



HANGCHA

HC FORKLIFT AMERICA CORPORATION

Company address:

10405-A Granite Street
Charlotte, NC 28273

Toll Free: (888) 652-8395

Phone: (980) 888-8335

Fax: (980) 888-8336

america@hcforklift.com

www.hcforkliftamerica.com



2021 VERSION 1 / COPYRIGHT 2021

HANGCHA GROUP CO., LTD. reserves the right to make any changes without notice concerning colors, equipment, or specifications detailed in this brochure, or to discontinue individual models. The colors of trucks, delivered may differ slightly from those in brochures.



XF Series Diesel / LPG Pneumatic Tire Trucks

with capacities of 11,000 to 15,500lbs

Making Material Handling Easier
SINCE 1956



Simple
Smart
Solid



Diesel Powered HANGCHA Forklifts

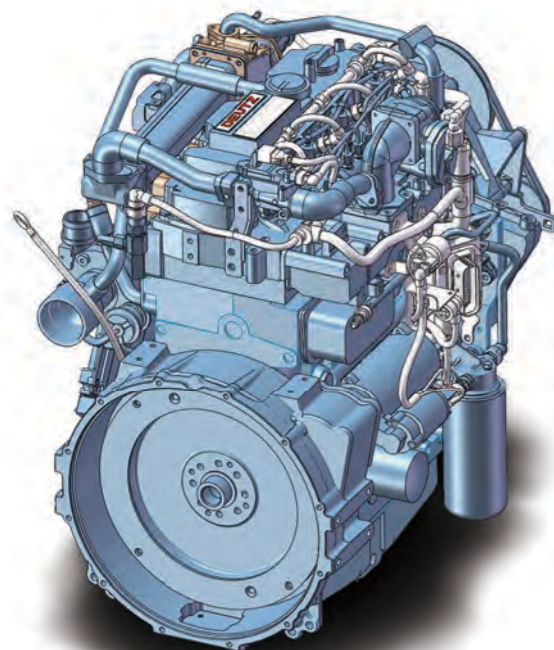
Efficient, reliable solutions to meet your demands.

TIER 4F

Hangcha uses the powerful DEUTZ diesel engine in our pneumatic tire forklifts. The DEUTZ engine is Tier 4F compliant. The engine uses common rail fuel systems, diesel oxidation catalysts (DOC), and diesel particulate filters (DPF) to meet the Tier 4F compliance. This engine helps the Hangcha forklifts maximize their efficiency and reliability for the end-user.



The instrument display consists of a 4" color LCD screen, four interactive buttons, and one CAN bus communication function. The communication protocol is compatible with CANopen and SAE J1939 standards.



DEUTZ

Productivity

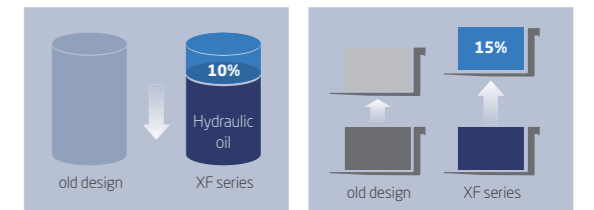
Thanks to a series of technological innovations, the efficiency of the truck is improved and energy consumption is reduced.



By optimizing the transmission design, the maximum driving speed is increased by **20%**



The new efficient lighting system uses LED's and a new type of reflector to reduce energy consumption. This significantly improves illumination performance while also prolonging operation time.



The new dynamic load sensing hydraulic steering system requires 10% less hydraulic oil while providing a 15% increase in lifting speed.

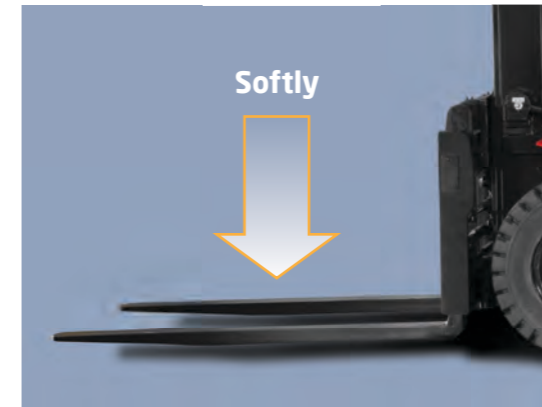
Operator Comfort

While developing the XF Series, comfort and ease of operation were carefully considered. The engineers decreased vibration levels by using a compound engine damper and full floating seat and cabin. The forklift was made more comfortable because a comfortable operator leads to increased operational productivity.



The foot space is now 30% wider to significantly reduce operator fatigue. The new wide, non-slip step makes getting in and out of the forklift safe and easy.

The easy-to-operate levers provide total load handling operation. The armrest is provided to reduce fatigue. The optional electro-hydraulic proportional control system gives the forklift the ability to make load handling more sensitive and precise.



In addition to the soft landing system, the soft lifting system is adopted (front lifting cylinders of the full free lift 2 & 3 stage masts). As a result, the noise and shock of the mast significantly decrease when lowering materials.



The mast was redesigned to provide broad forward visibility. This was done by increasing the distance between inside mast by 2.34"

Comfortable Operation

1. The new relocated, easy-to-see LCD instrument display lets the operator check on all aspects of operational status with a glance.
2. The new automobile-style light/turn-signal stalk and the forward-reverse lever are ergonomically designed and arranged to improve comfort and productivity.
3. The parking brake was developed to reduce the operational force by 30%.
4. The small diameter steering wheel, with tilt adjustment, provides an optimal driving position for the operator. The superior responsiveness of the steering wheel optimizes maneuverability even in narrow spaces.
5. The automobile-style suspended pedals provide a more ergonomic, operator centered experience.



Reliability

By focusing on enhancing reliability and reducing downtime, the XF Series is able to increase productivity for the end-users.



The new stamped air cleaner featuring tangential intake, double seal with safety filter is durable, corrosion-free and vibration-resistant, provides better filter efficiency and lower intake resistance than the previous.




The brake and steering hydraulic systems are separated to prevent interference between each other. By using the dynamic load sensing steering system, the forklift is easier to operate and more energy efficient.


The patented plated-fin aluminum radiator is used to increase cooling and improved the forklifts capability in harsh, hot environments.




Dampening pads are placed where the chassis meets the steering axle, engine, torque converter, and the overhead guard. The suspension seat also comes standard. This is all included in the design to reduce the amount of vibration to the operator and increase operator comfort.



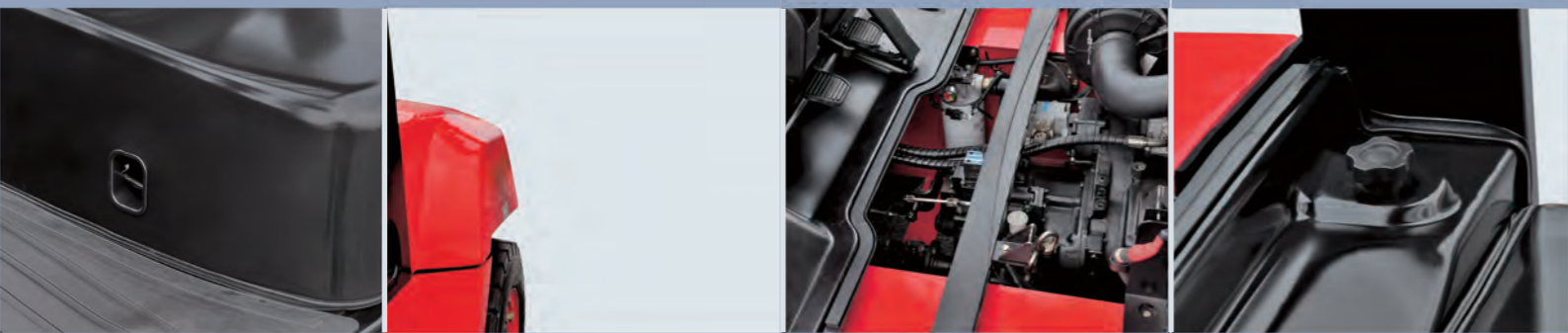
The chassis, mast, and front/rear axle designed to be strong. These components are also made with durable components. This is all done to increase the safety and reliability of the truck when for use in high strength applications.



The controllers, relays, and safety fuses are all placed in the dust and water-free controller box. The main electronic components are also all waterproof. This allows the operator to use the forklift in wet environments.



Easy Maintenance



Designed for easy inspection and servicing. The XF Series' quick and easy maintenance reduces downtime and operational costs.

The location of the air filter allows for easy reach and replacement when filter needs to be changed.

The engine oil level dipstick, hydraulic filter, and water separator are easy to reach, and allow for easy maintenance.

The gas spring support for the front cover of radiator auto-opens when the rear cover of radiator is opened.

Safety

A wide range of technology is applied to ensure absolute safety for both the operator and those in the vicinity.



There's an energy accumulator in the braking system. This allows for the brakes to continue to function after the engine is shut off.



There is a locking mechanism found on the engine hood, damper and the parking brake for the operator's safety.



1. The Operator Presence Sensing System (OPS) incorporates a lifting, tilting, and traveling stop function. When the operator leaves the seat, the system automatically locks the lifting/tilting functions and disables the forklift from traveling to ensure safety.
2. The throttling device locks the mast in place if there is a hydraulic failure. This adds to the operational safety of the truck.

Standard Specification

Transmission	Steering	Chassis	Control	Hydraulic
<ul style="list-style-type: none"> / ZF Transmission / Suspension Transmission / Oil Filter / Dipstick / Oil Cooler / Non-Asbestos Brake Pads / Wet Brakes 	<ul style="list-style-type: none"> / Full Hydraulic Power Steering / Smaller Diameter Steering Wheel / Adjustable Steering Wheel 	<ul style="list-style-type: none"> / Anti-Slip, Rubber Pedal / Engine Compartment Hood Strut 	<ul style="list-style-type: none"> / Power Steering / Suspension Pedal / Integrated Combination Switch / Parking Brake 	<ul style="list-style-type: none"> / Dynamic Load Sending Control Valve / Hydraulic Oil Filter / Tilt Cylinder Self-Lock Valve / Hydraulic Oil Dipstick / Accumulator

Truck	Power	Electronics	Control	Mast
<ul style="list-style-type: none"> / Traction Device / Hand Grip / Standard Seat / Standard Overhead Guard / Waterproof Cover on the Guard / Rearview Mirror / Air Pneumatic Tires / Tilt Cylinder Boot 	<ul style="list-style-type: none"> / Large Capacity Aluminum Radiator / Whirlwind Air Cleaner / Safety Filter / Highly Efficient Intake Muffler / Highly Efficient Exhaust Muffler / Overhead Gaurd Exhaust System / Fan Gaurd 	<ul style="list-style-type: none"> / LED Front Lights / LED Rear Lights / Maintenance-Free Battery / Combination Controller / LCD Display / Neutual Switch / Hour Meter / Fuel Gauge / Water Temperature Gauge 	<ul style="list-style-type: none"> / Pre-Heat Indicator / Charging Indicator / Engine Fuel Pressure Warning / Oil Temperature Gauge / Horn / Reversing Buzzer / Air Filter with Jam Sensor / Emergency Cut Off Switch 	<ul style="list-style-type: none"> / Limited Free Lift 2 Stage Mast / Standard Forks / Standard Fork Carriage / Standard Load Back Rest / Mast Speed Limiting Valve / Load Safety Valve / Soft Landing System / Soft Lifting System / Side Roller

Options

- / Full Cabin
- / Cabin Heater
- / Front Window
- / Solid Pneumatic Tires
- / Non-Marking Tires
- / Suspension Seat
- / Fire Extinguisher
- / Custom Colors
- / Counterweight Grill
- / Operator Presence Sensing System (OPS)
- / Air Pre-Cleaner
- / Raditor Screen
- / Auxiliary Hydraulic Valve
- / Electro-Hydraulic Proportional Control System
- / Front Working Light
- / Rear Working Light
- / Different Masts
- / Different Size Forks
- / Wider Load Backrests
- / Wider Carriage
- / Various Optional Attachments



XF Series Pneumatic Forklift 11,000-15,500lb Specification

		HANGCHA GROUP CO.,LTD.						
		FD50G	FP50	FD60G	FP60	FD70G	FP70	
Distinguishing Marks	1.1 Manufacturer	HANGCHA GROUP CO.,LTD.						
		HCFA Model	FD50G	FP50	FD60G	FP60	FD70G	FP70
	1.2 Manufacturer's Type Designation	CPCD50-XW65G	CPYD50-XW24	CPCD60-XW65G	CPYD60-XW24	CPCD70-XW65G	CPYD70-XW24	
	1.3 Drive: electric (battery or mains), diesel, petrol, fuel gas	Diesel	LPG	Diesel	LPG	Diesel	LPG	
	1.4 Operator Type: hand, pedestrian, standing, seated, order-picker	Seated	Seated	Seated	Seated	Seated	Seated	
	1.5 Rated Capacity/Rated Load	Q (lb)	11000	11000	13500	13500	15500	15500
	1.6 Load Centre Distance	c(in)	24	24	24	24	24	24
	1.8 Load Distance, centre of drive axle to fork	x(in)	23.5	23.5	23.5	23.5	23.8	23.8
	1.9 Wheelbase	y(in)	90.5	90.5	90.5	90.5	90.5	90.5
Weight	2.1 Service Weight	lb	17630	17630	18800	18800	20600	20600
	2.2 Axle Loading, laden front/rear	lb	24890/3770	24890/3770	28190/3830	28190/3830	32230/3700	32230/3700
	2.3 Axle Loading, unladen front/rear	lb	8530/9100	8530/9100	8260/10530	8260/10530	8150/12340	8150/12340
Tires & Chassis	3.1 Tires: solid rubber, superelastic, pneumatic, polyurethane	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	
	3.2 Tire size, front	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	
	3.3 Tire size, rear	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	8.25-15-14PR	
	3.5 Wheels, number front rear (x = driven wheels)	4x/2	4x/2	4x/2	4x/2	4x/2	4x/2	
	3.6 Tread, front	b10 (in)	58.6	58.6	58.6	58.6	58.6	58.6
	3.7 Tread, rear	b11 (in)	66.9	66.9	66.9	66.9	66.9	66.9
Dimensions	4.1 Tilt of Mast/Fork Carriage Forward/Backward	α/β(°)	6/12	6/12	6/12	6/12	6/12	6/12
	4.2 Height, mast lowered	h1 (in)	98.4	98.4	98.4	98.4	98.4	98.4
	4.3 Free Lift	h2 (in)	6.3	6.3	6.3	6.3	6.3	6.5
	4.4 Lift	h3 (in)	118	118	118	118	118	118
	4.5 Height, mast extended	h4 (in)	174	173.5	174	173.5	174	173.5
	4.7 Height of Overhead Guard	h6 (in)	95.7	95.7	95.7	95.7	95.7	95.7
	4.8 Seat Height	h7 (in)	53	53	53	53	53	53
	4.12 Coupling Height	h10 (in)	17	17	17	17	17	17
	4.19 Overall Length	l1 (in)	185	185	186	186	189	189
	4.20 Length to Face of Forks	l2 (in)	138	138	139	139	142	142
	4.21 Overall Width	b1(in)	80.7	80.7	80.7	80.7	80.7	80.7
	4.22 Fork Dimensions	s/e/l (in)	2.4x5.9x47.2	2.4x5.9x47.2	2.4x5.9x48	2.4x5.9x48	2.6x5.9x48	2.6x5.9x48
	4.23 Fork Carriage DIN 15173, class/type A, B		IV A	IV A	IV A	IV A	IV A	IV A
	4.24 Fork-Carriage Width	b3 (in)	67	67	67	67	67	67
	4.31 Ground Clearance, laden, mast	m1 (in)	7.5	7.5	7.5	7.5	7.5	7.5
	4.32 Ground Clearance, centre of wheelbase	m2 (in)	10.6	10.6	10.6	10.6	10.6	10.6
	4.34.1 Aisle Width for Pallets 39"x47" Crossways	Ast (in)	198	198	200	200	203	203
	4.34.2 Aisle Width for Pallets 31.5"x47" Lengthways	Ast (in)	206	206	208	208	211	211
	4.35 Turning Radius	Wa (in)	127	127	129	129	132	132
	4.36 Internal Turning Radius	b13 (in)	48	48	48	48	48	48
Performance Data	5.1 Travel Speed, laden/unladen	mph	14.9/17.6	18.5/19.2	14.3/17.6	17.5/19.2	13.7/17.6	16.8/19.2
	5.2 Lift Speed, laden/unladen	ft/min	80.7/88.6	85/91	80.7/88.6	85/91	70.9/78.7	75.2/85
	5.3 Lowering Speed, laden/unladen	ft/min	94.5/82.7	95/83	94.5/82.7	95/83	94.5/82.7	95/83
	5.5 Drawbar Pull/laden/unladen	lbf	14370/5710	14380/6110	14450/6000	14380/6310	14610/6180	14380/6510
	5.7 Gradeability, laden/unladen	%	48/20	58/20	43/20	50/20	36/20	44/20
	5.10 Service Brake		Wet Brake	Hydraulic	Wet Brake	Hydraulic	Wet Brake	Hydraulic
Combustion Engine	7.1 Engine Manufacturer/Type		Deutz TCD3.6 L4	PSI 4.3L(certified)	Deutz TCD3.6 L4	PSI 4.3L(certified)	Deutz TCD3.6 L4	PSI 4.3L(certified)
	Emission Standard		Tier 4 Final	EPA Certified	Tier 4 Final	EPA Certified	Tier 4 Final	EPA Certified
	7.2 Engine Power According to DIN ISO 1585	HP	74	103	74	103	74	103
	7.3 Rated Speed	r/min	2200	2300	2200	2300	2200	2300
	7.4 No. of Cylinders/Displacement	(-)/(in ³)	4/220	6/263	4/220	6/263	4/220	6/263
	Transmission Manufacturer		ZF	Hangcha	ZF	Hangcha	ZF	Hangcha
Additional Data	10.1 Operating Pressure for Attachments	bar	195	195	195	195	195	195
	10.2 Oil Volume for Attachments	l/min	120	120	120	120	120	120
	10.8 Towing Coupling, type DIN 15170		Pin	Pin	Pin	Pin	Pin	Pin

11,000-15,500lb XF Series Mast:

Type	Model	Max. Fork Height in	Overall Height			Free Lift		Load Distance, Centre of Drive Axle to Fork in	Tilt Range FWD/BWD (°)	Capacity		
			Lowered in	Extended		Without Backrest in	With Backrest in			Load capacity at 24 in Double Tire		
				Without Backrest in	With Backrest in					11000lb	13500lb	15500lb
										lb	lb	lb
Limited Free Lift 2 Stage Mast	X50/70M330	129.9	104.3	169.1/175.9	185.3	6.3	6.3	23.5/23.8	6/12	11000	13500	15500
	X50/70M360	141.7	110.2	180.9/187.7	197.1	6.3	6.3	23.5/23.8	6/12	11000	13500	15500
	X50/70M400	157.5	118.1	196.7/203.4	213	6.3	6.3	23.5/23.8	6/12	11000	13500	15500
	X50/70M450	177.1	130	216.5/223.1	232.6	6.3	6.3	23.5/23.8	6/6	11000	13500	15500
	X50/70M500	196.9	139.8	236.2/242.8	252.2	6.3	6.3	23.5/23.8	6/6	11000	13500	15500
	X50/70M550	216.5	151.6	257.9/262.5	272	6.3	6.3	23.5/23.8	3/6	10400	12500	14500
	X50/70M600	236.2	161.4	277.5/282.1	291.6	6.3	6.3	23.5/23.8	3/6	9800	11900	14100
Full Free Lift 2 Stage Mast	X50/70U300	118.1	96.5	155.7/162	162.9	58.9/52.6	51.7	24.5/25	6/12	11000	13500	15500
	X50/70U330	130	102.4	167.5/173.8	174.7	64.8/58.5	57.6	24.5/25	6/12	11000	13500	15500
	X50/70U360	141.7	108.3	179.3/185.6	186.5	70.7/64.4	63.5	24.5/25	6/12	11000	13500	15500
	X50/70U400	157.5	116.1	195.1/201.4	202.2	78.5/72.2	71.4	24.5/25	6/12	11000	13500	15500
Full Free Lift 3 Stage Mast	X50/70N450	177.2	107.3	225.8	232.6	59	52.3	26.3/26.5	6/6	9900	12300	14000
	X50/70N480	189	111.2	237.6	244.4	63	56.2	26.3/26.5	6/6	9901	12300	13800
	X50/70N500	196.9	113.2	244.6	252.2	65.8	58.2	26.3/26.5	6/6	9902	12100	13800
	X50/70N550	216.5	121.1	267.1	272	70.9	66.1	26.3/26.5	3/6	9200	11400	6100
	X50/70N600	236.2	127	284.8	291.6	78.7	72	26.3/26.5	3/6	8800	11000	12100

With sideshifter, subtract 1102lbs. With integral sideshifter, subtract 882lbs.

