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QUALITY CHANGES THE WORLD

PRODUCT
SPECIFICATIONS

SANY®

STC250T5

SANY TRUCK CRANE
25T LIFTING CAPACITY

Max. Lifting Capacity: 25 t
Max. Boom Length: 41 m
Max. Lifting Moment: 1063 kN·m

www.sanyglobal.com

L/R hand drive both available

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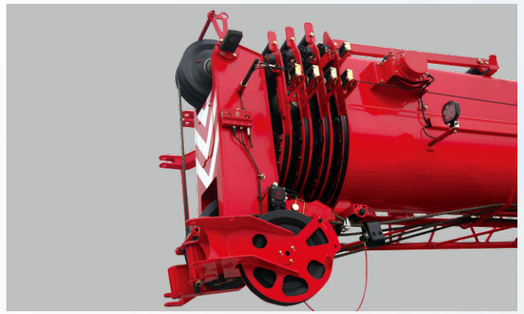
SANY TRUCK CRANE
STC250T5 / 25T LIFTING CAPACITY

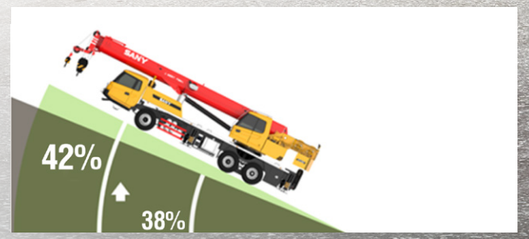
Strong boom

- 41m telescopic boom in five sections lifts to a new height of 41.5m, and further to 49m with jib mounted.
- Larger cross-section boom, achieving a load moment of 1063kN·m.
- Boom section overlap increased, resulting in higher torsion resistance and bending resistance.



Powerful chassis

- DF Cummins ISLe290 30 engine, FAST 9-speed synchronizing gearbox, rubber suspension, 12R22.5 wire tire.
- Frame torsion resistance verified by 20k times of reliability and safety cycling test.
- Outrigger span expanded to 5.18m×6.4m, providing a stable base.
- Low deck chassis enhances travelling stability.



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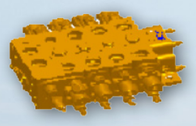
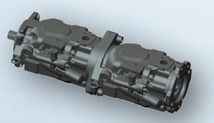
SANY TRUCK CRANE
STC250T5 / 25T LIFTING CAPACITY

Precise hydraulics

- Better maneuverability : smart flow-distribution hydraulic system secures combined action efficiency and stability.
- Precise motion: single rope can move stably at a min. speed of 1.2m/min and slewing can be slower to 0.1°/s , realizing micro-motion of millimeter level.
- Dynamically adjustable luffing down: Passive luffing down with speed limit provides safe and stable operation, while active luffing down at big boom angle optimizes efficiency.
- Power control: Engine speed reduced by 12% in operation, less fuel needed, less noise generated.

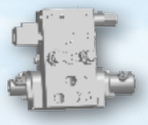


Big-flow main valve

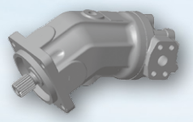


Bivariate piston pump

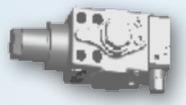
Luffing balance valve



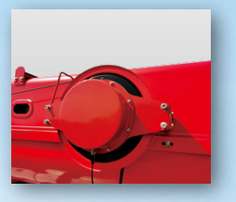
Slewing proportional valve



Winch motor



Winch balance valve



Length & angle indicator

Smart I/O power distribution

Height limit switch

Danfoss

Pressure sensor

Winch protector

Smart control

- BUS control system: instant transfer of information, as fast as 20ms.
- Fault diagnose: BCM controller for fault detection and easy maintenance.
- IO power distribution: Independent battery set controlling power distribution for the whole vehicle.
- 7"color display & smart panel: silica gel plate design, user friendly.
- Safety guarantee: SANY, Load Moment Indicator monitoring load and wire rope conditions. Length measuring of the 2nd boom for safe and better lifting solutions.

Confluence-shunt control valve

- Shunt: one pump for telescoping and hoisting, the other for luffing, to avoid interference or fluctuations of different actions, thus providing precise lifting solutions.
- Confluence: two pumps propelling one action for higher efficiency.

One-button switch to"shunt"mode

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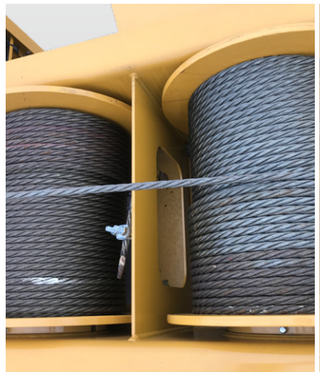
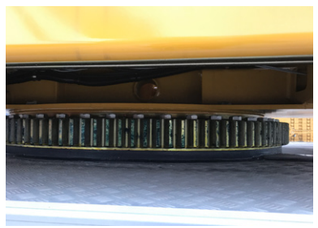
Technical Features



5 ton hook block

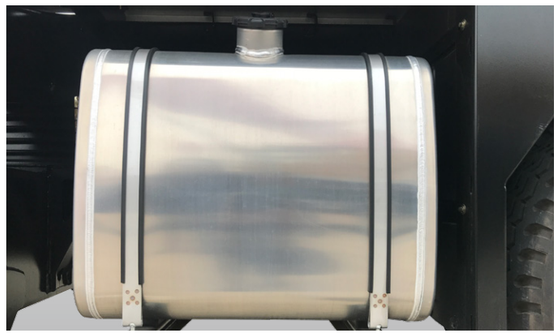
Winch for easy loading

- Max. single line pull up to 5 ton. Freight within 5t can be loaded with a 5t auxiliary hook (standard configuration).
- Auxiliary hook block: wide opening with latch, safe and convenient.



Walking deck

- Abundant distance between deck and slewing platform to place outrigger sleeper.
- Ample space on deck tail to place sleepers.



Power and travel

- 300L fuel reservoir, 900km possible after every refuel.

Heat radiator

- Oil radiator mounted on the right of slewing platform, clear airflow and radiating.

Model **STC250T5** | SERIES

Technical Features

Two cabs

- Egronomic design gives you comfortable drive and operation.
- Wide view and multiple indicators for safe performance.

Counterweight

- Fixed 5.6t counterweight, high density with smaller size.

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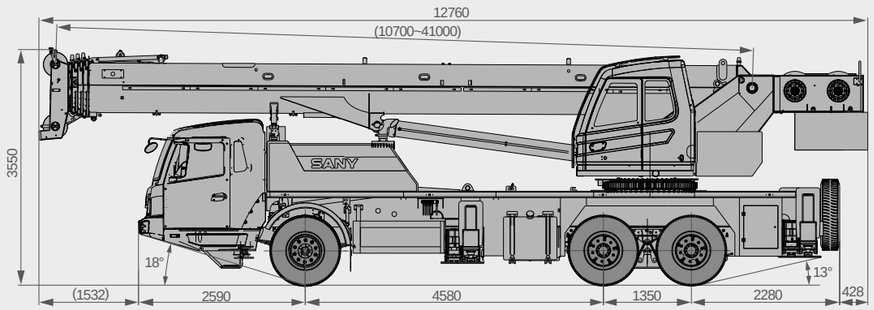
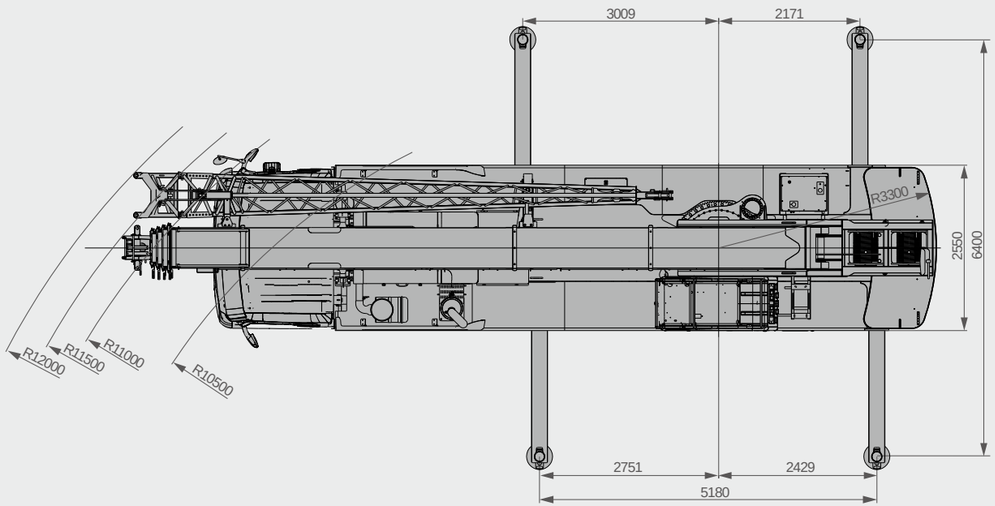
Overall Dimensions





Technical Specification

CATEGORY	ITEM		UNIT	VALUE
CAPACITY	Max. lifting capacity		t	25
WEIGHT	Gross weight		kg	32700
POWER	Engine model		-	ISLe290 30
	Max. engine power		kW/rpm	213/2100
	Max. engine torque		N·m/rpm	1050/(1200~1400)
DIMENSIONS	Overall length		mm	12760
	Overall width		mm	2550
	Overall height		mm	3550
	Axle base	Axle 1&2	mm	4580
		Axle 2&3	mm	1350
TRAVEL	Max.travel speed		km/h	90
	Steering radius	Min.steering radius	m	10.5
		Min.steering radius of boom tip	m	12.5
	Min.ground clearance		mm	250
	Approach angle		°	18
	Departure angle		°	13
	Max.gradeability		%	42
	Fuel consumption per 100km		L	35
MAIN PERFORMANCE	Working temperature range		°C	-20 ~ +45
	Min.rated lifting radius		m	3
	Tail slewing radius		m	3.3
	Boom sections (Qty.)		-	5
	Boom shape		-	U
	Max.lifting moment	Basic boom	kN·m	1063
		Full-extend boom	kN·m	624
		Full-extend boom+jib	kN·m	387
	Boom length	Basic boom	m	10.7
		Full-extend boom	m	41
		Full-extend boom+jib	m	49
	Outrigger span (Longitudinal×Transverse)		m	5.18×6.4
	Jib offset		°	0,15,30
OPERATION SPEED	Max.single rope lifting speed of main winch (empty load)		m/min	135
	Max.single rope lifting speed of auxiliary winch (empty load)		m/min	135
	Full extension/retraction time of boom		s	80/90
	Full luffing up/down time of boom		s	25/40
	Slewing speed		r/min	2.5
AIRCONDITIONER	In operator's cab		-	Heating & Cooling
	In driver's cab		-	Heating & Cooling

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Technical Parameters

Axle Load

Axle	1	2	3	Gross weight
Load per axle /kg	7100	12800	12800	32700

Hook

Load/t	Number of sheaves	Rope rate	Hook weight /kg
25	4	8	320
5	0	0	85

Operations

Item		Rope diameter/length	Max. single line pull
Main winch		16mm/185m	5t
Auxiliary winch		16mm/105m	5t
Slewing		2.5r/min	
Luffing		25s/40s	
Telescoping		80s/90s	
Outrigger jack	Retract	20s	
	Extend	20s	
Outrigger beam	Retract	15s	
	Extend	30s	

Crane Introduction

Carrier

Driver's cab

- Designed by Sany, driver's cab is equipped with seat with headrest, anti-fog fan, air conditioner, stereo radio, and control instruments.

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 controls steering, and axle 2&3 controls drive with differential lick.

Outrigger

- Outrigger beam extension is powered by hydraulics.

Engine

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

Transmission

- 9-speed manual gearbox and big torque transmission shaft delivers abundant power for grading and travelling.

Suspension system

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

Tire

- Eleven tires sized 12R22.5, featuring large bearing capacity and durability.

Brakes

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

Electrical system

- With 2×12V maintenance-free batteries, the crane power can be cut off manually via a switch.

superstructure

Operator's cab

- Egronomic design ensures 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.

Control system

- CAN-Bus instrument provides accurate data and functions fault detection. Load moment indicator ensures operation safety.

Luffing system

- Luffing angle: -2°~80°.

Telescopic system

- Five section boom in full extension realizes a max. lifting height of 41.5m, and further 49.5m when 8m jib is mounted. U-shape structure is welded using high-strength structural steel. Telescoping is realized via double cylinder and rope arranger.

Slewing system

- 360 degree slewing with a max. speed of 2.5r/min.

Hoist

- Winch piston motor sees smooth running of wire rope.

Safety device

- An all-round safety system covers load moment, hydraulics, winch, and wire rope. Motion with risks are cut off automatically.

Counterweight

- Counterweight is a fixed unit weighing 5600kg.

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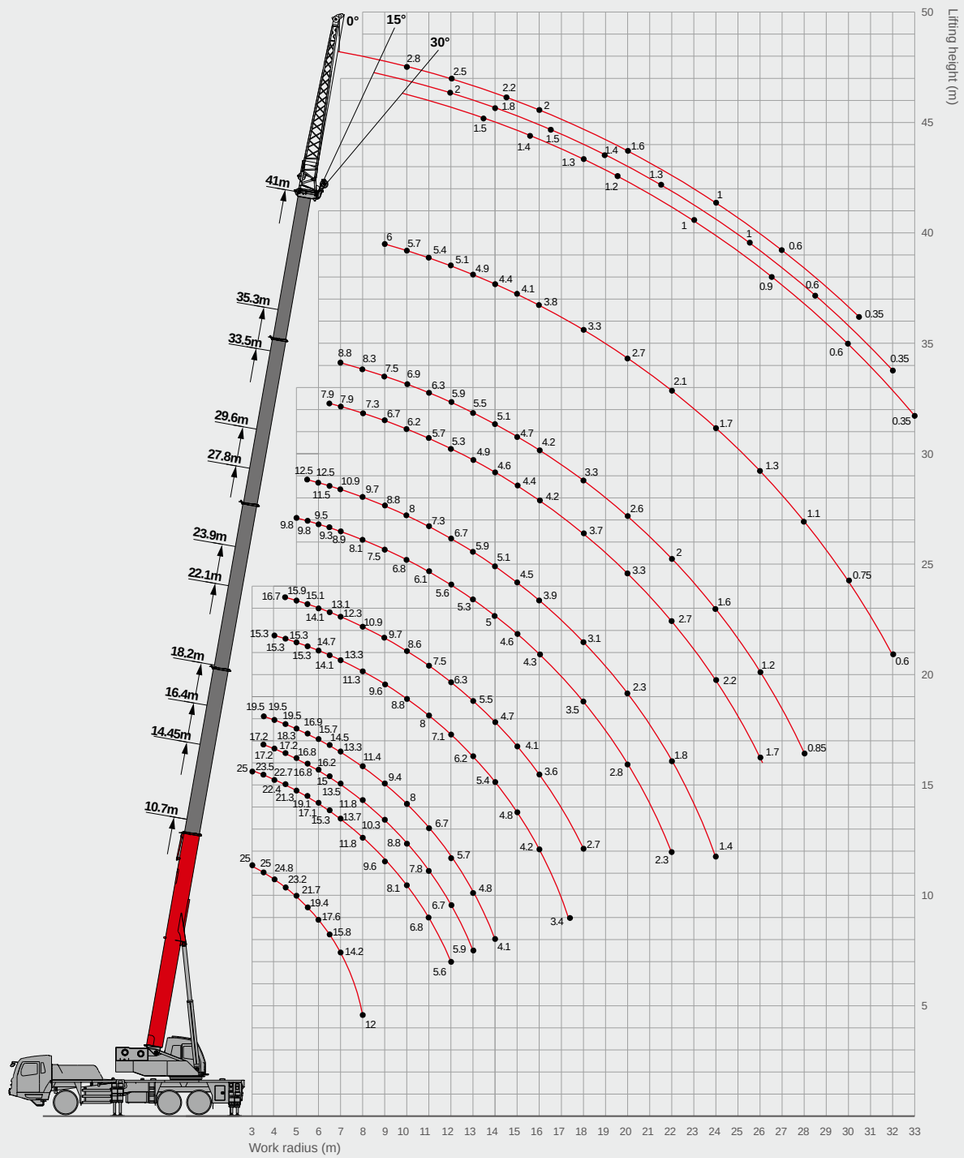
Operating Range



Load Chart-Telescopic Boom

Unit: kg

Radius (m)	10.7	14.45	16.4	18.2	22.1	23.9	27.8	29.6	33.5	35.3	41	Radius (m)
3	25000	25000										3
3.5	25000	23500	17200	19500								3.5
4	24800	22700	17200	19500	15300							4
4.5	23200	22400	17200	19500	15300	16700						4.5
5	21700	21300	16800	18300	15300	15900	9800					5
5.5	19400	19100	16800	16900	15300	15100	9800	12500				5.5
6	17600	17100	16200	15700	14700	14100	9500	12500				6
6.5	15800	15300	15000	14500	14100	13100	9300	11500	7900			6.5
7	14200	13700	13500	13300	13300	12300	8900	10900	7900	8800		7
8	12000	11800	11800	11400	11300	10900	8100	9700	7300	8300		8
9		9600	10300	9400	9600	9700	7500	8800	6700	7500	6000	9
10		8100	8800	8000	8800	8600	6800	8000	6200	6900	5700	10
11		6800	7800	6700	8000	7500	6100	7300	5700	6300	5400	11
12		5600	6700	5700	7100	6300	5600	6700	5300	5900	5100	12
13			5900	4800	6200	5500	5300	5900	4900	5500	4900	13
14				4100	5400	4700	5000	5100	4600	5100	4400	14
15					4800	4100	4600	4500	4400	4700	4100	15
16					4200	3600	4300	3900	4200	4200	3800	16
18					3400	2700	3500	3100	3700	3300	3300	18
20							2800	2300	3300	2600	2700	20
22							2300	1800	2700	2000	2100	22
24								1400	2200	1600	1700	24
26									1700	1200	1300	26
28									1350	850	1100	28
30											750	30
32											600	32
Telescoping status(%)												
Telescoping mode	I,II	I	I	II	I	II	I	II	I	II	I,II	Telescoping mode
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	7	8	6	6	4	5	3	3	3	Rope rate

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Load Chart-Jib

Unit: kg

Telescopic boom + jib length (41m+8m)				
Boom angle	jib offset angle			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.When the fifth outrigger is landed in position, value listed are applicable for 360 degree operation;
3.Value above are calculated with hooks and lifting slings considered (320kg main hook block, 85kg aux. hook block);
4.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;
5.Rated lifting performance on boom point sheave equals 5t;
6.Boom load capacity shall be 450kg less than value given when jib is mounted.

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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.

Any change in the technical parameters and configuration due to advancement in technology may occur without prior notice. The machine in the figures may include auxiliary equipment. This brochure is for reference only, and goods in kind shall prevail.
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