

## SANY HEAVY INDUSTRY INDIA PVT. LTD.

#### **HEAD OFFICE**

Address : Plot No. E-4, Chakan Industrial Area Phase-III,

Village Kuruli, Taluka Khed, District Pune - 410501,

Maharashtra, INDIA.

E-mail : customercare@sany.in

Website : www.sany.in

Toll Free No.: 1800-209-3337





# **PRODUCT SPECIFICATIONS**









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Model STC250C | SERIES Model STC250C | SERIES



Multi-outlet HVAC air flow CAN-BUS instrument, 5" color LCD and press buttons arranged clearly, easy to operate Precise PDC parking distance control with alarming sirens



Full vision extra large glass and skylight Indoor space extended for more comfortable working environment Standard 6" color screen with LMI, load data in real-time display Integrated electrical system and throttle control, eco mode

Mechanical control lever, lower maintenance cost



large cross section, high rigidity
PE slider used, smooth telescoping motions without shock



4 section U shape telescopic boom, Chamfered counterweight design for smaller slewing radius



Outrigger cross section optimized for carrier stability.

SANY TRUCK CRANE STC250C / 25T LIFTING CAPACITY



Powered by robust diesel from WEICHAI, complying with CEV Stage IV emission standard



shock absorption, better driving experience



lower fuel cost, smoother control



Large capacity fuel reservoir, endurance mileage ≥900km

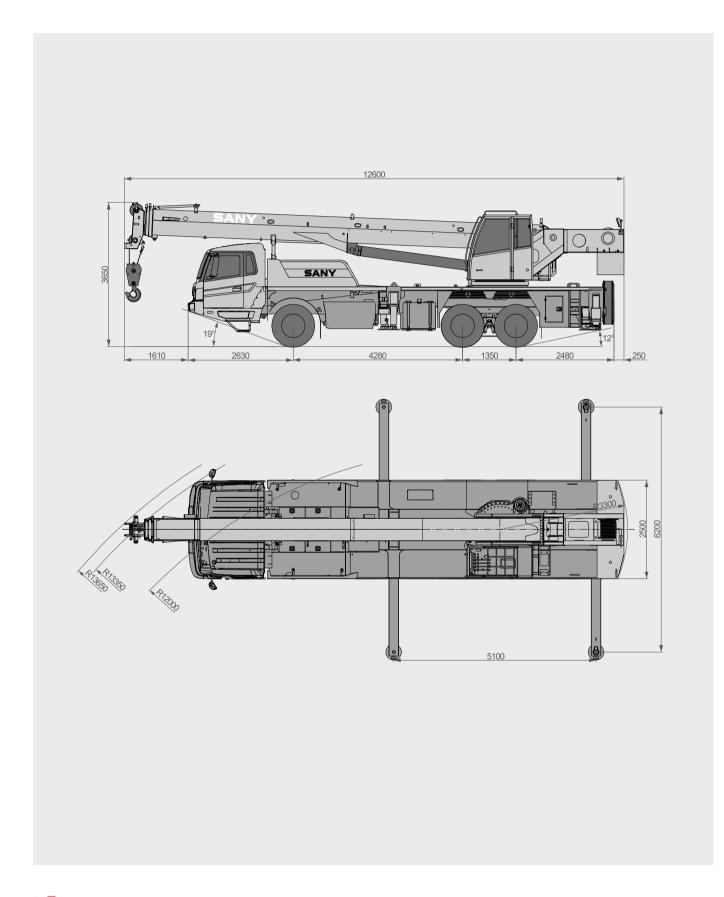


Standard cross ply radial tires sized 11.00 X 20, 16 PR high endurance and reliability



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# Overall Dimensions



# Technical Specification

CATEGORY	ITEM		UNIT	VALUE
CAPACITY	Max. lifting capacity		t	25
WEIGHT	Gross weight		kg	26300
	Engine model		-	WEICHAI WP7.270E61(CEV Stage IV
POWER	Max. engine power		kW/rpm	199/2100
	Max, engine torque		N·m/rpm	1200/(1200~1600)
	Overall length		mm	12600
DIMENSIONS	Overall width		mm	2500
	Overall height		mm	3650
	Max.travel speed		km/h	48
	O	Min.steering radius	m	12
	Steering radius	Min.steering radius of boom tip	m	13.65
	Wheel formula		-	6× 4
TRAVEL	Min.ground clearance		mm	250
	Approach angle		0	≥19
	Departure angle		0	≥12
	Max.gradeability		%	32
	Fuel consumption per 100km	1	L	≤30
	Working temperature range		°C	-20~45
	Min.rated lifting radius		m	3
	Tail slewing radius		m	3.3
	Boom sections (Qty.)		-	4
	Boom shape		-	U shape
		Basic boom	kN·m	857.5
	Max.lifting moment	Full-extension boom	kN·m	510
MAIN		Max.combination of boom + jib	kN·m	356.6
PERFORMANCE		Basic boom	m	10.55
	Boom length	Full-extension boom	m	33.5
		Max.combination of boom + jib	m	41.5
		Basic boom	m	11
	Max.lifting height	Full-extension boom	m	34
		Max.combination of boom + jib	m	42
	Outrigger span (Longitudinal	×Transverse)	m	5.1×6.2
	Jib offset		0	0, 15, 30
AIRCONDITIONER	In operator's cab	In operator's cab		Cooling
	In driver's cab		-	Cooling & heating

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# **Technical Parameters**



Axle	1	2	3	Gross weight	
Axle load /t	6	10	10	26	
Remark			<u>-</u>		



Load/t	Number of sheaves	Rope rate	Hook weight /kg	Remark
25	4	8	250	Standard
3	1	1	85	Optional



Item		Max.single rope lifting speed (empty load)	Rope diameter/length	Max. single line pull		
Main winch		110m/min	14mm/163m	3.5t		
Auxiliary winch		110m/min	14mm/95m	3.5t		
Slewing speed		0~2r/min				
Full luffing up/down time of boom		65s/60s				
Full extension/retraction time of boom		65s/55s				
Outrigger jeek	Retraction	20s				
Outrigger jack	Extension	35s				
Outrigger beam	Retraction	20s				
	Extension	35s				

# Crane Introduction

### ☐ Driver's cab

- Right hand drive. Integral steel structure cab in ergonomic design, featuring vibration and external noise isolation.
- The cab is furnished in concept of convenience, safety, and comfort with large rearview mirror, seats with headrest, demister, HVAC, stereo radio, full set of controls and panels.

## Carrier frame

Designed and manufactured by Sany, the torsion resistant box-type structure is welded by fine grain high-strength steel, featuring increased bearing capacity.

# Engine

- Model: Inline six-cylinder diesel engine with watercooler and inter cooler.
- Emission standard: CEV StageIV
- Fuel reservoir capacity: 300L.

# Transmission

• 8-speed manual transmission with synchronizer, large speed ratio range, adaptable to slope climbing and high-speed traveling.

## Transmission shaft

Optimized layout, higher torque output via contrate gear connecting transmission shaft cardan.

# **i** Axle

Axle 1 is steered; axles 2, 3 are drive axles with built-in differential lock, realizing tougher ability to rough-terrain travelling. Two-stage reducer gear and more compact axle bags contribute to better trafficability. Press welding process strengthens the axle cover, increasing bearing capacity.

## Suspension system

Front suspension is realized by independent leaf spring, and rear rubber. The system's strength is verified by 100,000 cycling fatigue tests, and ride comfort is ensured.

### Steering

Mechanical steering with hydro booster. Turn your steering wheel more

#### Tires

■ Eleven tires sized 11.00 X 20, strong bearing capacity and durability.

### 1-1 Wheel formula

■ 6× 4× 2

## (C) Brake

Four brake systems including service brake, parking brake, emergency brake, and assisting brake.

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# **Crane Introduction**

## Operator's cab

The cab is designed in ergonomic concept with deep consideration of convenience, safety, and comfort. Corrosion resistant bodywork with softened interior trim, the skylight, and tiltable seat make working on the crane more comfortable.



# Boom & telescoping system

Telescoping is realized by single cylinder with rope arranger.



Hoist smoothness is guaranteed by the perfect combo of winch balance valve and anti-slip tech. Hoist speed is controlled via pump and motor, more energy efficient.



# Luffing system

Passive luffing down, reducing energy cost. One luffing cylinder with hinge positioned to the front, making motion easier and boom stress optimized. Luffing angle: -2°~ 80°



Main oil pump, motor, valve and other key hydraulic components are of high quality and high durability, ensuring hydraulics to function smoothly and reliably.



Data display system: multiple sensors provide data feedback, realizing real-time monitoring. It helps you to monitor working status of the whole machine.

# **├** Outrigger

H-type layout, four point support, easy to operate. Welded by fine grain high tensile steel plate, optimized stability. Outrigger beam hydraulically telescoping.

### Counterweight

Fixed counterweight 3t, no movable unit.

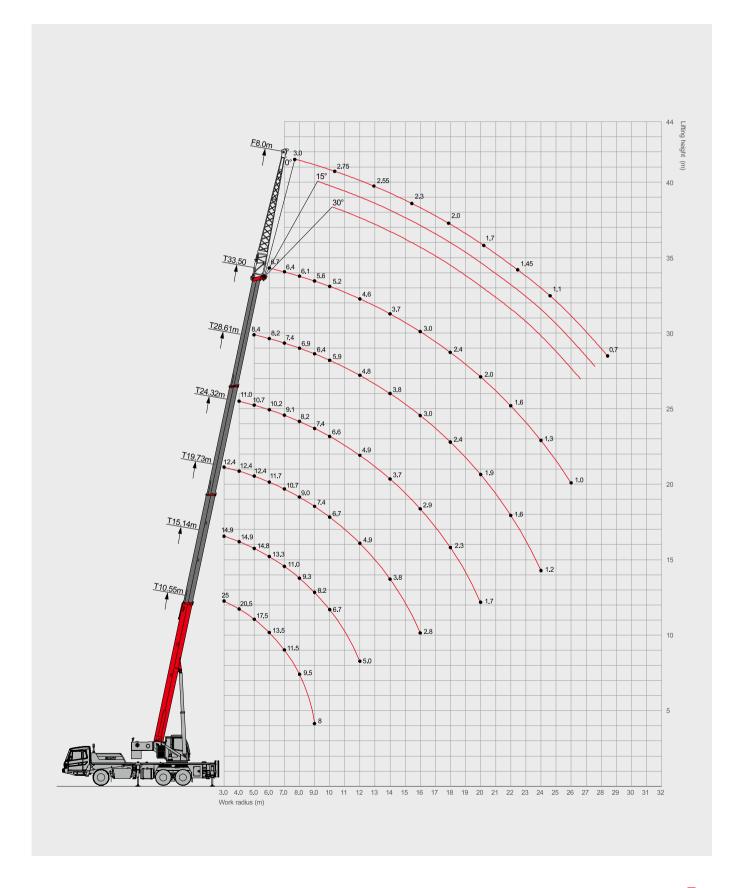
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- Self developed LMI is set through analytical mechanics approach. Load accuracy is maintained in a range of ±3% via online unloaded calibration.
- Hydraulic balance valve, relief valve, two-way pilot-controlled valve are equipped for hydraulic system reliability.
- Three-circle protector prevents winch wire rope from over-hoist down.
- Height limit switch at boom and jib head prevents wire rope from overhoist up.
- Boom length & angle sensor and stress sensor help monitor crane working status. Motion of risks are cut off automatically with buzzer warning simultaneously.

### Optional equipment at extra fees

- 8m fixed jib.
- Auxiliary winch.
- Auxiliary hook.
- Other equipment available upon request.

# Operating Range



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Load Chart-Jib

# Load Chart-Telescopic Boom



#### Unit: kg

Radius (m)	10.55	15.14	19.73	24.32	28.91	33.5	Radius (m)
3	25000	14900	12400				3
3.5	23000	14900	12400				3.5
4	20500	14900	12400	11000			4
4.5	19000	14900	12400	11000			4.5
5	17500	14800	12400	10700	8400		5
6	13500	13300	11700	10200	8200	6700	6
7	11500	11000	10700	9100	7400	6400	7
8	9500	9300	9000	8200	6900	6100	8
9	8000	8200	7400	7400	6400	5600	9
10		6700	6700	6600	5900	5200	10
12		5000	4900	4900	4800	4600	12
14			3800	3700	3800	3700	14
16			2800	2900	3000	3000	16
18				2300	2400	2400	18
20				1700	1900	2000	20
22					1600	1600	22
24					1200	1300	24
26						1000	26
Cylinder telescoping status	0%	20%	40%	60%	80%	100%	Cylinder telescoping status
Rope rate	8	6	4	4	3	3	Rope rate

Remark: the ratings are given for load over rear and side.











Optional

#### Unit: kg

Boom angle(°)	0°	15°	30°	Boom angle(° )
80	3000	2000	1550	80
78	2850	2000	1550	78
76	2750	1850	1450	76
74	2650	1800	1400	74
72	2550	1750	1350	72
70	2400	1600	1300	70
68	2300	1550	1250	68
66	2150	1450	1200	66
64	2000	1350	1150	64
62	1850	1250	1100	62
60	1700	1150	1050	60
58	1600	1050	1000	58
56	1450	1000	950	56
54	1250	950	900	54
52	1100	900	850	52
50	980	850	700	50
45	700	550	500	45

#### 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 (250kg 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 3.5t;
- 6. Boom load capacity shall be 450kg less than value given when jib is mounted.
- 7. Rated lifting capacities in the stability area comply with ISO4305.