MATERIAL HANDLING SOLUTIONS
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TERRAIN FORKLIFT



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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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.



2WD/4WD Rough Terrain Forklift

with capacities of 5,000 to 10,000kg

The World of Hangcha

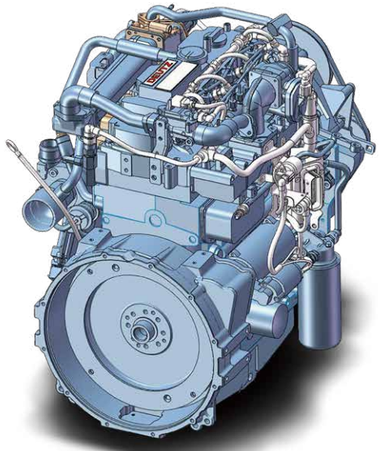
HANGCHA

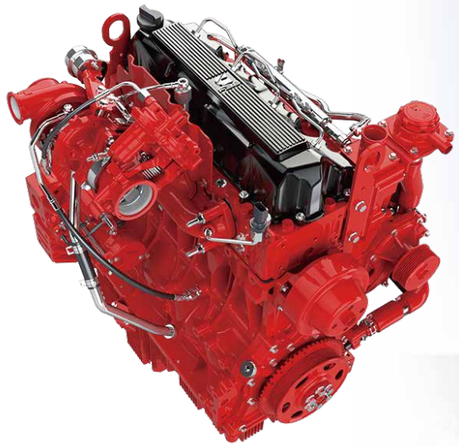
HANGCHA be with you at every stage

Efficient, reliable solutions for your demands

STAGE V

With Hangcha you can meet all Stage V emissions standards which provides customer demands for value, innovation and performance. Designed and optimised to every engine model, our forklift truck maximises efficiency and reliability.





DEUTZ

Technical Route:
TCI+CR+EGR+DOC+DPF

CUMMINS

Technical Route:
TCI+CR+DOC+DPF+SCR



Used for Deutz engine

Interactive instrument: The instrument has CAN bus communication function. The communication protocol is compatible with CANopen and SAE J1939 standards.



Used for CUMMINS engine

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

HANGCHA Forklift with StageV

No.	Capacity	Series	Manufacturer	Engine	Drive power	Model	Emission Std.	Transmission	Power (kw/rpm)	Service brake
1	5.0t	RT	DEUTZ	TCD 3.6 L4	Diesel	CPCD50-XW95E-RT2	EU stageV/EPA Tier 4F	China	55.4/2300	Wet brake
2	5.0t	RT	DEUTZ	TCD 3.6 L4	Diesel	CPCD50-XW95C-RT4	EU stageV/EPA Tier 4F	China	55.4/2300	Wet brake
3	7.0t	RT	CUMMINS	F3.8	Diesel	CPCD70-XH16C-RT4	EU stageV/EPA Tier 4F	China	90/2200	Wet brake
4	7.0t	RT	CUMMINS	F3.8	Diesel	CPCD70-XH16E-RT2	EU stageV/EPA Tier 4F	China	90/2200	Wet brake
5	10t	RT	CUMMINS	F3.8	Diesel	CPCD100-XH16C-RT4	EU stageV/EPA Tier 4F	China	90/2200	Wet brake

Note: Stage V applied for European Union also including Israel and Turkey

Powerful/
Efficient/
Reliable

CONCEPT

HANGCHA rough terrain forklift with 2WD/4WD was developed on the basis of the XF series of Hangcha. It adopts the Deutz and Cummins engine, which is powerful and reliable, easy to maintain; It can adapt to the rugged roads in the stone market, timber market, construction sites, etc., as well as the wet and slippery roads in rain and snow.



Safety

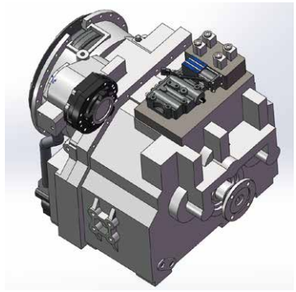
/ Thanks to the steering oil circuit and the brake oil circuit are independent of each other, thereby reducing the interference of the brake on the steering, the hydraulic braking system is very safe.
/ With the structure of brake valve plus the accumulator, it is safer and reliable.
/ The returned oil filtration device is taken as the standard configuration to extend the service life of the hydraulic elements.
/ OPS function is available for option, work is safer and reliable.

Comfort

/ With the suspension and integrated overhead guard, full-floating transmission, complex engine shock absorber and suspension seat, driving is more comfortable, and the vibration and noise of the truck can be reduced.
/ The extra foot space is provided to reduce operator fatigue significantly, non-slip step makes getting in and out easy and safe. The new designed steering wheel、new brake system and the easy-to-operate levers provide total handling operation.
/ Excellent upward visibility is provided by a large roof screen, in fact, visibility all-round is excellent.

4 drive wheel multi-gears transmission

/ The hydraulic transmission box of the multi-gear 4WD transmission electro-hydraulic commutation, with electronically controlled decoupling function (one-key switching between 4WD and 2WD), provides higher running speed and greater climbing ability.



/ 5t transmission gears are 3 in the front/1 in the back, 7t/10t transmission gears are 3 in the front/3 in the back.

Easy maintenance

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



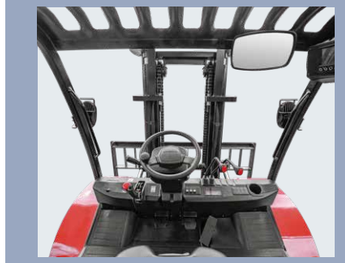
The easy-to-open hook provides quick access to the engine compartment



The tilt angle of the mast is 15° in the front/15° in the back, which is more suitable for loading, unloading and transportation of goods in off-road conditions



Oscillating steer axle allows either wheel to step over obstacles 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 reinforced truck chassis with CAE simulation software, optimized design is conducted for the tilt cylinder and steering drive axle installation.
/ Dual air filters and two-stage air filter are taken as the standard configuration to guarantee that the engine can operate for long time and under the optimal status.
/ Deutz engine adopt, "TCI+CR+EGR+DOC" technical route. Adopt EURO Ⅲ B/Tier4F emission can be met, and it is energy-saving and environment-friendly; A turbo engine further enhances performance at low engine speeds for improved power and tractive effort.



The differential is specifically designed for rough terrain and features manual differential lock providing ultimate traction during inclement weather conditions and rough operating surfaces, it differerntial lock prevents power loose when one wheel spins.



Full-floating hydraulic drive gear box has the function of switching between 2WD and 4WD, and can provide higher run speed and stronger climbing ability;

Higher specification fork mounting level-IVB(5t/7t), more weight can be loaded.



Front tyre

Rear tyre





Productivity

The transmission system gets the maximum performance from the engine without reaching high revolutions, which provides fuel saving, noise level reduction and engine life increase.

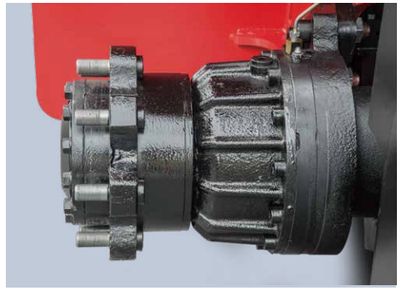


The new Dynamic load sensing hydraulic steering system contributes to reduce loss of hydraulic and improve energy efficiency.





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



Wet brake offers maximum service life for your brake system.

Maneuverability

The distance to ground is 370mm, it offers greater maneuverability and keep the truck moving in the roughest of applications, and yet we keep a very low center of gravity, by using a distributed weight in the forklift, giving it an excellent stability.





Standard specification

/ Counterweight cover
/ Full-suspension seat
/ Dual air filters
/ High-position exhaust
/ Fuel tank cover (with lock)
/ Fan protection device
/ Rear workling light
/ Alarm light
/ Emergency switch
/ Right and left reflective mirrors
/ PVC ceiling
/ Wet brake
/ Mud baffle provided with rigging hole

Options

/ Front windshield and wipers
/ Cab (warm air blower and fan are available for option)
/ Engine cover with lock
/ Engine cover with dual sound insulation cushion
/ Engine cover with lock+ dual sound insulation cushion
/ 3rd/4th/5th valve
/ Voice type reversing buzzer
/ Blue light lamp
/ Low-temperature cold start-up battery (-20℃)
/ OPS system
/ OPS system & Compatible with Sequential Seat Belt Interlock System
/ Sealant-filled tubeless tire



5t Mast: (pneumatic)

Type	Model	Max.fork height	Overall height			Free lift		Front Overhang	Tilt range		Capacity max height Load Center 24in(600mm)	
			Lowered	Extended		Without backrest	With backrest		FWD	BWD	ISO 22915-2 Counterbalanced trucks with mast	ISO 22915-13 Rough-terrain trucks with mast
				Without backrest	With backrest							
		mm	mm	mm	mm	mm	mm	mm	(°)	(°)	lb(kg)	lb(kg)
Wide view mast	RTC50M300	3000	2685	4183	4534	170	170	735	15	15	11000(5000)	11000(5000)
	RTC50M330	3300	2835	4483	4834	170	170	735	15	15	11000(5000)	11000(5000)
	RTC50M350	3500	2935	4683	5034	170	170	735	15	15	11000(5000)	11000(5000)
	RTC50M370	3700	3035	4883	5234	170	170	735	15	15	11000(5000)	11000(5000)
	RTC50M400	4000	3185	5183	5534	170	170	735	15	15	11000(5000)	11000(5000)
	RTC50M450	4500	3485	5685	6034	170	170	735	15	15	10450(4750)	10120(4600)
	RTC50M500	5000	3735	6185	6534	170	170	735	15	15	9240(4200)	9020(4100)
Wide view full free triplex mast	RTC50N400	4000	2760	5470	5534	1300	1051	804	15	15	11000(5000)	11000(5000)
	RTC50N430	4300	2850	5740	5834	1420	1141	804	15	15	10120(4600)	9900(4500)
	RTC50N450	4500	2910	5920	6034	1500	1201	804	15	15	9460(4300)	9020(4100)
	RTC50N480	4800	3010	6220	6334	1600	1301	804	15	15	9020(4100)	8580(3900)
	RTC50N500	5000	3060	6399	6534	1671	1351	804	10	15	8580(3900)	7700(3500)
	RTC50N550	5500	3260	6970	7034	1800	1551	804	10	15	7040(3200)	5720(2600)
	RTC50N600	6000	3410	7420	7534	2000	1701	804	10	15	6160(2800)	5060(2300)

Note: ISO 22915-2 for industrial use; ISO 22915-13 for rough terrain use.
With integral sideshifter minus 400kg,with sideshifter minus 500kg.

7t Mast: (pneumatic)

Type	Model	Max.fork height	Overall height			Free lift		Front Overhang	Tilt range		Capacity max height Load Center 24in(600mm)	
			Lowered	Extended		Without backrest	With backrest		FWD	BWD	ISO 22915-2 Counterbalanced trucks with mast	ISO 22915-13 Rough-terrain trucks with mast
				Without backrest	With backrest							
		mm	mm	mm	mm	mm	mm	mm	(°)	(°)	lb(kg)	lb(kg)
Wide view mast	RTC70M300	3000	2935	4385	4534	175	175	740	15	15	15500(7000)	15500(7000)
	RTC70M330	3300	3095	4685	4834	175	175	740	15	15	15500(7000)	15500(7000)
	RTC70M350	3500	3185	4885	5034	175	175	740	15	15	15500(7000)	15500(7000)
	RTC70M370	3700	3285	5085	5234	175	175	740	15	15	15500(7000)	15500(7000)
	RTC70M400	4000	3435	5385	5534	175	175	740	15	15	15500(7000)	15500(7000)
	RTC70M450	4500	3735	5935	6034	175	175	740	15	15	15500(7000)	15500(7000)
	RTC70M500	5000	3985	6435	6534	175	175	740	15	15	15500(7000)	15500(7000)
Wide view full free triplex mast	RTC70N400	4000	2760	5470	5534	1300	1236	810	15	15	15500(7000)	15500(7000)
	RTC70N430	4300	2850	5740	5834	1420	1326	810	15	15	15500(7000)	15500(7000)
	RTC70N450	4500	2910	5920	6034	1500	1386	810	15	15	15500(7000)	15500(7000)
	RTC70N480	4800	3010	6220	6334	1600	1486	810	15	15	15500(7000)	15057(6800)
	RTC70N500	5000	3060	6399	6534	1671	1536	810	10	15	15500(7000)	11293(5100)
	RTC70N550	5500	3260	6970	7034	1800	1736	810	10	15	12843(5800)	9521(4300)
	RTC70N600	6000	3410	7420	7534	2000	1886	810	10	15	9743(4400)	5314(2400)
	RTC70N650	6500	3560	7899	8034	2171	2036	810	10	15	8857(4000)	3986(1800)
	RTC70N700	7000	3860	8570	8570	2471	2300	810	10	15	/	/

10t Mast: (pneumatic)

Type	Model	Max.fork height	Overall height			Free lift		Front Overhang	Tilt range		Capacity max height Load Center 24in(600mm)	
			Lowered	Extended		Without backrest	With backrest		FWD	BWD	ISO 22915-2 Counterbalanced trucks with mast	ISO 22915-13 Rough-terrain trucks with mast
				Without backrest	With backrest							
		mm	mm	mm	mm	mm	mm	mm	(°)	(°)	lb(kg)	lb(kg)
Wide view mast	RTC100M300	3000	3290	4735	/	200	/	932	15	15	22000(10000)	22000(10000)
	RTC100M330	3300	3440	5035	/	200	/	932	15	15	22000(10000)	22000(10000)
	RTC100M350	3500	3540	5235	/	200	/	932	15	15	22000(10000)	22000(10000)
	RTC100M360	3600	3590	5335	/	200	/	932	15	15	22000(10000)	22000(10000)
	RTC100M400	4000	3790	5735	/	200	/	932	15	15	22000(10000)	22000(10000)
	RTC100M450	4500	4090	6285	/	200	/	932	15	15	22000(10000)	22000(10000)
	RTC100M500	5000	4340	6785	/	200	/	932	15	15	22000(10000)	22000(10000)
Wide view full free triplex mast	RTC100N450	4500	2990	6300	/	1500	/	1000	15	15	/	/
	RTC100N480	4800	3090	6600	/	1600	/	1000	15	15	/	/
	RTC100N500	5000	3190	6900	/	1600	/	1000	10	15	/	/
	RTC100N550	5500	3340	7350	/	1800	/	1000	10	15	/	/
	RTC100N600	6000	3490	7800	/	2000	/	1000	10	15	/	/
	RTC100N650	6500	3770	8380	/	2200	/	1000	10	15	/	/
	RTC100N700	7000	3940	8850	/	2400	/	1000	10	15	/	/

5.0-10t 2WD/4WD Rough Terrain Forklift

Distinguishing mark	1.1	Manufacturer										
	1.2	Manufacturer's type designation		CPCD50-XW70C-RT4	CPCD50-XW95C-RT4	CPCD50-XW70E-RT2	CPCD50-XW95E-RT2	CPCD70-XH16C-RT4	CPCD70-XH16E-RT2	CPCD100-XH16C-RT4	CPCD70-XW70C-RT4	CPCD70-XW70E-RT2	CPCD100-XW70C-RT4
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Diesel	Diesel	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	Seated	Seated
	1.5	Rated capacity/rated load	Q (kg)	5000	5000	5000	5000	7000	7000	10000	7000	7000	10000
	1.6	Load centre distance	c (mm)	600	600	600	600	600	600	600	600	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	735	735	735	735	740	740	932	740	740	932
	1.9	Wheelbase	y (mm)	2150	2150	2150	2150	2500	2500	2800	2500	2500	2800
Weight	2.1	Service Weight	kg	9050	9050	9050	9050	10400	10400	15500	10400	10400	15500
	2.2	Axle loading, laden front/rear	kg	12300/1750	12300/1750	12300/1750	12300/1750	15140/2260	15140/2260	22520/2980	15140/2260	15140/2260	22520/2980
	2.3	Axle loading, unladen front/rear	kg	4280/4770	4280/4770	4280/4770	4280/4770	4310/6090	4310/6090	6920/8580	4310/6090	4310/6090	6920/8580
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		445/65-22.5-18PR	445/65-22.5-18PR	445/65-22.5-18PR	445/65-22.5-18PR	445/65-22.5-24PR	445/65-22.5-24PR	17.5-25-36PR	445/65-22.5-24PR	445/65-22.5-24PR	17.5-25-36PR
	3.3	Tyre size, rear		12.5/80-18-12PR	12.5/80-18-12PR	12.5/80-18-12PR	12.5/80-18-12PR	12.5/80-18-16PR	12.5/80-18-16PR	385/55-24.5-18PR	12.5/80-18-16PR	12.5/80-18-16PR	385/55-24.5-18PR
	3.5	Wheels, number front / rear (x = driven wheels)		2×/2×	2×/2×	2×/2	2×/2	2×/2×	2×/2	2×/2×	2×/2×	2×/2	2×/2×
	3.6	Tread, front	b_{10} (mm)	1660	1660	1660	1660	1700	1700	2095	1700	1700	2095
	3.7	Tread, rear	b_{11} (mm)	1760	1760	1760	1760	1760	1760	1900	1760	1760	1900
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α / β (°)	15/15	15/15	15/15	15/15	15/15	15/15	15/15	15/15	15/15	15/15
	4.2	Height, mast lowered	h_1 (mm)	2685	2685	2685	2685	2935	2935	3290	2935	2935	3290
	4.3	Free lift	h_2 (mm)	170	170	170	170	175	175	200	175	175	200
	4.4	Lift	h_3 (mm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	4.5	Height, mast extended	h_4 (mm)	4534	4534	4534	4534	4534	4534	4735	4534	4534	4735
	4.7	Height of overhead guard	h_6 (mm)	2575	2575	2575	2575	2575	2575	2575	2575	2575	2575
	4.19	Overall length	l_1 (mm)	4865	4865	4865	4865	5360	5360	6242	5360	5360	6242
	4.20	Length to face of forks	l_2 (mm)	3665	3665	3665	3665	4140	4140	4722	4140	4140	4722
	4.21	Overall width	b_1(mm)	2105	2105	2105	2105	2145	2145	2550*	2145	2145	2550*
	4.22	Fork dimensions ISO 2331	s/e/l (mm)	60×150×1200	60×150×1200	60×150×1200	60×150×1200	65×150×1220	65×150×1220	80×160×1520	65×150×1220	65×150×1220	80×160×1520
	4.23	Fork carriage DIN 15 173 --- ISO 2328, class/type A,B		IVB	IVB	IVB	IVB	IVB	IVB	B	IVB	IVB	B
	4.24	Fork-carriage width	b_3 (mm)	1950	1950	1950	1950	1950	1950	2150	1950	1950	2150
	4.25	Distance between fork-arms	b_5 (mm)	300-1950	300-1950	300-1950	300-1950	300-1950	300-1950	440-2150	300-1950	300-1950	440-2150
	4.31	Ground clearance, laden, below mast	m_1 (mm)	385	385	385	385	385	385	390	385	385	390
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	370	370	370	370	387	387	424	387	387	424
	4.34	Aisle width	Ast (mm)	6285	6285	5685	5685	7450	6120	8392	7450	6120	8392
	4.35	Turning radius	Wa (mm)	4150	4150	3550	3550	5290	3960	5740	5290	3960	5740
Performance Data	5.1	Travel speed, laden/unladen	km/h	25/25	25/25	25/25	25/25	25/25	25/25	24/24	25/25	25/25	24/24
	5.2	Lift speed, laden	m/s	0.45/0.52	0.45/0.52	0.45/0.52	0.45/0.52	0.41/43	0.41/43	0.41/0.43	0.41/43	0.41/43	0.31/0.33
	5.3	Lowering speed, laden	m/s	0.5/0.43	0.5/0.43	0.5/0.43	0.5/0.43	0.46/0.39	0.46/0.39	0.46/0.39	0.46/0.39	0.46/0.39	0.46/0.39
	5.5	Drawbar pull, laden	N	95000	86000	82000	78000	96000/-	88000/-	97000/-	87000/-	80000/-	88000/-
	5.7	Gradeability, laden	%	55	45	42	41	68/-	60/-	41/-	59/-	52/-	36/-
	5.10	Service brake		Wet brake	Wet brake	Wet brake	Wet brake	Wet brake	Wet brake	Wet brake	Wet brake	Wet brake	Wet brake
		Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Combustion-engine	7.1	Engine manufacturer/type		QSF3.8t3TC115	DEUTZ TCD 3.6 L4	QSF3.8t3TC115	DEUTZ TCD 3.6 L4	CUMMINS F 3.8	CUMMINS F 3.8	CUMMINS F 3.8	CUMMINS QSF3.8t3TC115	CUMMINS QSF3.8t3TC115	CUMMINS QSF3.8t3TC115
		Emission STD		EURO IIIA/GB3	EU stageV/ EPA Tier 4F	EURO IIIA/GB3	EU stageV/ EPA Tier 4F	EU stageV/EPA Tier 4F	EU stageV/EPA Tier 4F	EU stageV/EPA Tier 4F	EURO IIIA/GB3	EURO IIIA/GB3	EURO IIIA/GB3
	7.2	Engine power according to DIN ISO 1585	kW/r/min	86/2200	55.4/2300	86/2200	55.4/2300	90/2200	90/2200	90/2200	86/2200	86/2200	86/2200
	7.3	Max. torque	N·m/r/min	470/1100-1700	405/1300	470/1100-1700	405/1300	500/1500	500/1500	500/1500	470/1100-1700	470/1100-1700	470/1100-1700
	7.4	Number of cylinders/displacement	(-)/(cm^3)	4/3759	4/3620	4/3759	4/3620	4/3759	4/3759	4/3759	4/3759	4/3759	4/3759
	7.10	Battery voltage/nominal capacity	V/Ah	2-12/90	2-12/90	2-12/90	2-12/90	2-12/90	2-12/90	2-12/90	2-12/90	2-12/90	2-12/90
Addition data	10.3	Hydraulic Tank - capacity (drain & refill)	liter	115	115	115	115	115	115	160	115	115	160
	10.4	Fuel tank capacity	liter	120	120	120	120	120	120	150	120	120	150

Note *: Truck can enter container by replacing small tyres.

