



4WD ROUGH TERRAIN FORKLIFT



HANGCHA

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Four-Wheel Drive Rough Terrain Forklift

with capacities of 11,000lbs



Making Material Handling Easier
SINCE 1956



CONCEPT

The Hangcha 11,000lb rough terrain forklift with 4WD was developed from the XF Series forklifts that Hangcha Group manufactures. It uses the reliable Cummins diesel engine to give it the power needed to navigate through any terrain. This forklift, with a 11,000lb load capacity, easily navigates through the rugged roads found in the stone industry, lumber industry, and at construction sites. The 4WD system works with the unique tire tread to provide traction in wet and slippery conditions. The 11,000lb rough terrain forklift, because the road isn't always smooth.

4WD
ROUGH TERRAIN



Safety

- / The steering hydraulic circuit and the brake hydraulic circuit are independent of each other reducing the interference between the braking and steering systems. This creates a safer hydraulic braking system.
- / Designed with an accumulator, the valve in the braking system is now safer and more reliable.
- / The optional Operator Presence Sensing (OPS) system will cut off all actions of the mast and running actions of the truck to increase safety when the operator leaves the seat.

Comfort

- / Working in unison, the suspension, overhead guard, full-floating transmission, engine shock absorbers, and the suspension seat provide a comfortable working environment with reduced noise and vibrations.
- / The extra foot space is provided to significantly reduce operator fatigue.
- / The non-slip step makes getting in and out of the forklift easy and safe.
- / A newly designed steering wheel, new brake system, and easy-to-operate levers provide the operator with comfortable operating experience.
- / This forklift is designed to provide excellent all around visibility. Upward visibility is also great thanks to redesigned overhead guard.

Easy Maintenance

- / The floorboard's two-piece design makes it easy to lift and remove for access to the powertrain.
- / The radiator cover fasteners can be turned easily by hand to enable quick inspections or servicing.



The easy-to-open maintenance hatch provides quick access to the engine compartment.



Easily shift between the three forward gears to reach a top speed of 15.5 miles per hour.



The large instrument display panel is attached to the overhead guard for clear visibility.



The oscillating steer axle allows either wheel to step over obstacles while keeping the truck and load level.



To achieve maximum productivity, a rough terrain forklift operator needs to be comfortable and in control. We've created a workplace that gets the best from your operators and your machinery.

Reliability

- / The truck chassis was reinforced using CAE simulation software. The tilt cylinder and steering drive axle were also optimally designed using this method.
- / Dual air filters and a two-stage air filter are the standard configuration to guarantee that the engine can operate reliably for a long time.
- / Deutz engine adopted the “TCI+CR+EGR+DOC” technical route so that Tier 4F emissions can be met. This is both energy-saving and environmentally friendly. Being a turbocharged engine further enhances engine performance at low RPMs for improved power and tractive efforts.
- / The oil filtration return device is part of the standard configuration to extend the service life of the truck’s hydraulic elements.



This rough terrain forklift features a manual locking differential to provide traction during inclement weather conditions and on rough operating surfaces. The operator locks the differential by pressing the switch. This prevents power loss when one wheel spins.



The full-floating hydraulic drive gearbox has the function of switching between 2WD and 4WD, provides a higher running speed, and has a stronger climbing ability.

New, higher specification, fork mounting means that more weight can be loaded.



Front Tire

Rear Tire



Productivity

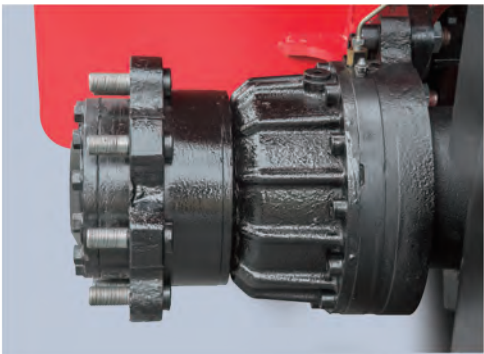
The transmission system is geared to get the maximum performance from the Cummins diesel engine without reaching a high RPM. This improves fuel consumption, a reduction in noise, and increases the engine's life.



The new dynamic load sensing hydraulic steering system improves hydraulic efficiency and reliability.



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.



Wet brakes offer the maximum amount of service life for your brake system without sacrificing stopping power.

Maneuverability

The 11,000lb Rough Terrain forklift has a ground clearance of 14.6". This keeps the truck moving through the roughest of applications. Hangcha Group also designed it to have a very low center of gravity by distributing the weight in the forklift. This gives it excellent stability when navigating through tough terrain.





Standard Specification

- / Counterweight Grill
- / Full Suspension Seat
- / Pre-Cleaner
- / Overhead Guard Exhaust
- / Fuel Tank Cap (with lock)
- / Fan Protection Device
- / Rear Working Light
- / Strobe Light
- / Emergency Switch
- / Right and Left Reflective Mirrors
- / PVC Roof
- / Wet Brakes
- / Reverse Grip with Horn
- / Operator Presence Sensing System (OPS)

Options

- / Front Windshield and Wipers
- / Full Cabin
- / Solid Pneumatic Tires
- / 3rd/4th/5th Valve
- / Blue Light
- / Heater
- / Air Conditioning
- / Operator Fan
- / Side Shifter
- / Side Shifter & Fork Positioner



Four Wheel Drive Rough Terrain Forklift

Distinguishing Marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
		HCHA Model		RT50
	1.2	Manufacturer's Type Designation		CPCD50-XW70C-RT4
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Diesel
	1.4	Operator Type: hand, pedestrian, standing, seated, order-picker		Seated
	1.5	Rated Capacity/Rated Load	Q lb(kg)	11000(5000)
	1.6	Load Centre Distance	c in(mm)	24(600)
	1.8	Load Distance, centre of drive axle to fork	x in(mm)	28.9(735)
	1.9	Wheelbase	y in(mm)	84.6(2150)
	2.1	Service Weight	lb(kg)	19620(8900)
Weight	2.2	Axle Loading, laden front/rear	lb(kg)	27100/3520(12300/1600)
	2.3	Axle Loading, unladen front/rear	lb(kg)	9370/10250(4250/4650)
Tires & Chassis	3.1	Tires: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic
	3.2	Tire Size, front		445/65-22.5
	3.3	Tire Size, rear		12.5/80-18
	3.5	Wheels, number front / rear (x = driven wheels)		4x4
	3.6	Tread, front	b ₀ in(mm)	65.3(1660)
	3.7	Tread, rear	b ₁ in(mm)	69.3(1760)
	4.1	Tilt of Mast/Fork Carriage Forward/Backward	α/β(°)	15/15
Dimensions	4.2	Height, mast lowered	h ₁ in(mm)	104.6(2685)
	4.3	Free Lift	h ₂ in(mm)	10.2(260)
	4.4	Lift	h ₃ in(mm)	118.1(3000)
	4.5	Height, mast extended	h ₄ in(mm)	178.5(4534)
	4.7	Height of Overhead Guard (Cabin)	h ₆ in(mm)	101.4(2575)
	4.19	Overall Length	l ₁ in(mm)	191.5(4865)
	4.20	Length to Face of Forks	l ₂ in(mm)	144.3(3665)
	4.21	Overall Width	b ₁ in(mm)	82.9(2105)
	4.22	Fork Dimensions ISO 2331	s/e/l in(mm)	2.4×5.9~47.2(60×150×1200)
	4.23	Fork Carriage DIN 15 173 --- ISO 2328, class/type A,B		B
	4.24	Fork-Carriage Width	b ₃ in(mm)	76.8(1950)
	4.25	Distance between Fork-Arms	b ₅ in(mm)	11.4-76.8(290-1950)
	4.31	Ground Clearance, laden, below mast	m ₁ in(mm)	15.1(385)
	4.32	Ground Clearance, centre of wheelbase	m ₂ in(mm)	14.6(370)
	4.34	Aisle Width	A _{st} in(mm)	248(6305)
Performance Data	4.35	Turning Radius	W _a in(mm)	163.4(4150)
	5.1	Travel Speed, laden/unladen	mph(km/h)	15.5/15.5(25/25)
	5.2	Lift Speed, laden	ft/min(m/s)	88.6/102.4(0.45/0.52)
	5.3	Lowering Speed, laden	ft/min(m/s)	98.4/84.7(0.5/0.43)
	5.5	Drawbar Pull, laden	N	95000
	5.7	Gradeability, laden	%	55
	5.10	Service Brake		Hydraulic
Combustion Engine		Parking Brake		Mechanical
	7.1	Engine Manufacturer/Type		QSF3.813TC115
	7.2	Engine Power According to DIN ISO 1585	hp/r/min(kw/r/min)	115/2200(86/2200)
	7.3	Rated Speed	N·m/r/min	470/1100-1700
	7.4	Number of Cylinders/Displacement	(-)/ (cm³)	4/3760
Additional Data	7.10	Battery Voltage/Nominal Capacity	V/Ah	24/90
	10.3	Hydraulic Tank - capacity (drain & refill)	gal(liter)	30.4(115)
	10.4	Fuel Tank Capacity	gal(liter)	31.7(120)

11,000lb Mast

Type	Model	Max. Fork Height	Overall Height				Free Lift		Front Overhang	Tilt Range		Load Capacity Max Height Load Center 24" (600mm)	
			Lowered in(mm)	Extended		Without Backrest in(mm)	With Backrest in(mm)	FWD		BWD	ISO 22915-2 Rough Terrain Forklift with Mast	ISO 22915-13 Rough Terrain Forklift with Mast	
				Without Backrest in(mm)	With Backrest in(mm)								
Limited Free Lift 2 Stage Mast		in(mm)	11000lb(5t)	11000lb(5t)	11000lb(5t)	11000lb(5t)	11000lb(5t)	11000lb(5t)	(°)	(°)	lb(kg)	lb(kg)	
	RTCS0M300	118.1(3000)	105.7(2685)	164.7(4183)	178.5(4534)	6.3(160)	6.3(160)	28.9(735)	15	15	10360(4700)	10360(4700)	
	RTCS0M330	129.9(3300)	111.6(2835)	176.5(4483)	190.3(4834)	6.3(160)	6.3(160)	28.9(735)	15	15	10360(4700)	10360(4700)	
	RTCS0M350	137.8(3500)	115.5(2935)	184.4(4683)	198.2(5034)	6.3(160)	6.3(160)	28.9(735)	15	15	10360(4700)	10360(4700)	
	RTCS0M370	145.7(3700)	119.5(3035)	192.2(4883)	206.1(5234)	6.3(160)	6.3(160)	28.9(735)	15	15	10360(4700)	10360(4700)	
	RTCS0M400	157.5(4000)	125.4(3185)	204.1(5183)	217.9(5534)	6.3(160)	6.3(160)	28.9(735)	15	15	10360(4700)	10360(4700)	
	RTCS0M450	177.2(4500)	137.2(3485)	223.8(5685)	237.6(6034)	6.3(160)	6.3(160)	28.9(735)	15	15	10472(4750)	10141(4600)	
	RTCS0M500	196.9(5000)	147(3735)	243.5(6185)	257.2(6534)	6.3(160)	6.3(160)	28.9(735)	15	15	9259(4200)	9039(4100)	
	RTCS0N400	157.5(4000)	108.7(2760)	215.4(5470)	217.9(5534)	51.2(1300)	41.4(1051)	31.7(804)	15	15	11000(5000)	11000(5000)	
	RTCS0N430	169.3(4300)	112.2(2850)	226(5740)	229.7(5834)	55.9(1420)	44.9(1151)	31.7(804)	15	15	10141(4600)	9921(4500)	
Full Free Lift 3 Stage Mast	RTCS0N450	177.2(4500)	114.6(2910)	233.1(5920)	237.6(6034)	59.1(1500)	47.3(1201)	31.7(804)	15	15	9480(4300)	9039(4100)	
	RTCS0N480	189(4800)	118.5(3010)	244.9(6220)	249.4(6334)	63(1600)	51.2(1301)	31.7(804)	15	15	9039(4100)	8598(3900)	
	RTCS0N500	196.9(5000)	120.5(3060)	251.9(6399)	257.2(6534)	65.8(1671)	53.2(1351)	31.7(804)	10	15	8598(3900)	7716(3500)	
	RTCS0N550	216.5(5500)	128.3(3260)	274.4(6970)	276.9(7034)	70.9(1800)	61.1(1551)	31.7(804)	10	15	7055(3200)	5732(2600)	
	RTCS0N600	236.2(6000)	134.3(3410)	292.1(7420)	296.6(7534)	78.7(2000)	67(1701)	31.7(804)	10	15	6173(2800)	5071(2300)	
	RTCS0N650	255.9(6500)	140.2(3560)	316.3(8034)	311(7899)	85.5(2171)	80(2036)	31.7(804)	10	15	5071(2300)	3968(1800)	

With sideshifter, subtract 8800's(400kg). With integral sideshifter, subtract 6800's (300kg).

