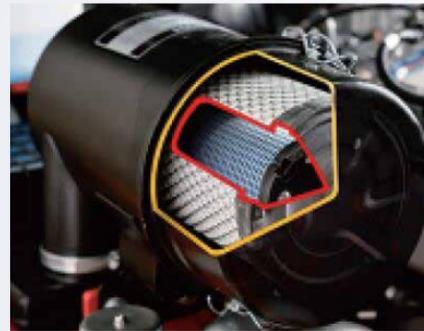
4. Optimized hydraulic breather structure and integrated with return oil filter can prolong the service life of hydraulic pressure system.

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

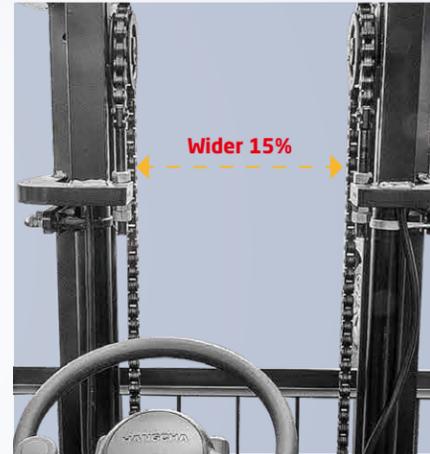
Comfort

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;



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



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 driving cab will greatly increase the forward visibility; The rear visibility will also be greatly improved through the optimization design of counterweight.



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

Intelligent 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

- / Reminder of maintenance
- / LED working light
- / Hydraulic oil filter
- / Electric Flameout
- / Seat with belt
- / Skidproof pedal
- / Air filter
- / Hydraulic oil dipstick
- / Traction device
- / Mast speed limiting valve
- / Full hydraulic power steering
- / Wide view duplex mast
- / Standard forks
- / Standard overhead guard
- / Rear combination LED light
- / Panoramic rearview mirror
- / Filf 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 (IV)
- / Timer
- / Load safety valve
- / Charging indicator
- / Water temperature gauge
- / Reversing buzzer
- / Return oil filter
- / Hand grip
- / Integrated controller
- / Oil-water separator
- / Engine fault warning
- / Rubber pedal
- / 2nd hydraulic function
- / Transmission oil temperature warning

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

- / Cover of tilt cylinder
- / 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
- / Fuel tank lock
- / Speed meter
- / Auxilliary hydraulic valve
- / Extinguisher
- / Reversing assist grip with horn button
- / Counter weight net
- / Height of overhead guard
- / Dual air filter
- / Milometer
- / Waterproof cover on the guard
- / Toolbox

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
- / Sideshifter
- / Rotating forks
- / Fork extensioner
- / Load release device
- / Carton clamp
- / Push-pull device
- / Bucket
- / Hook
- / Lengthened fork



X Series Diesel / Gasoline / LPG Counterbalanced Forklift Trucks

Distinguishing mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.						
			CPD40-XRW76	CPD45-XRW76	CPD50-XRW76	CPQYD40-XRW57	CPQYD45-XRW57	CPQYD50-XRW57	
1.2	1.2	Manufacturer's type designation	Diesel	Diesel	Diesel	Gasoline/LPG	Gasoline/LPG	Gasoline/LPG	
1.3	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Seated	Seated	Seated	Seated	Seated	Seated	
1.4	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	Seated	Seated	Seated	Seated	Seated	Seated	
1.5	1.5	Rated capacity/rated load	Q (kg)	4000	4500	5000	4000	4500	5000
1.6	1.6	Load centre distance	c (mm)	500	500	500	500	500	500
1.8	1.8	Load distance, centre of drive axle to fork	x (mm)	550	550	555	550	550	555
1.9	1.9	Wheelbase	y (mm)	2000	2000	2000	2000	2000	2000
2.1	2.1	Service Weight	kg	6200	6400	6750	6200	6400	6750
2.2	2.2	Axle loading, laden front/rear	kg	8880/1320	9640/1260	10435/1315	8880/1320	9640/1260	10435/1315
2.3	2.3	Axle loading, unladen front/rear	kg	2780/9420	2780/9620	2800/9950	2780/9420	2780/9620	2800/9950
3.1	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
3.2	3.2	Tyre size, front		8.25-15-14PR	300-15-18RP	300-15-18RP	8.25-15-14PR	300-15-18RP	300-15-18RP
3.3	3.3	Tyre size, rear		7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR
3.5	3.5	Wheels, number front / rear (x = driven wheels)		2x/2	2x/2	2x/2	2x/2	2x/2	2x/2
3.6	3.6	Tread, front	b10 (mm)	1160	1190	1190	1160	1190	1190
3.7	3.7	Tread, rear	b11 (mm)	1130	1130	1130	1130	1130	1130
4.1	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	6/1.2	6/1.2	6/1.2	6/1.2	6/1.2	6/1.2
4.2	4.2	Height, mast lowered	h1 (mm)	2245	2245	2245	2245	2245	2245
4.3	4.3	Free lift	h2 (mm)	160	160	160	160	160	160
4.4	4.4	Lift	h3 (mm)	3000	3000	3000	3000	3000	3000
4.5	4.5	Height, mast extended	h4 (mm)	4170	4170	4365	4170	4170	4365
4.7	4.7	Height of overhead guard (cabin)	h6 (mm)	2350(2345)	2350(2345)	2350(2345)	2350(2345)	2350(2345)	2350(2345)
4.8	4.8	Seat height relating to SIP	h7 (mm)	1335	1335	1335	1335	1335	1335
4.12	4.12	Coupling height	h10 (mm)	510	510	510	510	510	510
4.19	4.19	Overall length	l1 (mm)	4180	4200	4245	4180	4200	4245
4.20	4.20	Length to face of forks	l2 (mm)	3110	3130	3175	3110	3130	3175
4.21	4.21	Overall width	b1 (mm)	1420	1490	1490	1420	1490	1490
4.22	4.22	Fork dimensions	s/e/l (mm)	50*122*1070	50*150*1070	50*150*1070	50*122*1070	50*150*1070	50*150*1070
4.23	4.23	Fork carriage DIN 15 173 --- ISO 2328, class/type A,B		3/A	3/A	4/A	3/A	3/A	4/A
4.24	4.24	Fork-carriage width	b3 (mm)	1350	1350	1350	1350	1350	1350
4.25	4.25	Distance between fork-arms	b5 (mm)	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200
4.31	4.31	Ground clearance, laden, below mast	m1 (mm)	150	150	150	150	150	150
4.32	4.32	Ground clearance, centre of wheelbase	m2 (mm)	230	230	230	230	230	230
4.34.1	4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	4450	4470	4535	4450	4470	4535
4.34.2	4.34.2	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	4650	4670	4735	4650	4670	4735
4.35	4.35	Turning radius	Wa (mm)	2700	2720	2780	2700	2720	2780
4.36	4.36	Internal turning radius	b13 (mm)	845	845	845	845	845	845
5.1	5.1	Travel speed, laden/unladen	km/h	24/25	24/25	23.5/25	24/25	24/25	23.5/25
5.2	5.2	Lift speed, laden/unladen	m/s	0.46/0.50	0.46/0.50	0.40/0.44	0.46/0.50	0.46/0.50	0.40/0.44
5.3	5.3	Lowering speed, laden/unladen	m/s	0.46/0.44	0.46/0.44	0.46/0.44	0.46/0.44	0.46/0.44	0.46/0.44
5.5	5.5	Drawbar pull, laden/unladen	N	31640/19070	31640/19070	31640/19070	37200/19070	37200/19070	37200/19070
5.7	5.7	Gradeability, laden/unladen	%	25/25	22/24	20/23	30/25	27/24	25/23
5.10	5.10	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
		Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
7.1	7.1	Engine manufacturer/type		Mitsubishi S65	Mitsubishi S65	Mitsubishi S65	PSI4.3L	PSI4.3L	PSI4.3L
7.2	7.2	Engine power	kw	52	52	52	LPG: 77 Gasoline: 76	LPG: 77 Gasoline: 76	LPG: 77 Gasoline: 76
7.3	7.3	Rated speed	r/min	2300	2300	2300	2300	2300	2300
7.4	7.4	Number of cylinders/displacement	(-)/(cm³)	6/4966	6/4966	6/4966	6/4294	6/4294	6/4294
7.8	7.8	Generator	A	35	35	35	70	70	70
7.9	7.9	Vehicle electrical system voltage	V	24	24	24	12	12	12
7.10	7.10	Battery voltage/nominal capacity	V/Ah	2-12/60	2-12/60	2-12/60	12/60	12/60	12/60
		Rated torque	N·m/r/min	248/1700	248/1700	248/1700	LPG: 332/85/1400 Gasoline: 318/2300	LPG: 332/85/1400 Gasoline: 318/2300	LPG: 332/85/1400 Gasoline: 318/2300
		Transmissions Manufacturer		China	China	China	China	China	China
		Transmissions Type		Powershift	Powershift	Powershift	Powershift	Powershift	Powershift
		Stage FWD/RVS		2/1	2/1	2/1	2/1	2/1	2/1
10.1	10.1	Operating pressure for attachments	bar	180	180	180	180	180	180
10.2	10.2	Oil volume for attachments	l/min	100	100	100	100	100	100
10.3	10.3	Hydraulic Tank - capacity (drain & refill)	liter	80	80	80	80	80	80
10.4	10.4	Fuel tank capacity	liter	80	80	80	Lpg: 40 Gasoline: 80	Lpg: 40 Gasoline: 80	Lpg: 40 Gasoline: 80
10.7	10.7	Sound pressure level at the driver's seat	dB (A)	88	88	88	88	88	88

4.0-5.0t X series mast:(Pneumatic)

Type	Max. fork height	Overall height						Free lift				Front Overhang		Tilt range	Capacity					
		Lowered	Extended		With backrest		Without backrest		With backrest		Load capacity at 500mm		Load capacity at 500mm							
			4/4.5t	5.0t	4/4.5t	5.0t	4/4.5t	5.0t	4/4.5t	5.0t	4/4.5t	5.0t	Single tire		Dual tire					
Wide view mast	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	(°)	kg	kg	kg	kg	kg	kg	
	2450	1970	3260	3260	3620	3620	3830	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	2650	2070	3460	3460	3820	3820	4030	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	3000	2245	3810	3810	4170	4170	4380	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	3300	2395	4110	4110	4470	4470	4680	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	3500	2495	4310	4310	4670	4670	4880	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	3600	2545	4410	4410	4770	4770	4980	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	3700	2595	4510	4510	4870	4870	5080	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	4000	2820	4820	4820	5170	5170	5380	150	150	150	150	555	555	6/12	4000	4500	5000	4000	4500	5000
	4300	2970	5120	5120	5470	5470	5680	150	150	150	150	555	555	6/6	4000	4350	4750	4000	4500	5000
	4500	3070	5320	5320	5670	5670	5880	150	150	150	150	555	555	6/6	3800	4250	4700	4000	4500	5000
	4700	3170	5520	5520	5870	5870	6080	150	150	150	150	555	555	6/6	3700	4100	4500	3800	4200	4700
4800	3295	5695	5695	5970	5970	6180	150	150	150	150	555	555	6/6	3700	4100	4400	3800	4200	4600	
5000	3395	5895	5895	6170	6170	6380	150	150	150	150	555	555	6/6	3300	3700	4100	3500	4100	4300	
5500	3645	6395	6395	6670	6670	6880	150	150	150	150	555	555	3/6	3000	3400	3600	3200	3600	4000	
6000	3895	6895	6895	7170	7170	7380	150	150	150	150	555	555	3/6	2600	2800	3100	2800	3000	3300	
Wide view full free duplex mast	2450	1975	3260	3260	3620	3620	3830	1165	1165	805	595	555	555	6/12	4000	4500	5000	4000	4500	5000
	3000	2250	3810	3810	4170	4170	4380	1440	1440	1080	870	555	555	6/12	4000	4500	5000	4000	4500	5000
	3300	2400	4110	4110	4470	4470	4680	1590	1590	1230	1020	555	555	6/12	4000	4500	5000	4000	4500	5000
	3500	2500	4310	4310	4670	4670	4880	1690	1690	1330	1120	555	555	6/12	4000	4500	5000	4000	4500	5000
	3700	2600	4510	4510	4870	4870	5080	1790	1790	1430	1220	555	555	6/12	4000	4500	5000	4000	4500	5000
	4000	2825	4810	4810	5170	5170	5380	2000	2000	1655	1445	555	555	6/12	4000	4500	5000	4000	4500	5000
	4000	2050	4810	4810	5170	5170	5380	1240	1240	890	670	560	560	6/12	4000	4500	5000	4000	4500	5000
	4300	2155	5110	5110	5470	5470	5680	1345	1345	985	775	560	560	6/6	3900	4300	4700	4000	4400	4800
	4500	2225	5310	5310	5670	5670	5880	1415	1415	1055	845	560	560	6/6	3800	4200	4600	3900	4300	4700
	4700	2290	5510	5510	5870	5870	6080	1480	1480	1120	910	560	560	6/6	3					