



SANY

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SANY TRUCK CRANE STC 1000

ULTRA- LONG BOOM. STRONG LIFTING CAPACITY



P1

Product features
Chassis

P2

Product features
Superstructure

P3

Technical parameters

SPECIFICATION/CHASSIS

Frame

Integrated welding, highstrength steel plate.

Outrigger

H-form arrangement, fully hydraulic control.

Engine

OM502LA.III ,water-cooled 8 cylinder Benz diesel engine: rated 350kw at 1800rpm, torque 2300Nm at 1080rpm, oil tank capacity :450L.

Transmission system

ZF AS-Tronic transmission with automatic clutch, 12 forward and 2 reverse gear.

Tyre

16 wheels, 12.00R24 20PR tyres.

Steering

12x8,mechanical steering-limited ZF singlecircuit hydraulic servo, ZF emergency pump-driven steering device included.

Electrical system

24V, single line system

Driver's Cab

Steels throughout all cab and rubber airproof structure, one corrosion-resistant power coating and two painting coatings, 3.00m wide and ergonomic design, pneumatically sprung driver's seat incl. head rest, 3 point seat belts; kinds of dashboard for easy operation; vertically adjustable steering wheel; front gear is interlayer glass, wide vision and with defrost fan, electrical windows; engine-independent hot water heater, roller blinds and radio.

Axle

Axle 3,5,6 driven; 1,2,3,6 steered, all the driving axles are KESSLER equipped with inter-wheel differential lock, 5,6axles equipped inter-axle differential lock.

Suspension

Steel spring doule-axle balanced suspension on axle 1 and 2, steel spring suspension on axle 3,steel spring three-axle balanced suspension on axle 4,5 and 6.

Brake

Adopted air brake. Dual-circuit driving braking controlled by foot pedal; parking and emergency braking operated by hand brake handle, engine braking and air exhaust braking complied with Chinese Standard.

Hydraulic system

Adopted constant gear oil pump controls telescoping and retracting of outriggers.

SPECIFICATION SUPERSTRUCTURE

Cab

Equipped with huge round arc integrated front window, electrical control handle, simple operation panel. Being able to be tilted up 20 degrees, huge colorful display, control instrumentation and working display system flexibly combined for easy operation, electric handle, comprehensive safety system and trouble-shooting and alarming system.

Main boom

Base boom and 4 section telescopic boom made from Sweden high strength steel plate, U form cross section.

Counterweight

19.5t,hydraulically stowed on carrier.

Hydraulic system

2 electric-proportion variable displacement piston pumping. Dual pump could supply oil for single movement at the same time through confluent and flow distribution control technology. Slewing device adopted closed electric-proportion pump circuit and electric-proportion pressure valve to brake, wind-cooler control for oil-cooling device.

Main winch

Electric-proportion variable displacement piston plunger motor,hydraulic braking system.

Engine

OM906LA. E2/5. III water-cooled 6 cylinders Benz diesel engine: rated 150Kw at 2200rpm, torque 750Nm at 1200rpm.

Secondary winch

Constant displacement piston motor with spring-loaded multi-disc brake.

Luffing

Deadweight-dependent electric-proportion balanced valve controlled elevation

Slewing device

Closed pump, constant displacement piston motor, reduction slewing system, Max. slewing speed ≥ 2 /min.

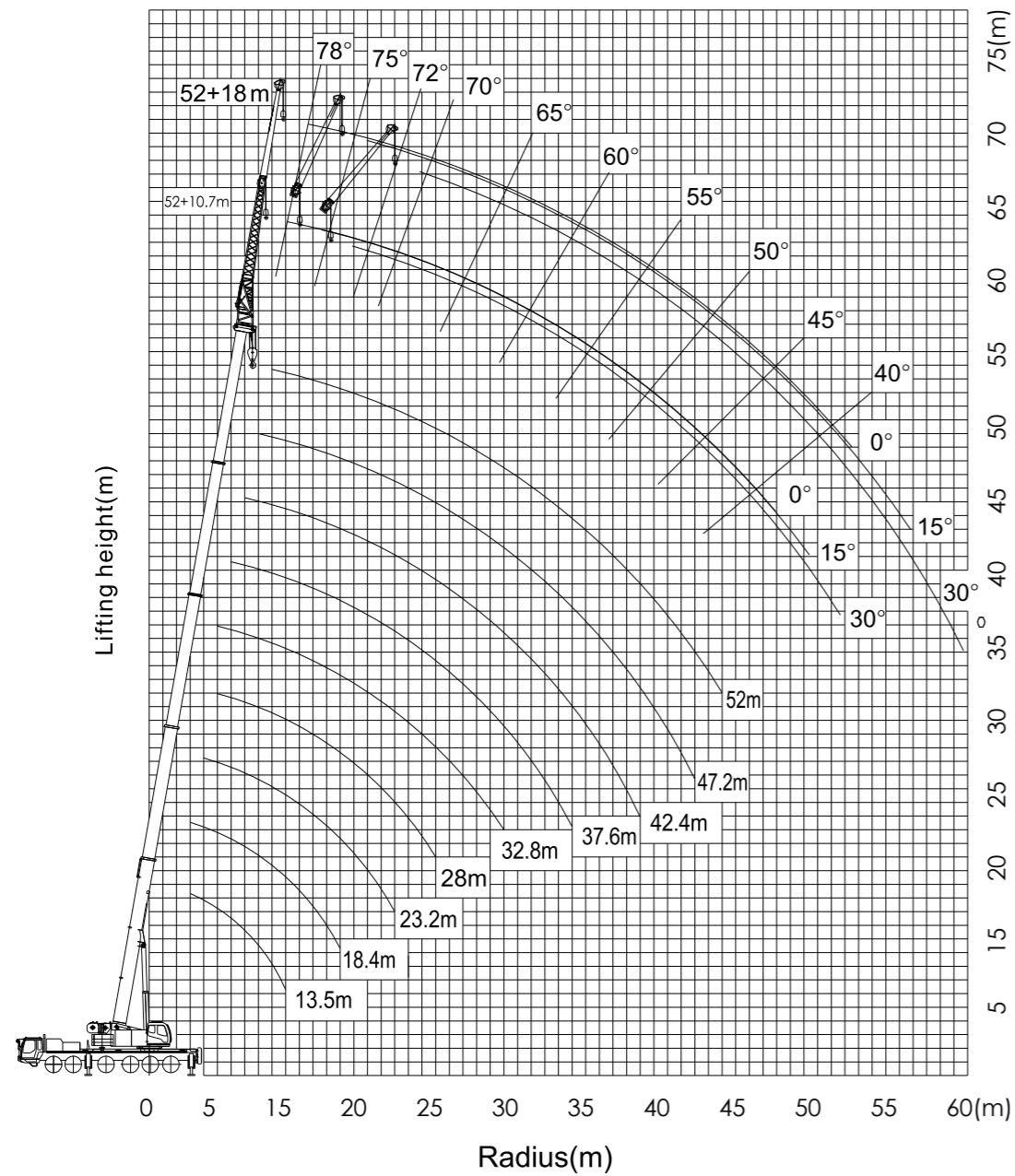
Safety devices

Wide colorful touch screen, displays moment proportion, hook load, rated load, boom length, angle, slewing radius and so on; alarm signed, easy for trouble-shooting, load chart and working parameter set in system as black box.

TECHNICAL PARAMETER

Category	Item	Parameter	Unit	
Dimensions	Overall Length	15961	mm	
	Overall width	3000	mm	
	Overall height	3907	mm	
	Axle distance	1st, 2nd	1450	mm
		2nd, 3rd	2400	mm
		3rd, 4th	1800	mm
		4th, 5th	1450	mm
		5th, 6th	1500	mm
	Wheel distance	1st, 2nd	2556	mm
		3rd, 6th	2380	mm
4th, 5th		2310	mm	
Weight	Overall weight(when travelling)	58000	kg	
	Axle load	1st, 2nd, 3rd, 6th	8500	kg
		4th, 5th	12000	kg
Power parameter	Carrier engine	Type	Benz OM502LA. III /1	
		Rated output	350kw/1800rpm	
		Max. rated torque	2300Nm /1100rpm	
		Exhaust emissions	Euro III	
	Superstructure engine	Type	Benz OM906LA	
		Rated output	150kw/2200rpm	
		Max. rated torque	750Nm /1200rpm-1600rpm	
Rated rotation speed		2200	r/min	
Travelling parameter	Travelling speed	Max. travelling speed	80	km/h
	Turning radius	Min. turning radius	12	m
	Min. ground clearance		300	mm
	Approach angle		≥ 19	-
	Departure angle		≥ 14	-
	Braking system(30km/h)		≤ 10	m
	Max. gradeability		40	%
	Oil consumption for every 100km		≤ 60	l
Main performance parameter	Max. lifting weight		100	t
	Min. working radius		3	m
	Max. lifting moment	Base boom	3602	kN.m
		Full extension	1920	kN.m
	Span of outrigger	Lateral	7.56	m
		Vertical	7.6	m
	Max. lifting height	Base boom	13.5	m
		Full extension	52	m
		Main boom& jib	52+18	m
	Length of lifting boom	Base boom	13.5	m
Full extension		52	m	
Main boom& jib		70	m	
Jib offset		0, 15, 30	-	
Working speed parameter	Max. single rope speed of main winch(no load)	135	m/min	
	Max. single rope speed of auxiliary winch(no load)	123	m/min	
	Boom extension/extraction time	120/100	s	
	Boom lifting/descending time	60/90	s	
	Max. slewing speed	0~1.93	r/min	
	Outrigger extension/retraction time(lateral)	25/15	s	
	Outrigger extension/retraction time(vertical)	35/25	s	

STC1000 WORKING RANGES



LOAD CHART FOR MAIN BOOM

(Unit:kg)

0 counterweight, fully extended outriggers, 360°									
Radius (m)	length of boom(m)								
	13.5	18.4	23.2	28	32.8	37.6	42.4	47.2	52
3	100000	90000							
3.5	100000	82000	70000						
4	91800	75000	65600						
4.5	81600	70000	61800	51800					
5	71500	64900	58400	48900					
5.5	59200	54200	50400	46200	40800				
6	50100	46200	43300	42500	38600				
6.5	43200	40000	37600	37300	36500	33300			
7	37700	35000	33100	33000	32600	31800			
7.5	32900	31000	29300	29500	29200	28700			
8	28700	27600	26200	26600	26400	26100	25500		
9	22300	21700	21300	21800	22000	21800	21500	18400	
10	17700	17200	17000	18200	18500	18500	18300	17500	
11	14100	13800	13500	15100	15800	15900	15800	15700	14000
12		11100	10900	12400	13500	13800	13800	13700	13600
14		6900	6700	8300	9400	10200	10500	10500	10500
16		3900	3800	5400	6400	7200	7800	8200	8200
18			1800	3300	4300	5100	5600	6100	6500
20				1700	2700	3400	4000	4400	4800
22					1400	2100	2700	3100	3500
24						1100	1600	2100	2500
26								1200	1600
28									900
Number of lines	12	10	8	6	5	4	4	3	2
Min. elevation	27.7	30.1	30.9	38.9	43.6	46.9	52.8	54.2	55.3

LOAD CHART FOR MAIN BOOM

(Unit:kg)

8.5t counterweight, fully extended outriggers, 360°									
Radius (m)	length of boom(m)								
	13.5	18.4	23.2	28	32.8	37.6	42.4	47.2	52
3	100000	90000							
3.5	100000	82000	70000						
4	91800	75000	65600						
4.5	81600	70000	61800	51800					
5	73400	66000	58400	48900					
5.5	66800	62000	55300	46200	40800				
6	61200	57300	52600	43800	38600				
6.5	53600	49800	47000	41600	36700	33300			
7	47000	43900	41500	39700	35000	31700			
7.5	41700	39000	37100	37000	33300	30300			
8	37400	35000	33300	33400	31900	28900	26500		
9	30100	28700	27400	27800	27700	27400	24300	18600	
10	24400	23900	22900	23500	23600	23500	23200	17700	
11	19900	19600	19400	20100	20300	20400	20200	16800	14500
12		16300	16100	17300	17700	17800	17700	15900	13700
14		11400	11300	12800	13700	13900	14000	14000	12700
16		7900	7900	9400	10400	11100	11200	11300	11300
18			5400	6800	7800	8600	9100	9200	9300
20			3400	4900	5900	6600	7100	7600	7700
22				3300	4300	5000	5600	6000	6400
24				2000	3000	3700	4300	4700	5100
26					2000	2700	3200	3600	4000
28					1100	1800	2300	2700	3100
30						1000	1500	2000	2300
32							900	1300	1700
34									1100
Number of lines	12	10	8	6	5	4	4	3	2
Min. elevation	27.7	30.1	30.9	31.4	31.7	32	37.1	44.4	46.6

LOAD CHART FOR MAIN BOOM

(Unit:kg)

14.5t counterweight, fully extended outriggers, 360°										
Radius (m)	length of boom(m)									
	13.5	18.4	23.2	28	32.8	37.6	42.4	47.2	52	
3	100000	90000								
3.5	100000	82000	70000							
4	91800	75000	65600							
4.5	81600	70000	61800	51800						
5	73400	66000	58400	48900						
5.5	66800	62000	55300	46200	40800					
6	61200	58300	52600	43800	38600	33300				
6.5	56500	53800	50000	41600	36700	31700				
7	52500	50000	47200	39700	35000	30300				
7.5	47700	44700	42500	37900	33300	28900	26500			
8	42800	40200	38300	36200	31900	26600	24300	18600		
9	35000	33100	31600	31900	29200	24500	22500	17700		
10	28800	27800	26600	27100	27100	23500	20900	16800	14500	
11	24000	23700	22700	23300	23500	20600	19400	15900	13700	
12		20200	19600	20300	20600	16300	16300	14500	12700	
14		14600	14500	15700	16100	13200	13300	13300	11700	
16		10600	10600	12100	12900	10800	10900	11000	10600	
18			7800	9200	10200	8700	9100	9200	9300	
20			5600	7000	8000	6900	7400	7800	7900	
22				5200	6200	5500	6000	6400	6700	
24				3800	4800	4300	4800	5200	5600	
26					3600	3300	3800	4200	4600	
28					2600	2400	2900	3400	3700	
30						1700	1700	2200	2600	3000
32							1100	1600	2000	2300
34								1000	1400	1700
36									900	1200
38										
Number of lines	12	10	8	6	5	4	4	3	2	
Min. elevation	27.7	30.1	30.9	31.4	31.7	32	32.2	32.3	40.1	

LOAD CHART FOR MAIN BOOM

(Unit:kg)

8.5t counterweight, fully extended outriggers, 360°									
Radius (m)	length of boom(m)								
	13.5	18.4	23.2	28	32.8	37.6	42.4	47.2	52
3	100000	90000							
3.5	100000	82000	70000						
4	91800	75000	65600						
4.5	81600	70000	61800	51800					
5	73400	66000	58400	48900					
5.5	66800	62000	55300	46200	40800				
6	61200	58300	52600	43800	38600				
6.5	56500	53800	50000	41600	36700	33300			
7	52500	50000	47200	39700	35000	31700			
7.5	49000	46600	44100	37900	33300	30300			
8	45900	43700	41300	36200	31900	28900	26500		
9	38800	36800	35200	33200	29200	26600	24300	18600	
10	32100	31000	29800	30200	27000	24500	22500	17700	
11	26900	26600	25500	26100	25000	22700	20900	16800	14500
12		22900	22100	22800	23000	21200	19400	15900	13700
14		17100	17000	17800	18100	18300	17000	14500	12700
16		13000	12900	14100	14600	14900	15000	13300	11700
18			9800	11200	12000	12300	12400	12000	10600
20				8800	9800	10200	10400	10500	9800
22				6900	7800	8500	8800	9000	8900
24				5300	6200	6900	7500	7600	7800
26					4900	5600	6100	6500	6700
28					3800	4500	5000	5500	5800
30					2900	3600	4100	4500	4900
32						2800	3300	3700	4000
34						2100	2600	3000	3300
36							1900	2300	2700
38							1400	1800	2100
40							900	1300	1600
42								900	1200
Number of lines	12	10	8	6	5	4	4	3	2
Min. elevation	27.7	30.1	30.9	31.4	31.7	32	32.2	32.3	32.4

LOAD CHART FOR JIB

(Unit:kg)

8.5t counterweight, fully extended outriggers, over side and rear												
elevation of main boom	52m length of boom											
	10.7m jib						18m jib					
	jib 0°		jib 15°		jib 30°		jib 0°		jib 15°		jib 30°	
	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)
78°	7000	10.1	5200	12.5	3700	14.8	3800	11.6	2800	15.8	2200	19.6
75°	6800	13.2	4500	15.6	3600	17.8	3400	15.1	2600	19.3	2100	22.9
72°	6300	16.2	4200	18.5	3400	20.6	3200	18.5	2500	22.6	2000	26.1
70°	5400	18.2	4000	20.5	3300	22.6	3000	20.7	2400	24.7	1900	28.2
65°	4400	23.1	3600	25.3	3100	27.2	2700	26.2	2100	30	1700	33.2
60°	2700	27.9	2400	30	2300	31.8	1900	31.5	1600	35.1	1400	38
55°	1500	32.4	1400	34.4	1300	36	1000	36.6	800	40	700	42.6
50°	700	36.7	700	38.6	600	40						

LOAD CHART FOR JIB

(Unit:kg)

14.5t counterweight, fully extended outriggers, over side and rear												
elevation of main boom	52m length of boom											
	10.7m jib						18m jib					
	jib 0°		jib 15°		jib 30°		jib 0°		jib 15°		jib 30°	
	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)
78°	7000	10.1	5200	12.5	3700	14.8	3800	11.6	2800	15.8	2200	19.6
75°	6800	13.2	4500	15.6	3600	17.8	3400	15.1	2600	19.3	2100	22.9
72°	6300	16.2	4200	18.5	3400	20.6	3200	18.5	2500	22.6	2000	26.1
70°	5400	18.2	4000	20.5	3300	22.6	3000	20.7	2400	24.7	1900	28.2
65°	4500	23.1	3600	25.3	3100	27.2	2700	26.2	2200	30	1700	33.2
60°	3900	27.9	3300	30	2900	31.8	2400	31.5	1900	35.1	1500	38
55°	2600	32.4	2400	34.4	2200	36	1800	36.6	1600	40	1400	42.6
50°	1600	36.7	1500	38.6	1600	40	1100	41.4	900	44.5	900	46.8
45°	1000	40.7	900	42.4	900	43.6						

LOAD CHART FOR JIB

(Unit:kg)

8.5t counterweight, fully extended outriggers, over side and rear												
elevation of main boom	52m length of boom											
	10.7m jib						18m jib					
	jib 0°		jib 15°		jib 30°		jib 0°		jib 15°		jib 30°	
	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)	weight	radius(m)
78°	7000	10.1	5200	12.5	3700	14.8	3800	11.6	2800	15.8	2200	19.6
75°	6800	13.2	4500	15.6	3600	17.8	3400	15.1	2600	19.3	2100	22.9
72°	6300	16.2	4200	18.5	3400	20.6	3200	18.5	2500	22.6	2000	26.1
70°	5400	18.2	4000	20.5	3300	22.6	3000	20.7	2400	24.7	1900	28.2
65°	4500	23.1	3600	25.3	3100	27.2	2700	26.2	2200	30	1700	33.2
60°	4000	27.9	3300	30	2900	31.8	2400	31.5	1900	35.1	1500	38
55°	3400	32.4	2400	34.4	2300	36	1900	36.6	1600	40	1400	42.6
50°	2400	36.7	2200	38.6	2100	40	1700	41.4	1500	44.5	1300	46.8
45°	1700	40.7	1600	42.4	1500	43.6	1100	45.9	1000	48.8	900	50.7
40°	1100	44.5	1000	46	900	47						



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For our consistent improvement in technology, specifications may change without notice.
The machines illustrated may show optional equipment which can be supplied at additional cost.