

**PRODUCT
SPECIFICATIONS**



STC300T5

**SANY TRUCK CRANE
30T LIFTING CAPACITY**



Max. Lifting Capacity: 30 t
Max. Boom Length: 42.5 m
Max. Lifting Moment: 1158 kN·m

SANY TRUCK CRANE STC300T5 / 30T LIFTING CAPACITY

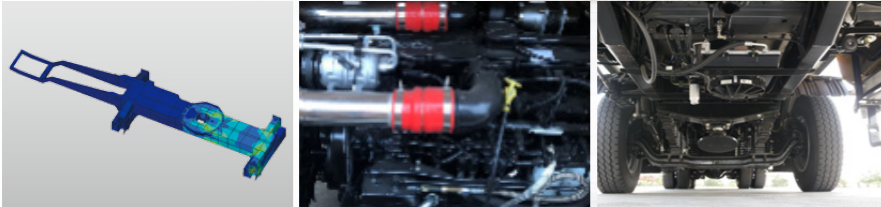
Maximized boom performance

- Industry-leading lifting height (with jib) among its class: 51m
- High efficiency in boom motions and jib installation, easy switchover.



Reinforced chassis

- Increased bearing capacity using higher strength steel plate
- Upgraded stability with tipover warning
- Reduced energy waste via multi engine modes



Smart hydraulics

- Upgrading from single pump to double pumps
- Larger flow ensures higher efficiency, like higher speed of wire rope reeling
- Shunted mode of independently controlled combined motions realizes higher stability, like simultaneous vibration-free luffing and hoisting.
- Load-sensing mechanism offers prolonged service life.



Precise electrical control

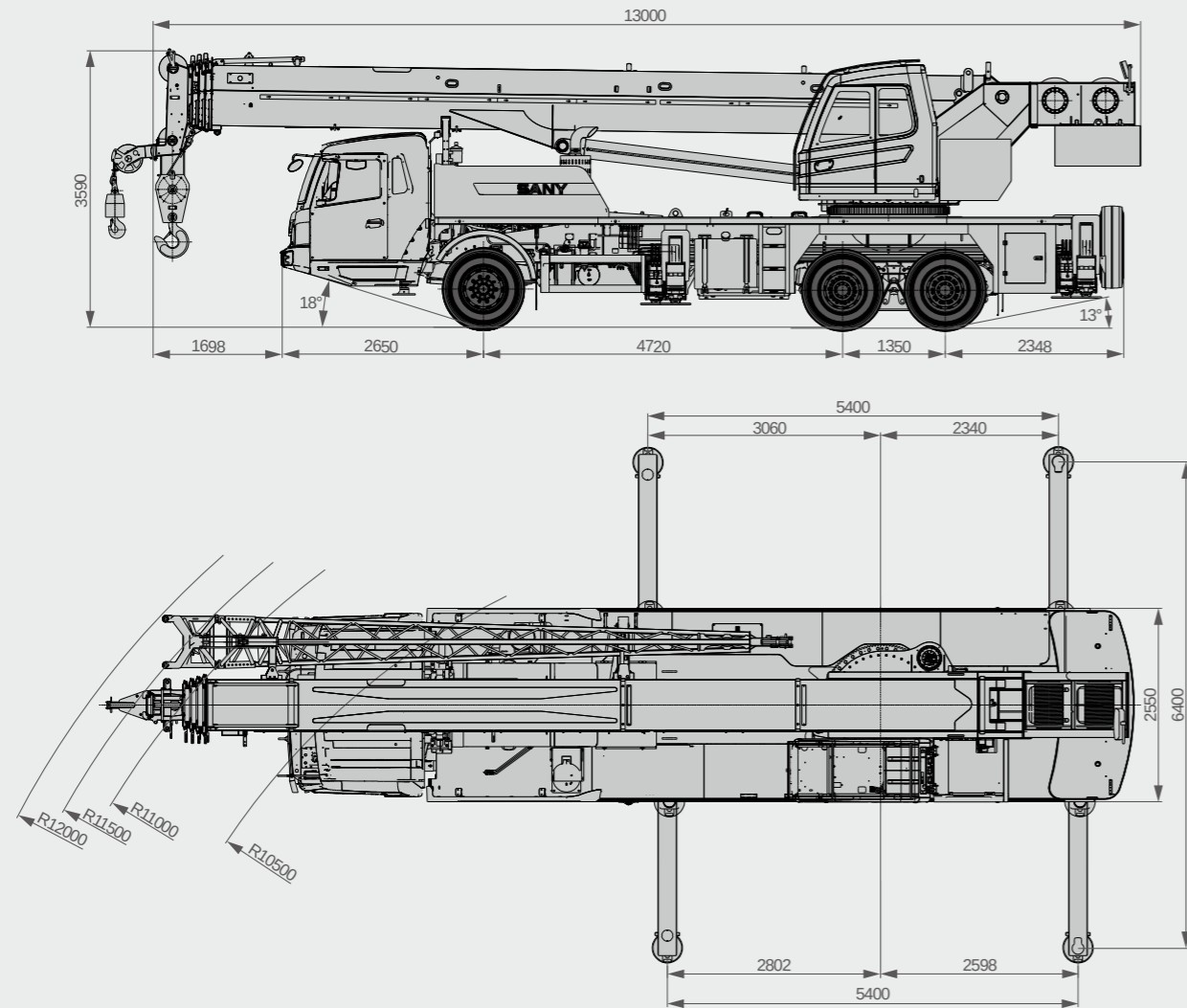
- Simple harness and steady signal transmission
- Real-time auto monitoring of operation conditions
- All-round protection by LMI
- Let the machine get its own safety logic

Uncompromised safety

- Equipment design complies with CE standard.
- Emergency steering, superstructure emergency stop, and slewing buzzer and light warning ensure safety of people on and around the crane.



Overall Dimensions



Technical Specification

CATEGORY	ITEM	UNIT	VALUE	
CAPACITY	Max. lifting capacity	t	30	
WEIGHT	Gross weight	kg	33800	
POWER	Engine model (Emission standard)	-	DF Cummins ISLe290 30 (Euro 3)	
	Max. engine power	kW/rpm	213/2100	
	Max. engine torque	N·m/rpm	1050/(1000-1900)	
DIMENSIONS	Overall length	mm	13000	
	Overall width	mm	2550	
	Overall height	mm	3590	
	Axle base	Axle 1&2 mm Axle 2&3 mm	4720 1350	
TRAVEL	Max.travel speed	km/h	90	
	Steering radius	Min.steering radius	m	10.5
		Min.steering radius of boom tip	m	12
	Wheel formula	-	6×4	
	Min.ground clearance	mm	240	
	Approach angle	°	18	
	Departure angle	°	13	
	Max.gradeability	%	42	
	Fuel consumption per 100km	L	31	
	MAIN PERFORMANCE	Working temperature range	°C	-20~+45
Min.rated lifting radius		m	3	
Tail slewing radius		m	3.4	
Boom sections (Qty.)		-	5	
Boom shape		-	U shape	
Max.lifting moment		Basic boom	kN·m	1158
		Full-extension boom	kN·m	727
		Full-extension boom+jib	kN·m	400
Boom length		Basic boom	m	10.9
		Full-extension boom	m	42.5
		Full-extension boom+jib	m	50.5
Max.lifting height		Basic boom	m	11.5
	Full-extension boom	m	43	
	Full-extension boom+jib	m	51	
Outrigger span (Longitudinal×Transverse)	m	5.4×6.4		
Jib offset	°	0, 15, 30		
AIRCONDITIONER	In operator's cab	-	Heating & cooling	
	In driver's cab	-	Heating & cooling	

Technical Parameters



Axle Load

Axle	Front	Rear	Gross weight
Load per axle /t	8	25.8	33.8



Hook

Load/t	Number of sheaves	Rope rate	Hook weight /kg
30	4	8	320
5	0	1	85



Operations

Item	Parameter	Rope diameter/length	Max. single line pull
Main winch	Single rope speed: 135m/min	16mm/185m	4.5t
Auxiliary winch	Single rope speed: 135m/min	16mm/110m	4.5t
Slewing		0~2.5r/min	
Luffing		40s/50s	
Telescoping		90s/100s	
Outrigger jack	Retract	25s	
	Extend	30s	
Outrigger beam	Retract	20s	
	Extend	25s	

Crane Introduction

Carrier

Driver's cab

- Standard considerable equipment incl. pneumatic driver's seat with headrest, easy to touch panel, variable height steer wheel, wide view rear mirror, demister, HVAC with engine thermal cycle heating, sunshed, and stereo radio.

Frame

- Designed and manufactured by Sany, torsion-resistant box structure is welded by fine-grain high-strength steel plate to provide strong bearing capacity.

Axle

- Axle 1 is steered mechanically with hydraulic booster, and axle 2&3 are drive axles with differential lock.

Engine

- Inline six-cylinder, water cooled, supercharged and inter-cooling diesel engine (Euro 3).
- Fuel reservoir capacity: 300L.

Transmission system

- 9-speed manual gearbox of large speed ratio delivers sufficient power for grading and travelling. Higher torque output is achieved via conrite gear connecting transmission shaft cardan.

Braking system

- Air-servo brakes are used for all wheels with dual-circuit braking system. Engine is equipped with an exhaust brake.

Suspension

- Front suspension is realized by plate spring, and rear rubber. Shock absorption is optimized.

Outriggers

- H-type layout, outrigger beam extension is powered by hydraulics.

Tire

- Eleven tires sized 315/80R22.5, featuring large bearing capacity and durability.

Electrical system

- 2×12V maintenance-free batteries.

superstructure

Operator's cab

- Ergonomic design integrates operation safety, convenience and comfort.

Hydraulic system

- Key hydraulic components are of proven quality and stability. Main valve functions flow compensation and load sensing. Big-flow winch motor features high efficiency. Slewing gets smoother controlled by balance valve.

Control system

- CAN-Bus instrument provides accurate data monitoring and functions engine fault detection. Easier maintenance is the trend.
- Load moment indicator ensures operation safety.

Luffing system

- Reduced energy cost during luffing. Luffing angle: -2°~80°.

Telescopic system

- Five section boom in full extension realizes a max. lifting height of 43m, and further 51m when 8m jib is mounted. U-shape structure is welded using high-strength structural steel. Telescoping is realized via double cylinder with rope arranger.

Slewing system

- 360° slewing, large torque output piston motor and reducer gear support smooth slewing of heavy load.

Hoist

- Winch piston motor sees smooth and fast reeling of wire rope.
- Main hoist wire rope spec. 16-4V×39S-5FC-1960-U-zSGB8918-L185m, aux. hoist wire rope spec. 16-4V×39S-5FC-1960-U-zSGB8918-L110m.

Safety system

- An all-round safety system covers load moment (LMI), hydraulics, winch, and wire rope. Motion of risks are cut off automatically with buzzer warning.

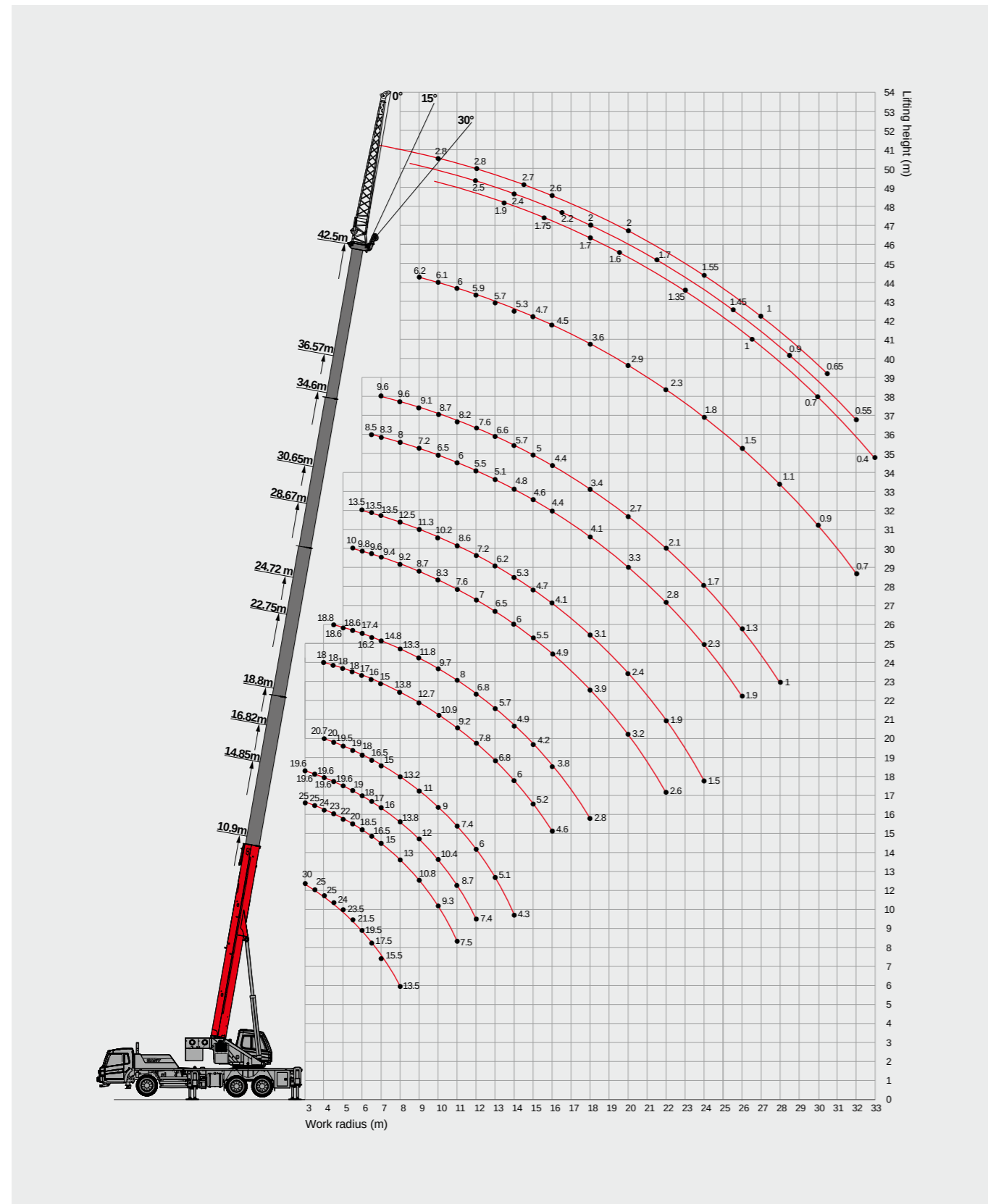
Counterweight

- 5900kg fixed unit without removable unit.

Optional equipment at extra fees

- Aerometer
- Reversing camera
- Customized painting
- Other equipment available upon request

Operating Range



Load Chart-Telescopic Boom



Unit: kg

Radius(m)	10.9m	14.85m	16.82m	18.8m	22.75m	24.72m	28.67m	30.65m	34.6m	36.57m	42.5m	Radius(m)
3.0	30000	25000	19600									3.0
3.5	25000	25000	19600									3.5
4.0	25000	24000	19600	20700	18000							4.0
4.5	24000	23000	19600	20000	18000	18800						4.5
5.0	23500	22000	19600	19500	18000	18600						5.0
5.5	21500	20000	19000	19000	18000	18600	10000					5.5
6.0	19500	18500	18000	18000	17000	17400	9800	13500				6.0
6.5	17500	16500	17000	16500	16000	16200	9600	13500	8500			6.5
7.0	15500	15000	16000	15000	15000	14800	9400	13500	8300	9600		7.0
8.0	13500	13000	13800	13200	13800	13300	9200	12500	8000	9600		8.0
9.0		10800	12000	11100	12700	11800	8700	11300	7200	9100	6200	9.0
10.0		9300	10400	9000	10900	9700	8300	10200	6500	8700	6100	10.0
11.0		7500	8700	7400	9200	8000	7600	8600	6000	8200	6000	11.0
12.0			7400	6000	7800	6800	7000	7200	5500	7600	5900	12.0
13.0				5100	6800	5700	6500	6200	5100	6600	5700	13.0
14.0				4300	6000	4900	6000	5300	4800	5700	5300	14.0
15.0					5200	4200	5500	4700	4600	5000	4700	15.0
16.0					4600	3800	4900	4100	4400	4400	4500	16.0
18.0						2800	3900	3100	4100	3400	3600	18.0
20.0							3200	2400	3300	2700	2900	20.0
22.0							2600	1900	2800	2100	2300	22.0
24.0								1500	2300	1700	1800	24.0
26.0									1900	1300	1500	26.0
28.0										1000	1100	28.0
30.0											900	30.0
32.0											700	32.0
Telescoping status (%)												
2nd boom	0	50	0	100	0	100	0	100	0	100	100	2nd boom
3rd boom	0	0	25	0	50	25	75	50	100	75	100	3rd boom
4th boom	0	0	25	0	50	25	75	50	100	75	100	4th boom
5th boom	0	0	25	0	50	25	75	50	100	75	100	5th boom
Rope rate	8	8	6	6	6	5	4	4	4	3	3	Rope rate

Load Chart-Jib



Unit: kg

Telescopic boom + jib length(42.5m+8m)				
Boom angle	Jib offset			Boom angle
	0°	15°	30°	
78°	2800	2000	1500	78°
75°	2500	1800	1400	75°
72°	2200	1500	1300	72°
70°	2000	1400	1200	70°
65°	1600	1300	1000	65°
60°	1000	1000	900	60°
55°	600	600	600	55°
50°	350	350	350	50°

Remark:

- 1.Value listed are the max. capacity when the crane is in a level condition on solid ground or surface;
- 2.Load value related to stability are given complying with ISO4305;
- 3.When the fifth outrigger is extended in position, value listed are applicable for 360 degree operation;
- 4.Value above are calculated with hooks and lifting slings considered (320kg main hook block, 85kg aux. hook block);
- 5.Load value is given according to the larger radius or boom length value when the actual radius or boom length falls between two numbers above;
- 6.Rated lifting performance on boom point sheave equals 5t;
- 7.Boom load capacity shall be 450kg less than value given when jib is mounted. Rated load capacity at aux. boom nose shall be within 5000kg.



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Reminder:

For safe and reliable operation of the diesel engines, please fill Grade IV machines with Grade IV diesel and urea solution conforming to related national standards. Please refer to the operating instructions and related standards for details.

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