

QUALITY CHANGES THE WORLD

PRODUCT
SPECIFICATIONS



SPC180T

SANY TRUCK CRANE
18T LIFTING CAPACITY



18 t



31.2 m



585 kN·m

www.sanyglobal.com

V1.0

SMALL YET CAPABLE

Featuring Optimum Capacity, Compactness, Control and Cost Efficiency

The max. lifting height reaches 31.5m, leading among smaller tonnage cranes.

Single plate boom head is designed in improved performance yet lightweight concept.

The crane is matched with two axle chassis of optimized cost efficiency. More compact body boosts its flexibility and versatility.

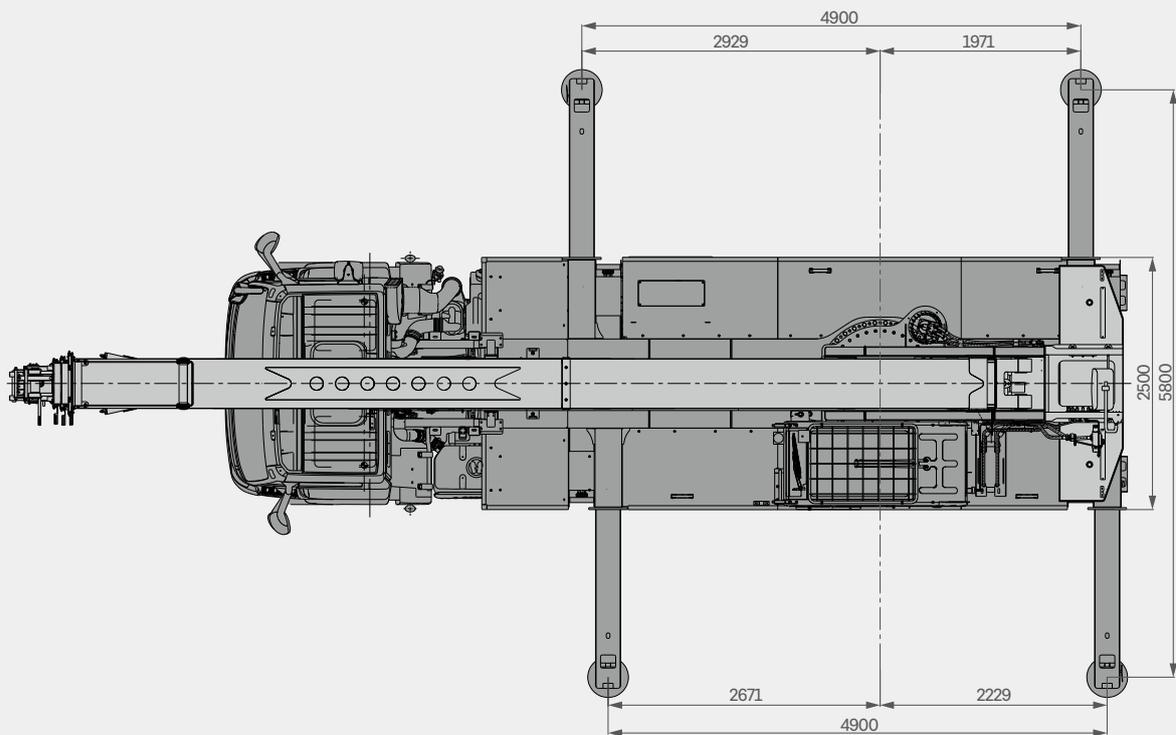
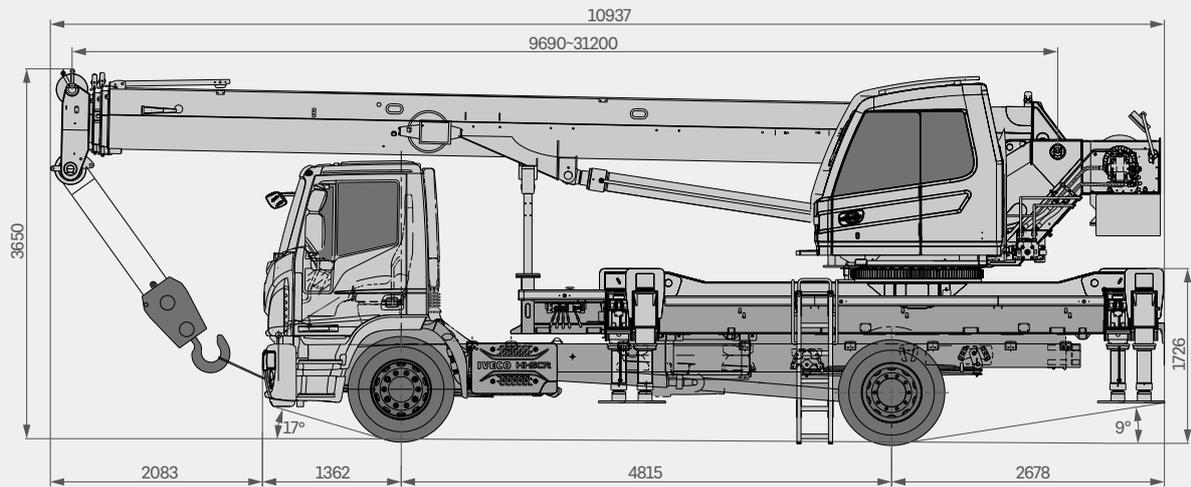
Crane control is realized intelligently and safely. The CAN-Bus communication, SANY controller and HD color E-touch are making crane operation more reliable. Smart fault self-diagnosis system can carry out precise location for easier troubleshooting and maintenance. Safety is guaranteed via SANY LMI of accuracy as high as 5‰ and response speed as fast as 20ms.

SANY TRUCK CRANE SPC180T / 18T LIFTING CAPACITY





Overall Dimensions



Remark: The chassis dimensions vary depending on chassis brand customers prefer.
The ratings above are given by IVECO for reference.

Technical Specification-Mounted on IVECO chassis

CATEGORY	ITEM	UNIT	VALUE	
CAPACITY	Max. lifting capacity	t	18	
WEIGHT	Gross weight	kg	17768	
POWER	Engine model	-	FPT Industrial/TECTOR7(Euro VI)	
	Max. engine power	kW/rpm	235/2500	
	Max. engine torque	N · m/rpm	1100/1875	
DIMENSIONS	Overall length	mm	10937	
	Overall width	mm	2500	
	Overall height	mm	3650	
TRAVEL	Working temperature range	°C	-25 ~ +40	
	Min.rated lifting radius	m	2.5	
	Tail slewing radius	m	2.49	
	Boom sections (Qty.)	-	4	
	Boom shape	-	U shape	
	Max.lifting moment	Basic boom	kN · m	585
		Full-extension boom	kN · m	264
	Boom length	Basic boom	m	9.69
		Full-extension boom	m	31.2
	Max.lifting height	Basic boom	m	10.4
		Full-extension boom	m	31
Outrigger span (Longitudinal × Transverse)		m	4.9 × 5.8	

Technical Parameters



Axle Load

Axle	1	2	Gross weight
Axle load /t	6.83	10.94	17.77
Remark	The ratings above are calculated when crane is mounted on IVECO chassis. Axle loads vary depending on chassis customers prefer		



Hook

Load/t	Number of sheaves	Rope rate	Hook weight /kg
20	4	8	250



Operations

Item	Max.single rope lifting speed (empty load)	Rope diameter/length	Max. single line pull
Main winch	120m/min	14mm/163m	3t
Slewing speed		2.3r/min	
Full luffing up/down time of boom		35s/50s	
Full extension/retraction time of boom		55s/40s	
Outrigger jack	Retraction	20s	
	Extension	20s	
Outrigger beam	Retraction	20s	
	Extension	20s	

Crane Introduction

Superstructure

Operator's cab

- The cab is designed in ergonomic concept with deep consideration of convenience, safety, and comfort. Working on the crane is made safer and more comfortable by corrosion resistant bodywork with softened interior trim and extra large indoor space, the skylight, adjustable seat, electric windshield wiper, and LMI touch screen integrating console and operation display system.

Boom & telescoping system

- Bending resistant U shape structure welded by high tensile steel plate. The boom telescopes via single cylinder with rope arranger. Four sections in full extension is 31.2m.

Hoist

- The main hoist adopts fixed displacement piston motor. The diameter and length of the main hoist wire rope are 14mm and 163m respectively.

Luffing system

- Active luffing down system. Luffing angle: -1.2° ~ 78° .

Hydraulics

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

Slewing

- Stepless speed regulation. Close type system reduces energy loss. Emergency brake available.

Control system

- 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, highly stable, outrigger beam hydraulically telescoping. Made by high tensile fine grain steels.

Counterweight

- Fixed counterweight 0.645t, no movable unit .

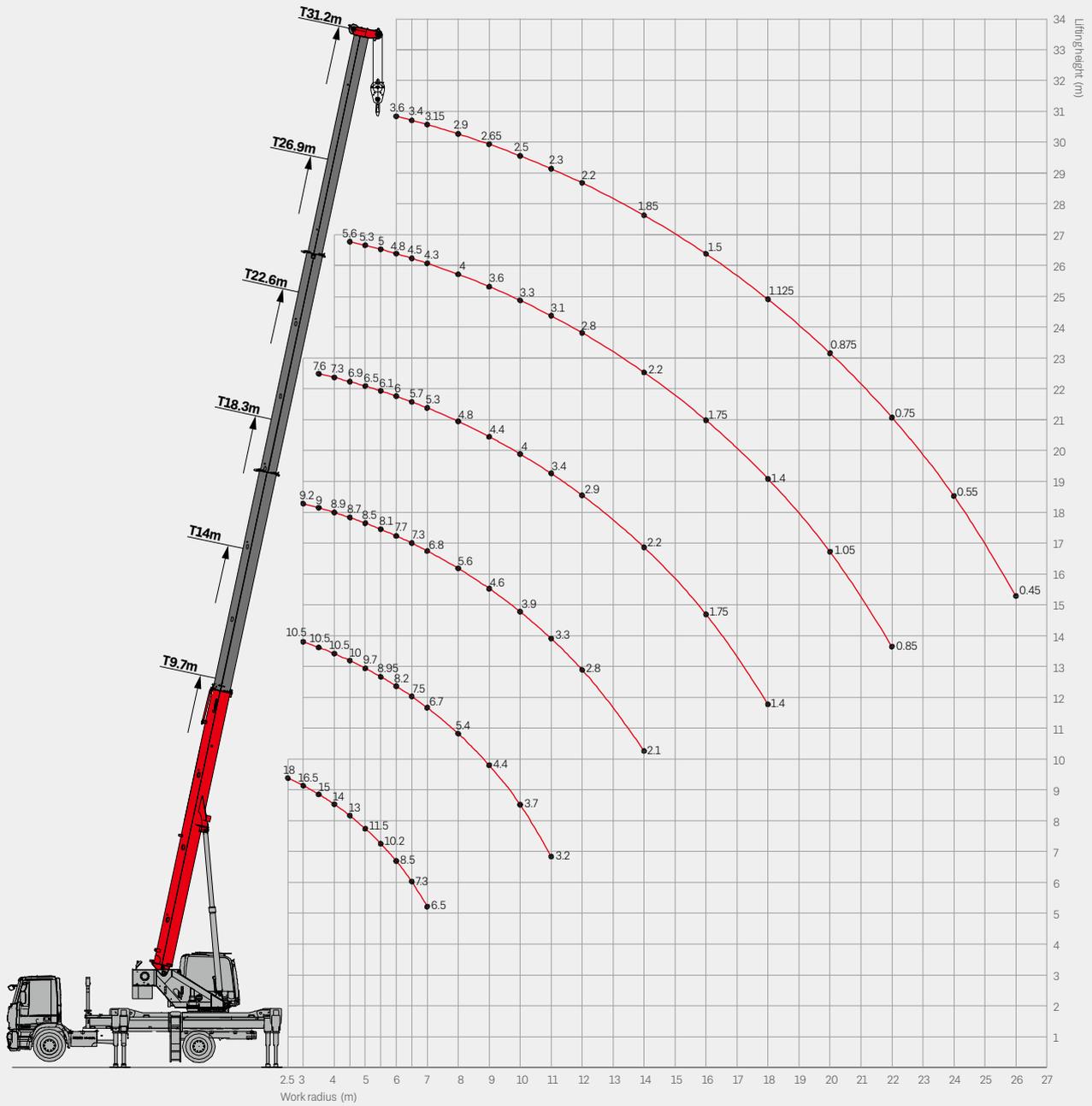
Safety equipment

- Hydraulic balance valve, relief valve, two-way pilot-controlled valve are equipped for hydraulic system reliability.
- Three-circle protector at main winch, preventing wire rope from overhoist down.
- Height limit switch at boom head, preventing wire rope from over-hoist 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

- Air conditioner in operator's cab.

Operating Range



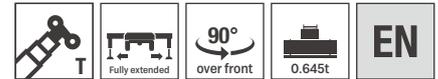
Load Chart-Telescopic Boom



Unit: kg

Radius (m)	9.7	14.0	18.3	22.6	26.9	31.2	Radius (m)
2.5	18000						2.5
3	16500	10500	9200				3
3.5	15000	10500	9000	7600			3.5
4	14000	10500	8900	7300			4
4.5	13000	10000	8700	6900	5600		4.5
5	11500	9700	8500	6500	5300		5
5.5	10200	8950	8100	6100	5000		5.5
6	8500	8200	7700	6000	4800	3600	6
6.5	7300	7500	7300	5700	4500	3400	6.5
7	6500	6700	6800	5300	4300	3150	7
8		5400	5600	4800	4000	2900	8
9		4400	4600	4400	3600	2650	9
10		3700	3900	4000	3300	2500	10
11		3200	3300	3400	3100	2300	11
12			2800	2900	2800	2200	12
14			2100	2200	2200	1850	14
16				1750	1750	1500	16
18				1400	1400	1125	18
20					1050	875	20
22					850	750	22
24						550	24
26						450	26
Telescoping status (%)							
2nd boom	0	20	40	60	80	100	2nd boom
3rd boom	0	20	40	60	80	100	3rd boom
4th boom	0	20	40	60	80	100	4th boom
Rope rate	8	6	4	4	3	3	Rope rate

Load Chart-Telescopic Boom



Unit: kg

Radius (m)	9.7	14.0	18.3	22.6	26.9	31.2	Radius (m)
3	12000	9500	8800				3
3.5	12000	9500	8600	7000			3.5
4	11000	9500	8400	7000			4
4.5	10200	9500	8200	6500	5300		4.5
5	8000	7800	8000	6100	5000		5
5.5	6200	6400	6500	5700	4700	3400	5.5
6	5000	5200	5400	5000	4400	3200	6
6.5	4200	4250	4600	4500	4200	3000	6.5
7	3400	3600	3900	3900	3600	2700	7
8		2600	2900	3000	2900	2200	8
9		2050	2300	2250	2300	1900	9
10		1600	1800	1850	1850	1650	10
11		1300	1400	1500	1500	1500	11
12			1100	1200	1200	1200	12
14			800	850	900	900	14
16				500	600	600	16
Telescoping status (%)							
2nd boom	0	20	40	60	80	100	2nd boom
3rd boom	0	20	40	60	80	100	3rd boom
4th boom	0	20	40	60	80	100	4th boom
Rope rate	8	6	4	4	3	3	Rope rate



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Reminder:

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