



# HANGCHA with you at every stage

Efficient, reliable solutions for your demands

## STAGE V & TIER 4F

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, diesel oxidation catalysts (DOC) and diesel particulate filters (DPF). Designed and optimised to every engine model, our forklift truck maximises efficiency and reliability.

**Powerful/  
Efficient/  
Reliable**



**XINCHAI**



Interactive instrument: The instrument adopts 4.0-inch color LCD display with four interactive buttons, and has one CAN bus communication function. The communication protocol is compatible with CANopen and SAE J1939 standards.



### HANGCHA Forklift with StageV and T4F

No.	Capacity	Series	Manufacturer	Engine	Drive power	Model	Emission Std.	Transmission	Power (kw/rpm)
1	4.0-5.5t	XF	KUBOTA	V3307-CR-TIE5B	Diesel	CPCD40/45-XW99BN,CPCD50/55-XXW99BN	Stage V / Tier4 final	OKAMURA	54.6/2200
2	4.0-5.5t	XF	XINCHAI	4E30YG52	Diesel	CPCD40/45-XH8BN,CPCD50/55-XXH8BN	Stage V	OKAMURA	55.8/2200

Note: Stage V applied for European Union also including Israel and Turkey  
Tier4 Final applied for North American



## Reliability

By focusing on enhancing reliability, reducing downtime, the XF series is able to make the greater productivity for customer.

XF series truck just equip with Okamura transmission. Brake drum and hub adopt monolithic construction.



XF series features rugged design, stamped frame and engine hood, stamped instrument panel and head guard, heavy profile rail mast combine to provide excellent rigidity, which ensures outstanding reliability even in heavy-duty work.

Extra capacity combined radiator with serpentine wave and optimized heat dissipation channel enhance the heat dissipation capability to keep engine reliability even in heavy-duty applications.



Bigger diameter of steering cylinder.

## Productivity

Dynamic load sensing hydraulic steering system, Efficiency lighting system, lower fuel consumption, combine to provide increased productivity and reduced operating costs.



The new Dynamic load sensing hydraulic steering system contributes to reduce loss of hydraulic and improve energy efficiency.



The new efficiency lighting system employs LED illuminant and new type reflector to reduce energy consumption, improve significantly illumination performance and prolong work time.

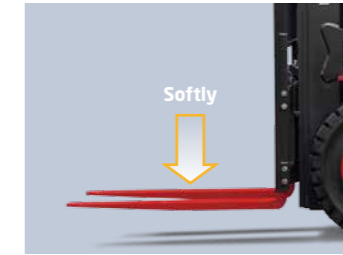
# Comfortable Operation

Optimal visibility in all directions create the best conditions for high productivity through relaxed and safe working.

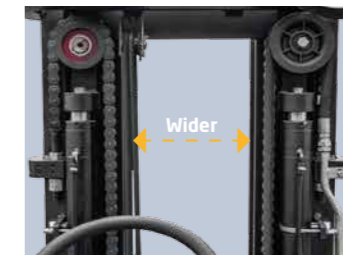


The extra foot space is provided to reduce operator fatigue significantly. The new wide-open, non-slip step makes getting in and out easy and safe.

The optional Electro-hydraulic proportional control system contributes more sensitive and precise load handling. The easy-to-operate levers provide total load handling operation. An armrest is provided to reduce fatigue.



In addition to the soft landing system, the soft lifting system is adopted (front lifting cylinders of triplex mast and full free duplex mast), as a result, the noise and shock of the mast significantly decreases.



The developed front lifting cylinders with smaller outer diameter give the operator superior forward visibility.

The double front lifting cylinders provide better forward visibility.

In developing the new XF Series, comfort and ease of operation is carefully considered, for example, to improve vibration levels, compound engine damper and full floating power train are adopted. Comfortable operating environments for operator also contribute to increased productivity.



In addition to rubber damper between frames and steering axle, compound engine damper and full floating power train achieve flexible connection between frames and driving system, as a result, traveling vibrations and vibrations from the driving system are significantly reduced.



The enlarged capacity of optimized exhaust muffler, the intake muffler and the noise shield technologies provide significantly lower noise levels.

1. The new, relocated easy-to-see LCD meter lets the operator check on all aspects of operational status at a glance.
2. The new automobile-style light/turn-signal lever and forward-reverse lever are ergonomically designed and arranged to improve comfort and productivity.
3. The small diameter steering wheel with tilt adjustment provides the ideal operating position. The superior responsiveness of the steering wheel optimizes maneuverability even in narrow spaces.
4. The parking brake is specially developed. The operational force is reduced by 30%.
5. The automobile-style suspended pedals provide more ergonomic operation.



# Safety

A wide range of technologies are applied to ensure absolute safety for both the operator and those in the surrounding.

An optional rear-pillar assist grip with a horn button enhances safety of operator while traveling in reverse.

The locking device of the engine hood damper and parking brake help add to safety.



1. The operator presence sensing system incorporates lifting / tilting and traveling locking function, when the operator leaves the seat, the system automatically locks lifting / tilting and disables traveling to ensure safety.
2. A throttling device is adopted to avoid the mast being out of control even some pipes are broken.

# Easy Maintenance

Careful design facilitates inspection and servicing. Easy maintenance reduces the amount of downtime and helps to reduce cost also.



The new vehicle controller integrates all electrical components, features excellent durability for temperature, water and vibration for most demanding operation.



CUMMINS engine use the special air filter, it can reduce air intake resistance dramatically, equipped with pressure alarm to master the maintaining time.



The cover on the Panel can be lifted up simply to check the brake fluid.

The easy-to-operate latch provides quick access to the engine compartment.

The two-piece design makes the floorboard easy to lift and remove for access to the power train.

The fasteners of the radiator cover can be turned easily by hand to enable quick inspections or servicing.

# Standards

Transmission	Steering	Chassis	Control	Hydraulic
<ul style="list-style-type: none"> <li>/ Suspension transmission</li> <li>/ Oil filter</li> <li>/ Dipstick</li> <li>/ Oil cooler</li> <li>/ Non-asbestos brake</li> </ul>	<ul style="list-style-type: none"> <li>/ Full hydraulic power steering</li> <li>/ Smaller diameter steering wheel</li> <li>/ Adjuster of steering wheel</li> </ul>	<ul style="list-style-type: none"> <li>/ Anti-slip pedal</li> <li>/ Rubber pedal</li> <li>/ Engine hood spring</li> </ul>	<ul style="list-style-type: none"> <li>/ Power steering</li> <li>/ Suspension pedal</li> <li>/ Integrated combination switch</li> <li>/ Cable parking brake</li> </ul>	<ul style="list-style-type: none"> <li>/ Dynamic load sensing control valve (Diesel IC)</li> <li>/ Hydraulic oil filter</li> <li>/ Tilt cylinder self-lock valve</li> <li>/ Hydraulic oil dipstick</li> <li>/ Dual pump</li> </ul>

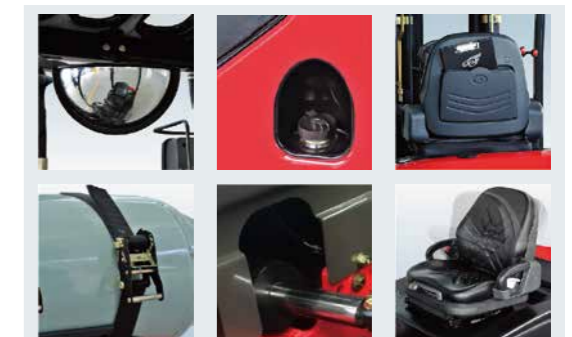
Truck	Electronics	Mast
<ul style="list-style-type: none"> <li>/ Traction device</li> <li>/ Hand grip</li> <li>/ Standard seat</li> <li>/ Standard overhead guard</li> <li>/ Waterproof cover on the guard</li> <li>/ Back view mirror</li> <li>/ Pneumatic tyres</li> <li>/ Toolbox</li> </ul>	<ul style="list-style-type: none"> <li>/ Counterweight net</li> <li>/ Fan protector</li> <li>/ Big capacity aluminum radiator</li> <li>/ Whirlwind air cleaner</li> <li>/ Safety filter</li> <li>/ High-efficient intake muffler</li> <li>/ High-efficient exhaust muffler</li> <li>/ Upright exhaust pipe</li> </ul>	<ul style="list-style-type: none"> <li>/ High-efficient front lights</li> <li>/ High-efficient LED rear lights</li> <li>/ Maintenance-free battery</li> <li>/ Combination controller</li> <li>/ LCD display</li> <li>/ Neutral switch</li> <li>/ Hour meter</li> <li>/ Fuel gauge</li> </ul>

# Options

Truck	Transmission	Power	Hydraulic	Electronics	Mast
<ul style="list-style-type: none"> <li>/ Cabin</li> <li>/ Cabin heater</li> <li>/ Front window</li> <li>/ Super elastic tyre</li> <li>/ Non-mark tyre(white/green)</li> <li>/ Suspension seat</li> <li>/ Extinguisher</li> <li>/ Cover of tilt cylinder</li> <li>/ Heightening overhead guard</li> <li>/ Reversing assist grip</li> <li>/ Customer painting</li> <li>/ OPS(Operator Presence Sensing system)</li> <li>/ Boot for tilt cylinder</li> <li>/ Additional counterweight</li> </ul>	<ul style="list-style-type: none"> <li>/ Dual driving tyre</li> <li>/ Solid tyre</li> <li>/ Japanese drum brake</li> </ul>	<ul style="list-style-type: none"> <li>/ DualfuelLPG system</li> <li>/ Big capacity copper radiator</li> <li>/ Upright exhaust system</li> <li>/ Middle-positioned exhaust system</li> <li>/ Dual air filter</li> <li>/ Net cover of radiator</li> <li>/ Sparkle arrester</li> <li>/ Purified exhaust system</li> <li>/ Swivel LPG bottle support</li> <li>/ Downward LPG bottle support</li> </ul>	<ul style="list-style-type: none"> <li>/ Auxiliary hydraulic valve</li> <li>/ Electro-hydraulic proportional control system</li> <li>/ Return oil filter</li> </ul>	<ul style="list-style-type: none"> <li>/ OBD</li> <li>/ Front working light</li> <li>/ Rear working light</li> <li>/ Warning lamp</li> <li>/ Speed meter</li> <li>/ Over-speed alarm</li> <li>/ LED working light</li> </ul>	<ul style="list-style-type: none"> <li>/ Duplex wide view free-lift mast</li> <li>/ Triplex wide view free-lift mast</li> <li>/ Triplex wide view 4-cylinder free-lift mast</li> <li>/ Special forks</li> <li>/ Wider fork carriage</li> <li>/ Widerload back rest</li> </ul>

# Optional Attachments

- / Paper roll clamp
- / Rotating bale clamp
- / Load stabilizer
- / Multi-drum clamp
- / Bale clamp
- / Drum clamp
- / Dumping clamp
- / Crane arm
- / String Pole
- / Sideshifter
- / Rotating forks
- / Fork extensioner
- / Load release device
- / Carton clamp
- / Push-pull device
- / Bucket
- / Hook
- / Lengthened fork



**XF series 4.0-5.5t forklift specification :**

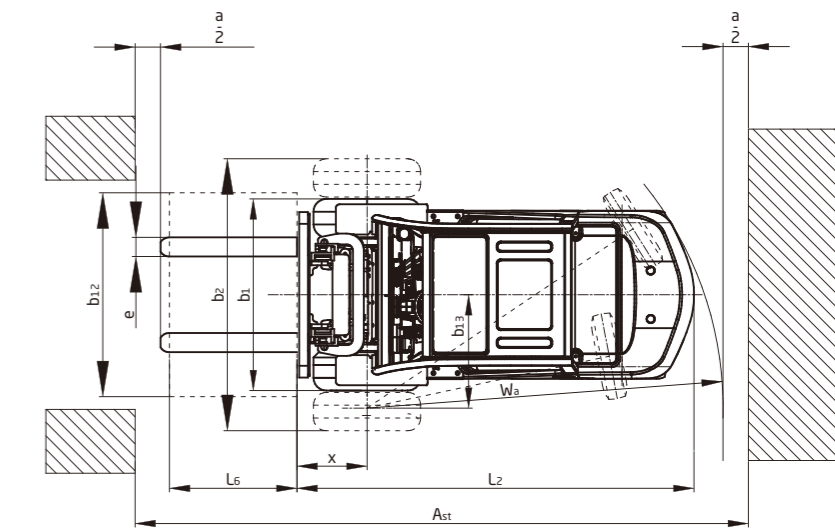
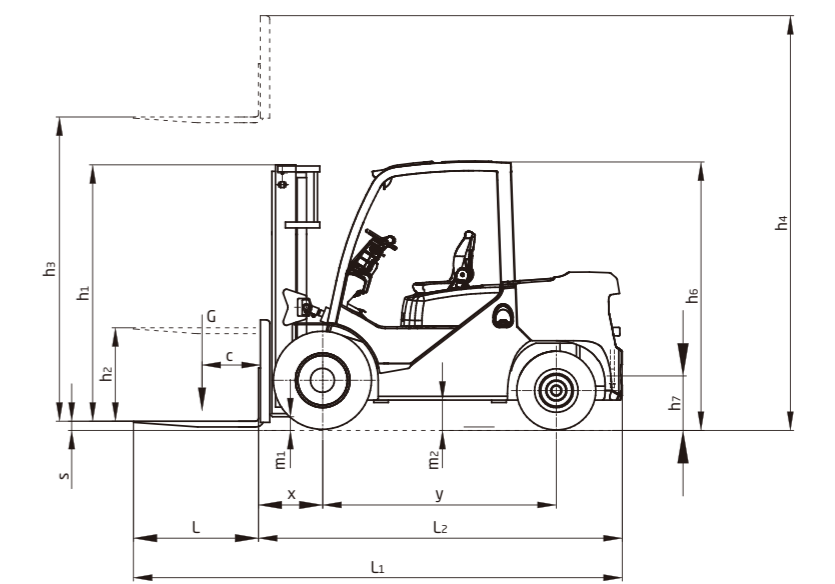
		HANGCHA GROUP CO.,LTD.													
		CPCD40-XW35B	CPCD45-XW35B	CPCD50-XXW35B	CPCD55-XXW35B	CPCD40-XW58B	CPCD45-XW58B	CPCD50-XXW58B	CPCD55-XXW58B	CPQYD40-XW57B CPYD40-XW57B	CPQYD45-XW57B CPYD45-XW57B	CPQYD50-XXW57B CPYD50-XXW57B	CPQYD55-XXW57B CPYD55-XXW57B		
Distinguishing mark	1.1	Manufacturer													
	1.2	Manufacturer's type designation													
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	DUAL FUEL/LPG	DUAL FUEL/LPG	DUAL FUEL/LPG	DUAL FUEL/LPG	
	1.4	Operated type (Hand, Pedestrian, Standing, Seating, Order-Picking)	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	
	1.5	Rated capacity/rated load	Q (kg)	4000(3500)	4500(4000)	5000(4500)	5500(5000)	4000(3500)	4500(4000)	5000(4500)	5500(5000)	4000(3500)	4500(4000)	5000(4500)	5500(5000)
	1.6	Load centre distance	c (mm)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)
	1.8	Load distance, centre of drive axle to fork	x (mm)	550	550	555	585	550	550	555	585	550	550	555	585
	Rear overhang	mm	535	565	560	595	535	565	560	595	535	565	560	595	
1.9	Wheelbase	y (mm)	2000	2000	2150	2150	2000	2000	2150	2150	2000	2000	2150	2150	
Weight	2.1	Service weight	kg	6500	6700	6850	7250	6500	6700	6850	7250	6500	6700	6850	7250
	2.2	Axle loading, laden front/rear	kg	9120/1380	9825/1375	10325/1525	11000/1750	9120/1380	9825/1375	10325/1525	11000/1750	9120/1380	9825/1375	10325/1525	11000/1750
		Counter weight	kg	2125	2315	2450	2780	2125	2315	2450	2780	2125	2315	2450	2780
	2.3	Axle loading, unladen front/rear	kg	3020/3480	3020/3680	3020/3830	3300/3950	3020/3480	3020/3680	3020/3830	3300/3950	3020/3480	3020/3680	3020/3830	3300/3950
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	
	3.2	Tyre size, front		8.25-15-14PR	300-15-18PR	300-15-18PR	300-15-18PR	8.25-15-14PR	300-15-18PR	300-15-18PR	300-15-18PR	8.25-15-14PR	300-15-18PR	300-15-18PR	
	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	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	
	3.6	Tread, front	b10 (mm)	1173	1203	1203	1203	1173	1203	1203	1203	1173	1203	1203	
	3.7	Tread, rear	b11 (mm)	1130	1130	1130	1130	1130	1130	1130	1130	1130	1130	1130	1130
Dimensions	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	6/12	6/12	
	4.2	Height, mast lowered	h1 (mm)	2245	2245	2245	2395	2245	2245	2245	2395	2245	2245	2395	
	4.3	Free lift	h2 (mm)	160	160	160	160	160	160	160	160	160	160	160	
	4.4	Lift	h3 (mm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	
	4.5	Height, mast extended	h4 (mm)	4170	4170	4320	4320	4170	4170	4320	4320	4170	4170	4320	
	4.7	Height of overhead guard	h6 (mm)	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	
	4.8	Seat height/stand height	mm	1306	1306	1306	1306	1306	1306	1306	1306	1306	1306	1306	
	4.12	Coupling height	mm	450	450	450	450	450	450	450	450	450	450	450	
	4.19	Overall length	mm	4155	4185	4335	4530	4155	4185	4335	4530	4155	4185	4335	4530
	4.20	Length to face of forks	l1 (mm)	3085	3115	3265	3330	3085	3115	3265	3330	3085	3115	3265	3330
	4.21	Overall width	b1 (mm)	1420	1503	1503	1503	1420	1503	1503	1503	1420	1503	1503	1503
	4.22	Fork dimensions ISO 2331	s/e/ (mm)	1070x122x50	1070x150x50	1070x150x50	1200x150x60	1070x122x50	1070x150x50	1070x122x50	1200x150x60	1070x122x50	1070x150x50	1070x150x50	1200x150x60
	4.24	Fork carriage width		1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
	4.25	Distance between fork-arms	bs (mm)	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200
	4.31	Ground clearance, laden, below mast	m1 (mm)	170	170	170	170	170	170	170	170	170	170	170	170
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	230	230	230	230	230	230	230	230	230	230	230	230
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	mm	4440	4470	4630	4690	4440	4470	4630	4690	4440	4470	4630	4690
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	mm	4440	4470	4630	4690	4440	4470	4630	4690	4440	4470	4630	4690
	4.35	Turning radius	Wα (mm)	2690	2720	2875	2905	2690	2720	2875	2905	2690	2720	2875	2905
	4.36	Internal turning radius	b13 (mm)	845	845	873	873	845	845	873	873	845	845	873	873
		Min. right angle stacking aisle width(Ast)	mm	3240	3270	3430	3490	3240	3270	3430	3490	3240	3270	3430	3490
Performance data	5.1	Travel speed, laden/unladen	km/h	/24	/24	/24	/24	/24	/24	/24	/24	/24	/24	/24	
	5.2	Lift speed, laden/unladen	m/s	0.460/-	0.460/-	0.400/-	0.400/-	0.460/-	0.400/-	0.400/-	0.460/-	0.460/-	0.400/-	0.400/-	
	5.3	Lowering speed, laden/unladen	m/s	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	
	5.5	Drawbar pull, laden/unladen	N	38000/-	38000/-	38000/-	38000/-	40000/-	40000/-	40000/-	40000/-	38000/-	38000/-	38000/-	38000/-
	5.7	Gradeability, laden/unladen*	%	33/-	31/-	29/-	27/-	35/-	33/-	31/-	28/-	33/-	31/-	29/-	27/-
Combustion-engine	7.1	Engine manufacturer/type		PERKINS 1104D-44	PERKINS 1104D-44	PERKINS 1104D-44	PERKINS 1104D-44	QSF2.8T4F	QSF2.8T4F	QSF2.8T4F	QSF2.8T4F	PSI-4.3L	PSI-4.3L	PSI-4.3L	PSI-4.3L
		Emission STD		EURO IIIA	EURO IIIA	EURO IIIA	EURO IIIA	EURO IIIB	EURO IIIB	EURO IIIB	EURO IIIB				
	7.2	Engine power according to DIN ISO 1585	kw	55.9	55.9	55.9	55.9	55	55	55	55	LP:77, G:76	LP:77, G:76	LP:77, G:76	LP:77, G:76
	7.3	Rated speed	min	2200	2200	2200	2200	2200	2200	2200	2200	2300	2300	2300	2300
	7.4	Number of cylinders/displacement	(-)/ (cm <sup>3</sup> )	4/4410	4/4410	4/4410	4/4410	4/2800	4/2800	4/2800	4/2800	6/4294	6/4294	6/4294	6/4294
	7.10	Battery voltage/nominal capacity	V/Ah	24/90	24/90	24/90	24/90	12/105	12/105	12/105	12/105	12/60	12/60	12/60	12/60
		Rated torque	Nm/r/min	265/1700	265/1700	265/1700	265/1700	298/1600	298/1600	298/1600	298/1600	LP:332.85/1400, G:318/2300	LP:332.85/1400, G:318/2300	LP:332.85/1400, G:318/2300	LP:332.85/1400, G:318/2300
		Transmissions Manufacturer		OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA
		Stage	FWD/RVS	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1
		Bore * stroke	mm*mm	105x127	105x127	105x127	105x127	94x100	94x100	94x100	94x100	101.6x88.4	101.6x88.4	101.6x88.4	101.6x88.4
	Transmissions Type		Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	
Addition data	10.1	Operating pressure for attachments	bar	190	190	190	190	190	190	190	190	190	190	190	190
	10.4	Fuel tank capacity	liter	80	80	90	90	80	80	90	90	80	80	90	90

Note: \*With suspension seat or cabin  
\* As a calculated value

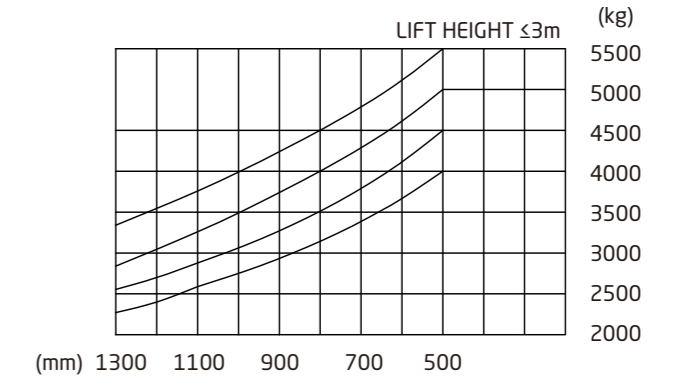


**XF series 4.0-5.5t forklift specification:**

		HANGCHA GROUP CO.,LTD.									
Distinguishing mark	1.1	Manufacturer									
	1.2	Manufacturer's type designation	CPCD40-XW99BN	CPCD45-XW99BN	CPCD50-XXW99BN	CPCD55-XXW99BN	CPCD40-XH8BN	CPCD45-XH8BN	CPCD50-XXH8BN	CPCD55-XXH8BN	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	
	1.4	Operated type (Hand, Pedestrian, Standing, Seating, Order-Picking)	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	
Weight	1.5	Rated capacity/rated load	Q (kg) 4000(3500)	4500(4000)	5000(4500)	5500(5000)	4000(3500)	4500(4000)	5000(4500)	5500(5000)	
	1.6	Load centre distance	c (mm) 500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	500(600)	
	1.8	Load distance, centre of drive axle to fork	x (mm) 550	550	555	585	550	550	555	585	
Tyres, chassis	1.9	Rear overhang	mm 535	565	560	595	535	565	560	595	
	1.9	Wheelbase	y (mm) 2000	2000	2150	2150	2000	2000	2150	2150	
	2.1	Service weight	kg 6500	6700	6850	7250	6500	6700	6850	7250	
Dimensions	2.2	Axle loading, laden front/rear	kg 9120/1380	9825/1375	10325/1525	11000/1750	9120/1380	9825/1375	10325/1525	11000/1750	
	2.3	Counter weight	kg 2125	2315	2450	2780	2125	2315	2450	2780	
	2.3	Axle loading, unladen front/rear	kg 3020/3480	3020/3680	3020/3830	3300/3950	3020/3480	3020/3680	3020/3830	3300/3950	
Performance data	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	
	3.2	Tyre size, front	8.25-15-14PR	300-15-18PR	300-15-18PR	300-15-18PR	8.25-15-14PR	300-15-18PR	300-15-18PR	300-15-18PR	
	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	7.00-12-12PR	7.00-12-12PR	
	3.6	Tread, front	b10 (mm) 1173	1203	1203	1173	1203	1203	1203	1203	
	3.7	Tread, rear	b11 (mm) 1130	1130	1130	1130	1130	1130	1130	1130	
	4.1	Tilt of mast/fork carriage forward/backward	α(R°) 6/12	6/12	6/12	6/12	6/12	6/12	6/12	6/12	
	4.2	Height, mast lowered	h1 (mm) 2245	2245	2245	2395	2245	2245	2245	2395	
	4.3	Free lift	h2 (mm) 160	160	160	160	160	160	160	160	
	4.4	Lift	h3 (mm) 3000	3000	3000	3000	3000	3000	3000	3000	
	4.5	Height, mast extended	h4 (mm) 4170	4170	4320	4320	4170	4170	4320	4320	
	4.7	Height of overhead guard	h5 (mm) 2270	2270	2270	2270	2270	2270	2270	2270	
	4.8	Seat height/stand height	mm 1306	1306	1306	1306	1306	1306	1306	1306	
	4.12	Coupling height	mm 450	450	450	450	450	450	450	450	
	4.19	Overall length	mm 4155	4185	4335	4530	4155	4185	4335	4530	
	4.20	Length to face of forks	l2 (mm) 3085	3115	3265	3330	3085	3115	3265	3330	
	4.21	Overall width	b1 (mm) 1420	1503	1503	1420	1503	1503	1420	1503	
	4.22	Fork dimensions ISO 2331	s/e/l (mm) 1070x122x50	1070x150x50	1070x150x50	1200x150x60	1070x150x50	1070x150x50	1070x150x50	1200x150x60	
	4.24	Fork carriage width	mm 1250	1250	1250	1250	1250	1250	1250	1250	
	4.25	Distance between fork-arms	b2 (mm) 310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	310-1200	
	4.31	Ground clearance, laden, below mast	m1 (mm) 170	170	170	170	170	170	170	170	
	4.32	Ground clearance, centre of wheelbase	m2 (mm) 230	230	230	230	230	230	230	230	
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	mm 4440	4470	4630	4690	4440	4470	4630	4690	
	4.34.2	Aisle width for pallets 800 x 1200 lengthways	mm 4640	4670	4830	4890	4640	4670	4830	4890	
	4.35	Turning radius	Wα (mm) 2690	2720	2875	2905	2690	2720	2875	2905	
4.36	Internal turning radius	b13 (mm) 845	845	873	873	845	845	873	873		
	Min. right angle stacking aisle width(Ast)	mm 3240	3270	3430	3490	3240	3270	3430	3490		
Combustion-engine	5.1	Travel speed, laden/unladen	km/h -/24	-/24	-/24	-/24	-/25	-/25	-/25	-/25	
	5.2	Lift speed, laden/unladen	m/s 0.500/-	0.500/-	0.430/-	0.430/-	0.500/-	0.500/-	0.430/-	0.430/-	
	5.3	Lowering speed, laden/unladen	m/s 0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	0.500/-	
	5.5	Drawbar pull, laden/unladen	N 38500/-	38500/-	38500/-	38500/-	38500/-	38600/-	38600/-	38600/-	
	5.7	Gradeability, laden/unladen*	% 28/-	25/-	23/-	23/-	30/-	28/-	26/-	26/-	
Additional data	7.1	Engine manufacturer/type	KUBOTA V3307-CR-TIE5B	KUBOTA V3307-CR-TIE5B	KUBOTA V3307-CR-TIE5B	KUBOTA V3307-CR-TIE5B	XINCHAI 4E30YG52	XINCHAI 4E30YG52	XINCHAI 4E30YG52	XINCHAI 4E30YG52	
	7.2	Emission STD	EU StageV EPA/CARB Tier4 F	EU StageV EPA/CARB Tier4 F	EU StageV EPA/CARB Tier4 F	EU StageV EPA/CARB Tier4 F	EU StageV	EU StageV	EU StageV	EU StageV	
	7.2	Engine power according to DIN ISO 1585	kw 54.6	54.6	54.6	55.8	54.6	55.8	55.8	55.8	
	7.3	Rated speed	min 2200	2200	2200	2200	2200	2200	2200	2200	
	7.4	Number of cylinders/displacement	(l) / (cm³) 4/3.331	4/3.331	4/3.331	4/3.331	4/2.970	4/2.970	4/2.970	4/2.970	
	7.10	Battery voltage/nominal capacity	V/Ah 12/105	12/105	12/105	12/105	12/105	12/105	12/105	12/105	
		Rated torque	Nm/min 330/1400	330/1400	330/1400	320/1200-1600	330/1400	320/1200-1600	320/1200-1600	320/1200-1600	
	Transmissions Manufacturer	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA	OKAMURA		
	Stage FwD/RVS	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1		
	Bore × stroke	mm×mm 94×120	94×120	94×120	94×120	94×107	94×107	94×107	94×107		
	Transmissions Type	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift	Powershift		
10.1	Operating pressure for attachments	bar 190	190	190	190	190	190	190	190		
10.4	Fuel tank capacity	liter 80	80	90	90	80	80	90	90		



$A_{st} = W_a + X + L_6 + a; a = 200$   
applies only if  $\frac{b_{12}}{2} \leq b_{13}$



Note: \*With suspension seat or cabin  
\* As a calculated value