

STC1000C6-8

SANY TRUCK CRANE
100 TONS LIFTING CAPACITY

SANY truck crane

- STC1000C6-8 Yuchai version (STC1000C6-826)
- STC1000C6-8 Weichai version (STC1000C6-836)



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Advantages of the whole machine

Superior lifting capacity

- Extra large oval-shaped large-section 6-section main boom, with a full extension of 60m, a standard 17.5m jib, an optional 9.5m extension arm, and a maximum lifting height of 87.5m;
- extension arm, and a maximum lifting height of 87.5m;

 H-type low front outriggers, span 8.3 × 6.63m, standard 26.5t counterweight, optional 2 × 5.5t side weight:
- The maximum lifting moment of the basic arm is 3557kN.m (60. 5t*6m), the maximum lifting weight of the fully extended main arm is 13.2t, and the maximum lifting range of the main arm is 52m.



Super chassis performance

- Using Yuchai K09 high-torque engine and 12-speed gearbox with synchronizer (optional Weichai WP10H series high-torque engine + 10-speed gearbox with synchronizer), heavy load For the axle, the maximum vehicle speed is 80km/h and the maximum gradeability is 45%;
- The tires are 4 × 385/95R25 at the front and 8 × 325/95R24 at the rear, which can carry 21.5 tons of counterweight and leave enough space to carry outrigger pads:
- Equipped with a 450L large-capacity fuel tank, the endurance capacity is increased by 30%.

Hydraulic system that meets precise control

- Electronically controlled double-rotation three-stage deceleration system, large-displacement oil pump, no impact when starting and stopping, output torque 35%, load-bearing capacity 10%, minimum stable rotation speed 0.08°/s, long armThe rotation is more powerful for long-range operations:
- The new electronically controlled dual-pump intelligent flow distribution system has independent amplitude and can extend the arms to merge, and the controllability of compound movements is improved by more than 50%:
- The winch uses a variable plunger motor, the noise is 7dB, and the minimum stable speed of the winch is 0.8m/min;
- Innovative automatic fall compensation technology makes the fall working condition more stable, and is equipped with winch follow-up and one-button arm extension functions.







Humanized control system

- The new "Leader" two-room cabin is equipped with a tilting control room and a new comfortable adjustable seat. The forward and backward movement distance is 150mm and the tilting distance is 140°. The space of the boarding control room is increased by 20%. The rail-changing sliding door can be opened and closed. Easy and smooth, sliding pedals, folding front pedals, smooth entry and exit, new interior design, new multi-channel three-dimensional air supply design, Equipped with a new soft interior, panoramic sunroof, electric wipers, and standard winch monitoring, the operation is more comfortable and easier.
- The chassis cab has a 7-inch high-definition LCD instrument cluster, multi-function steering wheel, air suspension seats, two-passenger passenger and other user-friendly designs.
- The second-generation heavy-duty suspension system can carry 21.5 tons of counterweight with the vehicle for transportation. There is no need to unload the vehicle for short-distance transportation, saving money and effort.

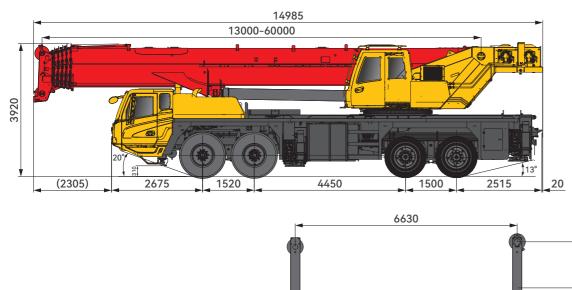
Full arm length Maximum grade Outrigger span

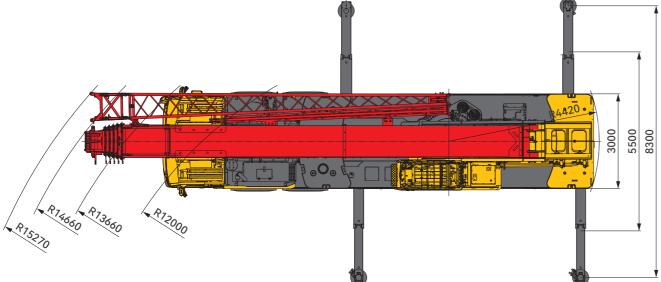
60m 45% 8.3×6.63m



Vehicle size MEASUREMENT







The main technical parameters PARAMETER

	project	unit	parameter		
	Size para	ime t ers			
	Overall length of the machine	mm	14985		
	Full width of the machine	mm	3000		
	Overall height of the machine	mm	3920		
	Weigh t p	arame t er			
	Total machine quality	kg	50000		
load	First and second axis	kg	24000		
ioau	loadThree and four axis loads	kg	26000		
	Dynamic p	oarame t ers			
	engine model	-	YuchaiYCK09380-60 (Country VI) WeichaiWP10H375E62 (countryVI)		
	engine maximum power	kW/rpm	280/1900 (Yuchai) 276/1900 (Weichai)		
	engine maximum output torque	N.m/rpm	1800/1100-1450 (Yuchai) 1800/1000-1400 (Weichai)		
	Driving pa	arame t ers			
I	Maximum driving speed	km/h	80		
I	Minimum turning radius	m	12		
	approach angle	0	≥ 20		
	departure angle	0	≥ 13		
	Maximum grade	%	45		
Fuel co	nsumption per 100 kilometers	I	≤ 43		
	Main performar	nce parame t ers			
Max	rimum rated total lifting capacity	t	100		
Turr	table tail turning radius	m	4.42		
	basic arm	kN.m	3557		
Maximum lifting	Longest main boom	kN.m	2293		
moment	Longest main boom + auxiliary boom	kN.m	1266		
	The longest main boom + extension arm (optional) + auxiliary boo	m kN.m	823		
	Outrigger span (horizontal × longitudinal)	m	8.3(5.55)×6.63		
	basic arm	m	13		
Boom length	Longest main boom	m	60		
Boom length	Longest main boom + auxiliary boom	m	77.5		
	The longest main boom + extension arm (optional)	auxiliary boom m	87		
	Working sp	peed parame t ers			
Maximu	ım speed of main winch single rope (no load)	m/min	135		
Maximum	speed of single rope of auxiliary winch (no load)	m/min	135		
	Boom full extension/retraction time	s	500/440		
	Full lifting/lowering time of boom	s	60/90		
	Swing speed	r/min	0 ~ 1.5		



Axle load

axis	1	2	3	4	gross weight
Axle load/t	12	12	13	13	50
Remark		1 11	d winch, the 2.5t is		



Extra load <i>l</i> t	Number of pulleys	magnification	Hook weight /kg
50 (anchor hook)	3	6	480
7.5	0	1	150
75 (anchor hook) *	5	10	735
100 (anchor hook) *	7	14	1030

^{*} For optional



serial number	name	weight				
1	fixed weight	2t				
2	Activity weight one	2.5t				
3	Activity weight two	6t				
4	Activity weight three	6t				
5	Activity weight four	5t				
6	additional weight	2×2.5t (standard) or 2×5.5t (optional)				
Counterweight stat		nnsition: 2t+2.5t+6t mounted behind the				
traveling with load	turntable, 6t+5t stacked in front of th	e frame				

Speed
of work

	project			þ	parameter	Wire rope diameter/length	Maximum single rope pulling force			
	main wir	ich	single	rope	s p e e d 0-135m/min	20mm/275m	7.5t			
	Vice win	ch	single	rope	s p e e d 0-135m/min	20mm/200m	7.5t			
	turn ard	ound				0-1.5r/min				
fluc	tuation rar	ige		60s/90s (0-80°)						
	Telescopic					500s/440s (13m-60m)				
	vertical	rece	eive			30s				
Out	legs	put				35s				
rigg	Horizon	rece	eive			15s				
er	tal legs	put				15s				

	serial number	name	Specification
Optional	1	75 (anchor hook) *	735kg
	2	100 (anchor hook) *	1030 kg
	3	Counterweight	2×5.5t (Side match)
	4	extension arm	9.5m

SANY independently develops an all-steel material and rubber sealing structure. It is designed using ergonomic principles and has excellent shock absorption and sealing properties. It has outward-opening doors on both sides. The main driver is equipped with an $\,$ air suspension seat and two passenger seats, and a three-point safety Belt, large-view $\,$ electric-adjustable rearview mirror, multi-function steering wheel, remote control key, electric air-conditioning, 7-inch instrument, 12.1-inch central control entertainment screen standard reversing image, comfortable, safe and user-friendly.

Frame

Designed and manufactured by SANY, it adopts a high-strength rectangular cross-section frame. The frame is taller and wider. Compared with the grooved frame, the rigidity is increased by 30% and the load-bearing capacity is greatly improved.

engine

- Type: in-line six-cylinder, water-cooled, supercharged and intercooled, diesel
- Environmental protection: Emissions comply with National VI standards;
- Effective volume of fuel tank: 450L

I Transmission system

 Transmission: Manual transmission with synchronizer and wide speed ratio range, which can meet both low-speed hill climbing and high-speed driving.

H steering system

• The 1st and 2nd axes adopt hydraulic power-assisted mechanical steering, and use a large-flow steering gear + steering assist cylinder to greatly reduce steering resistance and make steering easier.

drive/steering

* 8 x 4_o

axle

• The 3rd and 4th axles are drive axles, and the 1st and 2nd axles are steering axles. The axles have built-in inter-axle and inter-wheel differentials; the stamping and welding axle housing process has stronger load-bearing capacity.

□ suspension system

• The front axle uses independent leaf springs, and the middle and rear axles use a swing-bracket leaf spring balanced suspension system; the leaf springs have undergone more than 100,000 fatigue tests, and the performance parameters of the front and rear leaf springs have been optimized to ensure strength while taking into account ride comfort. sex.

tire

4*385/95R25 +8*325/95R24

Braking System

- All wheels use air servo brakes, dual-circuit braking system, and the engine has exhaust brake;
- The braking system includes service brakes, parking brakes, emergency brakes and
- The service brake adopts a dual-circuit braking system, and all wheels use air servo brakes. The front axle uses wedge brakes + double air chambers, which has stronger braking capacity;
- The parking brake acts on the second, third, and fourth axles through springs in the air chamber; the emergency brake valve uses an accumulator to store energy and cut off the air brake to also serve as emergency brake;
- The auxiliary brake is exhaust brake, which ensures safe braking when going down long slopes and ensures safe and reliable driving.
 Outrigger

H-shaped outriggers are supported at 4 points, with a longitudinal and span distance of 6.63m × 8.3m. The low front outriggers provide greater stability; they are made of fine-grained high-strength steel plates, and the first and second-level outriggers are fully hydraulically telescopic. The vertical cylinder of the outrigger adopts a two-way hydraulic lock for safety protection.

Getting on the bu

control room

SANY independently developed 312 new control rooms, equipped with rail-changing sliding doors, which can be opened and closed easily and smoothly; new interior design, multichannel three-dimensional air supply, bringing a more spacious and comfortable working environment; using corrosion-resistant steel plates and safety glass, equipped with fully covered soft interior, panoramic sunroof, adjustable seats, front pedals, electric retractable side pedals, integrated LED lighting and other humanized designs, electric wipers, making operation more comfortable and easy; equipped with high-definition color display, The standard winch monitoring system realizes the organic integration of the main console and the operation display system, making all working condition data of the hoisting operation clear at a glance.

Hydraulic system

- Adopting a newly developed dual-pump intelligent flow system, with independent amplitude and merging of the arms, the controllability of compound movements is improved by more than 50%;
- Using a load-sensitive variable plunger pump, the oil pump displacement can be adjusted in real time to achieve high-precision flow control and greatly reduce energy loss;
- The electronically controlled main valve has flow compensation and load feedback control functions, which can easily achieve stable control of single actions and combined actions under various working conditions;
- The winch uses a plunger variable motor with a noise level of 7dB and a minimum stable winch speed of 0.8m/min; the maximum speed of the main and auxiliary winch single ropes reaches 135m/min.

Control System

- Bus instrument: The bus instrument with integrated intelligent control electrical system can control driving parameters at any time, making driving easy; at the same time, it has an engine failure prompt function, making maintenance and troubleshooting convenient and fast;
- A comprehensive safety protection system, the main and auxiliary winches are equipped with three-turn protectors and height limiters to prevent the wire rope from over-releasing and over-winding, anti-tilt protection, and extreme angle protection;
- Torque limiter: Adopts a highly intelligent torque limiter system to fully protect lifting operations and ensure accurate, smooth and comfortable operation:
- The basic interface for boarding the vehicle displays arm length, elevation angle, working range, magnification, counterweight combination, engine speed, hook selection, etc. It is rich and easy to understand, and can quickly reflect the working status of the desting position profession.
- The fault self-diagnosis system uses the fault diagnosis system to detect faults such as electrical, hydraulic action, chassis (for major safety failures), engine and gearbox to ensure reliable operation of the crane.

Rotary system

Brand new electronically controlled double rotation system, 360° rotation maximum rotation speed 1.5r/min, automatic load compensation, no impact when starting and stopping, more stable, double reducer configuration, long-arm remote operation rotation is more powerful.

Lifting mechanism

- Dual variable speed regulation of pump and motor, high efficiency and energy saving;
- Normally closed winch brake, winch balance valve and unique anti-slip hook technology are perfectly combined to ensure smooth lifting and lowering of heavy objects;
- Main hook: the maximum lifting weight is 50t, the weight is 480kg; the auxiliary hook
- : 150kg, the maximum lifting weight is 7.5t;
- Main coil wire rope: left-hand wire rope 20-4V×39S-5FC-1960-U-zSGB8918 L275m;
- Secondary coil wire rope: left-hand wire rope 20-4V×39S-5FC-1960-U-zSGB8918 L200m.

Luffing mechanism

- Innovative falling automatic compensation technology makes falling working conditions faster and more stable;
- Amplitude angle: -1.5° ~ 80°.



Made of high-strength welded structural steel, extra large oval cross-section, fully extended arm length 60m, jib 17.5m, optional 9.5m extension arm, main arm fully extended lifting height 60.5m, with jib + extension arm (Optional) Maximum lifting height 87.5m.
 Highly reliable single-cylinder latch telescopic technology, mechanical, electrical and triple protection, integrated with automatic telescopic and telescopic buffer technology, easy to operate.

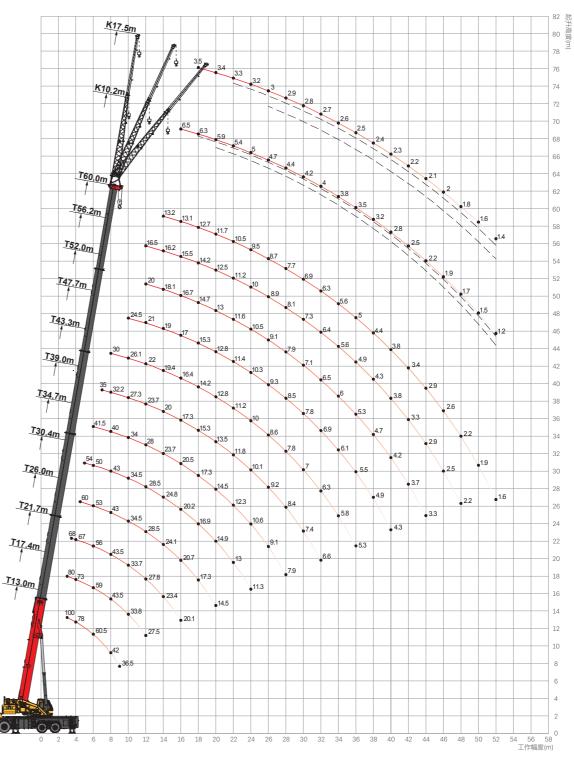
- Torque limiter: Using the analytical mechanics method, a torque limiter calculation system based on the lifting weight mechanics model was established. Through online no-load calibration, the rated lifting weight accuracy reaches ±3%, which fully protects the lifting operation; during overload operation, the system Automatic alarm prompts provide safety guarantee for operation operations;
- The hydraulic system is equipped with hydraulic balance valves, relief valves, two-way hydraulic locks and other components to ensure the stability and reliability of the hydraulic system;
- The main and auxiliary winches are equipped with three-turn protectors to prevent the wire rope from being over-discharged:
- The arm ends of the main and auxiliary arms are equipped with height limiters to prevent the wire rope from over-winding;
- Equipped with length angle sensor and pressure sensor, it can display the working status of the crane in real time, automatically cut off dangerous actions, and buzz the alarm.

Counterweight

- Standard 26.5t counterweight, optional 2×5.5t side counterweight (note: 2×2.5ton and 2×5.5ton side counterweight cannot be installed at the same time), with a maximum counterweight of 32.5t.
- The counterweight is disassembled by two lifting cylinders, which can be operated by wireless remote control and can be easily completed by one person.

Lifting height graph TJ main arm + jib

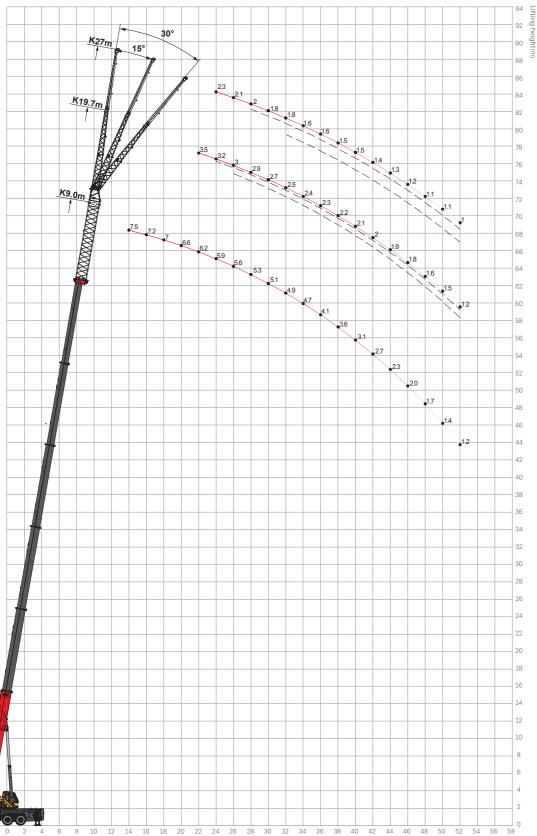
(Counterweight 26.5t)



Lifting height graph

TEJ main arm + extension arm + jib

(Counterweight 26.5t)



Lifting performance table T main arm



		ı	I		l		I					00% 00	20.01
	13.0	17.4	21.7	26.0	30.4	34.7	39.0	43.3	47.7	52.0	56.2	60.0	
3.0	100.0	80.0											3.0
3.5	80.0	75.0	68.0										3.5
4.0	78.0	73.0	67.0										4.0
4.5	74.0	70.0	66.0	60.0									4.5
5.0	70.0	67.0	63.5	58.0	54.0								5.0
5.5	64.7	61.0	59.5	55.1	52.0								5.5
6.0	60.5	59.0	56.0	53.0	50.0	41.5							6.0
6.5	54.5	52.0	52.3	50.4	47.5	41.5							6.5
7.0	49.0	49.5	49.0	48.0	46.0	41.0	35.0						7.0
7.5	45.2	45.3	45.3	45.5	43.8	40.5	33.5						7.5
8.0	42.0	43.5	43.5	43.0	43.0	40.0	32.2	30.0					8.0
9.0	36.5	38.0	37.9	38.0	39.0	37.2	29.5	28.0					9.0
10.0		33.8	33.7	34.5	34.5	34.0	27.3	26.1	24.5				10.0
12.0		27.5	27.8	28.5	28.5	28.0	23.7	22.0	21.0	20.0	16.5		12.0
14.0			23.4	24.1	24.8	23.7	20.0	19.4	19.0	18.1	16.2	13.2	14.0
16.0			20.1	20.7	20.2	20.5	17.3	16.4	17.0	16.7	15.5	13.1	16.0
18.0				17.3	16.9	17.3	15.3	14.2	15.3	14.7	14.2	12.7	18.0
20.0				14.5	14.9	14.5	13.5	12.8	12.8	13.0	12.5	11.7	20.0
22.0					13.0	12.3	11.8	11.2	11.4	11.6	11.2	10.5	22.0
24.0					11.3	10.6	10.1	10.0	10.3	10.5	10.0	9.5	24.0
26.0						9.1	9.2	8.6	9.3	9.1	8.9	8.7	26.0
28.0						7.9	8.4	7.8	8.5	7.9	8.1	7.7	28.0
30.0							7.4	7.0	7.8	7.1	7.3	6.9	30.0
32.0							6.6	6.3	6.9	6.5	6.4	6.3	32.0
34.0								5.8	6.1	6.0	5.6	5.6	34.0
36.0								5.3	5.5	5.3	4.9	5.0	36.0
38.0									4.9	4.7	4.3	4.4	38.0
40.0									4.3	4.2	3.8	3.8	40.0
42.0										3.7	3.3	3.4	42.0
44.0										3.3	2.9	2.9	44.0
46.0											2.5	2.6	46.0
48.0											2.2	2.2	48.0
50.0												1.9	50.0
52.0												1.6	52.0
倍率	14	10	9	8	7	6	5	4	4	3	3	2	倍率

Lifting performance table T main arm



THE STATE OF THE S	13.0	17.4	21.7	26.0	30.4	34.7	39.0	43.3	47.7	52.0	56.2	60.0	m jus
3.0	100.0	80.0			•								3.0
3.5	80.0	75.0	68.0										3.5
4.0	78.0	73.0	67.0										4.0
4.5	74.0	70.0	66.0	60.0									4.5
5.0	70.0	67.0	63.5	58.0	54.0								5.0
5.5	64.7	61.0	59.5	55.1	52.0								5.5
6.0	60.5	59.0	56.0	53.0	50.0	41.5							6.0
6.5	54.5	52.0	52.3	50.4	47.5	41.5							6.5
7.0	49.0	49.5	49.0	48.0	46.0	41.0	35.0						7.0
7.5	45.2	45.3	45.3	45.5	43.8	40.5	33.5						7.5
8.0	42.0	43.5	43.5	43.0	43.0	40.0	32.2	30.0					8.0
9.0	36.5	38.0	37.9	38.0	39.0	37.2	29.5	28.0					9.0
10.0		33.8	33.7	34.5	34.5	34.0	27.3	26.1	24.5				10.0
12.0		27.5	27.8	28.5	28.5	28.0	23.7	22.0	21.0	20.0	16.5		12.0
14.0			23.4	24.1	25.3	23.7	20.0	19.4	19.0	18.1	16.2	13.2	14.0
16.0			20.2	20.7	21.8	20.5	17.3	16.4	17.0	16.7	15.5	13.1	16.0
18.0				18.1	19.0	18.0	15.3	14.2	15.3	14.7	14.2	12.7	18.0
20.0				16.1	15.9	16.0	13.5	12.8	12.8	13.0	12.5	11.7	20.0
22.0					13.5	14.3	12.1	11.2	11.4	11.6	11.2	10.5	22.0
24.0					12.0	12.3	11.0	10.0	10.3	10.5	10.0	9.5	24.0
26.0						10.7	10.0	9.1	9.3	9.5	8.9	8.7	26.0
28.0						9.4	8.9	8.3	8.5	8.7	8.1	7.7	28.0
30.0							7.7	7.6	7.8	7.9	7.4	6.9	30.0
32.0							7.1	6.8	7.2	7.3	6.7	6.3	32.0
34.0								6.0	6.6	6.4	6.1	5.7	34.0
36.0								5.5	6.1	5.7	5.6	5.2	36.0
38.0									5.6	5.1	5.2	4.8	38.0
40.0									5.2	4.7	4.8	4.4	40.0
42.0										4.4	4.3	4.1	42.0
44.0										4.1	3.8	3.8	44.0
46.0											3.4	3.4	46.0
48.0											3.0	3.0	48.0
50.0												2.6	50.0
52.0												2.3	52.0
161 - 11													16
gnification	14	10	9	8	7	6	5	4	4	3	3	2 m	agnification



Lifting performance table TJ main arm + jib



													7070	20.01
m/sill		60+10.2			60+17.5		60+9	€	0+9.5+10	.2	ϵ	0+9.5+17	.5	m/silk
	0	15	30	0	15	30	0	0	15	30	0	15	30	
14.0							7.5							14.0
16.0	6.5						7.2							16.0
18.0	6.3	4.7		3.5			7.0							18.0
20.0	5.9	4.6	3.7	3.4			6.6							20.0
22.0	5.4	4.5	3.6	3.3	2.5		6.2	3.5						22.0
24.0	5.0	4.3	3.5	3.2	2.3		5.9	3.2	2.7		2.3			24.0
26.0	4.7	4.2	3.4	3.0	2.2	1.8	5.6	3.0	2.6	2.2	2.1			26.0
28.0	4.4	4.1	3.3	2.9	2.1	1.7	5.3	2.9	2.5	2.1	2.0	1.5		28.0
30.0	4.2	3.9	3.2	2.8	2.0	1.7	5.1	2.7	2.4	2.0	1.8	1.5		30.0
32.0	4.0	3.8	3.1	2.7	2.0	1.6	4.9	2.5	2.3	1.9	1.8	1.4	1.3	32.0
34.0	3.8	3.6	3.0	2.6	1.9	1.6	4.7	2.4	2.1	1.9	1.6	1.3	1.3	34.0
36.0	3.5	3.3	2.9	2.5	1.8	1.5	4.1	2.3	2.0	1.8	1.6	1.2	1.1	36.0
38.0	3.2	3.0	2.8	2.4	1.8	1.5	3.6	2.2	2.0	1.7	1.5	1.2	1.1	38.0
40.0	2.8	2.7	2.6	2.3	1.7	1.5	3.1	2.1	1.9	1.6	1.5	1.2	1.1	40.0
42.0	2.5	2.4	2.4	2.2	1.7	1.4	2.7	2.0	1.9	1.6	1.4	1.1	1.1	42.0
44.0	2.2	2.2	2.2	2.1	1.7	1.4	2.3	1.9	1.8	1.5	1.3	1.1	1.0	44.0
46.0	1.9	2.0	2.1	2.0	1.6	1.4	2.0	1.8	1.7	1.5	1.2	1.1	1.0	46.0
48.0	1.7	1.7	1.8	1.8	1.5	1.3	1.7	1.6	1.6	1.4	1.1	1.1	1.0	48.0
50.0	1.5	1.5	1.5	1.6	1.4	1.2	1.4	1.5	1.5	1.4	1.1	1.0	0.9	50.0
52.0	1.2	1.2	1.2	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.0	1.0	0.9	52.0



Sany Automobile Hoisting Machinery Co., Ltd.

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Kind tips:

n order to make your diesel engine operate safely and reliably, please add National VI diesel and urea solution that comply with national standards for National VI models. For details, please refer to the instruction manual and related standards.

Due to continuous technological updates, technical parameters and configurations are subject to change without prior notice. The machine in the picture may include additional equipment. This brochure is for reference only and the actual product shall prevail.

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