SANY®

Quality Changes the World

SRC600C

SANY Rough-Terrain Crane
60 Ton Lifting Capacity

- Main boom length: 11.3~43.5m
- Max lifting torque: 2115kN·m
- Max gradability: 75%

Excellent performance

- Key structural optimization, improve the product performance.
- Over-length boom and high tensile steel U-sharped boom, which allows for decreased boom weight and increased boom strength.
- Two-axle off-roader chassis, four-wheel driving, four-steering modes have good mobility.

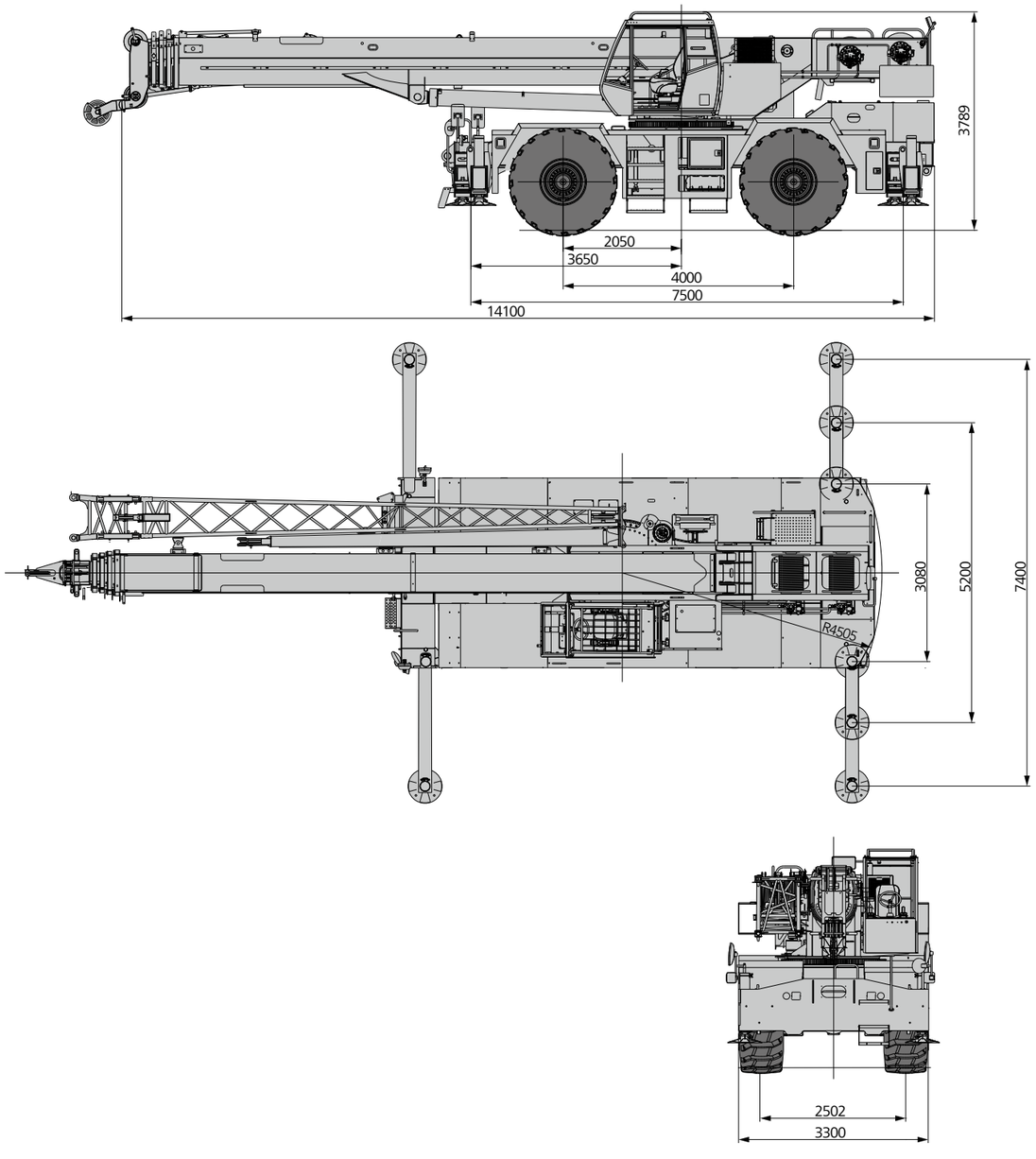
Energy and High efficiency

- The load sensitive variable displacement piston pump is applied to adjust the pump displacement in real time with little energy loss during operation.
- The dead-weight luffing compensation hydraulic system is applied to ensure good micro-mobility and excellent stability.
- The four-wheel steering control system is applied to ensure four individual steering modes with flexible operation.
- The dual-circuit braking system is applied with individual brakes for front and rear wheels and pressure maintained by an accumulator, providing good braking effect.
- Slewing and steering circuits are controlled by a priority valve, providing priority for steering control and ensuring the stability and rapid response of slewing action.

Safety and Reliable

- Load moment limiter: The system can provide comprehensive protection for the lifting operation and will alarm if the crane is overloaded, guaranteeing operation safety.
- A three-wrap rope protector is applied to both main and auxiliary winches to prevent over rolling-out of wire rope.
- A height limiter is applied at both boom and jib ends to prevent over-hoisting of the wire rope.
- Equipped with length sensor,angle sensor and press sensor to indicate the working condition of whole crane in real-time, giving an alarm and cutting off the dangerous action automatically.
- Use high-quality axle, engine, gearbox, hydraulic pump and hydraulic motor etc. key parts, improve the reliable of product.

Overall Dimensions



Technical Parameters

Category	Item		Unit	Value
Capacity	Max. lifting capacity		t	60
Weight	Gross weight		kg	44900
Power	Engine model		-	DF Cummins ISDe285 30 Tier 3
	Max. engine power		kW/rpm	210/2500
	Max. engine torque		N·m/rpm	970/1500
Dimensions	Overall length		mm	14100
	Overall width		mm	3300
	Overall height		mm	3760
	Wheel Track		mm	2502
Travel	Max.travel speed (empty load)		km/h	40
	Steering radius		m	12.9/7.4
	Wheel formula		-	4×4
	Min.ground clearance		mm	513
	Approach angle		°	22
	Departure angle		°	17
	Max.gradeability		%	75
Main Performance	Working temperature range		°C	-20~+46
	Min.rated lifting radius		m	3
	Tail slewing radius		m	4.5
	Boom sections (Qty.)		-	5
	Boom shape		-	U-shape
	Jib offset		°	0, 15, 30
	Max.lifting moment	Basic boom	kN·m	2115
		Full-extention boom	kN·m	1100
		Full-extention boom+jib	kN·m	530
	Boom length	Basic boom	m	11.3
		Full-extention boom	m	43.5
		Full-extention boom+jib	m	59.5
	Max. lifting height	Basic boom	m	13.8
		Full-extention boom	m	46
		Full-extention boom+jib	m	62
Operation speed	Max.single rope lifting speed of main winch (empty load)		m/min	155
	Max.single rope lifting speed of auxiliary winch (empty load)		m/min	155
	Full extension/retraction time of boom		s	95/110
	Full luffing up/down time of boom		s	55/75

Technical Parameters

Axle Load

Axle	1	2	Total weight
Axle load/t	24.8	20.1	44.9
Note		-	

Standard Equipment

Number	Name	Number	Name
1	Engine	14	Telescope balance vlave
2	Gear box	15	Swing buffer valve
3	Front axle assembly	16	Telescope cylinder I
4	Rear axle assembly	17	Telescope cylinder II
5	Torque converter radiator	18	Luffing cylinder
6	Tire	19	Air condition system
7	Piston pump	20	Swing bearing
8	Gear pump	21	Swing reducer
9	Main valve	22	Hoisting reducer
10	Hositing motor	23	Main hook
11	Swing motor	24	Auxiliary hook
12	Luffing balance vlave	25	Motion controller
13	Hoisting balance vlave		

Optional Equipment

- Optional hook I (lifting capacity:50t Mass:595kg)
- Optional hook II (lifting capacity:30t Mass:360kg)
- Gas pump
- Intake valve
- Winch and backup camera

Crane Introduction

Engine

- Model: ISDe285 30.
- Type: six cylinder, direct injection diesel, 4 cycle, turbo charged and after cooled.
- Rated Power: 210kw/2500r/min.
- Exhaust: Euro III.
- Fuel tank: 300L.

Transmission

- Transmission: DANA automatic gearbox, Power shift with 6 forward and 6 reverse speeds (3 speeds high and 3 speed low). Front axle disconnect for 4x2 travel.

Axles

- Front Axle: Drive/steer with differential and planetary reduction, traveling and parking brake.
- Rear Axle: Drive/steer axle with differential and planetary reduction, traveling brake.

Suspension

- Front Suspension: Rigid mounted to frame.
- Rear Suspension: Pivot mounted with hydraulic lockout device.

Tires

- Model: 29.5R25.

Brake System

- System Type: Full hydraulic double-circuit brake system and all wheels brake.
- Brake Model: Traveling brake (all wheels) and parking brake(front wheels).

Steering System

- System Type: Full hydraulic independent power steering.
- Steering Model: 2 wheel front, 2 wheel rear, 4 wheel coordinated and 4 wheel crab.

Outrigger System

- Outrigger Type: Hydraulic telescoping single-stage H type outrigger.
- Outrigger Span: 7.4m×7.5m (100% extension), 5.2m×7.5m (50% retracted), 3.08m×7.5m (fully retracted).

Cab

- The self-made full-vision anti-corrosion steel cab, equipped 10.4 in. touch screen,air-suspension seat, multi-function steering wheel, cold air-condition and heater.

Boom System

- Main Boom: 11.3m ~ 43.5m five-section U-shaped boom, maximum tip height 46m.
- Jib: 9.2m & 16m two stage bi-fold lattice type with 0°,15°,30°, maximum tip height 61m.

Elevation

- One double-acting hydraulic cylinder with integral holding valve, elevation angle from -2°~80°.

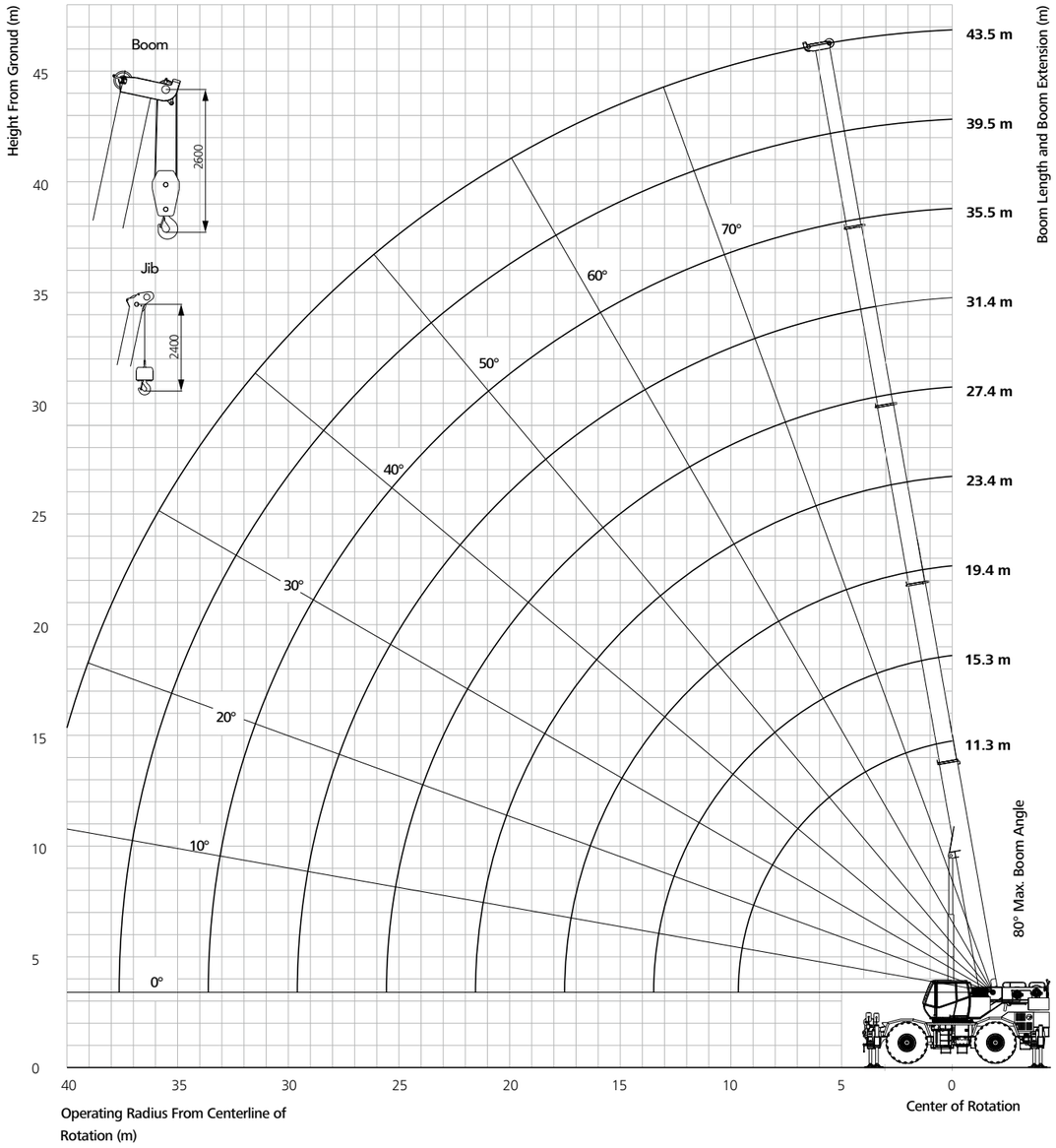
Hoist

- Main Hoist: Planetary reduction with variable motor, motor high/low speed control. Hoist speed feedback, maximum single line speed 155m/min, rope diameter 20mm, length 245m.
- Auxiliary Hoist: Planetary reduction with variable motor, motor high/low speed control. Hoist speed feedback, maximum single line speed 155m/min, rope diameter 20mm, length 145m.
- Hook: 60T main hook with 5 sheaves, weight is 660kg. 8T auxiliary hook, weight is 160kg.

Slewing

- 360° rotation, Maximum speed: 2.6r/min. Hydraulic controlled proportional speed adjustment is applied, providing stable and reliable operation of the system. Unique slewing buffer design ensures more stable braking operation.

Boom Operating Range



Load Chart - Telescopic Boom

Unit: metric ton

Radius (m)	11.30	15.33	19.35		23.38		27.40		31.43		35.45		39.48		43.50	Radius (m)
3.0	60.00	45.00	35.00	22.00												3.0
3.5	57.00	45.00	35.00	22.00	25.00	20.00										3.5
4.0	54.00	45.00	35.00	22.00	25.00	20.00	22.50	17.05								4.0
4.5	47.80	43.00	33.00	22.00	25.00	20.00	22.50	1705	17.50	15.00						4.5
5.0	43.00	41.00	32.00	22.00	24.50	20.00	22.00	17.05	17.50	15.00						5.0
5.5	39.00	38.00	32.00	22.00	24.20	20.00	21.50	17.05	17.50	15.00	15.50	11.00				5.5
6.0	35.50	34.70	32.00	22.00	23.80	19.50	20.50	17.05	17.50	14.50	14.50	11.00				6.0
6.5	32.50	32.00	30.50	22.00	22.30	19.00	19.80	16.30	17.50	14.00	14.00	11.00	12.50	10.00		6.5
7.0	30.00	29.70	29.00	22.00	21.50	18.50	18.80	15.70	17.50	13.50	14.00	11.00	12.00	10.00	9.50	7.0
7.5	27.80	27.50	26.00	22.00	21.00	18.00	18.00	15.00	17.50	13.00	13.00	11.00	11.50	10.00	9.50	7.5
8.0	25.80	25.00	23.50	22.00	20.00	17.50	17.20	14.50	16.50	12.50	12.50	11.00	11.00	10.00	9.50	8.0
9.0	20.00	20.00	19.50	21.70	18.00	17.00	16.50	13.50	15.00	12.00	12.00	10.30	10.50	10.00	9.30	9.0
10.0		16.00	16.00	17.80	16.00	12.50	15.00	12.50	13.50	11.00	11.50	9.60	10.00	9.60	9.00	10.0
12.0		10.90	11.00	12.80	12.00	12.00	11.80	10.70	11.00	10.00	10.00	8.60	9.00	9.10	8.30	12.0
14.0			7.70	9.80	8.50	9.50	8.80	9.35	8.60	8.60	8.50	7.80	8.00	8.60	8.00	14.0
16.0			5.50	7.50	6.00	7.80	6.80	8.05	6.90	7.20	7.10	6.75	7.30	7.60	7.35	16.0
18.0					4.50	6.50	5.20	6.55	5.60	6.20	5.70	6.05	6.00	6.20	5.80	18.0
20.0					3.40	5.30	4.10	5.35	4.40	5.20	4.50	5.25	4.80	4.90	4.70	20.0
22.0							3.15	4.45	3.30	4.40	3.55	4.55	3.70	4.15	3.80	22.0
24.0							2.45	3.65	2.50	3.60	2.85	3.75	2.90	3.35	3.10	24.0
26.0									1.90	3.10	2.25	3.25	2.30	2.85	2.50	26.0
28.0									1.50	2.60	1.75	2.75	1.90	2.35	2.00	28.0
30.0											1.35	2.35	1.50	1.95	1.60	30.0
32.0											1.00	1.95	1.20	1.55	1.25	32.0
34.0													0.90	1.25	0.95	34.0
36.0													0.70	1.05		36.0
2nd boom	0%	50%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	50%	100%	2nd boom
3rd boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	3rd boom
4th boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	4th boom
5th boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	5th boom
Rope rate	10	10	8	8	6	6	4	4	4	4	4	4	4	4	3	Rope rate

Load Chart - Telescopic Boom

Unit: metric ton

11.3-43.5m 5.2m×7.5m 5.0t

Radius (m)	11.30	15.33	19.35		23.38		27.40		31.43		35.45		39.48		43.50	Radius (m)
3.0	55.00	45.00	35.00	22.00												3.0
3.5	50.00	41.00	32.50	21.00	25.00	20.00										3.5
4.0	44.40	37.00	30.50	19.80	24.00	19.00	22.50	18.50								4.0
4.5	38.00	33.50	29.00	18.80	22.50	18.00	21.50	17.20	17.50	15.00						4.5
5.0	32.00	30.00	26.50	17.50	21.50	16.50	20.80	15.00	17.20	14.00						5.0
5.5	27.00	25.50	23.50	16.20	20.80	15.00	20.40	13.80	17.00	12.80	15.00	12.50				5.5
6.0	22.50	21.50	20.00	15.00	20.00	14.20	19.80	13.20	16.50	12.50	14.50	12.20	12.50	10.00		6.0
6.5	19.00	18.00	17.50	14.20	18.00	13.50	18.00	12.80	15.80	12.30	14.00	12.00	12.50	10.00		6.5
7.0	16.00	15.50	15.20	13.50	15.40	13.00	15.50	12.40	14.80	12.00	14.00	11.80	12.50	10.00	9.50	7.0
7.5	14.00	13.80	13.00	13.00	13.50	12.50	13.80	12.00	13.50	11.80	13.00	11.50	12.00	10.00	9.50	7.5
8.0	12.00	12.00	11.00	12.40	12.20	12.00	12.50	11.50	12.20	11.20	12.00	11.00	11.50	10.00	9.30	8.0
9.0	9.50	9.50	9.60	11.20	9.80	11.00	10.00	10.60	10.00	10.40	10.00	10.20	9.60	9.70	9.00	9.0
10.0		7.40	7.60	9.70	7.80	9.50	8.00	9.20	8.30	9.20	8.50	9.00	8.20	8.30	8.30	10.0
12.0		5.00	5.00	7.20	5.30	7.00	5.40	6.80	5.50	6.70	5.60	6.60	5.80	6.00	6.30	12.0
14.0			3.40	5.40	3.70	5.30	3.90	5.20	4.00	5.00	4.10	4.80	4.30	4.50	4.60	14.0
16.0			2.20	3.80	2.60	3.70	2.80	3.70	2.90	3.50	3.00	3.50	3.20	3.40	3.40	16.0
18.0					1.80	2.70	2.00	2.80	2.10	2.80	2.20	2.80	2.40	2.60	2.60	18.0
20.0					1.20	2.10	1.50	2.20	1.60	2.20	1.70	2.20	1.90	2.10	2.00	20.0
22.0							0.90	1.70	1.10	1.80	1.20	1.80	1.40	1.60	1.50	22.0
24.0								1.30		1.40	0.90	1.40	1.00	1.20	1.20	24.0
26.0										1.00		1.10		1.00	0.90	26.0
28.0										0.90		0.90				28.0
2nd boom	0%	50%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	50%	100%	2nd boom
3rd boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	3rd boom
4th boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	4th boom
5th boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	5th boom
Min boom angle	20	25	25	20	20	20	30	20	40	15	40	30	50	50	50	Min boom angle
Rope rate	10	10	8	8	6	6	4	4	4	4	4	4	4	4	3	Rope rate

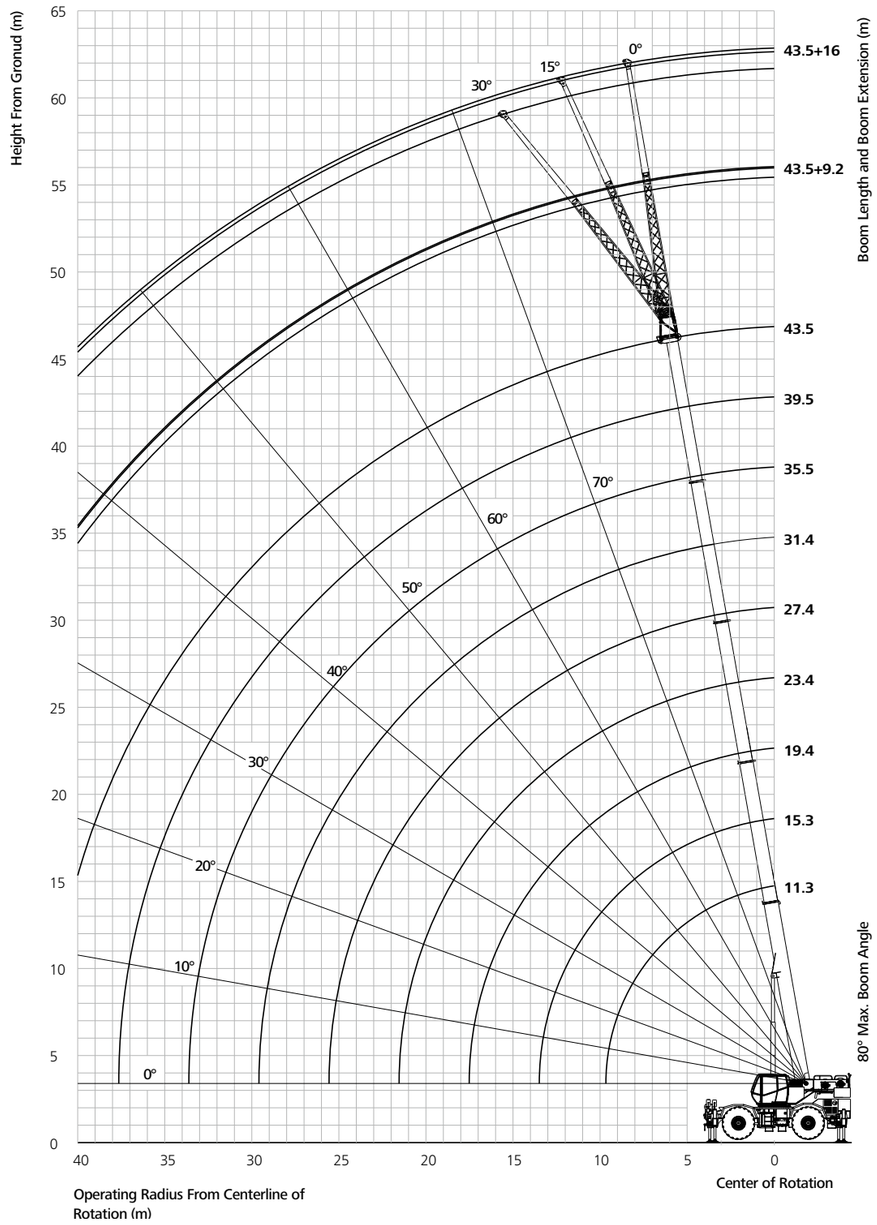
Load Chart - Telescopic Boom

Unit: metric ton

11.3-43.5m 3.08m×7.5m 5.0t

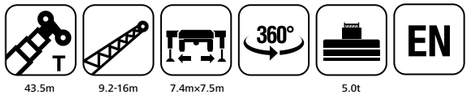
Radius (m)	11.30	15.33	19.35		23.38		27.40		31.43		35.45		39.48		43.50	Radius (m)
3.0	30.00	30.00	25.00	22.00												3.0
3.5	24.80	24.00	23.50	20.50	20.00	20.00										3.5
4.0	18.80	18.00	17.50	18.00	17.00	17.80	16.50	17.50								4.0
4.5	15.20	14.50	13.50	15.50	14.00	15.50	14.00	15.20	14.00	15.00						4.5
5.0	12.90	12.00	11.40	13.50	11.80	13.50	12.00	13.20	12.00	13.00						5.0
5.5	11.20	10.50	10.00	11.50	10.20	11.50	10.50	11.50	10.80	11.20	10.50	11.00				5.5
6.0	9.80	9.00	8.50	10.20	9.00	10.20	9.20	10.20	9.50	10.00	9.20	9.80	9.00	9.20		6.0
6.5	8.60	8.00	7.50	8.80	7.80	8.90	8.00	9.00	8.20	9.00	8.20	9.00	8.20	8.40		6.5
7.0	7.60	7.00	6.50	7.80	7.00	7.90	7.20	8.00	7.30	8.00	7.30	8.00	7.40	7.60	7.40	7.0
7.5	6.60	6.00	5.60	7.00	6.20	7.10	6.50	7.20	6.50	7.20	6.50	7.20	6.50	6.70	6.50	7.5
8.0	5.70	5.20	5.00	6.00	5.20	6.10	5.50	6.20	5.60	6.20	5.60	6.20	5.60	5.80	5.70	8.0
9.0	4.30	4.00	3.80	4.70	4.20	4.90	4.50	5.00	4.50	5.00	4.50	5.00	4.50	4.70	4.40	9.0
10.0		3.00	2.80	3.60	3.00	3.80	3.20	3.90	3.20	4.00	3.20	4.00	3.30	3.50	3.40	10.0
12.0		1.60	1.40	2.40	1.80	2.60	2.00	2.70	2.10	2.80	2.20	2.80	2.30	2.50	2.40	12.0
14.0				1.60	1.00	1.80	1.20	1.90	1.30	2.00	1.40	2.00	1.60	1.80	1.70	14.0
16.0				1.00		1.20		1.30	0.80	1.30	0.90	1.40	1.10	1.30	1.20	16.0
18.0								0.90		0.90		1.00	0.70	0.90	0.80	18.0
2nd boom	0%	50%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	50%	100%	2nd boom
3rd boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	3rd boom
4th boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	4th boom
5th boom	0%	0%	0%	33%	17%	50%	33%	66%	50%	84%	66%	100%	84%	100%	100%	5th boom
Min boom angle	20	25	45	25	45	40	55	45	55	50	60	55	62	60	62	Min boom angle
Rope rate	10	8	6	6	6	6	4	4	4	4	4	4	4	4	4	Rope rate

Jib Operating Range



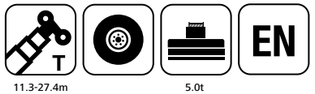
Load Chart - Fixed Jib

Unit: metric ton



Working lenth of the boom	43.5m+9.2m			43.5m+16m			Working lenth of the boom
	0°	15°	30°	0°	15°	30°	
80	4.50	2.70	2.40	2.60	1.50	1.10	80
78	4.50	2.70	2.40	2.60	1.50	1.10	78
76	4.00	2.50	2.30	2.40	1.40	1.10	76
74	3.75	2.40	2.25	2.20	1.30	1.10	74
72	3.50	2.30	2.15	2.00	1.20	1.00	72
70	3.00	2.20	2.05	1.80	1.15	1.00	70
68	2.70	2.10	1.95	1.60	1.10	0.95	68
66	2.50	2.00	1.85	1.50	1.05	0.90	66
64	2.20	1.80	1.75	1.45	1.00	0.85	64
62	2.00	1.65	1.50	1.30	0.95	0.80	62
60	1.70	1.45	1.20	1.10	0.85	0.75	60
58	1.20	1.00	0.85	0.90	0.75	0.65	58
56	1.00	0.85	0.75	0.80	0.65	0.60	56
54	0.80	0.70	0.60	0.70	0.60		54
52	0.70	0.60	0.55				52
50	0.60						50
Min Angle(°)	48°	50°	50°	52°	52°	54°	Min Angle(°)

Load Chart - Pick and Carry, Load over Front

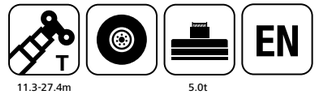


Unit: metric ton

Radius (m)	11.30	15.33	19.35	23.38	27.40	Radius (m)
3	18.10	14.10	9.00			3
3.5	16.00	14.10	8.00	6.50		3.5
4	14.30	14.10	7.00	6.50		4
4.5	12.85	12.65	7.20	6.50	5.50	4.5
5	11.60	11.40	6.50	6.50	5.00	5
5.5	10.50	10.30	6.00	6.00	4.50	5.5
6	9.20	9.35	5.30	5.00	4.20	6
6.5	8.00	8.40	4.80	4.30	3.80	6.5
7	7.00	7.50	4.20	4.00	3.50	7
7.5	6.00	6.60	3.80	3.50	3.20	7.5
8	5.30	5.80	3.20	3.00	2.90	8
8.5	4.65	5.40	2.95	2.70	2.50	8.5
9	4.00	5.00	2.70	2.40	2.20	9
10		4.00	2.20	2.00	1.90	10
11			1.70	1.60	1.50	11
12				1.50	1.30	12
14					1.00	14
1st cylinder	0%	0%	0%	0%	0%	1st cylinder
2nd cylinder	0%	17%	33%	50%	67%	2nd cylinder
Rope rate	6	6	6	6	6	Rope rate

For safety operation, traveling speed shall be less than 4km/h.

Load Chart - On Tires Stationary, Load over Front



Unit: metric ton

Radius (m)	11.30	15.33	19.35	23.38	27.40	Radius (m)
3	20.00	16.00	15.00			3
3.5	20.00	16.00	15.00	11.00		3.5
4	20.00	16.00	14.00	11.00	10.00	4
4.5	17.50	15.00	13.00	11.00	10.00	4.5
5	14.5 0	13.00	12.00	11.00	10.00	5
5.5	12.00	11.00	11.00	10.0 0	10.00	5.5
6	10.30	10.00	10.00	9.50	9.50	6
6.5	9.10	9.00	8.80	9.00	9.20	6.5
7	7.80	7.90	8.00	8.00	8.00	7
7.5	6.80	6.90	7.00	7.20	7.50	7.5
8	6.00	6.00	6.00	6.50	7.10	8
8.5	5.20	5.00	5.00	6.00	6.30	8.5
9	4.50	4.50	4.00	5.00	5.50	9
10		3.50	3.00	4.00	4.20	10
11			2.00	3.30	3.80	11
12			1.00	2.80	3.00	12
14				1.8 0	2.00	14
16				1.00		16
1st cylinder	0%	0%	0%	0%	0%	1st cylinder
2nd cylinder	0%	17%	33%	50%	67%	2nd cylinder
Rope rate	6	6	6	6	6	Rope rate

Load Chart - On Tires Stationary

Unit: metric ton

Radius (m)	11.30	15.33	19.35	23.38	27.40	Radius (m)
3	12.00	10.50	10.0			3
3.5	12.00	10.50	10.0			3.5
4	10.00	10.00	9.0	8.00		4
4.5	8.60	8.00	8.0	6.50	5.50	4.5
5	7.00	6.50	6.0	5.70	5.50	5
5.5	5.80	4.80	4.5	5.00	5.50	5.5
6	4.30	3.00	3.0	4.00	5.50	6
6.5	3.00	2.50	2.5	3.00	3.50	6.5
7	2.50	2.00	2.0	2.50	3.00	7
7.5	2.00	1.50	1.5	1.70	2.00	7.5
8	1.50	1.50	1.5	1.70	2.0 0	8
8.5		1.00	1.0	1.20	1.50	8.5
9					1.00	9
1st cylinder	0%	0%	0%	0%	0%	1st cylinder
2nd cylinder	0%	17%	33%	50%	67%	2nd cylinder
Rope rate	6	6	6	6	6	Rope rate

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Reminder:
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.

Any change in the technical parameters and configuration due to advancement in technology may occur without prior notice. The machine in the figures may include auxiliary equipment. This brochure is for reference only, and goods in kind shall prevail.

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