

MATERIAL HANDLING SOLUTIONS
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HANGCHA

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ISO45001
ISO45001:2018

ISO14001
ISO14001:2015

ISO9001
ISO9001:2015

HANGCHA trucks conform to the European Safety Requirements.

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X Series Internal Combustion Forklift

with capacities of 20,000 to 35,000kg

The World of Hangcha
SINCE 1956

HANGCHA

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.
/ 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.

Effcient

/ 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 is increased by more than 15%.

Intelligentized management system (option)

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



Reliable



ZF gearbox



Single double-acting transverse cylinder steering axle, full hydraulic power steering and load-sensing steering gear all can provides easy steering action.



Heavy-duty traction axle with two-stage deceleration; Maintenance-free wet brake; Hydraulic release spring action parking brake provides safe and reliable.

Maintenance

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



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.



Battery compartment is easy to open for easy maintenance.



Comfort

/ The compact integral joystick enables easy and accurate remote control. The optimized hydraulic braking curve enables smooth easy-to-control braking.
/ 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.



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

Safety



Excellent all round visibility is achieved by the overall design.



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



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.





Standard Specification

/ Duplex mast
/ Standard lifting height
/ Standard fork
/ Hydraulic Fork Positioning
/ Built in Sideshift
/ Standard color
/ Vehicle toolkit
/ Pneumatic tyre
/ Fully hydraulic power steering
/ Extended exhaust pipe
/ Pre-cleaner air filter
/ Tow pin
/ Rear-view mirror on right & left mudguards
/ Separate brake oil tank
/ Integrated joystick
/ Adjustable steering column
/ Adjustable armrest
/ Variable hydraulic pump system
/ Four-way hydraulic valve
/ Operation proportion control
/ 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
/ 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

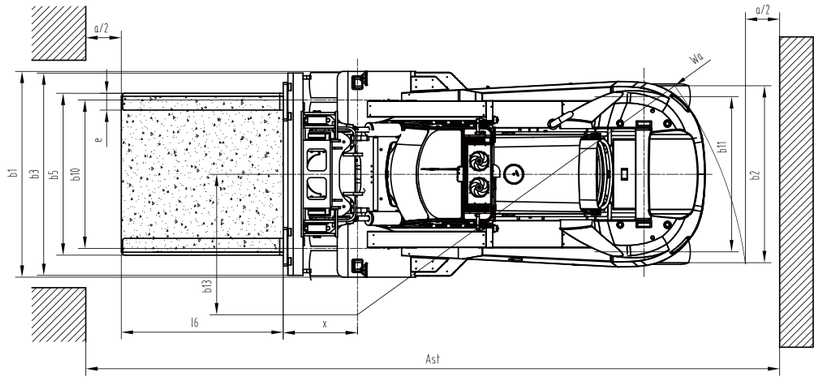
/ Optional lifting height
/ Other fork specifications
/ Fork hook on type
/ Independently-adjustable fork
/ User defined colour
/ Fire extinguisher (2kg/4kg)
/ Solid tyre
/ Centralized lubrication system (machine)
/ Lockable fuel cap
/ Spark arrester
/ Electrostatic discharge chain
/ Rearview camera 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
/ Tyre pressure monitoring
/ Electric tilting cabin
/ 1 x 24V power supply
/ 1 x 12V power supply
/ License plate frame

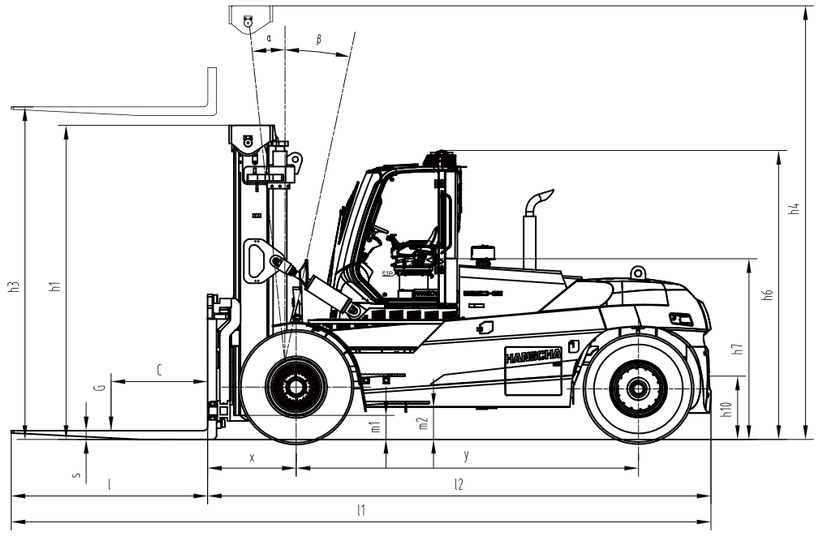
20-25t Mast Specification:(Pneumatic)

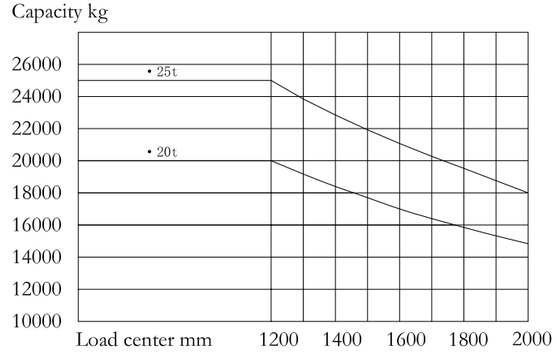
Type	Model	Max. fork height	Overall height		Tilt range
			Lowered	Extended	F/R
		mm	mm	mm	(°)
Wide view mast	M330	3300	3550	5190	6/10
	M360	3600	3700	5490	6/10
	M400	4000	3900	5890	6/10
	M430	4300	4050	6190	6/10
	M450	4500	4150	6390	6/10
	M480	4800	4300	6690	6/10
	M500	5000	4450	6940	6/10
	M550	5500	4700	7440	3/6
	M600	6000	5000	7990	3/6
	M650	6500	5250	8490	3/6
	M700	7000	5550	9040	3/6

X Series 20-25t Internal Combustion Forklift Specification

Distinguishing mark	1.1	Manufacturer					
	1.2	Manufacturer's type designation		CPCD200-XRW83G	CPCD250-XRW83G	CPCD200-XRH10G	CPCD250-XRH10G
	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)	20000	25000	20000	25000
	1.6	Load centre distance	c (mm)	1200	1200	1200	1200
	1.8	Load distance, centre of drive axle to fork	x (mm)	1100	1100	1100	1100
	1.9	Wheelbase	y (mm)	4250	4250	4250	4250
Weight	2.1	Service Weight	kg	33500	35500	33500	35500
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		14.00-24-24PR	14.00-24-28PR	14.00-24-24PR	14.00-24-28PR
	3.3	Tyre size, rear		14.00-24-24PR	14.00-24-28PR	14.00-24-24PR	14.00-24-28PR
	3.5	Wheels, number front / rear (x = driven wheels)		4×/2	4×/2	4×/2	4×/2
	3.6	Tread, front	b_{10} (mm)	2200	2200	2200	2200
	3.7	Tread, rear	b_{11} (mm)	2300	2300	2300	2300
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	6/10	6/10	6/10	6/10
	4.2	Height, mast lowered	h_1 (mm)	3900	3900	3900	3900
	4.3	Free lift	h_2 (mm)	110	110	110	110
	4.4	Lift	h_3 (mm)	4000	4000	4000	4000
	4.5	Height, mast extended	h_4 (mm)	5950	5950	5890	5890
	4.7	Height of overhead cabin	h_6 (mm)	3580	3580	3580	3580
	4.8	Seat height relating to SIP	h_7 (mm)	2250	2250	2250	2250
	4.12	Coupling height	h_{10} (mm)	720	720	720	720
	4.19	Overall length	l_1 (mm)	8690	8690	8690	8690
	4.20	Length to face of forks	l_2 (mm)	6250	6250	6250	6250
	4.21	Overall width	b_1/b_2(mm)	3050/2750	3050/2750	3050/2750	3050/2750
	4.22	Fork dimensions	s/e/l (mm)	110×250×2400	110×250×2400	110×250×2400	110×250×2400
	4.24	Fork-carriage width	b_3 (mm)	3000	3000	3000	3000
	4.25	Distance between fork-arms	b_5 (mm)	900/2600	900/2600	900/2600	900/2600
	4.31	Ground clearance, laden, below mast	m_1 (mm)	300	300	300	300
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	400	400	400	400
	4.34.1	Aisle width with load length 1800mm	A_{st} (mm)	9540	9540	9540	9540
	4.34.2	Aisle width with load length 2400mm	A_{st} (mm)	9540	9540	9540	9540
	4.35	Turning radius	W_a (mm)	5800	5800	5800	5800
	4.36	Minimum pivoting point distance	b_{13} (mm)	2080	2080	2080	2080
Performance data	5.1	Travel speed, laden/unladen	km/h	27/31	26/30	27/31	26/30
	5.2	Lift speed, laden/unladen	m/s	0.35/0.38	0.34/0.36	0.35/0.38	0.34/0.36
	5.3	Lowering speed, laden/unladen	m/s	0.45/0.41	0.45/0.41	0.45/0.41	0.45/0.41
	5.5	Drawbar pull, laden/unladen	N	160000	160000	160000	160000
	5.7	Gradeability, laden/unladen	%	25	25	25	25
	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 TAD851VE	VOLVO TAD851VE	VOLVO TAD881VE	VOLVO TAD881VE
	7.2	Engine power	kW	185	185	185	185
	7.3	Rated speed	r/min	2200	2200	2210	2210
	7.4	Number of cylinders/displacement	(-)/(cm^3)	6/7700	6/7700	6/7700	6/7700
		Emission Std.		Stage 3A/Tier 3	Stage 3A/Tier 3	Stage V	Stage V
	7.9	Vehicle electrical system voltage	V	24	24	24	24
	7.10	Battery voltage/nominal capacity	V/Ah	2×12/150	2×12/150	2×12/150	2×12/150
		Rated torque	N·m/r/min	1160/1350	1160/1350	1175/1400	1175/1400
		Transmissions Manufacturer		ZF	ZF	ZF	ZF
		Transmissions Type		3WG 211	3WG 211	3WG 211	3WG 211
		Stage FWD/RVS		3/3	3/3	3/3	3/3
Addition data	10.1	Operating pressure for attachments	Mpa	23	23	23	23
	10.2	Oil volume for attachments	l/min	300	300	300	300
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	420	420	420	420
	10.4	Fuel tank capacity	liter	420	420	420	420
	10.7	Sound pressure level at the driver´s seat	dB (A)	76	76	76	76







X Series 28-35t Internal Combustion Forklift Specification

Distinguishing mark	1.1	Manufacturer								
	1.2	Manufacturer's type designation		CPCD280-XRW83G	CPCD300-XRW83G	CPCD320-XRW83G	CPCD350-XRW83G	CPCD280-XRH10G	CPCD300-XRH10G	CPCD320-XRH10G	CPCD350-XRH10G
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated
	1.5	Rated capacity/rated load	Q (kg)	28000	30000	32000	35000	28000	30000	32000	35000
	1.6	Load centre distance	c (mm)	1200	1200	1200	1200	1200	1200	1200	1200
	1.8	Load distance, centre of drive axle to fork	x (mm)	1160	1160	1160	1180	1160	1160	1160	1180
	1.9	Wheelbase	y (mm)	4750	4750	4750	4750	4750	4750	4750	4750
Weight	2.1	Service Weight	kg	40000	42000	43600	46500	40000	42000	43600	46500
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		16.00-25-32PR	16.00-25-32PR	16.00-25-32PR	16.00-25-36PR	16.00-25-32PR	16.00-25-32PR	16.00-25-32PR	16.00-25-36PR
	3.3	Tyre size, rear		16.00-25-32PR	16.00-25-32PR	16.00-25-32PR	16.00-25-36PR	16.00-25-32PR	16.00-25-32PR	16.00-25-32PR	16.00-25-36PR
	3.5	Wheels, number front / rear (x = driven wheels)		4×/2	4×/2	4×/2	4×/2	4×/2	4×/2	4×/2	4×/2
	3.6	Tread, front	b_{10} (mm)	2460	2460	2460	2460	2460	2460	2460	2460
	3.7	Tread, rear	b_{11} (mm)	2440	2440	2440	2440	2440	2440	2440	2440
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	6/10	6/10	6/10	6/10	6/10	6/10	6/10	6/10
	4.2	Height, mast lowered	h_1 (mm)	4100	4100	4100	4350	4100	4100	4100	4350
	4.3	Free lift	h_2 (mm)	110	110	110	125	110	110	110	125
	4.4	Lift	h_3 (mm)	4000	4000	4000	4000	4000	4000	4000	4000
	4.5	Height, mast extended	h_4 (mm)	6090	6090	6090	6340	6090	6090	6090	6340
	4.7	Height of overhead cabin	h_6 (mm)	3710	3710	3710	3710	3710	3710	3710	3710
	4.8	Seat height relating to SIP	h_7 (mm)	2430	2430	2430	2430	2430	2430	2430	2430
	4.12	Coupling height	h_{10} (mm)	760	760	760	760	760	760	760	760
	4.19	Overall length	l_1 (mm)	9350	9350	9350	9370	9350	9350	9350	9370
	4.20	Length to face of forks	l_2 (mm)	6910	6910	6910	6930	6910	6910	6910	6930
	4.21	Overall width	b_1/b_2(mm)	3420/2960	3420/2960	3420/2960	3420/2960	3420/2960	3420/2960	3420/2960	3420/2960
	4.22	Fork dimensions	s/e/l (mm)	110×300×2440	110×300×2440	110×300×2440	125×300×2440	110×300×2440	110×300×2440	110×300×2440	125×300×2440
	4.24	Fork-carriage width	b_3 (mm)	3300	3300	3300	3300	3300	3300	3300	3300
	4.25	Distance between fork-arms	b_5 (mm)	1000/3000	1000/3000	1000/3000	1000/3000	1000/3000	1000/3000	1000/3000	1000/3000
	4.31	Ground clearance, laden, below mast	m_1 (mm)	300	300	300	300	300	300	300	300
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	450	450	450	450	450	450	450	450
	4.34.1	Aisle width with load length 1800mm	A_{st} (mm)	10400	10400	10400	10400	10400	10400	10400	10400
	4.34.2	Aisle width with load length 2400mm	A_{st} (mm)	10400	10400	10400	10400	10400	10400	10400	10400
	4.35	Turning radius	W_a (mm)	6600	6600	6600	6600	6600	6600	6600	6600
	4.36	Minimum pivoting point distance	b_{13} (mm)	2600	2600	2600	2600	2600	2600	2600	2600
Performance data	5.1	Travel speed, laden/unladen	km/h	22/25	22/25	22/25	22/25	22/25	22/25	22/25	22/25
	5.2	Lift speed, laden/unladen	m/s	0.30/0.35	0.27/0.34	0.26/0.33	0.25/0.32	0.30/0.35	0.27/0.34	0.26/0.33	0.25/0.32
	5.3	Lowering speed, laden/unladen	m/s	0.45/0.45	0.45/0.45	0.45/0.45	0.45/0.45	0.45/0.45	0.45/0.45	0.45/0.45	0.45/0.45
	5.5	Drawbar pull, laden/unladen	N	240000	240000	240000	240000	240000	240000	240000	240000
	5.7	Gradeability, laden/unladen	%	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
		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	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
Engine	7.1	Engine manufacturer/type		VOLVO TAD851VE	VOLVO TAD851VE	VOLVO TAD851VE	VOLVO TAD851VE	VOLVO TAD881VE	VOLVO TAD881VE	VOLVO TAD881VE	VOLVO TAD881VE
	7.2	Engine power	kW	185	185	185	185	185	185	185	185
	7.3	Rated speed	r/min	2200	2200	2200	2200	2210	2210	2210	2210
	7.4	Number of cylinders/displacement	(-)/(cm^3)	6/7700	6/7700	6/7700	6/7700	6/7700	6/7700	6/7700	6/7700
		Emission Std.		Stage 3A/Tier 3	Stage 3A/Tier 3	Stage 3A/Tier 3	Stage 3A/Tier 3	Stage V	Stage V	Stage V	Stage V
	7.9	Vehicle electrical system voltage	V	24	24	24	24	24	24	24	24
	7.10	Battery voltage/nominal capacity	V/Ah	2×12/150	2×12/150	2×12/150	2×12/150	2×12/150	2×12/150	2×12/150	2×12/150
		Rated torque	N·m/r/min	1160/1350	1160/1350	1160/1350	1160/1350	1175/1400	1175/1400	1175/1400	1175/1400
		Transmissions Manufacturer		ZF	ZF	ZF	ZF	ZF	ZF	ZF	ZF
		Transmissions Type		3WG 211	3WG 211	3WG 211	3WG 211	3WG 211	3WG 211	3WG 211	3WG 211
		Stage FWD/RVS		3/3	3/3	3/3	3/3	3/3	3/3	3/3	3/3
Addition data	10.1	Operating pressure for attachments	Mpa	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
	10.2	Oil volume for attachments	l/min	340	340	340	340	340	340	340	340
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	500	500	500	500	500	500	500	500
	10.4	Fuel tank capacity	liter	500	500	500	500	500	500	500	500
	10.7	Sound pressure level at the driver´s seat	dB (A)	75	75	75	75	75	75	75	75

28-32t Mast Specification:(Pneumatic)

Type	Model	Max. fork height	Overall height		Tilt range
			Lowered	Extended	F/R
		mm	mm	mm	(°)
Wide view mast	M360	3600	3900	5690	6/10
	M400	4000	4100	6090	6/10
	M430	4300	4250	6390	6/10
	M450	4500	4350	6590	6/10
	M480	4800	4500	6890	6/10
	M500	5000	4650	7140	6/10
	M550	5500	4900	7640	3/6
	M600	6000	5200	8190	3/6
	M650	6500	5450	8690	3/6
	M700	7000	5750	9240	3/6

35t Mast Specification:(Pneumatic)

Type	Model	Max. fork height	Overall height		Tilt range
			Lowered	Extended	F/R
		mm	mm	mm	(°)
Wide view mast	M360	3600	4150	5940	6/10
	M400	4000	4350	6340	6/10
	M430	4300	4500	6640	6/10
	M450	4500	4600	6840	6/10
	M480	4800	4750	7140	6/10
	M500	5000	4900	7390	6/10
	M550	5500	5150	7890	3/6
	M600	6000	5450	8440	3/6
	M650	6500	5700	8940	3/6
	M700	7000	6000	9490	3/6

