

SAC1100S

SANY All Terrain Crane
110 Ton Lifting Capacity



Max. Lifting Capacity: 110 t

Max. Boom Length: 63 m

Max. Lifting Height: 90.5 m

Efficient Power System

- The crane shares a single power engine, with the energy saving enhancement of more than 10%, and the maintenance cost decrease of more than 35%;
- The carrier power is transmitted mechanically to superstructure. The structure is simple, safe and reliable, with low fault rate;
- Single-engine power system is adopted for weight reduction of the superstructure power system and enhancement of the load-bearing components, increasing crane lifting performance by 20%.

Excellent lifting performance

- 7-section telescoping boom with single cylinder pin. The total boom length is 63m, and jib length is 27.5m include 15.5m folding jib (standard) and 2*6m extention jib;
- Maximum lifting height is 90.5m and maximum working radius is 70m, ensuring a wider working range;
- Maximum lifting torque of basic boom is 4145KN.m, featuring superior lifting and loading performance.

Mobile and flexible carrier

- The crane is 14.5m long and 2.8m wide, with strong adaptability to construction site;
- 5-axle all-wheel steering and 8.5m minimum turning radius, ensuring flexible movement of the crane;
- With a powerful carrier, the maximum travel speed is 85km/h, and the maximum gradient can reach up to 60%;
- When travelling in the state of 60T, it can carry counterweight or parts to up 7.1t. Full counterweights could be carried 19.2t for short-distance movement.



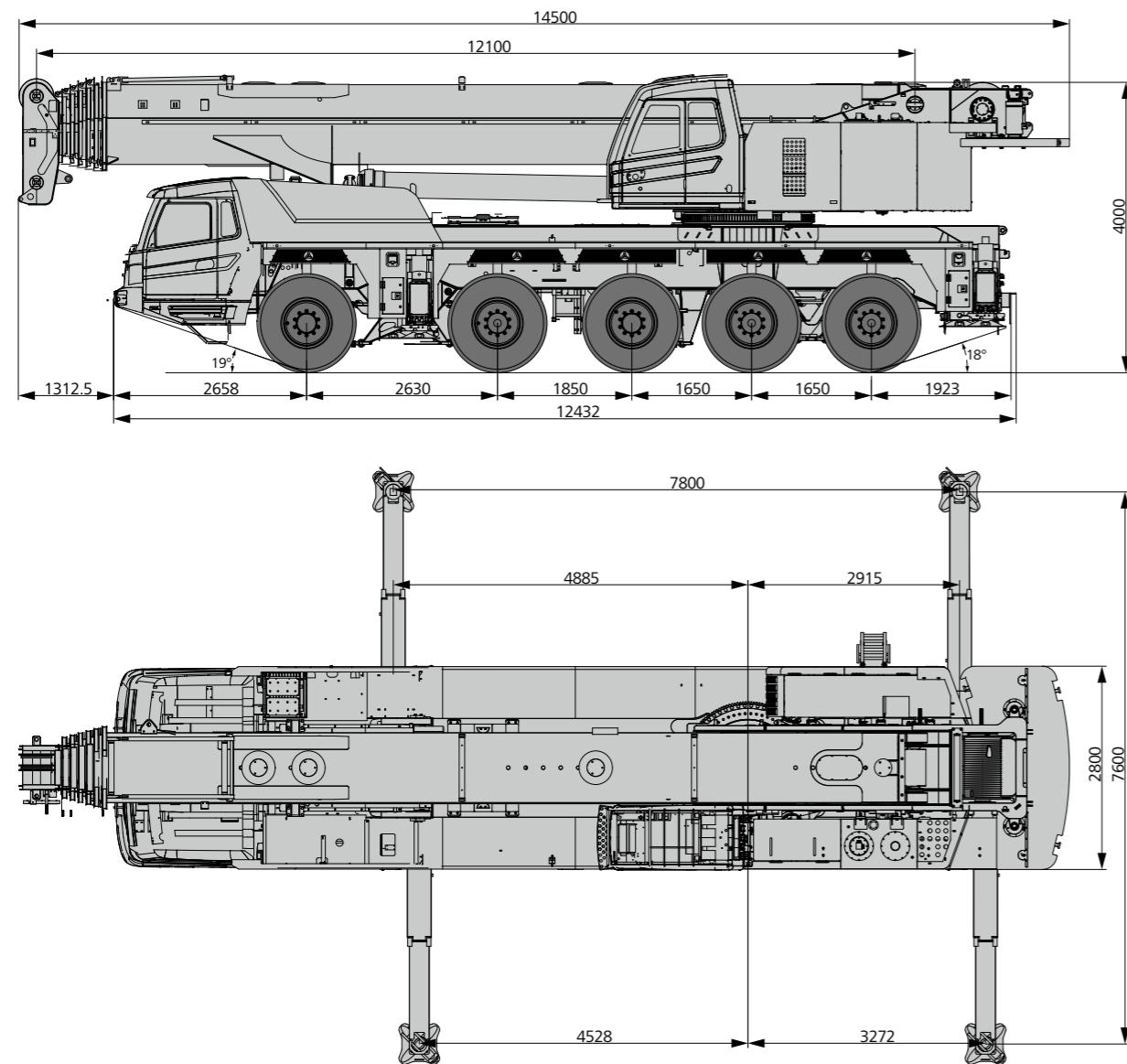
Safe control system

- Equipped with an anti-tipping warning system, advance warning is issued through sound and light notice to ensure the safety of crane;
- Equipped with a voice alarm system, voice notices are issued for various movement to prevent mis-operation and ensure safety of personnel and operation;
- High-accuracy, high-stability, high-intelligence load moment limiter system is adopted for full protection of lifting and loading operation;
- The abundant sensors give timely feedback of data information and realize real-time monitoring.

Energy-saving hydraulic system

- The application of electrically controlled variable displacement pump, displacement and speed grade control technology increase working efficiency by 15%, while saving energy by 20%;
- With dual pump converging / diverging intelligent speed regulation technology, the dual pump supplies oil independently for compound movements, which ensures the stability and reliability of the movements with better micro-mobility. The various diverging distribution mode makes work freer and easier;
- The dual protection of winching, luffing, telescoping on the hydraulic circuit makes operation safer and more reliable.

Overall Dimensions



Technical Parameters

Type	Item	Parameter	
Dimensions	Total length of crane	14500 mm	
	Total width of crane	2800 mm	
	Total height of crane	4000 mm	
Weight	Total weight of crane	54000 Kg	
	Axle load	Load of axle 1, axle 2, axle 3	
		32600 kg	
Power	Load of axle 4, axle 5	21400 kg	
	Max. engine power	360/1800 kw(r/min)	
	Max. engine output torque	2200/1300 N.m(r/min)	
Travel	Max.traveling speed	85 km/h	
	Turning radius	Min.turning radius	
		8.5 m	
		Min.turning radius of boom head	
	Drive/Steer	10 x 6 x 10	
	Min.ground clearance	285 mm	
	Approach angle	19 °	
	Departure angle	18 °	
	Max.gradeability	60%	
	Fuel consumption per 100km	≤ 70 L	
Performance specifications	Temperature range	- 20°C ~ + 40°C	
	Min.rated range	3 m	
	Tail slewing radius of swingtable	4.85 m	
	Boom section	7	
	Boom shape	U	
	Max. Lifting torque	Base boom	4145 kN·m
		Full-extend boom	1890 kN·m
		Full-extend boom+jib	1350 kN·m
	Boom length	Base boom	12.1 m
		Full-extend boom	63 m
		Full-extend boom+jib	90.5 m
	Outrigger span (LongitudinalxTransversal)	7.8 x 7.6 m	
	Jib offset	0°, 15°, 30°	
Working speed	Max.single rope lifting speed of main winch (no load)	130 m/min	
	Full extension/retraction time of boom	500/500 s	
	Full lifting/descending time of boom	60/150 s	
	Slewing speed	1.5 r/min	

Technical Parameters



Axle load

Item	1	2	3	4	5	Total weight
Axle load	12	12	12	12	12	60
Remarks	Including 2t fixed counterweight					



Hook

Lifting capacity (t)	Pulleys	Parts of line	Hook weight (kg)
100(optional)	5	11	1243
80	3	7	694
32(optional)	1	3	479
12.5	0	1	270



Gradient

Weight	Tire	Speed ratio of transfer gear	Ropes												Max. Gradient		
			1	2	3	4	5	6	7	8	9	10	11	12	R1	R2	
60t	385/95R25	0.8	5.9	7.6	9.9	12.7	16.1	20.7	27.3	35.1	45.2	58.1	73.7	94.6	6.5	8.3	40%
60t	385/95R25	1.83	2.6	3.3	4.3	5.6	7	9	11.9	15.3	19.7	25.3	32.1	41.2	2.8	3.6	> 60%
60t	445/95R25	0.8	6.3	8.2	10.5	13.5	17.1	22	28.9	37.2	48	61.6	78.1	99.8	6.8	8.8	38%
60t	445/95R25	1.83	2.7	3.5	4.5	5.8	7.5	9.6	12.6	16.2	20.9	26.9	34	43.7	3	3.8	> 60%

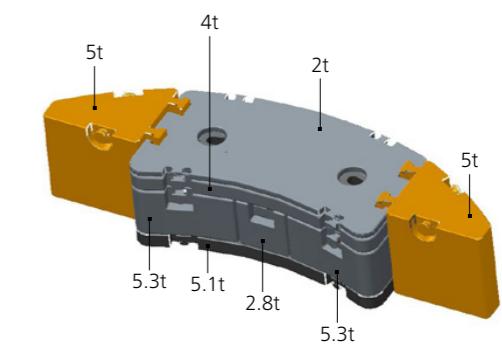
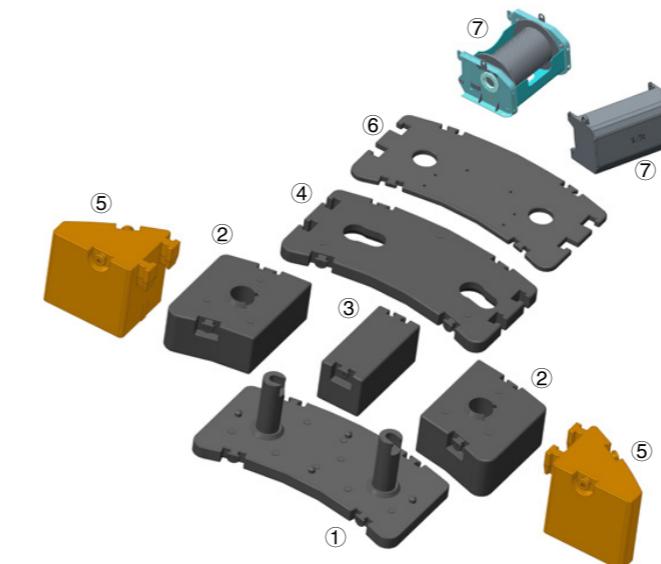


Main movement parameters

Item	Maximum speed	Diameter / Length	Max. single line pull.
Main winch	130 m/min	22 mm/280 m	105 kN
Auxiliary winch	130 m/min	22 mm/190 m	105 kN

Crane Introduction

No	Name	Manufacture
1	Engine	Benz
2	Transmission	ZF
3	Axle	KESSLER
4	Tire	Techking
5	Piston pump	Rexroth
6	Winch motor	Kawasaki
7	Transfer box	Kessler



Counterweight	Mass(t)	Counterweight Combination	Mass(t)	Note
Movable Counterweight 1	5.1	⑥ + ⑦	3.5t	The total mass ≤60t
Movable Counterweight 2	5.3	① + ⑥ + ⑦	8.6t	-
Movable Counterweight 3	2.8	① + ② *2+ ⑥ + ⑦	19.2t	Transition for short distance
Movable Counterweight 4	4	① + ② *2+ ③ + ⑥ + ⑦	22t	-
Movable Counterweight 5	5	① + ② *2+ ③ + ④ + ⑥ + ⑦	26t	-
Fixed Counterweight 6	2	① + ② *2+ ③ + ④ + ⑤ *2+ ⑥ + ⑦	36t	-
Moveable Counterweight 7	1.5			

Crane Introduction

Driving cab

- The whole frame is made of corrosion-resistant steel sheets. The design of instrument panel in the cab meets the principle of ergonomics, and the cab is equipped with full coverage softening interior, large arc integral front window, electronic analog meter, radio / player device, air conditioner etc.

Crane frame

- The crane frame is optimized with rectangular cross section, replacing the original concave cross section: 1. The resistance to bending and twisting is improved greatly. 2. Under the condition of the same flexural modulus, the weight of rectangular cross-section crane frame is smaller than the weight of concave cross-section crane frame. 3. The crane frame stability is improved.

Carrier engine

- Model: OM460LA.E3A/1 360kW Benz six-cylinder, water-cooled, supercharged intercooler, diesel engine.
- Rated power: 360kW/1800rpm
- Emission standard: EU Stage III A.
- Fuel reservoir capacity: 560L.

Crane axle

- Axle 1, single tire, steering axle;
- Axle 2, single tire, steering drive axle;
- Axle 3, single tire, steering axle;
- Axle 4, single tire, steering drive axle;
- Axle 5, single tire, steering drive axle.

Driving axle

- Steering drive axle: axle 2, axle 4 and axle 5.

Axle suspension

- All crane axle suspension devices are hydro-pneumatic suspension system.

Tire

- Super-level all-steel radial tire, featuring stronger bearing capacity and better wearing resistance. Tire model: 385/95R25.

Braking system

- The braking system includes service brake, parking brake, emergency brake and auxiliary brake;
- The service brake adopts the dual-circuit braking system. All wheels use the air servo brake, and are all installed with the disc brake;
- The parking brake is driven by the spring brake chamber and acts on axle 2 to axle 5;
- The emergency brake is driven by cutoff of the spring stored energy and concurrently serves as emergency brake;
- The auxiliary brake is composed of engine brake, exhaust brake and hydraulic retarder brake, guaranteeing the safety and reliability of traveling.

Steering system

- Six steering modes;
- Axle 1, and axle 2 adopts mechanical linkage hydraulic power steering, and the steering gear is dual-circuit servo power steering gear;
- Electro-hydraulic ratio control auxiliary steering is adopted for axle 3, axle 4 and axle 5.

Outrigger

- Made of high-strength steel sheet materials, front and rear telescoping outriggers are controlled through outrigger control panel with automatic leveling function and flexible operation;
- 4-point support, the transverse, longitudinal span is 7.8m×7.6m, with easy operation and strong stability.

Electrical equipment

- Independently researched and developed by Sany, SYMC, a special controller for engineering machinery is adopted;
- CAN bus all-digital network control technology is configured with abundant sensor parts, with stable control signal, simple wire harness and high reliability;
- With timely information feedback, the real-time monitoring on the crane working status is realized;
- Configured with the load moment limiter with a full-range intelligent protection system, its accuracy is within ±5%. And the operation is safer and more reliable with comprehensive logical, interlocking control;
- Increased the precast cable wiring of superstructure, the protection for the machine would be more stable and reliable.

Crane Introduction

Operating cab

- With the corrosion-resistant streamlined integral composite shell, it is configured with large arc integral front window, load moment limiter display, air conditioner, and the cab can tilt up to 20°on the whole to effectively relieve the fatigue;
- The adjustable back seat makes operation more comfortable;
- With a 10.4-inch large-screen TFT display, the working condition is clear at a glance;
- The console and the working condition display system are combined for convenient and efficient operation. Easy operation is achieved through electric control handle.

Boom system

- Boom: 12.1m-63m, 7 sections, made of high strength steel 960 sheets. The torque of Min. boom reaches 4145kN.m, and the torque of fully extended boom reaches 1890kN.m, with strong lifting capacity;
- The fully optimized U-shape large arc cross-section boom makes the boom carry weights more evenly, the boom of lighter weight improves safety significantly;
- The finite-element analysis is adopted for design of the boom to optimize the strength and rigidity of structural parts to the greatest extent in order to effectively improve the stress distribution and improve the safety;
- There are 6 kinds of jib length combinations, 9.4m, 15.4m, 15.5m, 21.4m, 1.5m, 27.5m, and the jib offset angle is 0°, 15°, 30°
- Telescoping mechanism: With advanced single cylinder pin telescoping technology, the boom length can be telescoped automatically according to the working condition, and the combination form of multiple boom lengths can be chosen. By simply inputting the lifting weight, working radius, working height, you can complete the lifting and loading operation prompted, which is convenient and efficient.

Lifting mechanism

- Standard hook: 12.5(ball hook), 80t dual hook; Optional: 32t, 100t dual hook.

Luffing mechanism

- With single luffing cylinder, the luffing mechanism uses the design software of three-connected joints to optimize the design of pin-connected points;
- The Max. luffing angle is 81°.

Swing mechanism

- Electric proportional pump control dual swing mechanism is adopted for stable movement, excellent speed control and low power consumption;
- Unique design of swing buffer makes braking more stable;
- High strength bolts are used to fix the carrier frame with outer ring and turntable with inner ring.

Swing bearing

- Manufactured by Sany Sauter, the swing bearing features strong bearing capacity.

Turntable structure

- The optimized turntable structure ensures enough rigidity and strength of the turntable.

Superstructure hydraulic system

- The main / auxiliary winch adopts electric proportional variable displacement motor, and the maximum speed is 130m/min;
- The winching, luffing, telescoping are set with dual protection on the hydraulic circuit, safer and more reliable;
- Sany patented dual pump converging intelligent speed control technology increases working efficiencies significantly;
- With dual pump converging / diverging intelligent speed regulation technology, the dual pump supplies oil independently for compound movements, which ensures the stability and reliability of the movements with better micro-mobility. The various diverging distribution mode makes work freer and easier.

Safety device

- With load moment limiter, electric proportional security key, height limiter, three-wrap protector, and combined modeling method of theoretical modeling and prototyping model correction, the modeling is closer to reality and the control is more accurate. The full-range protection of lifting and loading operation ensures accurate, smooth and comfortable operation. With abundant interface display, the display interface is customized, modified according to user needs.

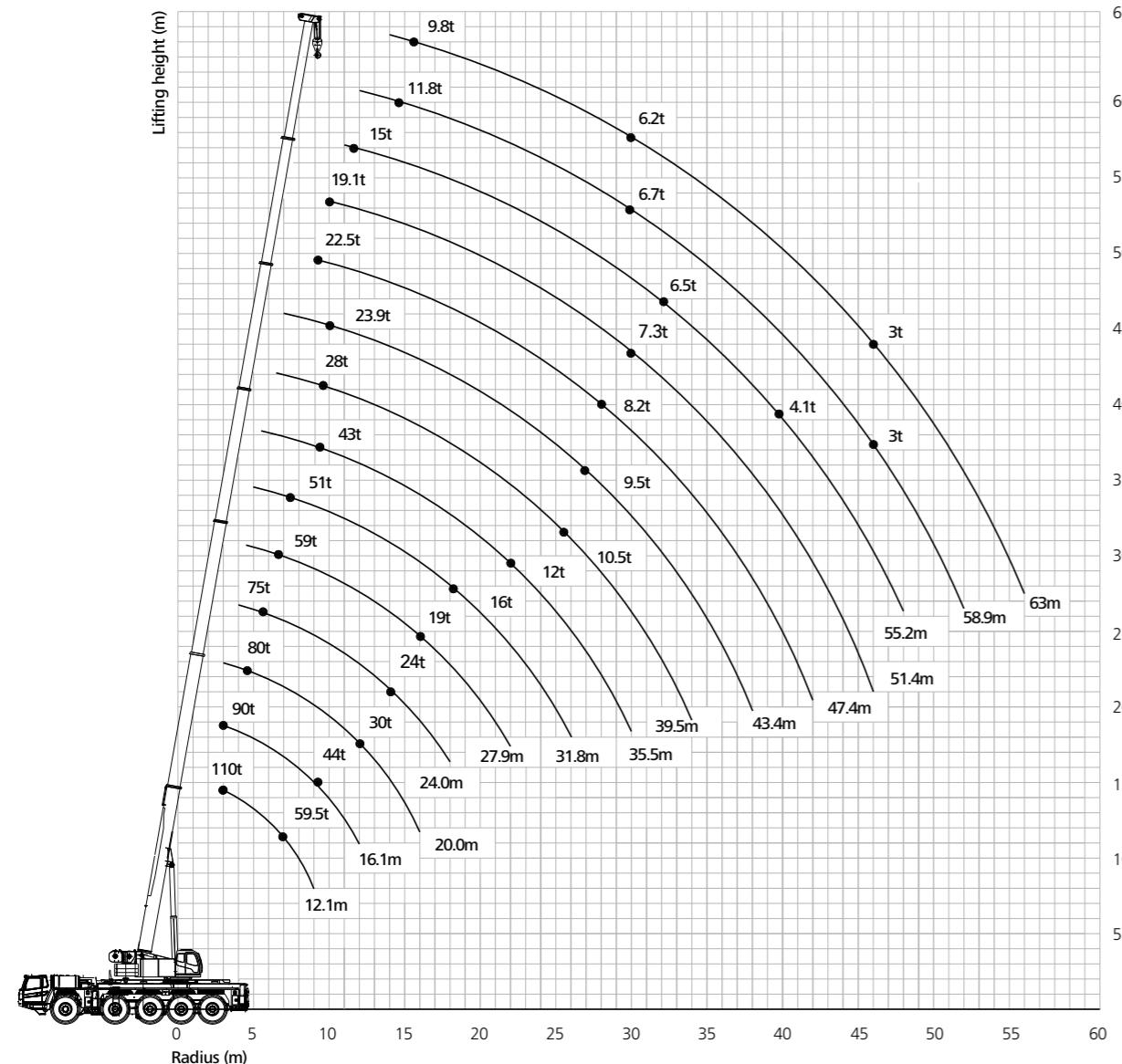
Counterweight

- With lifting-type counterweight structure and remote controllable technology, the completion of counterweight assembly work by one person can be realized to further save manpower and shorten the preparation time before operation;
- Counterweight combination: 3.5t, 8.6t, 19.2t, 22t, 26t, 36t.

Optional

- Tire: 445R95;
- Drive: 10X8, optional drive for axle1;
- Hook: 32t, 100t(dual hook)
- Jib: There are two extended jib for 12m, each one is 6m;
- Auxiliary winch;
- Benz engine OM460LA.E3B/3 (complying with EU Stage III B emission standard).

Boom Operating Range



Load Chart - Telescopic Boom

Unit: t

Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)
3	110	92	84												3
3.5	100	90	84												3.5
4	95	87	84	77											4
4.5	87	82	82	77	61										4.5
5	81	77	76	75	61	53									5
5.5	75.5	72	71	72	61	53	44								5.5
6	70.5	68	67	68	61	53	44								6
6.5	64.5	64	63	64	61	53	44	35.5							6.5
7	60	60	60	59	59	53	44	35	27						7
8	52	52	52	52	52	51	44	32	27						8
9	42	45	45	46	46	46	44	29.9	26	23					9
10	39.5	39.5	41	41	41	40	40	27.6	24.6	22	20.1				10
11	35	35	35	36	36	37	37	25.6	23.1	20.6	19.1				11
12	31	30.2	30.5	31	33	32	24	21.7	19.4	18.1	15.3				12
14		26	24	26	26	25.5	20.7	19.3	17.3	16.4	14	12			14
16		21	21.2	21.5	21	21	18.4	16.9	15.4	14.6	12.9	11.1	9.8		16
18			18.4	18.3	18	17.5	16.4	15.3	14	13.2	11.7	10.4	9.3		18
20				15.6	15.3	14.8	14.4	13.6	12.4	12	10.7	9.6	8.7		20
22					13.6	13.2	12.8	12.8	11.9	11.3	11.1	9.9	9	8.2	
24						11.6	11.5	11.4	10.8	10.2	10	9	8.4	7.7	
26							10.2	10.4	10	9.7	9.3	9.1	8.3	7.8	
28								9.3	8.8	8.6	8.2	8.3	7.6	7.2	
30								8.3	7.9	7.6	7.5	7.4	7	6.8	
32									7	6.7	6.6	6.5	6.6	6.4	5.8
34										6.3	6	6.1	6	5.9	5.4
36											5.4	5.6	5.6	5.5	5.1
38											4.8	5.3	5.2	5	4.8
40												4.8	4.8	4.7	4.5
42												4.3	4.5	4.3	4
44													4.2	3.9	3.5
46														3.8	3.5
48														3.1	2.7
50															2.4
52															2.1
54															1.8
56															1.5
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2	Rope rate

Load Chart - Telescopic Boom

Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)
3	110	92	84												3
3.5	98	90	84												3.5
4	95	87	84	77											4
4.5	87	82	82	77	61										4.5
5	80	77	76	75	61	53									5
5.5	73	72	71	72	61	53	44								5.5
6	66	66	65	67	61	53	44								6
6.5	60	61	60	62	61	53	44	35.5							6.5
7	55	56	56	56	57	53	44	35	27						7
8	47	48	49	48	49	50	44	32	27						8
9	40	40	40.5	41	42	42	43	29.9	26	23					9
10	35	35	34	36	37	36	27.6	24.6	22	20.1					10
11	31	31	29.4	32	31.5	31	25.6	23.1	20.6	19.1					11
12	27	27	27.1	28	27.5	27	24	21.7	19.4	18.1	15.3				12
14			21	22	22	21.5	21	20.3	19.3	17.3	16.4	14	12		14
16			17.5	18.1	18	17.7	17.3	16.9	16.5	15.4	14.6	12.9	11.1	9.8	16
18			15.2	15	14.7	15	14.6	14.3	13.9	13.2	11.7	10.4	9.3		18
20			12.8	12.4	12.7	12.3	12	12	11.8	10.7	9.6	8.7		20	
22			11	10.7	10.9	10.5	10.3	10.3	10.1	9.9	9	8.2			22
24			9.2	9.5	9.1	8.8	9.4	8.8	8.8	8.4	7.7		24		
26			8.1	8.3	7.9	7.6	8.2	8.1	7.9	7.8	7.2		26		
28			7.3	6.9	6.6	7.2	7.5	7.2	6.9	6.7		28			
30			6.5	6.1	5.8	6.3	6.6	6.3	6	6		30			
32					5.3	5.1	5.6	5.9	5.6	5.3	5.3		32		
34					4.7	4.4	4.9	5.2	4.9	4.6	4.6		34		
36					3.9	4.4	4.7	4.3	4.1	4.1	4.1		36		
38					3.3	3.9	4.2	3.8	3.5	3.5	3.5		38		
40						3.4	3.7	3.3	3	3	3		40		
42						3	3.3	2.9	2.5	2.5	2.5		42		
44						2.9	2.5	2.1	2.1	2.1	2.1		44		
46						2.5	2.1	1.8	1.8	1.8	1.8		46		
48							1.8	1.5	1.5	1.5	1.5		48		
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2	Rope rate

Load Chart - Telescopic Boom

Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)	
3	110	92	84												3	
3.5	98	90	84												3.5	
4	95	87	84	77											4	
4.5	86	82	82	77	61										4.5	
5	78	77	76	75	61	53									5	
5.5	70	69	70	70	61	53	44								5.5	
6	63	64	63	64	61	53	44								6	
6.5	57	58	57	58	59	53	44	35.5							6.5	
7	52	53	52	53	54	53	44	35	27						7	
8	44	45	44	45	46	47	44	32	27						8	
9	38	39	38	39	39.5	42	40	29.9	26	23					9	
10	35	35	33	36	36.5	35	27.6	24.6	22	20.1					10	
11	30	30	29.4	31	31	30	25.6	23.1	20.6	19.1					11	
12	25.7	26.2	27	27	26.6	26	24	21.7	19.4	18.1	15.3				12	
14		20.1	20.8	20.7	20.4	20.1	19.4	18.9	17.3	16.4	14	12			14	
16		16	16.7	16.6	16.2	16.7	16.3	16	15.3	14.6	12.9	11.1	9.8		16	
18			13.7	13.6	13.3	13.7	13.3	13	12.8	12.5	11.7	10.4	9.3		18	
20					11.4	11.1	11.5	11	10.8	11.3	10.4	10.7	9.6	8.7	20	
22						9.7	9.3	9.8	9.3	9	9.5	9.6	9.1	9	8.2	22
24						8	8.4	7.9	7.6	8.1	8.4	8.1	7.8	7.7		24
26						6.8	7.2	6.8	6.4	7	7.2	7	6.6	6.6		26
28							6.3	5.8	5.4	6	6.3	6	5.6	5.6		28
30							5.4	4.9	4.6	5.1	5.4	5.1	4.7	4.8		30
32								4.2	3.8	4.4	4.7	4.4	4	4.1		32
34								3.6	3.2	3.8	4	3.7	3.4	3.5		34
36									2.7	3.2	3.5	3.2	2.8	2.9		36
38									2.2	2.7	3	2.7	2.3	2.4		38
40										2.3	2.6	2.2	1.9	2		40</

Load Chart - Telescopic Boom

Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)			
3	110	92	84												3			
3.5	98	90	84												3.5			
4	93	87	84	77											4			
4.5	83	82	81	77	61										4.5			
5	74	73	74	73	61	53									5			
5.5	66.5	65	66	67	61	53	44								5.5			
6	60	58.5	59	60	57	53	44								6			
6.5	54.5	53	53	54	54	53	44	35.5							6.5			
7	49.5	48.5	48.5	49	49	50.5	44	35	27						7			
8	42	41	41	41	42	44	41	32	27						8			
9	33	35	35	34	36.5	36	35	29.9	26	23					9			
10		28.5	29.1	30	30	29.5	28.9	27.6	24.6	22	20.1				10			
11		23.7	24.3	25.2	25.1	24.7	24.4	23.6	23.1	20.6	19.1				11			
12		20.2	20.7	21.5	21.5	21.1	21.6	20.9	20.5	18.6	17.1	15.3			12			
14			15.6	16.4	16.3	15.9	16.5	16	15.7	15.6	15.2	14	12		14			
16			12.3	13	12.9	12.5	13	12.5	12.2	12.8	12.2	12.2	11.1	9.8	16			
18				10.5	10.4	10.1	10.5	10.1	9.8	10.4	10.6	10.4	10.4	9.3	18			
20					8.6	8.3	8.7	8.2	8	8.5	8.8	8.5	8.2	8.2	20			
22						7.2	6.8	7.3	6.8	6.5	7.1	7.3	7.1	6.7	22			
24							5.6	6.1	5.6	5.3	5.8	6.1	5.8	5.5	24			
26								4.7	5.1	4.6	4.3	4.8	5.1	4.8	4.5	26		
28									4.3	3.8	3.4	4	4.3	4	3.6	3.7	28	
30										3.6	3.1	2.7	3.3	3.6	3.3	2.9	3	30
32											2.5	2.1	2.7	3	2.7	2.3	2.4	32
34											2	1.6	2.2	2.4	2.1	1.8	1.9	34
36												1.2	1.7	2	1.7	1.3	1.4	36
38													1.3	1.6				38
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2			Rope rate	

Load Chart - Telescopic Boom

Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)			
3	110	92	84												3			
3.5	98	90	84												3.5			
4	86	85	80	77											4			
4.5	75	76	74	71	61										4.5			
5	66	68	67	65	57	53									5			
5.5	59	60	60	58	54	53	44								5.5			
6	54.2	53.9	54	52.6	51	53	42								6			
6.5	49.2	48	48	45.8	48.5	53	39	35.5							6.5			
7	43.3	42.3	42.3	39.1	46	46	37	35	27						7			
8	32.1	33.8	34.4	32.9	35.8	35.8	33	30	27						8			
9	25.2	27	27.6	28.2	28.7	28.2	27.4	25.8	24.4	23					9			
10		21.7	22.3	23.2	23.2	22.8	22.5	21.7	21.1	20.8	20.1				10			
11		17.9	18.4	19.3	19.3	18.9	19.2	18.4	17.4	18.1	16.8				11			
12		15.1	15.6	16.4	16.4	16	16.5	15.9	15.6	15.6	14.6	14.6			12			
14			11.5	12.3	12.2	11.8	12.4	11.9	11.6	12	11.9	11.5	11.1		14			
16				8.9	9.5	9.5	9.1	9.6	9.1	8.8	9.4	9.5	9.2	8.8	8.5	16		
18					7.6	7.5	7.1	7.6	7.1	6.8	7.4	7.7	7.4	7.1	6.9	18		
20						5.9	5.5	6	5.5	5.2	5.8	6.1	5.8	5.4	5.4	20		
22							4.8	4.4	4.9	4.4	4	4.6	4.9	4.6	4.2	4.3	22	
24								3.3	3.9	3.2	2.9	3.5	3.9	3.5	3	2.9	24	
26									2.5	3.1	2.5	2.2	2.7	3	2.7	2.4	26	
28										2.4	1.8	1.4	2	2.3	2	1.6	1.6	28
30											1.8	1.2	1.5	1.7			30	
Rope rate	12	11	10	9	7	6	5	4	3	3	3	3	2	2	Rope rate			

Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)
3	110	92	84												3
3.5	98	90	84												

Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)
3	110	92	84												3
3.5	100	90	84												3.5
4	95	87	84	77											4
4.5	87	82	82	77	61										4.5
5	81	77	76	75	61	53									5
5.5	75.5	72	71	72	61	53	44								5.5
6	66	65	65	66	61	53	44								6
6.5	61	60	60	61	61	53	44	35.5							6.5
7	50	49	49	49.5	50	51	44	35	27						7
8	40	41	41	39	42	42	41	32	27						8
9	33	34	34	34	35	35	34	29.9	26	23					9
10		29	29	30	30	29	29	27.6	24.6	22	20.1				10
11		25	25	26	26	25	25	24	23.1	20.6	19.1				11
12		21.5	22	23	22.5	22	22	21	21	19.4	18.1	15.3			12
14			17.6	18.2	18	17.8	18.2	17.7	17.5	17	16.4	14	12		14
16			14.3	14.9	14.8	14.5	14.8	14.4	14.1	14.1	14.4	12.9	11.1	9.8	16
18				12.5	12.3	12	12.3	11.9	11.7	12.3	11.5	11.7	10.4	9.3	18
20					10.5	10.2	10.4	10	9.8	10.4	10.4	9.9	9.6	8.7	20
22						9	8.7	8.9	8.5	8.3	8.8	9.2	8.9	8.6	22
24							7.5	7.7	7.3	7.1	7.6	7.9	7.6	7.4	24
26							6.5	6.7	6.3	6	6.6	6.9	6.6	6.3	26
28								5.9	5.5	5.2	5.7	6	5.7	5.5	28
30								5.2	4.7	4.5	5	5.3	5	4.7	30
32									4.1	3.8	4.4	4.7	4.4	4.1	32
34									3.6	3.2	3.8	4.1	3.8	3.5	34
36										2.7	3.3	3.6	3.3	2.9	36
38										2.2	2.8	3.1	2.8	2.5	38
40											2.4	2.7	2.3	2	40
42											2	2.3	2	1.6	42
44												2	1.6	1.3	44
46												1.7	1.3	1	46
48													1		48
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2	Rope rate

Load Chart - Telescopic Boom

Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)	
3	110	92	84												3	
3.5	98	90	84												3.5	
4	95	87	84	77											4	
4.5	87	82	82	77	61										4.5	
5	75	76	76	75	61	53									5	
5.5	70	69	69	70	61	53	44								5.5	
6	54	52	52	53	54	53	44								6	
6.5	50	49	49	50	51	52	44	35.5							6.5	
7	40	41.5	42	41	45.5	43	42	35	27						7	
8	32	33	33	34	34	34	33	32	27						8	
9	26	27	27	28	28	28	27.4	27	26	23					9	
10		23	23	24	24	23	24	23.5	22.9	22	20.1				10	
11		19.8	20	21	20	20	20	20	20	19.7	19.1				11	
12		17.2	19.1	18.3	18.2	17.9	18.2	17.8	17.5	17.5	17.3	15.3			12	
14			13.7	14.4	14.3	14	14.3	13.9	13.6	14.3	13.5	13.6	12		14	
16				11	11.7	11.5	11.2	11.5	11.1	10.9	11.5	11.9	11.5	11.1	9.8	16
18					9.6	9.5	9.2	9.5	9.1	8.8	9.4	9.8	9.5	9.2	9.2	18
20						7.9	7.6	7.9	7.5	7.3	7.8	8.2	7.9	7.6	7.6	20
22						6.7	6.4	6.7	6.3	6	6.6	6.9	6.6	6.3	6.3	22
24							5.4	5.7	5.2	5	5.6	5.9	5.6	5.3	5.3	24
26							4.6	4.8	4.4	4.2	4.7	5	4.7	4.5	4.5	26
28								4.2	3.7	3.4	4	4.3	4	3.7	3.7	28
30								3.6	3	2.7	3.3	3.7	3.3	3	3	30
32									2.5	2.1	2.7	3.1	2.7	2.4	2.4	32
34									2	1.6	2.2	2.6	2.2	1.9	1.9	34
36										1.2	1.8	2.2	1.8	1.5	1.5	36
38										0.8	1.4	1.8	1.4	1.1	1.1	38
40											1.1	1.4	1			40
42											0.8	1.1				42
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2	Rope rate	

Load Chart - Telescopic Boom

Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)				
3	110	92	84												3				
3.5	98	90	84												3.5				
4	95	87	84	77											4				
4.5	86	82	82	77	61										4.5				
5	73	72	72	72	61	53									5				
5.5	59	58	58	59	60	53	44								5.5				
6	49	51	50	49	51	52	44								6				
6.5	42	44	45	43	46	45	44	35.5							6.5				
7	36	38	39	40	40	39.5	39	35	27						7				
8	28.9	30	31	31	31.5	31	30	27							8				
9	23.4	24.8	25.4	26.2	26.1	25.8	26.4	25.1	24.7	23					9				
10		20.8	21.2	22	22	21.6	22.2	21.7	21.4	21	20.1				10				
11		17.7	18.1	18.9	18.8	18.5	19	18.5	18.2	18.3	17.7				11				
12		15.2	15.7	16.4	16.3	16	16.5	16	15.7	16.3	15.3	15.3			12				
14			12.1	12.7	12.3	12.8	12.4	12.1	12.6	12.9	12.6	12			14				
16				9.6	10.2	10.1	9.8	10.3	9.8	9.5	10.1	10.3	10.1	9.8	9.3	16			
18					8.3	8.2	7.9	8.4	7.9	7.6	8.2	8.4	8.2	7.9	7.9	18			
20						6.8	6.4	6.9	6.4	6.1	6.7	6.9	6.7	6.3	6.3	20			
22							5.6	5.2	5.7	5.2	4.9	5.4	5.7	5.4	5.1	22			
24								4.2	4.7	4.2	3.9	4.4	4.7	4.4	4.1	24			
26									3.5	3.9	3.4	3.1	3.6	3.9	3.6	26			
28										3.2	2.7	2.4	2.9	3.2	2.9	2.6	28		
30											2.6	2.1	1.8	2.3	2.6	2.3	2	30	
32												1.6	1.3	1.8	2.1	1.8	1.5	1.5	32
34													1.2		1.4	1.6	1.3	1	34
36															1	1.2			36
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2	2	Rope rate			

Load Chart - Telescopic Boom

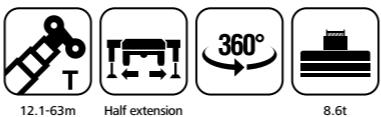
Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)						
3	110	92	84												3						
3.5	98	90	84												3.5						
4	93	87	84	77											4						
4.5	74	73	73	74	61										4.5						
5	57	57	56	57	58	53									5						
5.5	46	48	49	47	50	50	44								5.5						
6	38	40	41	42	42	41	41								6						
6.5	32	34	35	36	36	35.5	35.5	34							6.5						
7	28.4	30	30	31	31.5	31	31	30	27						7						
8	21.9	23.5	24.1	25	24.9	24.5	25.2	24.6	24.2						8						
9	17.5	19	19.5	20.3	20.3	19.9	20.5	20	19.6	20.3					9						
10		15.7	16.2	17	16.9	16.6	17.1	16.6	16.3	16.9	16.4				10						
11		13.2	13.7	14.4	14.4	14	14.6	14.1	13.8	14.4	14.6				11						
12		11.3	11.7	12.4	12.3	12	12.5	12	11.8	12.3	12.6	12.4			12						
14						8.8	9.5	9.4	9.1	9.5	9.1	8.8	9.4	9.6	9.4	9		14			
16							6.7	7.4	7.3	7	7.5	7	6.7	7.3	7.5	7.3	6.9	7	16		
18								5.9	5.7	5.4	5.9	5.4	5.1	5.6	5.9	5.7	5.3	5.3	18		
20									4.5	4.1	4.6	4.1	3.8	4.4	4.7	4.4	4	4.1	20		
22										3.6	3.2	3.6	3.1	2.8	3.4	3.7	3.4	3	3.1	22	
24											2.4	2.8	2.3	2	2.6	2.9	2.6	2.2	2.2	24	
26												1.8	2.2	1.7	1.4	1.9	2.2	1.9	1.6	26	
28													1.6	1.1		1.3	1.6	1.3	1	1	28
30														1.2			1.1			30	
Rope rate	12	11	10	9	7	6	5	4	3	3	2	2	2	2	2	2	2	2	Rope rate		

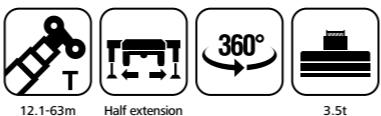
Load Chart - Telescopic Boom

Unit: t

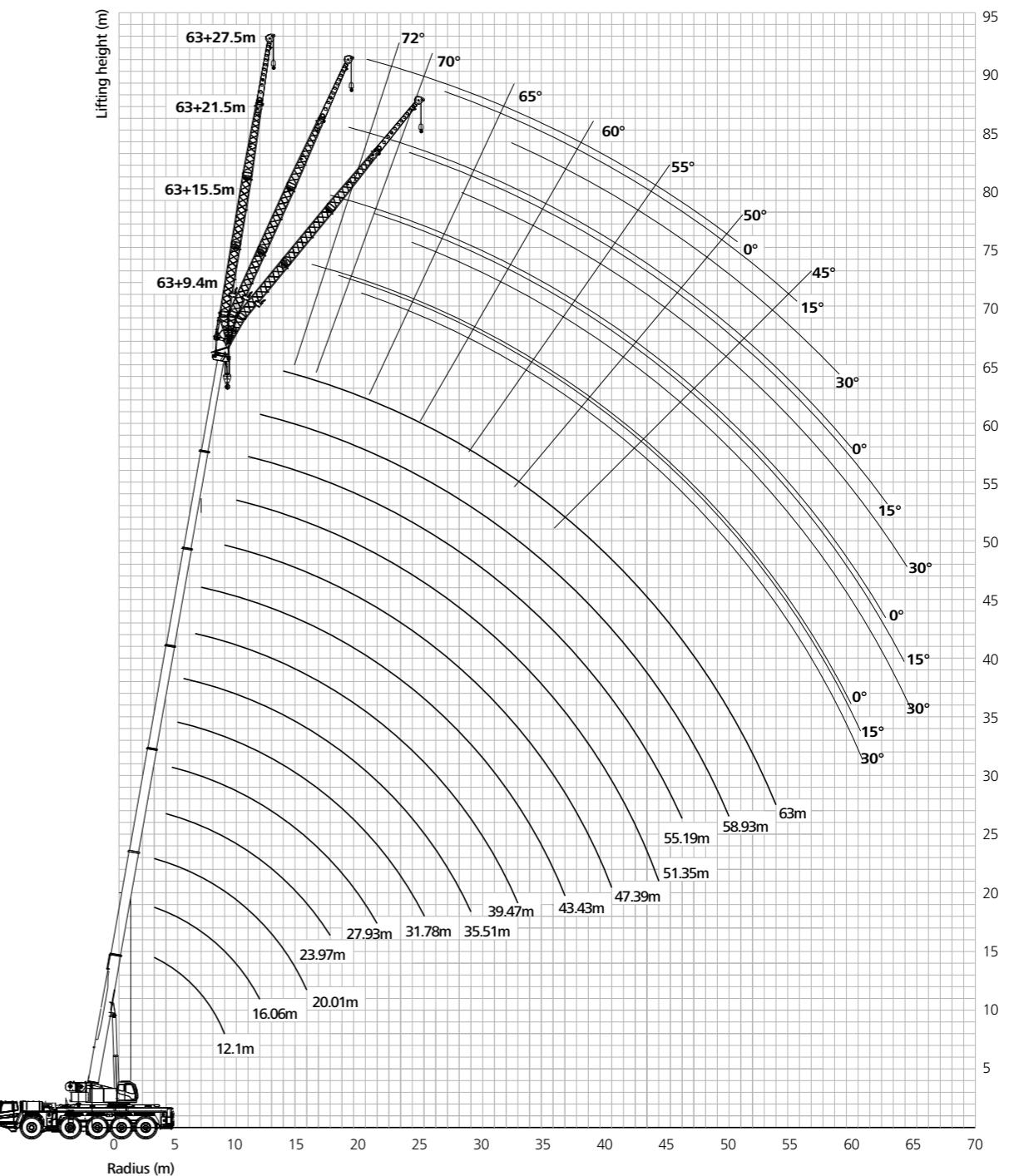


Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)
3	110	92	84												3
3.5	98	90	84												3.5
4	77.4	74.7	74.1	73.7											4
4.5	55.9	56	56.7	55.1	56										4.5
5	43	44.7	45.3	44.9	45.6	45.6									5
5.5	34.5	36.5	37.5	37.9	38.5	38.1	36.4								5.5
6	28.4	30.4	31.2	32.1	32.1	31.6	31.3								6
6.5	23.9	25.8	26.4	27.5	27.5	27	27.1	26							6.5
7	20.6	21	22.7	23.7	23.8	23.4	23.9	23	21.4						7
8	15.5	17.1	17.7	18.6	18.5	18.1	18.8	18.2	17.8						8
9	12.2	13.6	14.1	14.9	14.9	14.5	15.1	14.6	14.2	14.9					9
10		11.1	11.6	12.4	12.3	11.9	12.5	12	11.7	12.3	12.4				10
11		9.1	9.6	10.3	10.3	9.9	10.5	10	9.7	10.3	10.5				11
12		7.6	8	8.7	8.6	8.3	8.8	8.3	8.1	8.6	8.9	8.7			12
14			5.6	6.4	6.3	5.9	6.5	5.9	5.6	6.2	6.6	6.3	5.7		14
16				4	4.7	4.6	4.2	4.7	4.2	3.9	4.5	4.8	4.5	4	16
18					3.3	3.3	2.7	3.3	3	2.4	3.1	3.5	3.2	2.7	18
20						2.4	1.8	2.4	2	1.5	2.1	2.3	2.1	1.6	20
22							1.6		1.6		1.3	1.6	1.4		22
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2	Rope rate

Unit: t



Radius (m)	12.1	16.1	20	24	27.9	31.8	35.5	39.5	43.4	47.4	51.3	55	58.9	63	Radius (m)
3	110	92	84												3
3.5	98	90	84												3.5
4	74	72	72	73											4
4.5	52	55	56	51	55										4.5
5	40	42	43	44	44	44									5
5.5	32	34	35	36	36	35.5	36								5.5
6	26.4	28.4	29.1	30	30	29.6	30								6
6.5	22.2	24	24.6	25.7	25.7	25.2	25.9	25.2							6.5
7	18.9	20	21.2	22.2	22.2	21.8	22.4	21.8	20.4						7
8	14.2	15.8	16.4	17.3	17.2	16.8	17.5	16.8	16.5						8
9	11.1	12.5	13	13.8	13.8	13.4	14	13.5	13.1	13.8					9
10		10.1	10.6	11.4	11.3	10.9	11.5	11	10.7	11.3	11.6				10
11		8.3	8.7	9.5	9.4	9.1	9.6	9.1	8.8	9.4	9.7				11
12		6.8	7.2	8	7.9	7.6	8.1	7.6	7.3	7.9	8.2	7.9			12
14			5	5.8	5.7	5.3	5.9	5.3	5	5.6	6	5.7	5.3		14
16			3.5	4.2	4.1	3.7	4.2	3.7	3.4	4	4.3	4	3.6	3.7	16
18				3	2.9	2.5	3	2.5	2.2	2.8	3.1	2.8	2.4	2.4	18
20					2	1.6	2.1	1.6	1.3	1.8	2.1	1.9	1.5	1.5	20
22						1.3	1.4			1.1	1.4	1.1			22
Rope rate	12	11	10	9	7	6	5	4	3	3	3	2	2	2	Rope rate

Jib Operating Range

Load Chart - Fixed Jib

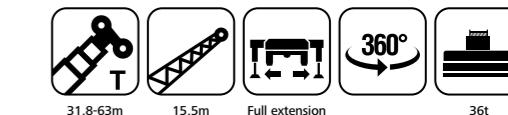
Unit: t



Radius (m)	47.4			51.3			55.2			58.9			63.0			Radius (m)	
	0°	15°	30°	0°	15°	30°	0°	15°	30°	0°	15°	30°	0°	15°	30°		
10	3.8															10	
11	3.8			3.4			3.1									11	
12	3.8			3.4			3.1			3						12	
14	3.7			3.4			3.1			3			2.6			14	
16	3.7	3.4		3.4	3.3		3.1			3			2.6			16	
18	3.7	3.4		3.4	3.3		3.1	2.9		3	2.9		2.6	2.5		18	
20	3.6	3.4	3.1	3.4	3.3		3.1	2.9		3	2.9		2.6	2.5		20	
22	3.5	3.4	3.1	3.4	3.3	2.9	3	2.9	2.7	3	2.9	2.7	2.6	2.5		22	
24	3.5	3.2	3.1	3.3	3.2	2.9	3	2.9	2.7	3	2.9	2.7	2.6	2.5	2.4	24	
26	3.4	3.1	3	3.3	3.1	2.9	3	2.9	2.7	3	2.9	2.7	2.6	2.5	2.4	26	
28	3.2	3	2.9	3.2	3	2.8	2.9	2.8	2.7	3	2.9	2.7	2.6	2.5	2.4	28	
30	3.1	2.9	2.8	3.1	2.9	2.8	2.9	2.7	2.6	2.9	2.8	2.6	2.6	2.5	2.4	30	
32	3	2.8	2.7	3	2.8	2.7	2.8	2.6	2.5	2.9	2.7	2.6	2.6	2.5	2.4	32	
34	2.9	2.7	2.6	2.9	2.7	2.6	2.7	2.5	2.5	2.8	2.6	2.5	2.5	2.4	2.4	34	
36	2.8	2.6	2.5	2.8	2.6	2.5	2.6	2.5	2.4	2.7	2.6	2.5	2.5	2.4	2.3	36	
38	2.7	2.5	2.5	2.7	2.5	2.5	2.4	2.3	2.3	2.6	2.5	2.4	2.4	2.3	2.3	38	
40	2.6	2.4	2.4	2.6	2.4	2.4	2.5	2.3	2.3	2.6	2.4	2.4	2.4	2.3	2.2	40	
42	2.5	2.4	2.3	2.5	2.4	2.3	2.4	2.3	2.2	2.5	2.3	2.3	2.3	2.2	2.2	42	
44	2.4	2.3	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.4	2.3	2.3	2.3	2.2	2.1	44	
46	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.3	2.2	2.2	2.1	2.1	2.1	46		
48	1.9	2.2	2.2	1.9	2.1	2.1	2.1	2.1	2.2	2.2	2.2	1.9	2	2	48		
50	1.7	1.9	2	1.7	1.9	1.9	2	2	2	2.1	2.1	1.8	1.8	1.9	50		
52	1.6	1.8	1.8	1.5	1.7	1.7	1.7	1.9	1.9	1.8	2	2.1	1.6	1.7	1.7	52	
54	1.4	1.6	1.6	1.4	1.5	1.5	1.6	1.7	1.8	1.6	1.8	1.9	1.4	1.5	1.6	54	
56	1.2	1.4	1.4	1.2	1.3	1.3	1.4	1.5	1.6	1.4	1.6	1.7	1.2	1.4	1.5	56	
58	1	1.2	1.3	1	1.1	1.2	1.1	1.3	1.4	1.2	1.4	1.5	1.1	1.2	1.3	58	
60	0.9	1	1.1	0.8	1	1	0.9	1.2	1.2	1	1.2	1.3	0.9	1	1.2	60	
62	0.7	0.8	0.9	0.6	0.8	0.9	0.7	0.9	1	0.8	1	1.2	0.7	0.9	1	62	
64	0.5	0.6	0.6		0.6	0.7	0.5	0.7	0.8	0.6	0.8	1	0.5	0.7	0.9	64	
66							0.5	0.6		0.6	0.7		0.5	0.7	66		
68										0.5			0.5		68		
70													70				
Rope rate	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Rope rate	

Load Chart - Fixed Jib

Unit: t



Radius (m)	31.8			35.5			39.5			43.4			47.4			Radius (m)		
	0°	15°	30°	0°	15°	30°	0°	15°	30°	0°	15°	30°	0°	15°	30°			
6	5.8															6		
6.5	5.7															6.5		
7	5.6						5.3									7		
8	5.5						5.3						5.1			8		
9	5.4						5.2						5			9		
10	5.2	4.2					5						4.9			10		
11	5	4.2					4.8	4					4.8			11		
12	4.8	4					4.6	3.9					4.6			12		
14	4.6	3.9	3.5	4.4	3.8	3.7	3.3	4.3	3.7	3.8	3.4	4.5	3.9	4.2	3.8	14		
16	4.4	3.8	3.4	4.3	3.7	3.6	3.3	4.2	3.7	3.8	3.4	4.1	3.7	3.3	4.4	3.8	3.3	
18	4.2	3.7	3.3	4.1	3.6	3.5	3.3	4.2	3.7	3.8	3.4	4.1	3.7	3.3	4.2	3.7	3.3	
20	4	3.6	3.3	4	3.5	3.2	3.7	3.5	3.2	3.6	3.3	3.9	3.5	3.2	4.1	3.6	3.2	
22	3.9	3.5	3.2	3.8	3.5	3.2	3.9	3.5	3.2	3.8	3.5	3.2	3.8	3.5	3.2	4	3.6	3.2
24	3.8	3.4	3.2	3.7	3.4	3.2	3.8	3.4	3.2	3.7	3.4	3.2	3.7	3.4	3.2	3.9	3.5	3.2
26	3.6	3.4	3.2	3.6	3.3	3.2	3.7	3.3	3.2	3.6	3.4	3.2	3.7	3.3	3.2			

Load Chart - Fixed Jib

Unit: t



Radius (m)	51.3			55.2			58.9			63.0			Radius (m)
	0°	15°	30°	0°	15°	30°	0°	15°	30°	0°	15°	30°	
6													6
6.5													6.5
7													7
8													8
9													9
10	3.9			3.9									10
11	3.8			3.8			3.9						11
12	3.8			3.8			3.8			3.5			12
14	3.8	3.7		3.7	3.5		3.8			3.5			14
16	3.7	3.6		3.7	3.4		3.7	3.5		3.4	3.2		16
18	3.6	3.6	3.2	3.6	3.4	3.1	3.7	3.4	3.2	3.4	3.2		18
20	3.6	3.5	3.2	3.6	3.3	3.1	3.6	3.4	3.1	3.4	3.2	3.1	20
22	3.5	3.5	3.2	3.5	3.3	3.1	3.6	3.4	3.1	3.4	3.2	3.1	22
24	3.5	3.4	3.2	3.5	3.3	3.1	3.5	3.3	3.1	3.3	3.1	3.1	24
26	3.4	3.3	3.1	3.4	3.2	3.1	3.5	3.3	3.1	3.3	3.1	3.1	26
28	3.4	3.3	3.1	3.4	3.2	3.1	3.4	3.2	3.1	3.2	3.1	3.1	28
30	3.3	3.3	3.1	3.3	3.2	3.1	3.4	3.2	3.1	3.2	3.1	3.1	30
32	3.3	3.2	3.1	3.3	3.1	3.1	3.3	3.2	3.1	3.2	3.1	3.1	32
34	3.3	3.2	3.1	3.3	3.1	3.1	3.3	3.2	3.1	3.1	3	3.1	34
36	3.2	3.2	3.1	3.2	3.1	3.1	3.3	3.1	3.1	3.1	3	3.1	36
38	3.1	3.2	3.1	3.1	3	3	3.2	3.1	3.1	3	3	3	38
40	3	3.1	3.1	3	2.9	2.9	3.1	3.1	3.1	3	2.9	3	40
42	2.8	3.1	3.1	2.8	2.8	2.7	3	3	3.1	2.8	2.8	2.9	42
44	2.7	2.8	2.8	2.6	2.6	2.6	2.9	2.9	2.9	2.6	2.6	2.7	44
46	2.5	2.5	2.6	2.4	2.4	2.4	2.6	2.7	2.8	2.4	2.4	2.4	46
48	2.2	2.3	2.3	2.1	2.2	2.2	2.4	2.5	2.6	2.2	2.2	2.3	48
50	2	2	2.1	1.9	2	2	2.1	2.3	2.4	2	2.1	2.1	50
52	1.7	1.8	1.9	1.7	1.8	1.8	2	2	2.1	1.7	1.9	1.9	52
54	1.4	1.6	1.7	1.5	1.6	1.6	1.7	1.9	1.9	1.6	1.6	1.8	54
56	1.2	1.3	1.4	1.2	1.4	1.4	1.4	1.6	1.7	1.3	1.5	1.5	56
58	0.9	1.1	1.1	1	1.2	1.2	1.1	1.3	1.5	1.1	1.3	1.4	58
60	0.7	0.8	0.8	0.8	0.9	1	0.9	1.1	1.2	0.8	1	1.2	60
62	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.9	0.6	0.8	0.9	62
64						0.5	0.5	0.6	0.7		0.6	0.7	64
66									0.5			0.4	66
68													68
Rope rate	1	1	1	1	1	1	1	1	1	1	1	1	Rope rate



SANY GROUP CRANE BU

SANY Mobile Crane Industrial Park, No.168 Jinzhou Avenue, Jinzhou Development Zone, Changsha City,
Hunan Province, P.R. China Zip 410600
Consulting sanycrane@sanygroup.com (Crane BU) / crd@sany.com.cn (IHQ)
After-sales Service 0086-400 6098 318

Reminder:

Any change in the technical parameters and configuration due to product modification or upgrade may occur without prior notice. The machine in the picture may include additional equipment. This brochure is for reference only, and goods in kind shall prevail.

Copyright at SANY. No part of this brochure may be copied or used for any purpose without written approval from SANY.

© Edited in April 2021

