QUALITY CHANGES THE WORLD

PRODUCT
SPECIFICATIONS

SANY®

STC1100S

SANY TRUCK CRANE
110T LIFTING CAPACITY

Max. Lifting Capacity: 110t
Max. Boom Length: 59m
Max. Lifting Moment: 2156 kN·m

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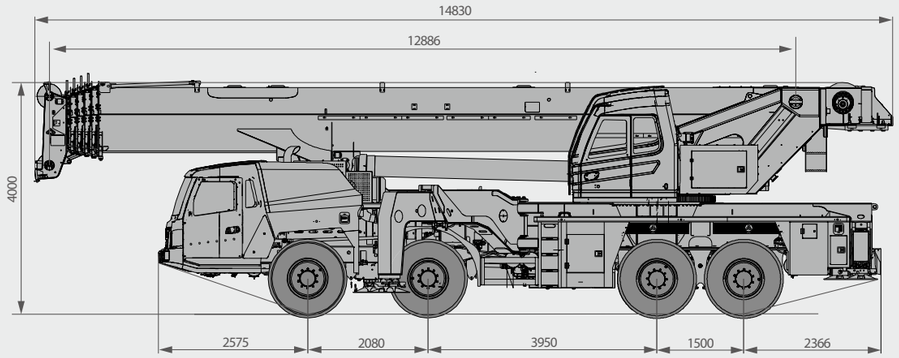
SANY TRUCK CRANE
STC1100S / 110T LIFTING CAPACITY

All-wheel steering truck crane capable of traveling with 15t CW.

Overall Dimensions



Technical Specification

CATEGORY	ITEM		UNIT	VALUE
CAPACITY	Max. lifting capacity		t	110
WEIGHT	Gross weight		kg	47000
POWER	Engine model (Emission standard)		-	WEICHAI WP9H350E6 (BS4)
	Max. engine power		kW/rpm	257/1900
	Max. engine torque		N·m/rpm	1700/(1100~1400)
DIMENSIONS	Overall length		mm	14830
	Overall width		mm	2800
	Overall height		mm	4000
	Axle base	Axle 1&2	mm	2080
		Axle 2&3	mm	3925
		Axle 3&4	mm	1500
TRAVEL	Max.travel speed		km/h	50
	Min.steering radius		m	10.5
	Min.ground clearance		mm	305
	Approach angle		°	21
	Departure angle		°	19
	Max.gradeability		%	40%
	Fuel consumption per 100km		L	≤50
MAIN PERFORMANCE	Min.rated lifting radius		m	2.5
	Boom sections (Qty.)		-	6
	Boom shape		-	U shape
	Max.lifting moment	Basic boom	kN·m	3704
		Full-extension boom	kN·m	2156
	Boom length	Basic boom	m	12.9
		Full-extension boom	m	59
		Full-extension boom+jib	m	76.5 (86)
	Max.lifting height	Basic boom	m	12.9
		Full-extension boom	m	59
		Full-extension boom+jib	m	76.5 (86)
	Outrigger span (Longitudinal×Transverse)		m	7.8×7.91
	Jib offset		°	0,15,30
OPERATION SPEED	Max.single rope lifting speed of main winch (empty load)		m/min	130
	Max.single rope lifting speed of auxiliary winch (empty load)		m/min	125
	Full extension/retraction time of boom		s	550/580
	Full luffing up/down time of boom		s	75/90
	Slewing speed		r/min	0~1.8
AIRCONDITIONER	in operator's cab		-	heating & cooling
	in driver's cab		-	heating & cooling

Crane Introduction

superstructure

Operator's cab

- 20° tiltable. Modern and comfortable interior with adjustable seat. Wide view for all-round load monitoring. Multi-outlet air-conditioning. Other user-friendly features include membrane button, egronomic touch plate setting, cellphone holder, cup holder and rear shelf.

Hydraulic system

- Through the adoption of load sensing variable displacement piston pump, pump displacement can be adjusted in real-time, achieving high-precision flow control with no energy loss during operation.
- Self-developed dual-pump converging/diversion main valve is used, enabling stable and convenient control of single action and combined action under different operation conditions.
- Main winch adopts electric proportional variable motor to ensure high operation efficiency. Max. single line speeds of main winch is up to 130m/min and the auxiliary winch is 125m/min.
- Opened slewing system with free slipping function is equipped to ensure more stable starting and control of the slewing operation as well as excellent inching-motion.

Control system

- CAN-bus instrument: CAN-bus instrument with a combined intelligent control electrical system is used for easy reading of the traveling parameters at any time. The engine fault warning function is applied to ensure convenient and fast troubleshooting.
- Automatic outrigger system: Electrically controlled outrigger with auto leveling, which is easy to operate.
- With fully security protection system, main and auxiliary winches are equipped with overall out limiter and height limiters to prevent over-rolling out and over-hoisting of steel rope, achieving limit angle protection.
- LMI: The adoption of high intelligent load moment indicator can comprehensively protect lifting operation, ensuring accurate, stable and comfort operation.

Luffing system

- The use of dead-weight luffing system with compensation control of the system ensures good luffing speed controllability, inching-motion and excellent stability.
- Luffing angle : -1°~ 81°.

Telescopic system

- With single-cylinder pin technology, inserting and pulling actions of the cylinder pin and boom pin can be achieved through electrohydraulic control system.
- Telescopic action of the lifting boom can be applied with a single telescopic cylinder. The use of multi-stage pressure control, multiple telescopic balance valve element and mechanical hydraulic double-interlock mechanism of the cylinder pin and boom pin ensure safe and reliable operation of the telescopic system.
- Six-section boom is applied with basic boom length of 12.9m, full-extended boom length of 59m, jib length of 17.5m (one 9.5m extended boom is optional) and lifting height of fully extended boom is 59m. Max. lifting height is 86m including jib. It is made of fi ne grain high-strength steel with U-shaped cross-section.

Slewing system

- With 360°rotation and with Max slewing speed of 1.8r/min applied. The use of electrical proportion open-type slewing system ensures perfect operation and stable slewing.

Hoisting system

- The adoption of pump and motor double variable speed control ensures high efficiency and excellent energy saving functionality. With perfect combination of winch balance valve and unique anti-slip technology of hook, heavy load can lift and lower smoothly. Closed winch brake and winch balance valve effectively prevent imbalance of the hook.
- One 75t main hook (double hook): 735kg, one 8t auxiliary hook: 210kg. Optional configuration: one 90t hook (single hook). Wire rope of main winch: right-handed wire rope 260m. Wire rope of auxiliary winch: right-handed wire rope 200m.

Safety system

- Load detection is achieved through the establishment of accurate and concise load model, which significantly increases the overall system precision of load moment indicator. Online empty load marking effectively prevent inaccurate lifting caused by discrepancy in boom structure specification, increasing system accuracy to ±5%.
- Hydraulic system is configured with the balance valve, overflow valve and two-way hydraulic lock etc. components, thus achieving the stable and reliable operation of the hydraulic system.
- Main and auxiliary winches are equipped with over roll-out limiter to prevent over rolling-out of wire rope.
- Boom and jib ends are equipped with height limiters respectively to prevent over-hoisting of wire rope.
- Boom head is equipped with anemometer to detect whether the high-altitude wind speed is within the allowable range.
- It is equipped with the sensor of length and angle.

Counterweight

- Seven counterweight combinations, 1.2t, 4t, 12.2t, 15t, 20.2t, 23t, 29.5t, which is easy to install.
- Slewing radius is 4220 mm.

Model **STC1100S** | SERIES

Crane Introduction

Chassis

Engine

- Type: Inline six-cylinder, water cooled, turbocharged and inter-cooling diesel engine.
- Rated power: 257kw/1900rpm.
- Emission: BS4 standard.
- Capacity of fuel tank: 450L.

Transmission system

- Gearbox: Manual gearbox is adopted with 10-gear and large speed ratio range applied,which meets the requirements of low gradeability speed and high traveling speed.
- Transmission shaft: With optimized arrangement of the transmission shaft, the transmission is stable and reliable. For most optimized transmission, face-tooth coupling transmission shaft is used with large transmission torque.

Brakes system

- Brakes system includes traveling brake, parking brake, emergency brake and auxiliary brake.
- Traveling brake: it is equipped with dual-circuit brake system. All wheels use the air servo brakes. The front axles are equipped with disk brake and the rear axles are equipped with drum brake.
- Parking brake: axle 2,3 and 4 is controlled by the spring brake chamber.
- For emergency brake, spring braking is used for emergency brake.
- Exhaust brake is used for auxiliary brake.

Suspension system

- All axles adopt the plate spring suspension systems with plate spring passed 100,000 fatigue tests and with optimization of performance parameters of the front and rear plate springs applied to ensure strength and also to provide comfort ridding.

Steering system

- Dual-circuit hydraulic power steering system equipped with mechanical steering limit is used.

Outriggers

- Made of fine-grain high-strength steel sheet, outriggers can be controlled through control panel with automatic leveling function. Front swing outriggers and rear telescopic outriggers are arranged. Four-point supporting ensures easy operation and strong stability with Max. span up to 7. 8m×7.91m.

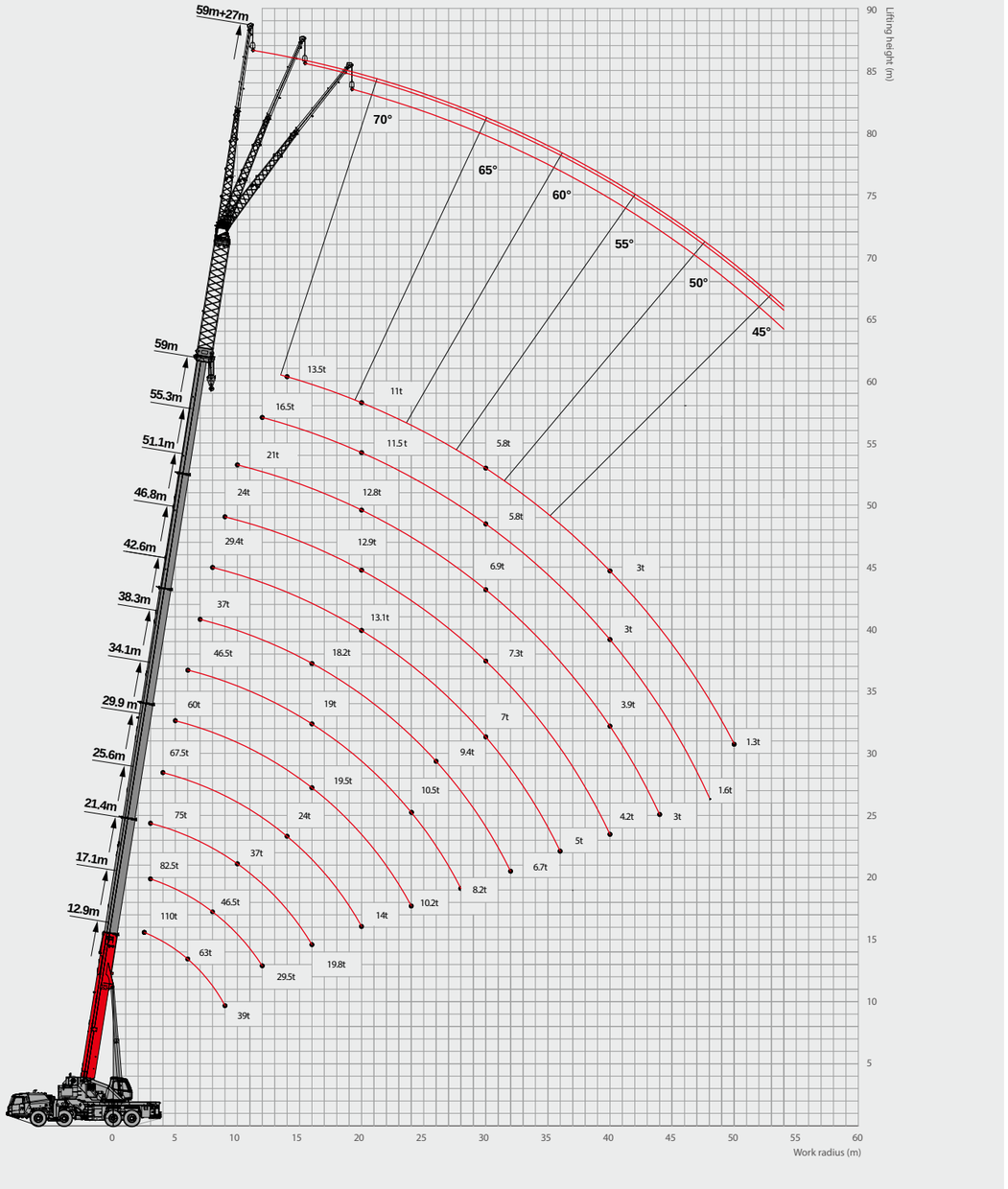
Tires

- 8*385/95R25.

Electrical system

- With 2*12V maintenance-free batteries, the crane power can be cut off manually via a mechanical master power switch. The use of CAN-bus control system can achieve information interaction between superstructure and undercarriage.

Operating Range



Load Chart-Telescopic Boom

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
2.5	110												2.5
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	63	62	60	61	60	46.5							6
7	53	54	53.5	53	54	44	37						7
8	45	46.5	46.5	46	47	41	34	29.4					8
9	39	41	41.5	40.5	42	36.5	30	27.6	24				9
10		36.5	37	36	38	35.5	27.5	25.4	22.5	21			10
12		29.5	30	28.6	30	30.2	25	22.2	20.6	19	16.5		12
14			24	24	24	23.5	22	19.7	18.5	17	15	13.5	14
16			19.8	19.8	19.5	19	18.2	17.2	16.8	15.5	13.7	12.5	16
18				16.5	16.2	15.8	16	15.5	14.9	14	12.6	11.5	18
20				14	13.7	13.5	13.6	13.1	12.9	12.8	11.5	11	20
22					11.8	12	11.6	11.3	11	11.2	9.9	9.9	22
24					10.2	10.5	10.5	10.3	10.3	10	8.6	8.6	24
26						9.3	9.4	9	9.3	8.9	7.5	7.5	26
28						8.2	8.3	7.9	8.2	7.8	6.6	6.6	28
30							7.4	7	7.3	6.9	5.8	5.8	30
32							6.7	6.2	6.5	6.1	5.1	5.1	32
34								5.6	5.8	5.4	4.5	4.5	34
36								5	5.2	4.8	4	4	36
38									4.7	4.3	3.5	3.5	38
40									4.2	3.9	3	3	40
42										3.4	2.6	2.6	42
44										3	2.2	2.2	44
46											1.9	1.9	46
48											1.6	1.6	48
50												1.3	50
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
3	100	82.5	75										3
3.5	90	79	73										3.5
4	88	77	71	67.5									4
4.5	80	76	69	67									4.5
5	73	71	67	66	60								5
6	63	62	60	61	60	46.5							6
7	48	50	50	48	49	43	35.2						7
8	38	39	40	38	39	39	32.6	29.4					8
9	31	32.5	33.8	32	33	33	29	27.6	23				9
10		27	28.4	28	28	28	26.5	25.4	22	21			10
12		20	21.1	21	21	21	21	21	20.6	19	16.5		12
14			17	17.2	16.9	17	17	16.8	17.3	17	15	13.5	14
16			13.8	13.8	13.6	14	14	14	14.3	13.8	13.7	12.5	16
18				11.4	11.2	11.9	11.6	12	12	11.9	11.5	11.5	18
20				9.6	9.6	10	10	10	10.3	10	8.2	9.6	20
22					8.2	8.5	8.8	8.5	8.7	8.5	7	7	22
24					7	7.3	7.6	7.3	7.6	7.2	6	6	24
26						6.3	6.6	6.3	6.6	6.2	5.1	5.1	26
28						5.5	5.8	5.4	5.7	5.4	4.4	4.4	28
30							5	4.7	5	4.6	3.7	3.7	30
32							4.4	4.1	4.4	4	3.1	3.1	32
34								3.6	3.8	3.5	2.6	2.6	34
36								3	3.3	2.9	2.1	2.1	36
38									2.9	2.4	1.7	1.7	38
40									2.5	2	1.3	1.3	40
42										1.7	1	1	42
44										1.3			44
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Load Chart-Telescopic Boom

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
2.5	110												2.5
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	63	62	60	61	60	46.5							6
7	53	54	53.5	53	54	44	37						7
8	45	46.5	46.5	46	47	41	34	29.4					8
9	36	40	41.5	40	41	36.5	30	27.6	23				9
10		33	34.5	33	34	35	26.5	25.4	22	20			10
12		24	25	25	25	25.8	23.3	22.2	20.6	19	16.5		12
14			20.5	20.5	19.5	20	19.8	18.7	18.5	17	15	13.5	14
16			16.5	17	16.5	16.2	16.5	16	15.8	15.5	13.7	12.5	16
18				14.1	13.6	14	13.6	13.2	13.5	13.1	12.6	11.5	18
20				12	11.5	11.8	11.6	11.6	11.8	11.6	9.5	11	20
22					9.8	10.2	10.3	9.9	10	9.8	8.1	8.1	22
24					8.5	8.8	9	8.5	8.8	8.5	7	7	24
26						7.6	7.8	7.4	7.7	7.3	6	6	26
28						6.7	6.8	6.4	6.7	6.3	5.2	5.2	28
30							6	5.6	5.9	5.5	4.5	4.5	30
32							5.3	4.9	5.2	4.8	4	4	32
34								4.3	4.6	4.2	3.4	3.4	34
36								3.8	4.1	3.7	2.8	2.8	36
38									3.6	3.1	2.4	2.4	38
40									3.2	2.7	2	2	40
42										2.3	1.6	1.6	42
44										2	1.3	1.3	44
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	58	60	59	58	58	46.5							6
7	44	45	45	43	44	44	37						7
8	34	35	36	35	36.5	36	34	29.4					8
9	28	29	30	30	30	30	29	27.6	23				9
10		24	25	25.5	26	25.8	25	24.3	22	20			10
12		18	18.5	19	19	19.2	19	19	19.4	19	16.5		12
14			14.5	15	15	15.5	15.5	15.6	15.6	15.5	15	13.5	14
16			11.5	12.3	12.2	12.6	12.9	12.6	12.7	12.5	12.2	12	16
18				10.2	10.2	10.5	10.6	10.3	10.7	10.3	10	10	18
20				8.6	8.5	8.6	9	8.6	8.9	8.5	6.9	8.2	20
22					7.2	9.5	7.6	7.2	7.5	7.2	5.8	5.8	22
24					6.1	6.3	6.5	6.1	6.4	6.1	4.8	4.8	24
26						5.4	5.6	5.2	5.5	5.2	4.1	4.1	26
28						4.6	4.8	4.4	4.7	4.4	3.4	3.4	28
30							4.2	3.8	4	3.7	2.7	2.7	30
32							3.7	3.2	3.5	3.1	2.2	2.2	32
34								2.7	2.9	2.5	1.7	1.7	34
36								2.2	2.5	2	1.3	1.3	36
38									2	1.6	1	1	38
40									1.7	1.2			40
42										1			42
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Model **STC1100S** | SERIES

Load Chart-Telescopic Boom

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
2.5	110												2.5
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	63	62	60	61	60	46.5							6
7	53	54	53.5	53	54	44	37						7
8	45	46.5	46.5	46	47	41	34	29.4					8
9	35	38	38.5	37	38	36.5	30	27.6	23				9
10		31	32	31	33	32	26.5	25.4	22	20			10
12		23	24.5	24.5	24.5	24	23.3	21.8	20.6	19	16.5		12
14			19	19	19.1	18.6	19	18.5	17.8	17	15	13.5	14
16			15.5	15.5	15.4	15.7	15.3	14.9	15.3	14.3	13.7	12.5	16
18				12.8	12.7	13	12.5	12.8	13	12.7	12.3	11.5	18
20				10.8	10.6	11	11.2	10.8	11	10.7	8.7	10.3	20
22					9	9.3	9.6	9.2	9.4	9.1	7.4	7.4	22
24					7.8	8	8.2	7.8	8	7.7	6.3	6.3	24
26						7	7.1	6.7	7	6.7	5.4	5.4	26
28						6.1	6.2	5.8	6.1	5.7	4.7	4.6	28
30							5.5	5.1	5.3	5	4	4	30
32							4.8	4.4	4.6	4.3	3.4	3.4	32
34								3.8	4.1	3.7	2.8	2.8	34
36								3.3	3.6	3.2	2.3	2.3	36
38									3.1	2.7	1.9	1.9	38
40									2.7	2.2	1.5	1.5	40
42										1.8	1.1	1.1	42
44										1.5			44
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
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4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	55	56	56	55	58	46.5							6
7	41	42.5	42	40.5	43	42	37						7
8	32	33.5	33	34	34	33.5	32.6	29.4					8
9	26	27	28	28	28.7	28	27	27	23				9
10		23	24	24	24	23	23	23	22	20			10
12		17	18	18	17.8	18	17.9	18	18.2	17	16.5		12
14			14	14	13.8	14.5	14.3	14	14.5	14	13.5	13.5	14
16			11	11.3	11	11.3	11.4	11.2	11.6	11.2	10.8	10.8	16
18				9.2	9	9.2	9.3	9	9.5	9.2	8.8	8.7	18
20				7.5	7.2	7.5	7.8	7.5	7.8	7.5	6	7.2	20
22					6	6.2	6.5	6.2	6.5	6.2	5	5	22
24					5	5.2	5.5	5.2	5.5	5.2	4.1	4.1	24
26						4.2	4.6	4.3	4.7	4.3	3.4	3.3	26
28						3.6	4	3.7	3.9	3.6	2.7	2.6	28
30							3.2	3	3.3	3	2.1	2	30
32							2.8	2.3	2.8	2.3	1.5	1.5	32
34								1.8	2.2	1.8	1.1	1.1	34
36								1.5	1.8	1.4			36
38									1.3	1			38
40									1				40
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Model **STC1100S** | SERIES

Load Chart-Telescopic Boom

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
2.5	110												2.5
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	63	62	60	61	60	46.5							6
7	53	54	53.5	53	54	44	37						7
8	42	44.5	44	42.5	43	41	34	29.4					8
9	33	35.6	35.5	33.5	37	35.5	30	27.6	23				9
10		29.3	29.6	28.5	30	29.5	26.5	24.3	22	20			10
12		21.3	22.5	22.5	22	21.5	21.5	21	19.5	18.5	16.5		12
14			17.4	17.4	17	17.3	16.8	16.1	16.8	15.5	15	13.5	14
16			14	14	13.5	14	13.5	13.7	13.5	13.7	13	12.5	16
18				11.5	11.3	11.5	11.6	11.3	11.6	11.2	10.8	10.8	18
20				9.7	9.4	9.6	9.6	9.4	9.7	9.3	7.5	9	20
22					8	8.1	7.9	7.9	8.2	7.8	6.3	6.3	22
24					6.8	6.9	7.1	6.7	7	6.6	5.3	5.3	24
26						5.9	6.1	5.7	6	5.6	4.5	4.5	26
28						5.1	5.3	4.9	5.2	4.8	3.8	3.8	28
30							4.6	4.2	4.5	4.1	3.2	3.1	30
32							4.1	3.6	3.9	3.5	2.6	2.6	32
34								3	3.3	2.9	2.1	2.1	34
36								2.6	2.8	2.4	1.6	1.6	36
38									2.4	1.9	1.2	1.2	38
40									2	1.6	1	1	40
42										1.3			42
44										1			44
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	71	71	67	66	60								5
6	48	49	50	47	48.5	46.5							6
7	35	37	37	38	37	36.5	37						7
8	28	29	30	30.5	30	30	28	28.5					8
9	22	24	25	25.4	25	25.5	24.5	23.5	23				9
10		20	21	21.2	21	21.5	20.8	20.8	20.8	19.5			10
12		15	15	15.6	15.5	16	16	15	16	15.8	15		12
14			12	12	11.8	12.3	12.3	12	12.6	12.2	11.8	11.5	14
16			9.4	9.5	9.2	9.6	9.7	9.5	10	9.7	9.3	9	16
18				7.6	7.4	7.6	7.8	7.7	8.1	7.8	7.5	7.3	18
20				6.2	6	6.2	6.3	6.3	6.7	6.3	4.8	6	20
22					4.8	5	5.2	5.1	5.5	5.1	3.9	3.9	22
24					3.9	4	4.3	4.2	4.5	4.2	3.1	3.1	24
26						3.3	3.5	3.5	3.8	3.5	2.3	2.3	26
28						2.7	3	2.8	3.1	2.7	1.7	1.7	28
30							2.5	2.2	2.5	2.1	1.2	1.2	30
32							2	1.6	2	1.5			32
34								1.2	1.5	1.1			34
36									1.1				36
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Model **STC1100S** | SERIES

Load Chart-Telescopic Boom

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
2.5	110												2.5
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	63	62	60	61	60	46.5							6
7	49	52	52	51	52	44	37						7
8	39	40	39.5	38.8	39	40.5	34	29.4					8
9	30	32	32	32	33	32	30	27.6	23				9
10		26	27.5	27.5	27	26.8	26.5	24.3	22	20			10
12		18.5	19.5	19.8	20	20.5	19.5	19	19.4	17	16.5		12
14			15	15.6	15.4	15.8	15.5	15.6	15.7	15.5	15	13.5	14
16			12	12.4	12.3	12.7	12.7	12.5	12.5	12.3	12	12	16
18				10	10	10.3	10.5	10.2	10.3	10.1	9.8	9.7	18
20				8.5	8.3	8.5	8.7	8.4	8.7	8.3	6.6	8	20
22					7	7.1	7.4	7	7.3	7	5.5	5.5	22
24					5.9	6.1	6.3	5.9	6.2	5.8	4.6	4.6	24
26						5.1	5.4	5	5.2	4.9	3.8	3.8	26
28						4.4	4.6	4.2	4.5	4.1	3.1	3.1	28
30							4	3.5	3.8	3.5	2.5	2.5	30
32							3.4	3	3.2	2.9	2	2	32
34								2.4	2.7	2.3	1.5	1.5	34
36								2	2.2	1.8	1.1	1.1	36
38									1.8	1.4			38
40									1.5	1			40
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	67	68	67	66	60								5
6	45	47	46	45	47	46							6
7	33	35	35	36	36	35	36						7
8	26	27	28	28.9	28.5	29	27.8	27					8
9	21	22	23.4	23.5	23.2	24	23	23.1	22.3				9
10		18.5	19.5	19.6	19.3	20	19.6	19.6	19.5	18.7			10
12		14	14.2	14.3	14.2	14.8	14.6	14.3	14.5	14.2	13.8		12
14			10.8	11	10.9	11.3	11.4	11	11.3	11	10.8	10.5	14
16			8.5	8.6	8.5	9	9	8.8	9	8.7	8.4	8.4	16
18				6.8	6.7	7.3	7.3	7	7.3	7	6.6	6.6	18
20				5.5	5.4	5.9	6	5.7	6	5.6	4.2	5.3	20
22					4.3	4.8	5	4.6	4.9	4.5	3.3	3.3	22
24					3.5	4	4.1	3.7	4	3.6	2.5	2.5	24
26						3.2	3.3	2.9	3.2	2.8	1.8	1.8	26
28						2.6	2.7	2.3	2.6	2.1	1.2	1.2	28
30							2.2	1.7	2	1.6			30
32							1.7	1.2	1.5	1.1			32
34									1				34
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Model **STC1100S** | SERIES

Load Chart-Telescopic Boom

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
2.5	0												2.5
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	60								5
6	52	53.5	55	54	56	46.5							6
7	36	40	40	40	41	41	35.2						7
8	27	30	30	31	31	30	31	28.2					8
9	21	24.5	24	25	26	25.5	25	24.5	22.3				9
10		20.5	20	21	21	21	20.5	20.8	20	18			10
12		14.5	14.5	15	15	16	15	15	15.3	15	13.5		12
14			11	11	11.5	12	12	11.5	12	11	11	11	14
16			8.5	9	9	9.3	9.5	9	9.5	9	8.6	8.5	16
18				7.3	7.3	7.5	7.7	7.2	7.6	7.2	6.8	6.6	18
20				6	6	6	6.2	6	6.2	5.8	4.3	5.3	20
22					4.8	5	5.2	4.8	5.1	4.6	3.3	3.4	22
24					3.9	4.1	4.3	3.9	4.2	3.8	2.5	2.5	24
26						3.4	3.5	3.1	3.4	3	1.9	1.9	26
28						2.7	3	2.4	2.7	2.3	1.3	1.3	28
30							2.4	1.8	2.1	1.7			30
32							1.8	1.3	1.6	1.1			32
34								1	1.2				34
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	65	69	67	66									4.5
5	51	54	53	52	52								5
6	34	36.5	37	37	36	35							6
7	25	27	28	28	27	28.5	27.5						7
8	19	21	22	22.1	21	22	22.1	21					8
9	15	17	17.7	18	17.4	18	18	17	17				9
10		14	14.6	14.8	14.5	15	15	14.6	14.5	13.5			10
12		9.8	10.3	11.4	10.2	10.8	11	10.7	11	10	9		12
14			7.6	7.8	7.5	8.1	8.4	8	8.3	7.7	7	6.5	14
16			5.7	5.8	5.6	6.2	6.4	6.1	6.4	6	5.6	5	16
18				4.5	4.2	4.6	5	4.7	5	4.6	4.3	4.2	18
20				3.4	3.1	3.5	4	3.8	3.9	3.5	2.2	3.2	20
22					2.2	2.7	3.1	2.6	3	2.5	1.4	1.4	22
24					1.5	2	2.3	1.8	2.2	1.7	1	1	24
26						1.3	1.7	1.2	1.5	1.1			26
28							1.1		1				28
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Model **STC1100S** | SERIES

Load Chart-Telescopic Boom

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
2.5	0												2.5
3	100	82.5	75										3
3.5	90	80	73										3.5
4	88	79	73	67.5									4
4.5	80	76	70	67									4.5
5	73	71	67	66	58								5
6	50	53	55	52	54	46.5							6
7	35	38.8	38.5	39	39	38.5	35.2						7
8	26	29	30	30	29.5	29.7	29	28.2					8
9	20	23	24	24	24	24.7	23.7	23.1	22.3				9
10		19	19.5	20	19.7	20.2	20	19.7	19.5	18			10
12		13.2	14.2	14.3	14.1	14.6	14.6	14.3	14.6	14.2	13.5		12
14			10.8	10.8	10.6	10.9	11.1	10.7	11.1	10.6	10.2	10	14
16			8.4	8.5	8.2	8.5	8.7	8.3	8.6	8.2	7.9	7.8	16
18				6.8	6.5	6.8	6.9	6.5	6.9	6.5	6.1	6.1	18
20				5.5	5.2	5.4	5.6	5.2	5.5	5.2	3.8	4.8	20
22					4.2	4.4	4.6	4.2	4.5	4.1	2.8	2.8	22
24					3.3	3.6	3.7	3.3	3.6	3.2	2.1	2.1	24
26						2.8	3	2.5	2.9	2.4	1.4	1.4	26
28						2.2	2.4	1.9	2.2	1.8			28
30							1.9	1.4	1.7	1.2			30
32							1.5	1	1.2				32
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Unit: t

Radius (m)	12.9	17.1	21.4	25.6	29.9	34.1	38.3	42.6	46.8	51.1	55.3	59	Radius (m)
3	100	82.5	75										3
3.5	90	80	73										3.5
4	85	79	73	67.5									4
4.5	61	62	62	60									4.5
5	47	48	48	50	48								5
6	31	32	33	33.5	33	33							6
7	22	23.5	24	25	24	25	25						7
8	17	18.5	18.5	19.3	19	20	19	18					8
9	13.5	14.5	15.2	15.5	15.3	16	16	15	15				9
10		12	12.5	12.7	12.5	13.3	13.3	13	13	12			10
12		8	8.7	9	8.6	9.2	9.4	9.3	9.6	8.7	8		12
14			6	6.4	6.2	6.7	7.2	7	7.3	6.8	6	5.5	14
16			4.5	4.5	4.4	5	5.6	5.2	5.5	5.1	4.7	4	16
18				3.3	3.1	3.6	4.3	3.9	4.2	3.8	3.5	3.3	18
20				2.5	2.1	2.6	3.2	2.8	3.1	2.7	1.5	2.3	20
22					1.3	1.7	2.4	1.9	2.2	1.8	1	1	22
24						1	1.7	1.2	1.5	1.1			24
26							1.1		1				26
Rope rate	12	11	10	8	7	6	5	4	3	3	3	3	Rope rate

Load Chart - 59m Boom with Jib

Unit:t

Radius (m)	Jib length													Radius (m)
	9m	10.2m			17.5m			19.7m			27m			
	0°	0°	15°	30°	0°	15°	30°	0°	15°	30°	0°	15°	30°	
14														14
16	6	6.8			4			3			4			16
18	5.7	6.6	6.1		3.9			2.9	2.3		3.9			18
20	5.6	6.6	6	4.6	3.7			2.8	2.2	1.7	3.7			20
22	5.5	6.4	5.8	4.4	3.5	3.3		2.7	2.1	1.6	3.5	3.3		22
24	5.3	5.8	5.2	4.3	3.5	3.2	2.7	2.6	1.9	1.5	3.5	3.2	2.7	24
26	5.1	5.1	4.7	4.2	3.2	3	2.5	2.6	1.9	1.5	3.2	3	2.5	26
28	5	4.3	4.7	4.1	3	2.8	2.4	2.4	1.8	1.4	3	2.8	2.4	28
30	4.8	3.9	3.8	4.1	2.7	2.6	2.3	2.3	1.7	1.4	2.7	2.6	2.3	30
32	4.5	3.9	3.6	3.3	2.6	2.5	2.3	2.1	1.6	1.3	2.6	2.5	2.3	32
34	4.2	3.8	3.6	3.3	2.5	2.5	2.2	1.9	1.5	1.2	2.5	2.5	2.2	34
36	3.8	3.2	3.6	3.3	2.4	2.4	2.2	1.9	1.4	1.2	2.4	2.4	2.2	36
38	3.4	2.9	2.8	3.3	2.2	2.1	2.2	1.8	1.4	1.1	2.2	2.1	2.2	38
40	3	2.9	2.6	3.3	1.9	1.9	2.1	1.7	1.3	1.1	1.9	1.9	2.1	40
42	2.5	2.3	2.6	2.4	1.9	1.9	2	1.6	1.2	1	1.9	1.9	2	42
44	2.2	2.2	2.6	2.4	1.9	1.9	1.6	1.5	1.1	1	1.9	1.9	1.6	44
46	1.9	2.2	2	2.4	1.6	1.9	1.6	1.4	1	0.9	1.6	1.9	1.6	46
48	1.6	2.2	2	2.4	1.5	1.6	1.6	1.2	0.9	0.7	1.5	1.6	1.6	48
50	1.5	2.2	2	1.8	1.5	1.5	1.6	1.1	0.7	0.5	1.5	1.5	1.6	50
52	1.2	1.9	1.9	1.8	1.5	1.5	1.6	1	0.6		1.5	1.5	1.6	52
54	1	1.6	1.5	1.6	1.2	1.5	1.3				1.2	1.5	1.3	54
56		1.4	1.4	1.4										56
Rope rate	1	1	1	1	1	1	1	1	1	1	1	1	1	Rope rate

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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.