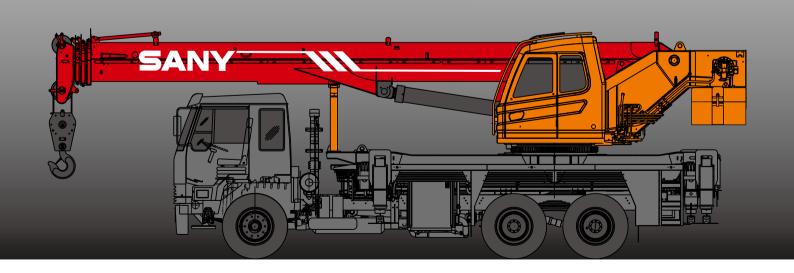


Quality Changes the World









SPC300 TRUCK CRANE **SELLING POINTS** 

# **SANY TRUCK CRANE**

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- 15 Wheel Crane Family Map





Carrier frame



Suspension system



Hydraulic system



Outriggers



Telescopic boom



Control system





Lattice jibs



Telescopic system



Transmission system







Luffing lattice jib

winch mechanism:

Superlift devices



Slewing

Luffing system









Safety system

Counterweight



Brakes system



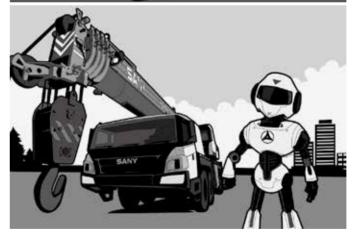
Hoist system



Electrical system







## Ultra long, super strong and highly sensitive load lifting capacity

Four-section boom of high strength steel structure and optimized U-shaped cross section reduces weight significantly with higher safety rates. Jib mounting angles are 0°, 15°, and 30° which ensures fast and convenient change-over between different operating conditions so as to improving working efficiency of the machine.

## Highly efficient, stable, energy-saving, and adjustable hydraulic system

Triple gear pump, load feedback and constant power control are applied to provide strong lifting capacity and good micromobility. Unique steering buffer design is applied to ensure stable braking operation.

### Safe, stable, advanced, and intelligent electric control system

Self-developed controller SYMC specially for engineering machinery is configured. The adoption of CAN-bus full-digital network control technology ensures stable control signal, simple harness, and high reliability. Timely feedback of data information can achieve the monitoring of the overall working status in realtime; the load moment limiter equipped with the comprehensive intelligent protection system is used with accuracy within 3% to provide a comprehensive logic and interlock control, thus ensuring more safe and reliable operation.

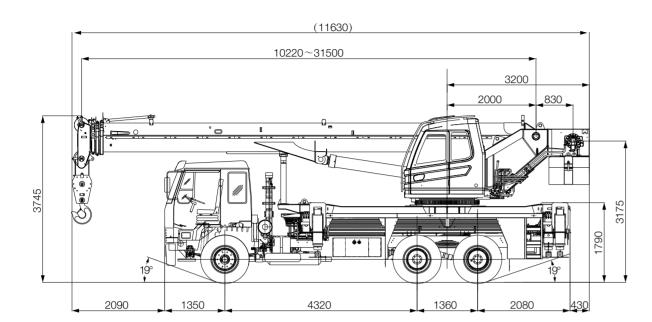


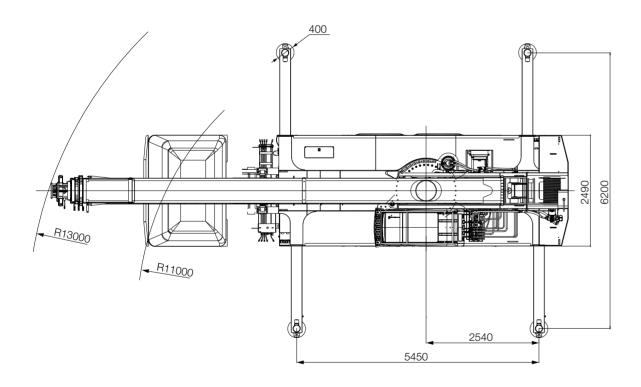


	Superstructure
@ Cab	It is made of anti-corrosion steel plate with ergonomic design such as full-coverage soften interior, panoramic sunroof and, adjustable seats etc., and humanized design providing more comfortable and relaxing operation experience. The display of load moment limiter integrates main console and operation display system, which clearly show the data of all operating superstructure conditions for lifting operation.
<b>(A)</b> Hydraulic system	<ul> <li>High-quality key hydraulic components such as main oil pump, rotary pump, main valve, winch motor, and balancing parts etc. are adopted to achieve stable and reliable operation of the hydraulic system. Superior operation performance is guaranteed by accurate parameter matching.</li> <li>Main valve has flow compensation and load feedback control function, enabling stable and convenient control of single action and combined action under different operation conditions</li> <li>Winch adopts the electronically controlled variable motor to ensure high operation efficiency. Max. single line speeds of winches is up to 115m/min.</li> <li>Slewing system is equipped with the integrated slewing buffer valve to ensure more stable starting and control of the slewing operation and excellent micro-mobility.</li> </ul>
Control system	<ul> <li>With fully security protection system, winches are equipped with over-roll out limiter and height limiters to prevent over-rolling out and over-hoisting of steel rope, including tip-over and limit angle protection.</li> <li>Load moment limiter: The adoption of high intelligent load moment limiter system can comprehensively protect lifting operation, ensuring accurate, stable and comfort operation.</li> </ul>
Luffing system	<ul> <li>Dead-weight luffing provides more stable luffing operation at low energy loss.</li> <li>Luffing angle: -2°~78°.</li> </ul>
Telescopic system	■ Four-section boom is applied with basic boom length of 10.22m, full-extended boom length of 32m,jib length of 8m and lifting height of fully extended boom length of 32.5m respectively. Max. lifting height is 40.5m including jib. It is made of fine grain high-strength steel with U-shaped cross section and with telescopic operation controlled independent by ylinder rope.
Slewing system	■ 360° rotation can be achieved with Max. slewing speed of 2.5r/min. Hydraulic controlled proportional speed adjustment is applied to provide stable and reliable operation of the system. Unique rotary buffer design ensures more stable braking.

	Superstructure
Hoisting system	<ul> <li>The winch adopts the high-pressure automatic variable plunger motor, enabling automatic switch-over between low load high speed mode and high load low speed mode, and ensuring highly efficient operation and stable lifting and lowering of the load.</li> <li>One main hook: 360Kg, and the Max. lifting capacity is 30t. Wire rope of winch: left-handed wire rope 16-35W×7-1960USZ 175m.</li> </ul>
Safety system	<ul> <li>Load moment limiter: Load moment limiter calculation system based on lifting load mechanical model is established using an analytical mechanics method with rated lifting accuracy up to ±3% through on-line non-load calibration, providing full protection to lifting operation. In case of overload operation, system will automatically issue an alarm to provide safety protection for manipulation.</li> <li>Hydraulic system is configured with the balance valve, overflow valve and two-way hydraulic lock etc. components, thus achieving stable and reliable operation of the hydraulic system.</li> <li>Winch is equipped with over roll-out limiter to prevent over rolling-out of wire rope.</li> <li>Boom is equipped with height limiters respectively to prevent over-hoisting of wire rope.</li> <li>Boom head is equipped with anemometer and press sensor to indicate the working condition of whole crane in real-time, giving an alarm and cutting off the dangerous action automatically.</li> </ul>
Counterweight	■ Counterweight is 1500kg, flexible counterweight is 2500kg.
The vice carrier frame	■ Designed and manufactured by SANY, anti-torsion box structure is welded by fine-grain high-strength steel plate, to provide strong load bearing capacity.
• Outriggers	■ Four-point supporting of the H-shaped outriggers ensures easy operation and strong stability with max. span up to 5.45m×6.2m. They are made of fine-grain high-strength steel sheet with horizontal single-cylinder rope line telescoping for outrigger. Vertical cylinder of outrigger adopts bi- directional hydraulic locks to improve safety.



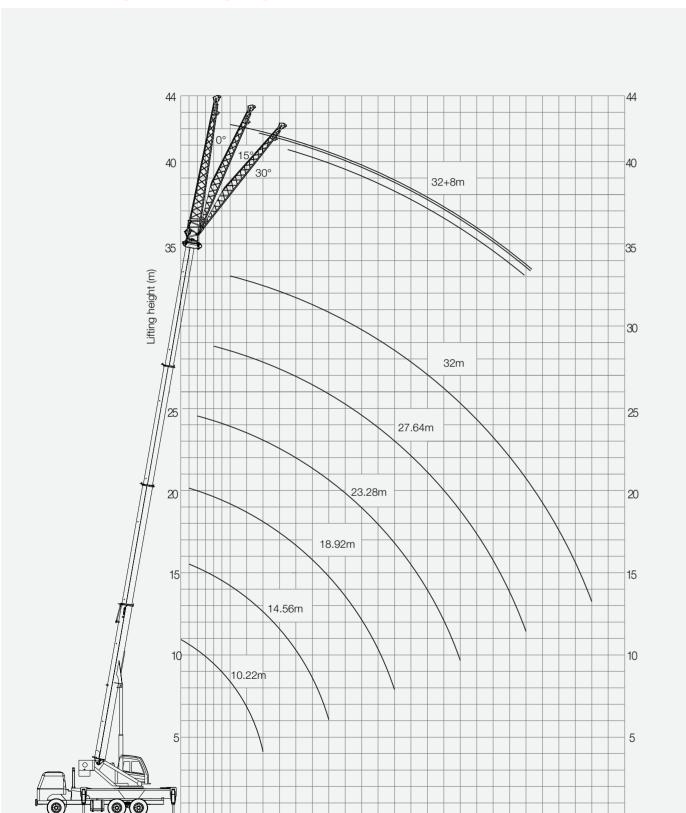




Туре	Item	Parameter	
Capacity	Max. lifting capacity	30t	
	Overall length	11630mm	
	Overall width	2490mm	
Dimensions	Overall height	3745mm	
		Axle-1,2	4320mm
	Axle distance	Axle-2,3	1360mm
	Overall weight		25000kg
		Front axle	6000kg
Weight	Axle load	Rear Axle	19000kg
	Rated power		132kW/2500rpm
	Rated torque	675N.m/1500rpm	
	Max.traveling speed	75km/h	
	<b>-</b>	Min.turning radius	11m
	Turning radius	Min.turning radius of boom head	13m
Traveling	Wheel formula	6×4	
	Approach angle	19°	
	Departure angle	19°	
	Max.gradeability	26%	
	Min.rated range		3m
	Boom section	4	
	Boom shape	U-shaped	
Main Performance Data	Max.lifting moment	Base boom	1026kN⋅m
Data	Waxanting mornoric	Full-extend boom	530kN·m
	Boom length	Base boom	10.22m
		Full-extend boom	32m
	Outrigger span (Longitudinal×Tra	5.45×6.2m	
	Max.single rope lifting speed of w	115m/min	
Working speed	Full extension/retraction time of b		70/50s
Toming opood	Full lifting/descending time of boo	65/50s	
	Slewing speed	2.5r/min	

Unit:Ka

## SPC300 Working radius-lifting height curve



Prerequisites:

- 1 Boom operating condition(fully extended boom length),min.length is 10.22 and.max.length is 32m 2 The span of outrigger is 5.45×6.2m 3 240°rotation is applied

- 4 Counterweight is 1.5T

) Maral dia 20 10 20 20 20 (10)	Main boom						
Working range(m)	10.2	14.6	18.9	23.3	27.6	32	Working range(m)
3	30000	19300					3
3.5	27600	19300	14700				3.5
4	24600	18500	14600				4
4.5	22000	18000	14500	11000			4.5
5	20000	17000	14000	10800	8800		5
5.5	18100	15500	13000	10600	8500		5.5
6	15800	14700	12000	10100	8200	6800	6
6.5	13700	13000	11500	9800	8000	6700	6.5
7	12100	11500	11000	9200	7500	6500	7
8	9000	8800	8600	8400	7000	6100	8
9		7400	7200	7100	6500	5600	9
10		6300	6000	6000	5800	5100	10
12		4800	4500	4300	4200	4100	12
14			3500	3500	3400	3300	14
16				2800	2700	2700	16
18				2300	2200	2200	18
20					1800	1900	20
22						1400	22
Number of lines	8	6	6	4	3	3	Number of lines
Telescoping condition(%)							
1	100%	100%	100%	100%	100%	100%	I
II	0	20%	40%	60%	80%	100%	II
III	0	20%	40%	60%	80%	100%	III
IV	0	20%	40%	60%	80%	100%	IV

- 1. All rated loads have been tested to and meet minimum requirements of IS 4573-1982-Specification for Power Driven Mobile Cranes, and do not exceed 85% of the tipping load on outriggers as determined by SAE J765 OTC80 Crane stability Test Code.
- 2. The weight of hookblock, slings and all similarly used load handing devices must be added to the weight of the load.
- 3. Radius shown in the table are the actual radius when working.
- 4. When the crane works in the outside, It can be used only when the wind power is less than 10m/s.
- 5. All capacities are for crane on firm, level surface. It may be necessary to have structureal supports under the outrigger floats to spread the load to a larger
- 6. For outrigger operation, all outriggers shall be full extended with tyres raised free of ground before raising the boom or lifting loads.

Unit:Ka

Unit:Ka

#### Prerequisites:

- ① Boom operating condition(fully extended boom length),min.length is 10.22 and.max.length is 32m
- 2 The span of outrigger is 5.45×6.2m
- 3 360°rotation is applied
- 4 Counterweight is 1.5T

Manting was a feet	Main boom						10/a-d-i-a()
Working range(m)	10.2	14.6	18.9	23.3	27.6	32	Working range(m)
3	25700	16000					3
3.5	22500	16000	13500				3.5
4	19800	15500	13000				4
4.5	17800	15500	13000	10500			4.5
5	15800	14500	12600	10000	8500		5
5.5	14300	13500	12000	10000	8300		5.5
6	12800	12500	11400	9400	7900	6300	6
6.5	11000	11000	10600	8700	7600	6100	6.5
7	9200	9800	9800	8000	7100	6000	7
8	7200	7600	7800	7200	6800	5600	8
9		6100	6100	6100	6000	5200	9
10		5350	5000	5000	5000	4700	10
12		3750	3600	3600	3500	3500	12
14			2600	2600	2700	2600	14
16				1950	1850	2000	16
18				1600	1500	1600	18
20					1100	1200	20
22						750	22
Number of lines	8	6	6	4	3	3	Number of lines
Telescoping condition(%)							
I	100%	100%	100%	100%	100%	100%	1
II	0	20%	40%	60%	80%	100%	II
III	0	20%	40%	60%	80%	100%	III
IV	0	20%	40%	60%	80%	100%	IV

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- 2. The weight of hookblock, slings and all similarly used load handing devices must be added to the weight of the load.
- 3. Radius shown in the table are the actual radius when working.
- 4. When the crane works in the outside, It can be used only when the wind power is less than 10m/s.
- 5. All capacities are for crane on firm, level surface. It may be necessary to have structureal supports under the outrigger floats to spread the load to a larger
- 6. For outrigger operation, all outriggers shall be full extended with tyres raised free of ground before raising the boom or lifting loads.

## Prerequisites:

- 1 Boom operating condition(fully extended boom length),min.length is 10.22 and.max.length is 32m
- 2 The span of outrigger is 5.45×6.2m
- 3 240°rotation is applied
- 4 Counterweight is 4T

Marking range()	Main boom						Morting range(re)
Working range(m)	10.2	14.6	18.9	23.3	27.6	32	Working range(m)
3	30000	21300					3
3.5	27600	21000					3.5
4	24600	19800	17700				4
4.5	22000	18800	16400	11000			4.5
5	20500	17200	15600	10800	8800		5
5.5	18400	16000	14600	10600	8500		5.5
6	16800	15000	13600	10300	8500	7300	6
6.5	14800	13800	12600	9800	8200	7200	6.5
7	13700	12700	12000	9500	8000	7100	7
8	11200	11000	10500	8400	7300	6800	8
9		9200	9100	7900	6700	6200	9
10		7900	8100	7300	6200	5700	10
12		6000	5800	5800	5200	4800	12
14			4500	4500	4500	4200	14
16				3500	3500	3500	16
18				2800	2800	2800	18
20					2300	2400	20
22						1900	22
Number of lines	8	6	6	4	3	3	Number of lines
			Telescoping	condition(%)			
I	100%	100%	100%	100%	100%	100%	I
II	0	20%	40%	60%	80%	100%	II
III	0	20%	40%	60%	80%	100%	III
IV	0	20%	40%	60%	80%	100%	IV

- 1. All rated loads have been tested to and meet minimum requirements of IS 4573-1982-Specification for Power Driven Mobile Cranes, and do not exceed 85% of the tipping load on outriggers as determined by SAE J765 OTC80 Crane stability Test Code.
- 2. The weight of hookblock, slings and all similarly used load handing devices must be added to the weight of the load.
- 3. Radius shown in the table are the actual radius when working.
- 4. When the crane works in the outside, It can be used only when the wind power is less than 10m/s.
- 5. All capacities are for crane on firm, level surface. It may be necessary to have structureal supports under the outrigger floats to spread the load to a larger
- 6. For outrigger operation, all outriggers shall be full extended with tyres raised free of ground before raising the boom or lifting loads.



Unit:Ka

#### Prerequisites:

- 1 Boom operating condition(fully extended boom length),min.length is 10.22 and.max.length is 32m
- 2 The span of outrigger is 5.45×6.2m
- 3 360°rotation is applied
- 4 Counterweight is 4T

Modeina rongo(m)	Main boom					Morling range(m)	
Working range(m)	10.2	14.6	18.9	23.3	27.6	32	Working range(m)
3	30000	17000					3
3.5	23500	17000	14500				3.5
4	20800	16500	14000				4
4.5	18800	16500	14000	10500			4.5
5	16800	15500	13600	10000	8500		5
5.5	15300	14500	13000	10000	8300		5.5
6	13800	13500	12400	9500	8100	6500	6
6.5	11900	11900	11600	9000	7800	6300	6.5
7	10000	10500	10500	8500	7300	6200	7
8	8300	8600	8600	8000	6900	5800	8
9		7000	7000	6500	6300	5400	9
10		6000	6000	5500	5500	5100	10
12		4300	4300	4200	4100	4000	12
14			3200	3200	3100	3100	14
16				2300	2300	2300	16
18				1800	1800	1800	18
20					1400	1400	20
22						900	22
Number of lines	8	6	6	4	3	3	Number of lines
Telescoping condition(%)							
I	100%	100%	100%	100%	100%	100%	1
II	0	20%	40%	60%	80%	100%	II
III	0	20%	40%	60%	80%	100%	III
IV	0	20%	40%	60%	80%	100%	IV

- 1. All rated loads have been tested to and meet minimum requirements of IS 4573-1982-Specification for Power Driven Mobile Cranes, and do not exceed 85% of the tipping load on outriggers as determined by SAE J765 OTC80 Crane stability Test Code.
- 2. The weight of hookblock, slings and all similarly used load handing devices must be added to the weight of the load.
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- 4. When the crane works in the outside, It can be used only when the wind power is less than 10m/s.
- 5. All capacities are for crane on firm, level surface. It may be necessary to have structureal supports under the outrigger floats to spread the load to a larger
- 6. For outrigger operation, all outriggers shall be full extended with tyres raised free of ground before raising the boom or lifting loads.

Unit:Ka

#### Prerequisites:

- 1) Boom operating condition(fully extended boom length + jib length),max. length is 32m+8m
- 2 The span of outriggers is 5.45×6.2m
- 3 240° rotation is applied

~				
Main boom angle		Main beam angle		
	Compensation angle0°	Compensation angle 15°	Compensation angle 30°	Main boom angle
78°	2700	2400	1800	78°
75°	2510	2220	1750	75°
72°	2140	1830	1520	72°
70°	1910	1570	1350	70°
65°	1450	1240	1000	65°
60°	1080	1020	750	60°
55°	800	720	560	55°
50°	580	500	400	50°

#### TRUCK CRANE





Meximum Load Capacity: 501 Rescourc Boom: 5 Sections, 11.5-43m





Missimon Load Capacity, 80t Telescopic Boom: 5 Sections, 12.2-47m



STC1300C



STC1600





Maximum Lond Capacity, 256
Telescopic Booms: 5 Sections, 10.5-39.5m

Triescopic Booms 5 Sections, 11.5-43m

STC2200



STC900S Maximum Load Capacity 508 Telescopic Boom 5 Sections, 10.6-40.5m



STC600S Teknoont Boom 5 Sections, 11/3-435m



STC1000S Telescopic Boom 5 Sections, 12:26-56m



STC300TH Misimum Load Capacity 308
Telescopic Boom: 4 Sections, 10.6-33.5m





STC1200S Minimum I, card Capacity: 120t Telescook Boom: 7 Sections, 12 6-63.5m





SAC1800 Movimum Load Capacity, 1801 Telescopic Boom, 6 Sections, 13.5 62m.



SAC2200 Mismum Load Capacity: 2203 Tolescopic Boom 6 Sections, 13.5-62m



SAC2600 Maximum Load Capacity: 2501 Briescopic Boom 6 Sections, 15-65-73m



Mostnum Load Capacity: 3001 Telescopic Boors 7 Sections, 15.4 80m



Maximum Land Capacity: 3501 Rescapic Boom 6 Sections, 15-2-70m



SAC8000 Mannum Load Capacity, 6001 Telescopic Boom, 7 Sections, 17.1-90m.

#### ROUGH-TERRAIN CRANE



Maximum Lond Capacity, 254 Telescopic Boom: 4 Sections, 9.9-31.5m





Telescopic Boom: 4 Sections, 11:25-34.5m



Maximum Load Capacity: 55f Telescopic Boons 5 Sections, 11.5-43m



Maximum Load Capacity, 79t Telescopic Boom: 5 Sections, 11.8-45m.



Maximum Load Capacity 120f Telescope: Boon: 5 Sections: 13-45m

**SANY** Quality Changes the World

Quality Changes the World



Quality Changes the World

## **SANY AUTOMOBILE HOISTING MACHINERY**

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