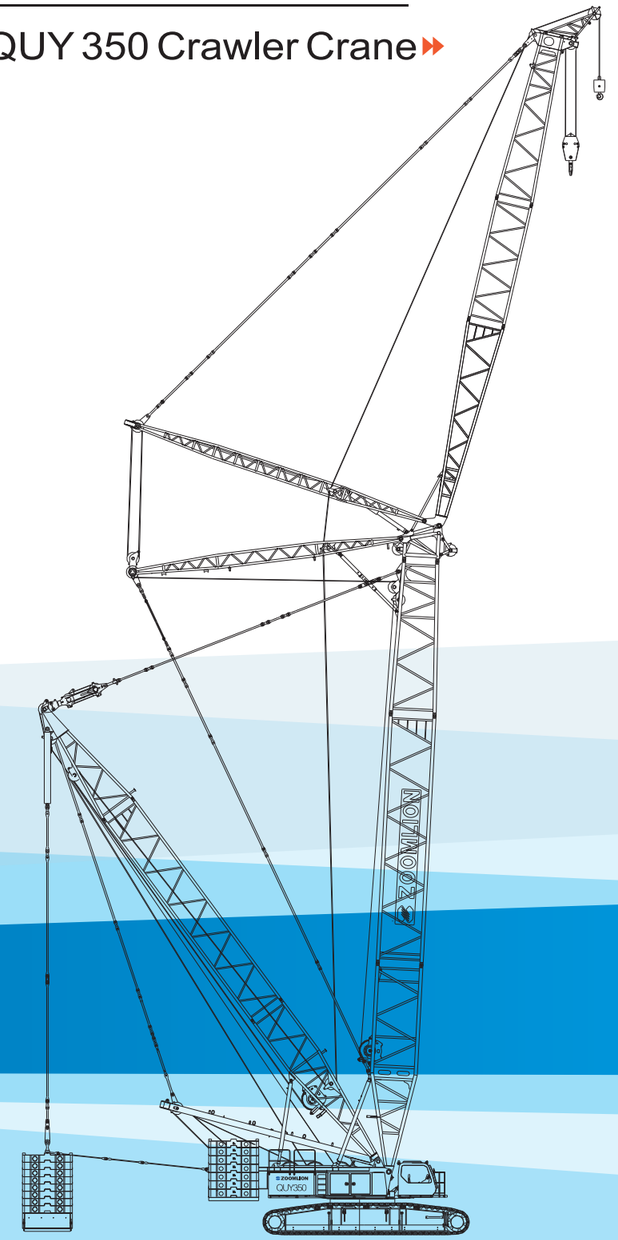
ZOOMLION

QUY350

Zoomlion QUY 350 Crawler Crane



2010.4

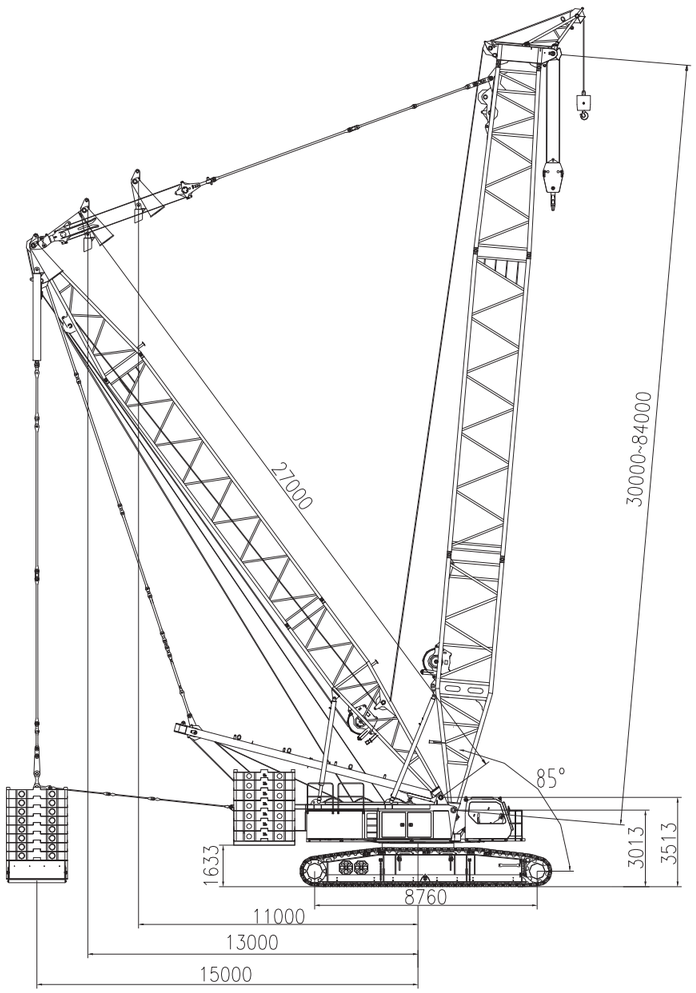
Contents

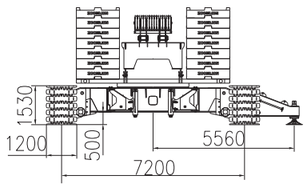
Vision Creates the Future

Expertise Heavy Industry Sci-Tech

I. External Dimensions and Main Parameters

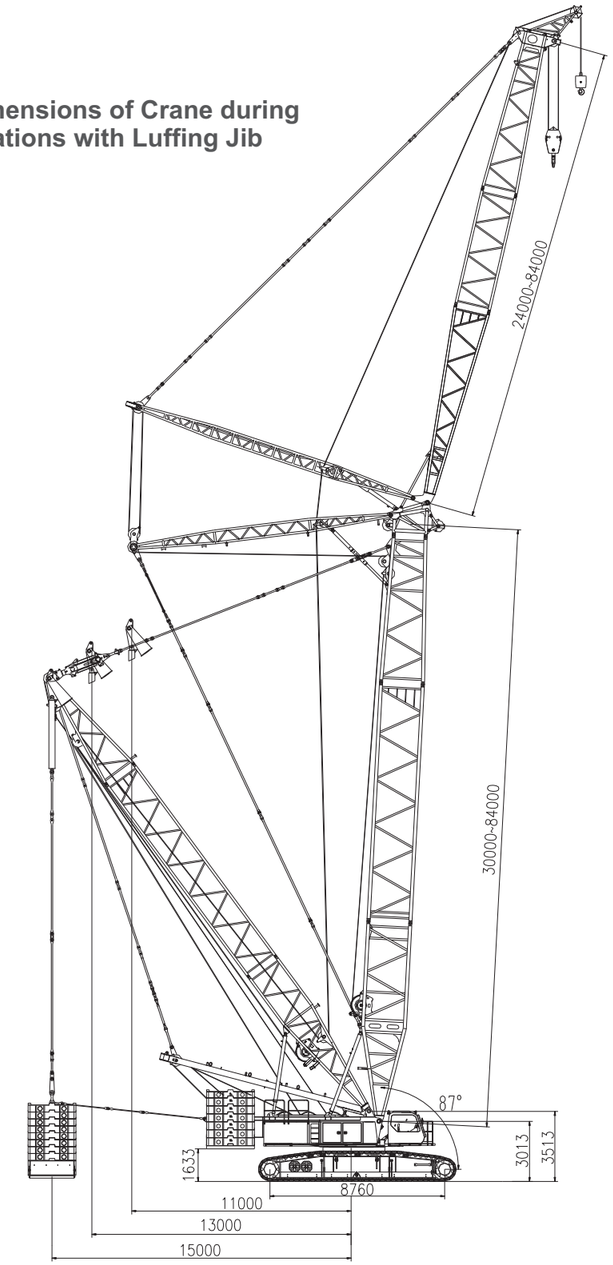
1. External Dimensions of Crane during Superlift Operations with Main Boom





Note: the counterweight radius during superlift operations can be: 11m, 13m, and 15m

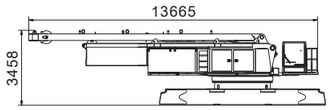
2. External Dimensions of Crane during Superlift Operations with Luffing Jib



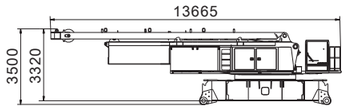
3. Main Performance Parameters

Items		Unit of measurement	Values	Remarks
Maximum lifting capacity/ radius/boom length	Standard	t/m/m	350/5/18	
	Superlift	t/m/m	350/5.5/30	
Length of main boom	Standard	m	18 ~ 84	
	Superlift	m	30 ~ 84	
Length of light duty boom	Standard	m	24 ~ 102	
	Superlift	m	42 ~ 120	
Length of fixed jib		m	12	
Maximum lifting capacity with fixed jib		t	80	
Jib set angle		°	10, 25 and 40	
Length of main boom during crane operations with fixed jib	Standard light duty boom	m	54 ~ 96	
	Light duty boom in superlift operations	m	54 ~ 102	
Length of luffing jib	Standard	m	24 ~ 66	
	Superlift	m	24 ~ 84	
Maximum lifting capacity with luffing jib	Standard	t	140	
	Superlift	t	160	
Working angle of main boom in crane operation with luffing jib		°	65, 75 and 87	
Length of main boom during crane operations with luffing jib	Standard	m	30 ~ 60	
	Superlift	m	30 ~ 84	
Maximum length of main boom + jib during crane operations with luffing jib	Standard	m	54 + 66, 60 + 42	
	Superlift	m	84 + 78(84)	
Speed of single rope on drum	Primary lifting	m/min	135	
	Secondary lifting	m/min	120	
	Main luffing	m/min	50 X 2	
	Luffing of luffing jib	m/min	120	
	Luffing during superlift	m/min	120	
Maximum swiveling speed		rpm	1.0	
Maximum traveling speed		km/h	1.2	
Gradeability			20%	
Ground pressure		Mpa	0.115	
Deadweight of crane with basic boom		t	310	
Maximum single component transport weight		t	58.7	With mast and winch, without track change
		t	47.2	Without main and auxiliary winches
Engine	Model		QSM11	
	Power/rotational speed	kW/rpm	298/2100	
	Torque/rotational speed	Nm/rpm	1898/1400	

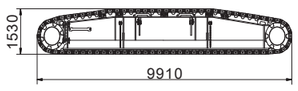
4. External Dimensions and Weight of Main Transport Components



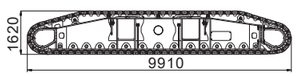
Name	Main machine (telescoping version)
Weight (t)	63.5 (including mast and luffing winch) 52 (excluding main and auxiliary winches)
Quantity	1
Remarks	Width 3400mm



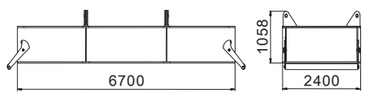
Name	Main machine (standard version)
Weight (t)	58.7 (including mast and luffing winch) 47.2 (excluding main and auxiliary winches)
Quantity	1
Remarks	Width 3300mm



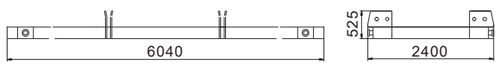
Name	Crawler carrier assembly (standard version)
Weight (t)	28.5
Quantity	2
Remarks	Width 1200mm



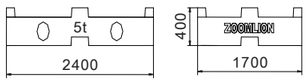
Name	Crawler carrier assembly (telescoping version)
Weight (t)	26.5
Quantity	2
Remarks	Width 1000mm



Name	Counterweight base during superlift operations
Weight (t)	4.8
Quantity	1
Remarks	

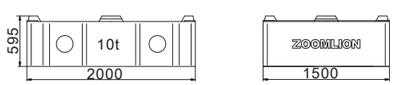


Name	Counterweight base plate
Weight (t)	25.4
Quantity	1
Remarks	

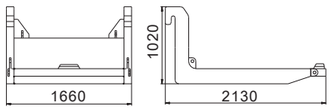


Name	Counterweight block
Weight (t)	5
Quantity	3
Remarks	

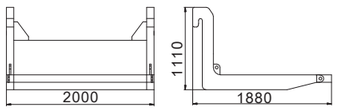
Name	Counterweight block
Weight (t)	10
Quantity	26
Remarks	



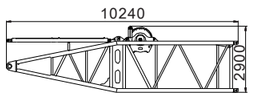
Name	Ballast weight of vehicle body (telescoping version)
Weight (t)	10
Quantity	4
Remarks	When the telescoping version is used, the said ballast weight is used in place of 4 × 10t counterweight blocks.



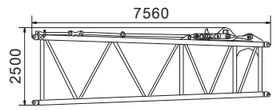
Name	Vehicle body ballast weight support (standard version)
Weight (t)	5.1
Quantity	2
Remarks	



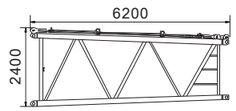
Name	Vehicle body ballast weight support (telescoping version)
Weight (t)	5.1
Quantity	2
Remarks	



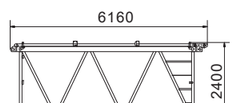
Name	Base section of main boom
Weight (t)	(Including winch and 11overturn protection oil cylinders)
Quantity	1
Remarks	Width 3000mm



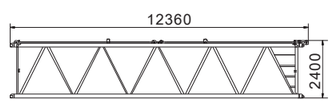
Name	Top section of main boom
Weight (t)	3.5
Quantity	1
Remarks	Width 3000mm



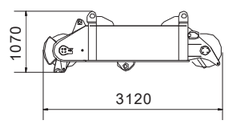
Name	Transition section
Weight (t)	1.6
Quantity	1
Remarks	Width 300mm



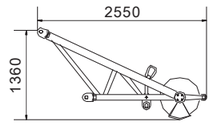
Name	6m section
Weight (t)	2
Quantity	1
Remarks	Width 3000mm



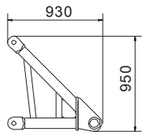
Name	12m section
Weight (t)	4
Quantity	5
Remarks	Width 3000mm



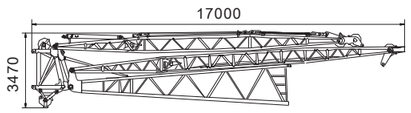
Name	350t boom head
Weight (t)	2.9
Quantity	1
Remarks	Width 2500mm



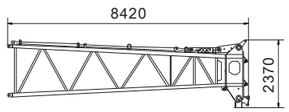
Name	Gooseneck boom
Weight (t)	0.3
Quantity	1
Remarks	Width 900mm



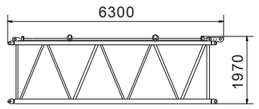
Name	Connection bracket
Weight (t)	0.15
Quantity	1
Remarks	Width 1300mm



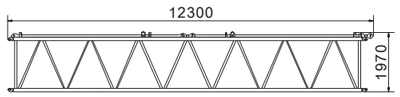
Name	Luffing jib bracing pole assembly
Weight (t)	13
Quantity	1
Remarks	Width 2600mm



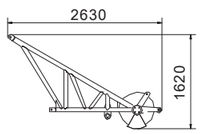
Name	Top section of luffing jib
Weight (t)	2.2
Quantity	1
Remarks	Width 2600mm



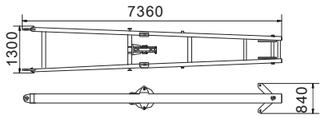
Name	6m section of luffing jib
Weight (t)	1.3
Quantity	1
Remarks	Width 2600mm



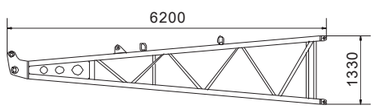
Name	12m section of luffing jib
Weight (t)	2.4
Quantity	5
Remarks	Width 2600mm



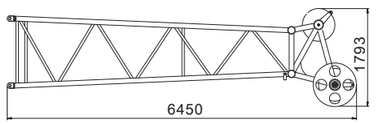
Name	Luffing jib gooseneck boom
Weight (t)	0.25
Quantity	1
Remarks	Width 1300mm



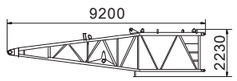
Name	Bracing pole of fixed jib
Weight (t)	0.96
Quantity	1
Remarks	



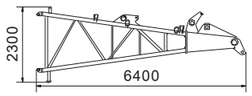
Name	Base section of fixed jib
Weight (t)	0.9
Quantity	1
Remarks	Width 1500mm



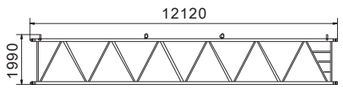
Name	Top section of fixed jib
Weight (t)	0.93
Quantity	1
Remarks	Width 1450mm



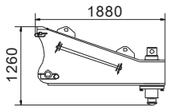
Name	Base section of superlift mast
Weight (t)	2.4
Quantity	1
Remarks	Width 2520mm



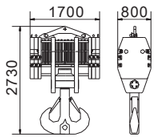
Name	Top section of superlift mast
Weight (t)	2.4
Quantity	1
Remarks	Width 2520mm



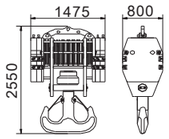
Name	12m section of superlift mast
Weight (t)	2.1
Quantity	1
Remarks	Width 2520mm



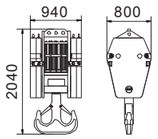
Name	Auxiliary outrigger
Weight (t)	0.9
Quantity	2
Remarks	Width 500mm



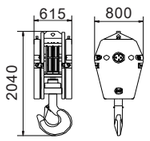
Name	300T hook
Weight (t)	7.2
Quantity	1
Remarks	



Name	200T hook
Weight (t)	5.7
Quantity	1
Remarks	



Name	100T hook
Weight (t)	3.6
Quantity	1
Remarks	



Name	50T hook
Weight (t)	2.2
Quantity	1
Remarks	

II. Technical Descriptions

5. Boom System

Operating mode: standard operating mode and superlift operating mode

Boom: truss-type structure made of high strength tubings

Standard operating mode

Main boom operating mode

Length of heavy duty boom: 18~84m

Length of light duty boom: 24~102m

Length of additional adjustable section of main boom: 6m, 12m

Table of Boom Length Combinations during Crane Operation with Heavy Duty Boom

Length of main boom (m)	Intermediate section of main boom	
	6m	12m
18	0	0
24	1	0
30	0	1
36	1	1
42	0	2
48	1	2
54	0	3
60	1	3
66	0	4
72	1	4
78	0	5
84	1	5

Table of Boom Length Combinations during Crane Operations with Light Duty Boom

Length of main boom (m)	Transition section	Intermediate section of main boom		Intermediate section of luffing jib	
	6m	6m	12m	6m	12m
24	1	0	0	0	0
30	1	1	0	0	0
36	1	0	1	0	0
42	1	1	1	0	0
48	1	1	1	1	0
54	1	1	1	0	1
60	1	1	1	1	1
66	1	0	2	1	1
72	1	1	2	1	1
78	1	1	2	0	2
84	1	0	3	0	2
90	1	1	3	0	2
96	1	1	3	1	2
102	1	0	4	1	2

Fixed jib operating mode

Main boom + fixed jib operating mode: Length of heavy duty boom: 54~84m

Light duty boom + fixed jib operating mode: Length of light duty boom: 54~96m

Length of fixed jib: 12m

Luffing jib operating mode

Length of main boom: 30~60m

Length of luffing jib: 24~66m

Length of additional adjustable section of luffing jib: 6m, and 12m

Table of Luffing Jib Length Combinations

Length of luffing jib (m)	Intermediate section of luffing jib	
	6m	12m
24	1	0
30	0	1
36	1	1
42	0	2
48	1	2
54	0	3
60	1	3
66	0	4

Crane operating mode with boom head used for wind power setup

Length of heavy duty boom: 54~84m Length of boom head used for wind power setup: 7m

Superlift operating mode

Superlift operating mode with main boom

Length of heavy duty boom during superlift operations: 30~84m

Length of light duty boom during superlift operations: 42~12m

Table of Length Combinations for Heavy Duty Boom in Superlift Operating Mode

Length of main boom (m)	Intermediate section of main boom	
	6m	12m
30	0	1
36	1	1
42	0	2
48	1	2
54	0	3
60	1	3
66	0	4
72	1	4
78	0	5
84	1	5

Table of Length Combinations for Light Duty Boom in Superlift Operations

Length of light duty boom (m)	Transition section	Intermediate section of main boom		Intermediate section of luffing jib	
	6m	6m	12m	6m	12m
42	1	1	1	0	0
48	1	1	1	1	0
54	1	1	1	0	1
60	1	1	1	1	1
66	1	0	2	1	1
72	1	1	2	1	1
78	1	0	3	1	1
84	1	1	3	1	1
90	1	0	4	1	1
96	1	1	4	1	1
102	1	0	5	1	1
108	1	0	5	0	2
114	1	1	5	0	2
120	1	1	5	1	2

Superlift operating mode with fixed jib

Heavy duty boom + fixed jib operating mode: Length of heavy duty boom: 54~84m

Light duty boom + fixed jib operating mode: Length of light duty boom: 54~102m

Length of fixed jib: 12m

Crane superlift operations with luffing jib

Length of main boom: 30~84m

Length of luffing jib: 24~84m

Table of Length Combinations for Luffing Jib in Superlift Operation

Length of luffing jib (m)	Intermediate section of luffing jib	
	6m	12m
24	1	0
30	0	1
36	1	1
42	0	2
48	1	2
54	0	3
60	1	3
66	0	4
72	1	4
78	0	5
84	1	5

6. Mechanisms

Primary and secondary lifting mechanisms

The primary and secondary lifting mechanisms are both comprised of a variable displacement axial plunger hydraulic motor, balance valve, speed reducer, normally closed brake, and wire ropes, and can be controlled independently of other mechanisms. The wire ropes used are special anti-twisting wire ropes imported from Germany.

Lifting mechanism	Primary lifting mechanism	Single rope tension (kN)	160
		Rope diameter (mm)	28
		Rope length (m)	1000
		Lifting speed (m/min) (8th layer)	135
	Secondary lifting mechanism	Single rope tension (kN)	130
		Rope diameter (mm)	26
		Rope length (m)	600
		Lifting speed (m/min) (7th layer)	120

Luffing mechanism

The luffing mechanism and superlift luffing mechanism are both comprised of a variable displacement axial plunger hydraulic motor, balance valve, speed reducer, normally closed brake, and wire ropes. The main luffing mechanism is comprised of a fixed-displacement axial plunger hydraulic motor, balance valve, speed reducer, normally closed brake, and wire ropes. The wire ropes used are special anti-twisting wire ropes imported from Germany.

Luffing mechanism	Main boom luffing mechanism	Single rope tension (kN)	125 × 2
		Rope diameter (mm)	26
		Rope length (m)	530
		Luffing speed (m/min) (7th layer)	50 × 2
	Luffing mechanism	Single rope tension (kN)	130
		Rope diameter (mm)	26
		Rope length (m)	650
		Luffing speed (m/min) (7th layer)	120
	Superlift luffing mechanism	Single rope tension (kN)	130
		Rope diameter (mm)	26
		Rope length (m)	850
		Luffing speed (m/min) (7th layer)	120

Slewing mechanism

The slewing mechanism employs a closed-type three-driving-three slewing mechanism; it is comprised of a fixed-displacement hydraulic motor, gear speed reducer, brake, pinions and slewing bearings.

The slewing mechanism is equipped with a controllable slip-turn function to reduce shock and allow for higher stability during initiation and braking.

The slewing mechanism employs triple-row-roller external geared slewing bearings to provide strong carrying capacity and high precision, thereby ensuring slewing stability and accuracy.

The slewing mechanism offers stepless speed regulation within the range of 0~1.0r/min.

Traveling mechanism

The traveling mechanism is a four-motor four-reducer type, with imported hydraulic motor and balance valve. The control handle and foot pedal are both used to dually control the crawlers, allowing for such actions as straight line traveling, unilateral steering, differential steering, pivotal steering, and driving with load, etc, thus offering a high level of mobility, maneuverability and flexibility.

Traveling speed: 0~1.2km/h.

Gradeability: 20%.

Crawler tensioning: the tensioning oil cylinder is controlled by a standalone pump station, making adjustment is fast, easy and reliable.

The changeable gauge structure format for the undercarriage can be selected as necessary.

Mast jack-up mechanism

Comprised of the mast, mast jack-up oil cylinder, auxiliary hydraulic system, etc, this mechanism is used during self-assembling/disassembling (or relocating) of the whole machine, where the mast is jacked up beyond 90 degrees perpendicular from its horizontal position to make it easy to connect the anchoring rods, assemble the boom, and mount the crawler assembly and counterweight.

Control room swiveling and luffing mechanism

The operational oscillating and swiveling mechanism allows the control room to rotate by 90° from the side of the rotating platform to the front of the rotating platform, thus reducing the width of the overall crane and making it easier to transport.

The control room luffing mechanism allows the control room to luff upwards by 20°, thereby dramatically expanding the driver's field of vision.

Outrigger jack-up and crawler self-mounting and dismounting mechanism

The outrigger jack-up and crawler self-mounting and dismounting mechanism is comprised of the undercarriage outriggers, outrigger oil cylinders, outrigger valves, and crawler power pin, etc. The outrigger jack-up mechanism is the primary load carrying mechanism during the crawler self-mounting and dismounting process. The crawler self-mounting and dismounting mechanism installs the crawler assembly through the mast jack-up mechanism and mast lifting oil cylinder. When no auxiliary lifting equipment is available, the outrigger jack-up and crawler self-mounting and dismounting mechanism can independently mount and dismount the crawler assembly, thereby improving operational efficiency, reducing the manual work intensity, and avoiding the risks involved in manual control.

7. Systems

Hydraulic system

The hydraulic system is comprised of an oil pump, control valve, hydraulic motor, hydraulic oil tank, and cooler, etc.

The hydraulic system employs one of the world's most advanced load feedback control systems; imported products are used for all major components such as the pump, motor, and main control valve to help save energy and ensure high efficiency, high reliability, and long service life.
Main hydraulic pump: variable displacement plunger pump.

Oil pumps of auxiliary mechanisms: variable displacement plunger pump.

Main control valve: pilot electrohydraulic proportional control valve.

Main circuit control method: valve controlled system.

Control of auxiliary mechanisms: multi-directional solenoid valve block.

Outrigger control: multi-directional solenoid valve block operated from the electric control box.

Capacity of hydraulic oil tank: 850L.

Oil filter: discharge oil filter, the precise filter for oil circuit control.

Cooler: aluminum radiator, powered by the hydraulic motor.

Various overflow valves in the hydraulic system: these can effectively prevent local systems or the whole system from overloading and protect all system components to ensure their safe operation.

Electrical system

DC 24V, negative ground, 2 x 195AH batteries.

The electrical components of the vehicle primarily include: power supply, engine starter, engine misfiring, indicator lights, alarms, lighting devices, fans, windshield wipers, horn, lifting height limiters, hydraulic oil cooling fans, digital display monitor, PLC controller, load moment limiter system, engine preheater, and safety devices, etc.; these appliances ensure that the crane will operate safely and provide a comfortable working environment for the driver and other workers. The whole vehicle employs CAN bus technology to effectively connect the engine, PLC controller, load moment limiter and digital display together with fault detection and self-diagnosis functions; the vehicle also uses a GPS/GPRS global positioning system (optional) and fault diagnosis system.

Power system

The engine is an original imported US Cummins electronic injection diesel engine with a CAN bus interface.

Rated output power: 298kw, 2100r/min

Maximum output torque: 1898Nm, 1400r/min

Emissions standard: U.S. EPA Tier 3 and EU Stage III.

For the fuel oil tank, a large-volume 700L tank is used to ensure a sufficiently long working time of the engine.

Centralized display system

The 10.4 in. touch-screen LCD monitor, with multi-language display capabilities, can centrally display the various operating mode signals collected by the PLC controller, including the engine's rotational speed, water temperature, fuel oil pressure, hydraulic pump pressure, main motor pressure, and the level of the main machine operation, etc. It can monitor working conditions in realtime; when the crane is working abnormally, the system will emit a yellow or red light alarm and sound an audible alarm in case of a red alarm.

Centralized lubrication system

Three sets of centralized lubrication systems are adopted (one for the upper machinery, and two for the undercarriage) to dramatically reduce the wear and tear on parts and components and to allow for easy maintenance.

8. Safety Devices

This crane adopts multiple types of safety and alarm devices, including mechanical, electronic, and hydraulic, to ensure safe operation of the machine.

Load moment limiter

The limiter is comprised of a load moment indicator and a digital LCD monitor. When the lifting load reaches 90% of the rated load moment, the yellow lamp will light up; when the lifting load moment reaches the rated load moment, the red lamp will light on, a buzzer alarm will sound and operation of the crane will stop automatically to prevent any incidents that may occur as a result of the crane overloading during construction operations, thus helping to ensure normal and safe operation of the crane.
The digital LCD monitor can display the following data:
Moment ratio
Main boom elevation angle
Length of main boom
Working radius
Actual load
Allowed lifting load
Maximum allowed lifting height

Height limiter devices

The limit switch, movement weight and other components are mounted on the top section boom, and are used to prevent excessive lifting of the hook. When the hook is lifted to a certain height, the limit switch signals the electrical system to automatically stop the lifting of the hook, also setting off an acoustooptic warning through the buzzer and display screen in the control room to prevent overwinding of the hook.

Lifting boom limiting position alarm and protection system

This protection system has a load moment limiter and limit switch for dual-level control, enabling automatic termination of luffing movements of the boom's limited elevation angle position, while also simultaneously triggering an acoustooptic warning.

Dynamic center-of-gravity detection system

This system dynamically displays the center-of-gravity position and realtime ground pressure of the whole machine, according to different load lifting operating modes.

Whole machine level sensor

This electronic level meter can display in realtime the inclination angle of the whole machine and send an alarm on the digital display screen in order to ensure safe operation of the vehicle.

Wire rope over-release protection device

When the wire rope in the drum has been released until only three single wound coils remain, this protection device signals the electrical system to automatically cut off the releasing of rope and the descending hook, also setting off an acoustooptic warning through the buzzer and display screen in the control room.

Wind speed indicator

The electronic wind speed sensor can indicate wind speed levels on digital display screen in realtime, conveniently alerting workers of potentially dangerous working conditions.

Boom overturn protection device

The brace poles, which are of a nested steel tube and spring structure, are mounted at the base section of the main boom. They employ spring-loaded compression force to provide support and to prevent the main boom from overturning.

Emergency stop button

In case of any emergency, press this button to stop all actions.

Tri-color warning light

With three different colors, red, yellow and green, the warning light can synchronously indicate overload status. Green indicates that the load factor is below 90%, yellow informs operators that the load factor is between 90% and 102%, while the red color warns that the load factor has exceeded 102% and that the crane is in danger of overloading.

Monitoring system

This system includes four cameras for monitoring conditions at the rears of the winch mechanism and of the whole machine.
Monitor: with the press of a button you can toggle between different monitoring feeds.

Remote GPS monitoring system

This system allows for GPS satellite positioning, GPRS data transmission, equipment use status inquiry, statistical information, remote fault diagnosis and other functions.

9. Control Room

The structure of the control room is made entirely of steel, is surrounded by reinforced glass on all four sides, and has laminated glass for its sunroof and windshield. The interior is equipped with a sun shield, adjustable seat, windshield wipers, electronic control handle, load moment indicator, digital display monitor, air conditioners, electric fans, illuminating lamps, CD player, cigarette lighters, and fire extinguishers, etc. The control room offers a broad field of vision, and a spacious and comfortable interior.

10. Hook

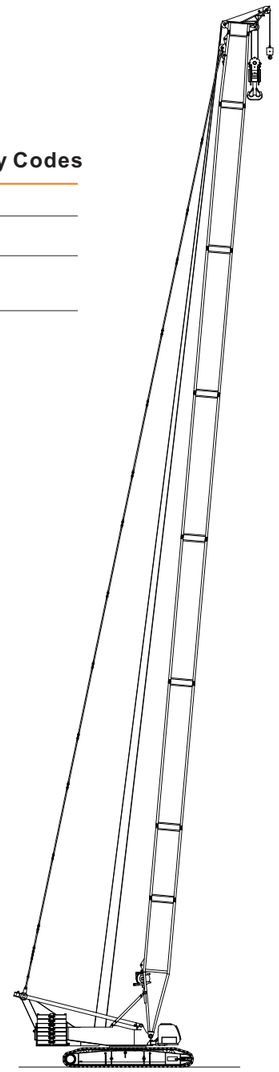
The following hooks are optionally available, all of which have a rotating hook and safety latch.
300t hook: equipped with 12 pulleys.
200t main hook: equipped with 8 pulleys.
100t main hook: equipped with 4 pulleys.
50t main hook: equipped with 2 pulleys.
16t hook: cylindrical hook.

III. Description of Boom Assembly

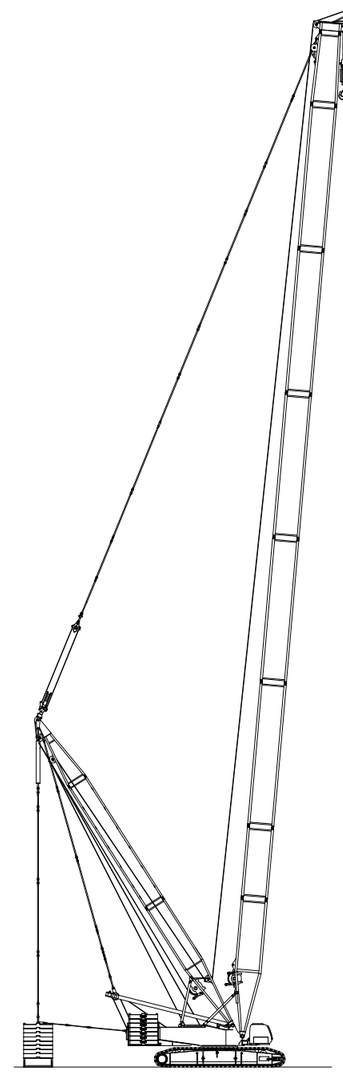
Description #1

Descriptions of Boom Assembly Codes

Code	Type	Working parameters
S	Standard heavy duty boom	Main boom: 18~84m
SDB	Heavy duty boom in superlift operations	Main boom: 30~84m



S

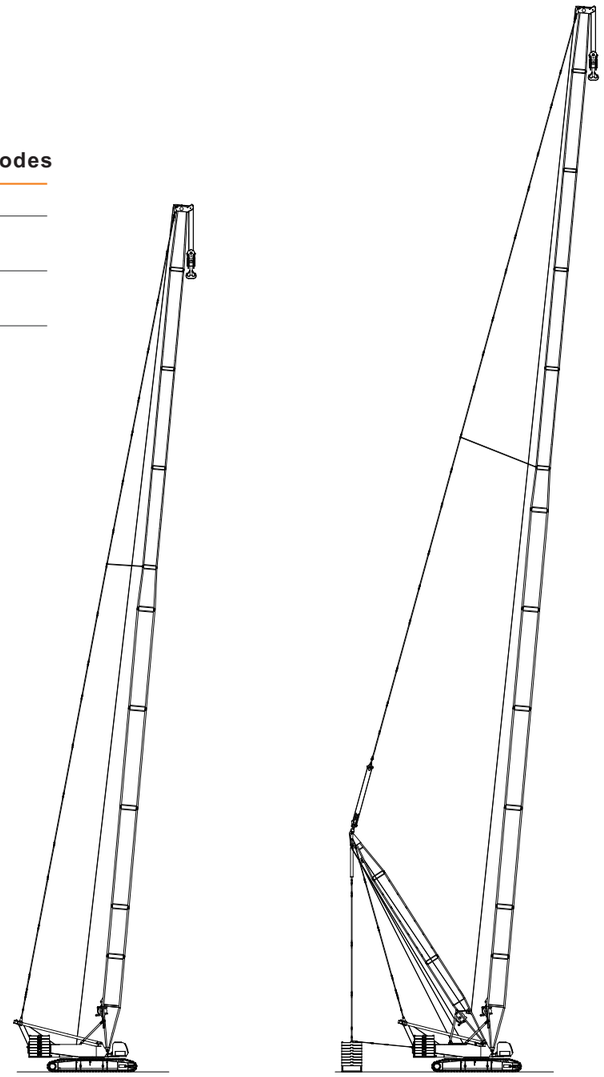


SDB

Description #2

Descriptions of Boom Assembly Codes

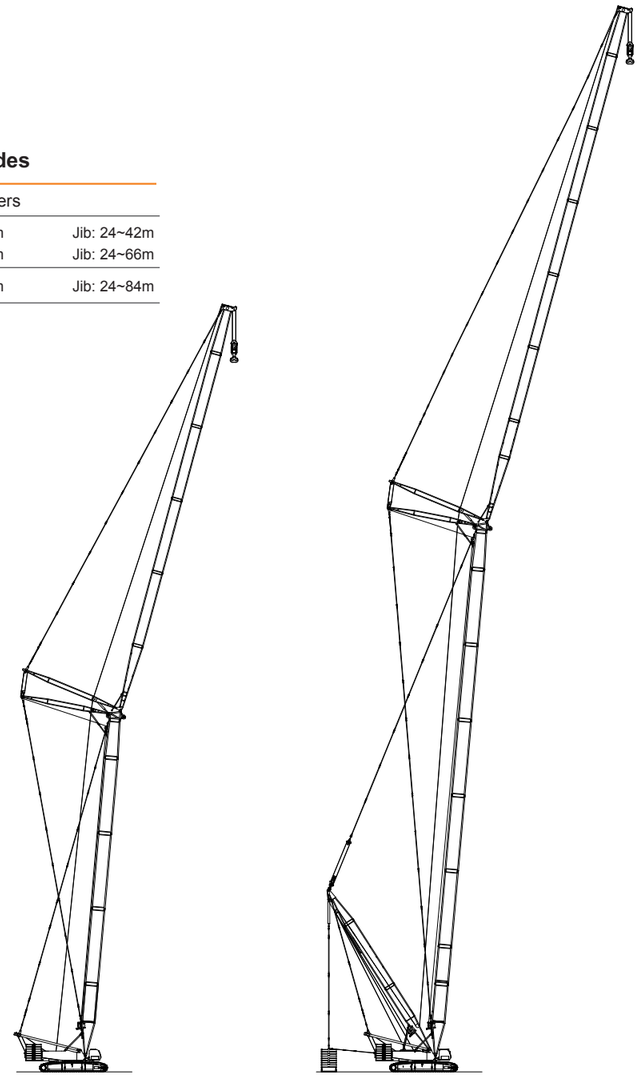
Code	Type	Working parameters
SL	Standard light duty boom	Main boom: 24~102m
SLDB	Light duty boom in superlift operations	Main boom: 42~120m



Description #3

Descriptions of Boom Assembly Codes

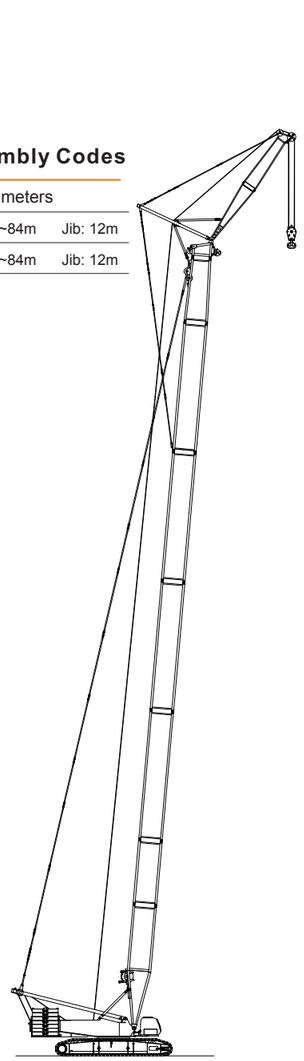
Code	Type	Working parameters	
SW	Standard luffing jib	Main boom: 30~60m Main boom: 30~54m	Jib: 24~42m Jib: 24~66m
SWDB	Superlift luffing jib	Main boom: 30~84m	Jib: 24~84m



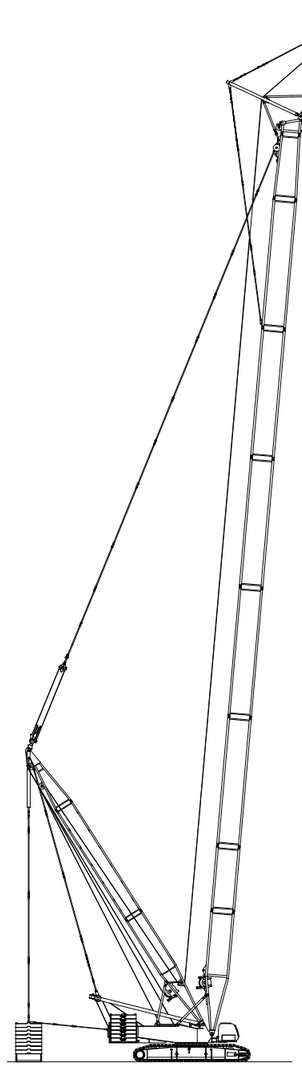
Description #4

Descriptions of Boom Assembly Codes

Code	Type	Working parameters	
SF	Standard fixed jib	Main boom: 54~84m	Jib: 12m
SFDB	Superlift fixed jib	Main boom: 54~84m	Jib: 12m



SF

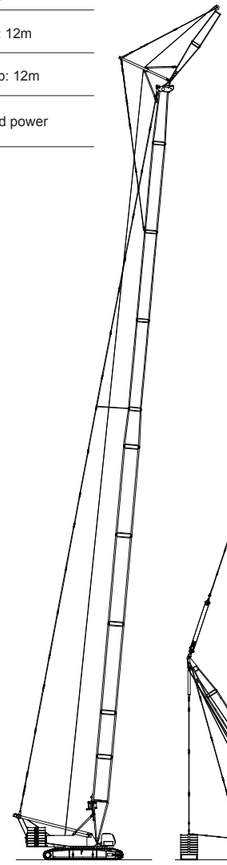


SFDB

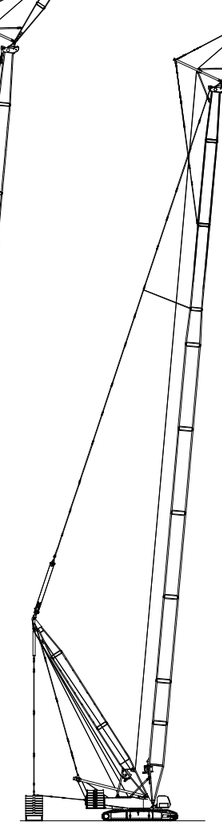
Description #5

Descriptions of Boom Assembly Codes

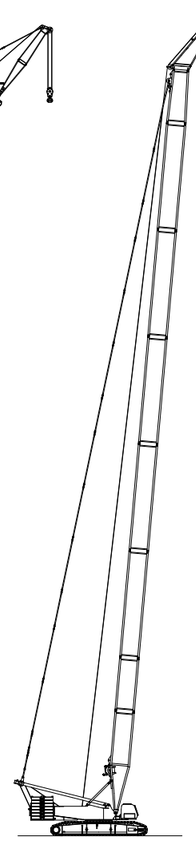
Code	Type	Working parameters
SLFV	Fixed jib of standard light duty boom	Main boom: 54~96m Jib: 12m
SLFVDB	Fixed jib of light duty boom in superlift operations	Main boom: 54~102m Jib: 12m
SHS	Crane operating mode with boom head used for wind power setup	Main boom: 54~84m Boom head used for wind power setup: 7m



SLFV



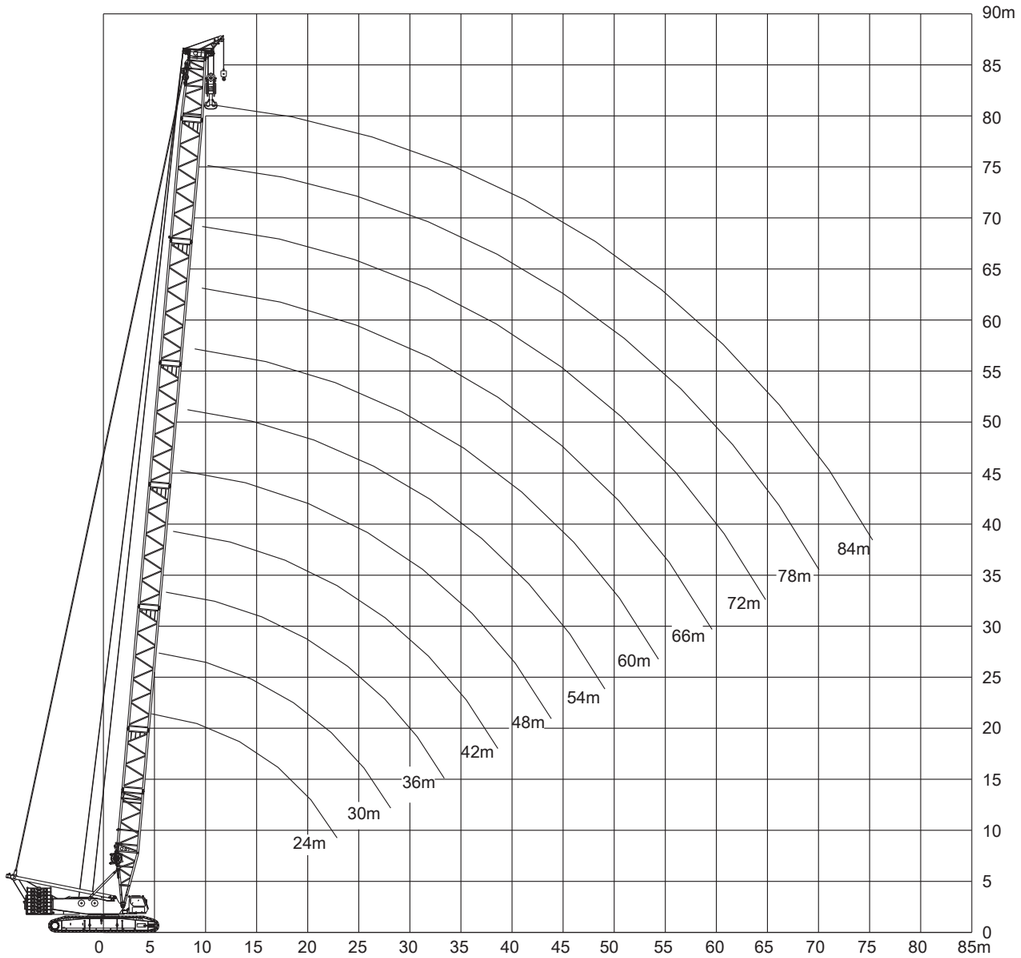
SLFVDB



SHS

IV. Lifting Performance

11. Lifting Characteristics of Heavy Duty Boom



Notes:

1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The working length of the S-type main boom during crane operations is 18~84m.

Table of Lifting Capacity of Heavy Duty Boom (I)

Counterweight 125t Ballast weight of vehicle body 50t

Unit of measurement: t

Radius (m)	Length of main boom (m)											
	18	24	30	36	42	48	54	60	66	72	78	84
5.0	350	300.0										
6.0	300.0	295.0	290.0	282.0								
7.0	260.7	259.1	2591	258.8	247.5							
8.0	228.9	227.5	226.5	225.1	224.2	217.2	184.0					
9.0	201.9	200.5	199.5	198.3	197.4	196.0	172.7	155.0	147.0	134.3		
10.0	180.2	179.0	178.9	176.9	176.6	176.8	166.7	140.4	134.2	128.3	119.2	104.0
11.0	160.0	160.0	1600	155.5	150.0	145.0	140.0	136.0	126.0	117.2	112.1	102.0
12.0	144.4	148.0	149.0	141.4	137.5	135.3	134.3	133.3	116.2	107.0	103.0	99.0
14.0	115.1	118.0	118.0	118.2	113.1	108.1	106.1	105.0	103.0	98.4	88.9	84.8
16.0	95.4	98.0	98.0	97.0	97.0	90.9	93.0	88.9	87.9	86.7	83.1	74.7
18.0	80.0	83.0	83.0	81.8	81.8	76.8	79.0	75.8	74.7	74.5	73.4	69.9
20.0		72.0	71.0	70.7	70.7	70.7	69.7	67.0	65.7	63.2	63.2	62.2
22.0		64.0	62.5	62.6	61.6	61.6	61.0	59.5	58.6	56.6	55.1	54.1
24.0			60.0	57.6	56.6	55.6	55.6	54.5	53.5	53.0	52.5	51.0
26.0			56.5	54.0	53.0	52.5	52.0	52.0	51.5	51.5	51.0	50.7
28.0				49.1	48.2	47.7	47.2	46.8	46.7	46.5	46.1	45.6
30.0				44.7	43.9	43.2	42.9	42.4	42.2	42.0	41.5	41.0
32.0					39.0	39.0	39.0	37.0	39.0	38.0	37.0	35.0
34.0					37.1	36.5	36.0	35.5	35.1	34.9	34.5	34.0

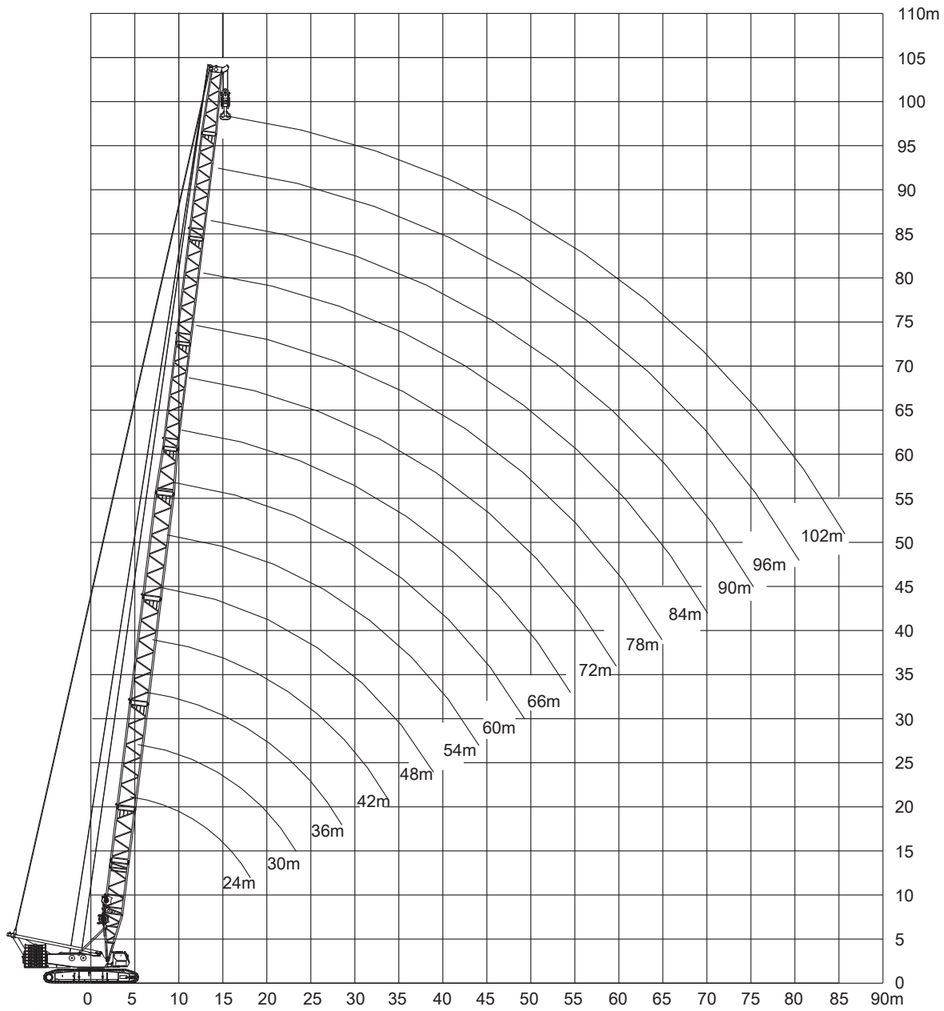
Table of Lifting Capacity of Heavy Duty Boom (II)

Counterweight 125t Ballast weight of vehicle body 50t

Unit of measurement: t

Radius (m)	Length of main boom (m)											
	18	24	30	36	42	48	54	60	66	72	78	84
36.0					30.8	34.0	34.0	32.0	32.0	31.0	30.5	30.0
38.0						31.1	30.6	30.1	29.9	29.	29.2	28.6
40.0						28.0	28.0	28.0	26.0	26.0	26.0	25.0
42.0						25.5	25.5	26.0	24.0	24.0	23.0	23.5
44.0						23.0	23.0	24.0	22.0	22.0	20.0	22.0
46.0							21.5	22.0	20.8	21.0	19.5	20.3
48.0							20.0	20.0	19.5	20.0	19.0	18.6
50.0								18.5	18.4	18.5	17.5	17.5
52.0								17.0	17.3	17.0	16.0	16.3
54.0									16.3	16.0	15.0	15.2
56.0									15.2	15.0	14.0	14.1
58.0										14.0	13.3	13.1
60.0										13.0	12.5	12.0
62.0										12.0	11.8	11.1
64.0										11.0	11.0	10.2
66.0											10.8	9.4
68.0												8.5
70.0												7.8

12. Lifting Characteristics of Light Duty Boom



Notes:

1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The working length of the SL-type main boom during crane operations is 24~102m.

Table of Lifting Capacity of Light Duty Boom (I)

Counterweight 125t Ballast weight of vehicle body 50t

Unit of measurement: t

Radius (m)	Length of light duty boom (m)													
	24	30	36	42	48	54	60	66	72	78	84	90	96	102
6.0	160.0													
7.0	160.0	160.0	160.0											
8.0	160.0	160.0	160.0	160.0	160.0									
9.0	160.0	160.0	160.0	160.0	160.0	153.5	143.4							
10.0	160.0	160.0	156.0	160.0	154.5	141.4	140.4	119.2						
11.0	152.0	147.0	140.4	150.0	141.4	130.3	130.3	116.2	109.1					
12.0	133.0	133.0	144.4	136.0	130.3	120.2	119.2	113.1	106.1	92.9	79.8			
14.0	106.0	120.0	121.2	115.1	109.1	103.0	102.0	99.0	94.9	88.9	75.8	72.7	64.6	
16.0	88.0	99.0	100.0	99.0	93.9	86.9	88.9	85.9	82.8	79.8	71.7	69.7	62.6	58.6
18.0	75.0	84.0	84.8	84.8	83.8	75.8	78.8	75.8	73.7	70.7	67.7	66.7	59.6	56.6
20.0	65.0	73.0	73.7	72.7	72.7	68.7	70.7	67.7	65.7	63.6	61.6	59.6	56.6	55.6
22.0	57.0	65.0	64.6	64.6	63.6	61.6	63.6	61.6	58.6	57.6	55.6	53.5	52.5	50.0
24.0		58.0	57.6	57.6	56.6	56.6	56.6	55.6	53.5	52.5	50.5	48.5	47.5	45.5
26.0		52.0	51.5	51.5	50.5	50.5	50.5	50.0	49.0	47.5	46.0	44.4	42.9	41.4
28.0		47.0	47.0	46.5	46.0	45.5	45.5	44.9	44.4	43.4	41.9	40.4	39.4	37.9

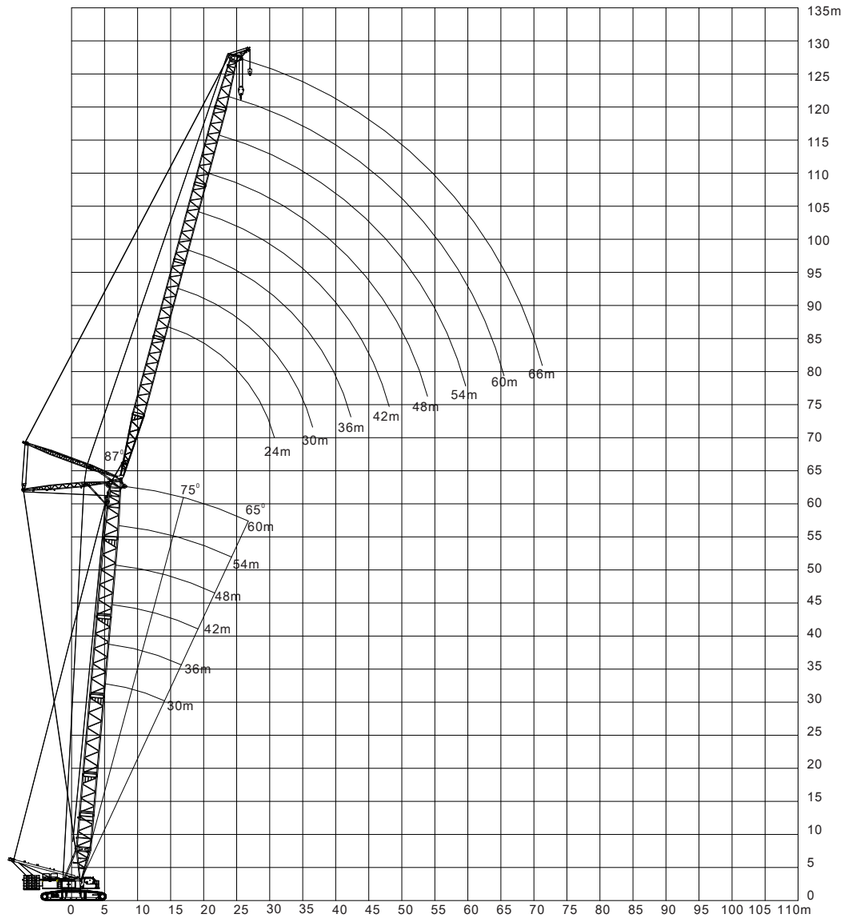
Table of Lifting Capacity of Light Duty Boom (II)

Counterweight 125t Ballast weight of vehicle body 50t

Unit of measurement: t

Radius (m)	Length of light duty boom (m)													
	24	30	36	42	48	54	60	66	72	78	84	90	96	102
30.0			42.9	42.4	41.9	41.4	41.4	40.9	40.4	39.9	38.9	37.4	36.4	34.3
32.0			39.4	38.9	38.4	37.9	37.9	37.4	36.9	36.4	35.9	34.3	33.3	31.8
34.0				35.9	35.4	34.3	34.3	34.3	33.8	33.3	33.3	31.8	30.8	29.3
36.0				33.3	32.8	31.8	31.8	31.3	30.8	30.8	30.3	29.5	28.5	27.1
38.0				30.8	30.3	29.7	29.5	29.1	28.5	28.3	28.0	27.4	26.4	25.0
40.0					28.2	27.6	27.4	27.0	26.4	26.2	25.8	25.3	24.4	23.1
44.0					24.7	24.1	23.8	23.3	22.7	22.5	22.1	21.6	21.2	19.9
48.0						21.3	20.9	20.4	19.8	19.6	19.2	18.6	18.3	17.2
52.0							18.6	18.0	17.4	17.1	16.7	16.2	15.8	14.7
56.0								16.0	15.4	15.0	14.5	13.9	13.4	12.5
60.0									13.6	13.1	12.7	12.0	11.5	10.6
64.0									12.0	11.5	11.0	10.3	9.8	9.0
68.0										10.1	9.6	8.9	8.4	7.6
72.0											7.8	7.6	7.1	6.3
76.0												6.5	6.0	5.2
80.0												5.6	4.8	4.1

13. Lifting Characteristics of Luffing Jib



Notes:
1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The length of the SW-type main boom during crane operations is 30~60m, and the length of the luffing jib is 24~42m; or the length of the main boom is 30~54m, and the length of the luffing jib is 24~66m.

Unit of measurement: t

Radius (m)	Operating mode of crane with standard luffing jib — Main boom 30m — Counterweight 125t — Ballast weight of vehicle body 50t								Operating mode of crane with standard luffing jib — Main boom 36m — Counterweight 125t — Ballast weight of vehicle body 50t							
	Length of jib								Length of jib							
	24	30	36	42	48	54	60	66	24	30	36	42	48	54	60	66
	87°								87°							
12	140								125							
14	125	115							120	105						
16	106	105	96	90					105	99	94	90				
18	95	93	91	87	82				93	91	87	82	77			
20	83	83	82	78	72	68			83	82	82	78	72	66		
22	75	74	73	72	68	64	62	58	73	72	70	68	64	62	58	
24	69	67	66	65	62	58	56	54	66	66	65	64	62	57	54	51
26	60	60	59	58	57	53	51	49	60	59	58	58	56	52	49	47
28		56	54	53	53	51	48	45		54	54	53	52	50	46	44
30		52	50	49	49	48	46	42		50	48	48	48	46	43	41
32			46	45	45	44	42	39		45	45	44	44	43	40	39
34			43	42	41	40	38	36			41	40	40	39	36	35
36			41	39	38	37	36.5	34			38	38	37.5	37	35	34
38				36	36	35	35	32				36	35	35	34	32
40				34	33	33	32.5	30				34	33	32	32	30
42				32	31	31	30	29				32	31	30	30	28
44					29.5	29	28.5	28					29.5	28	28	26
46					28	28	27	27					28	27	26	25
48					26	26	25.5	25					27	25.5	25	24
50						24	24	24						24	24	23
52						23	23	23						23	23	22
54						22	22	22						22	22	21
56							21	20.5							21	20
58							20	19							20	19
60							19	17.5							19	18
62								16								17
64								15								16

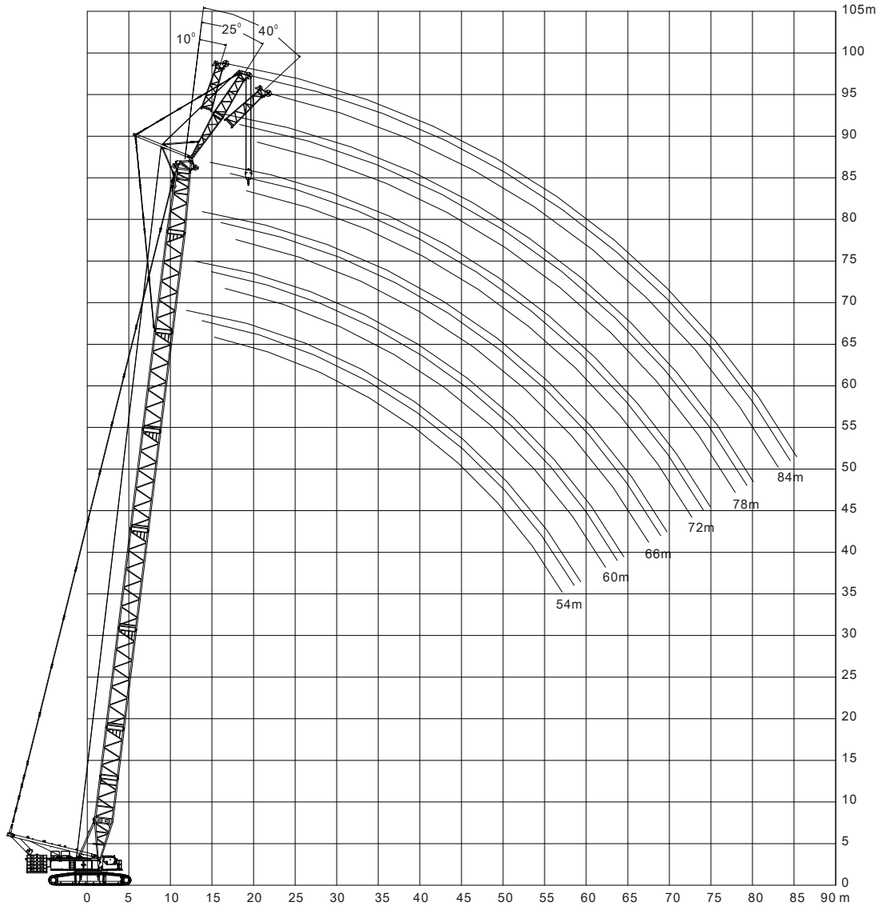
Unit of measurement: t

Radius(m)	Operating mode of crane with standard luffing jib			Main boom 42m		Counterweight 125t		Ballast weight of vehicle body 50t	Operating mode of crane with standard luffing jib			Main boom 48m		Counterweight 125t		Ballast weight of vehicle body 50t
	Length of jib								Length of jib							
	24	30	36	42	48	54	60	66	24	30	36	42	48	54	60	66
	87°								87°							
12	120								110							
14	105	100							100	96						
16	100	92	85						90	86	84					
18	90	85	78	76	74				85	77	73	71				
20	81	79	70	68	66	64			78	73	70	67	62	58		
22	72	72	68	62	60	58	56		71	69	65	62	59	55	50	
24	64	64	63	57	55	53	51	47	65	63	60	56	54	52	48	44
26	58	57	57	53	52	50	48	45.5	58	56	56	53	50	48	46	43
28		52	51	50	48	45	43	43		52	51	50	47	45	43	40
30		48	48	47	46	44	42	40		48	47	47	43	41	40	38.5
32		44	43	43	42	40	38	37		44	43.5	43	41	39	37	36
34			41	41	40	39	37	35			40	40	39	38	35	33.5
36			38	38	37	36	35	33			37.5	37	36.5	36	33	31
38			36	35	34	34	33	31			35	34	34	34	31	29
40				33	32	32	31	29				32.5	32	32	29.5	28
42				31	30	30	29	28				31	30	30	28	26.5
44					28.5	28	27.5	26				30	28.5	28	27	25
46					27	26	26	24					27	26	26	23
48					26	25	25	23.5					26	25	24.5	22
50						24	24	23						24	23	21
52						23	22.5	21.5						23	22	20.5
54						22	21	20						22	21	20
56							20	19							20	19
58							19	18							19	18
60							18	17							18	17
62								16								16
64								15								15
66								14								14

Unit of measurement: t

Radius (m)	Operating mode of crane with standard luffing jib			Main boom 54m		Counterweight 125t		Ballast weight of vehicle body 50t	Operating mode of crane with standard luffing jib			Main boom 60m		Counterweight 125t		Ballast weight of vehicle body 50t
	Length of jib								Length of jib							
	24	30	36	42	48	54	60	66	24	30	36	42	48	54	60	66
	87°								87°							
12																
14	93	85							85							
16	86	81	74						79	71	64					
18	77	74	70	65					74	67	61	57				
20	72	68	66	63	57	50			70	63	59	54				
22	68	64	61	59	55	48	45		64	60	56	53				
24	62	60	57	54	51	45	42	38	59	56	52	49				
26	56	56	52	50	48	45	40	36	54	52	49	46				
28		52	50	47	44	42	38	35		48	46	44				
30		48	47	44	43	40	37	34		45	43	42				
32		46	43	42	40	37	36	33		42	40.5	38				
34			40	40	38	36	34	31			39	36				
36			37.5	37	35.5	33.5	32	30			36	34				
38			35	34	33	31	30	28			34	32				
40				32.5	31.5	29.5	28	26				30				
42				31	30	28	27	25				28.5				
44				30	28.5	27	26	23				27				
46					27	26	24	21								
48					25.5	24.5	23	20								
50					24	23	22	19								
52						22	21	19								
54						21	20	18								
56							19	18								
58							18	17								
60							17	16								
62								15								
64								14								
66								13								

14. Lifting Characteristics of Heavy Duty Boom + Fixed Jib



Notes:
1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The length of the SF-type main boom during crane operations is 54~84m, and the length of the fixed jib is 12m.

Table of Lifting Capacity of Heavy Duty Boom + Fixed Jib (I)

Counterweight 125t Ballast weight of vehicle body 50t Length of fixed jib 12m

Unit of measurement: t

Length of main boom (m)	54			60			66		
Radius (m)	Jib set angle			Jib set angle			Jib set angle		
	10°	25°	40°	10°	25°	40°	10°	25°	40°
14.0	80.0			80.0					
16.0	80.0	51.3		80.0	51.0		80.0		
18.0	80.0	48.8	30.0	80.0	48.0		78.8	45.6	
20.0	72.4	47.5	28.8	71.2	47.5	28.2	69.8	45.1	27.7
22.0	64.7	45.0	27.5	63.6	44.5	27.0	62.3	42.3	26.4
24.0	58.3	43.8	27.5	57.3	43.0	27.0	56.1	40.9	26.4
26.0	52.9	42.5	26.3	52.0	42.0	25.8	50.8	39.9	25.3
28.0	48.3	40.0	26.3	47.5	39.0	25.8	46.4	37.1	25.3
30.0	44.2	38.8	25.0	43.6	38.0	24.5	42.6	36.1	24.0
32.0	40.5	38.1	25.0	40.2	37.0	24.5	39.2	35.2	24.0
34.0	37.3	35.2	24.4	37.0	34.0	23.9	36.3	32.3	23.4
36.0	34.5	32.4	23.8	34.1	31.0	23.3	33.5	29.5	22.9
38.0	32.0	29.8	23.8	31.7	28.0	23.3	30.5	26.6	22.9
40.0	29.8	27.6	23.1	28.5	26.0	22.6	28.8	24.7	22.2
44.0	26.0	23.7	22.5	24.5	22.0	22.1	23.5	20.9	21.6
48.0	22.9	20.4	20.5	21.3	19.0	20.1	20.5	18.1	19.7
52.0	20.3	17.7	17.7	19.1	17.0	17.3	18.4	16.2	17.0
56.0				16.2		14.0	15.5	14.2	13.7
60.0						12.0	14.0	12.4	11.8
64.0								10.7	

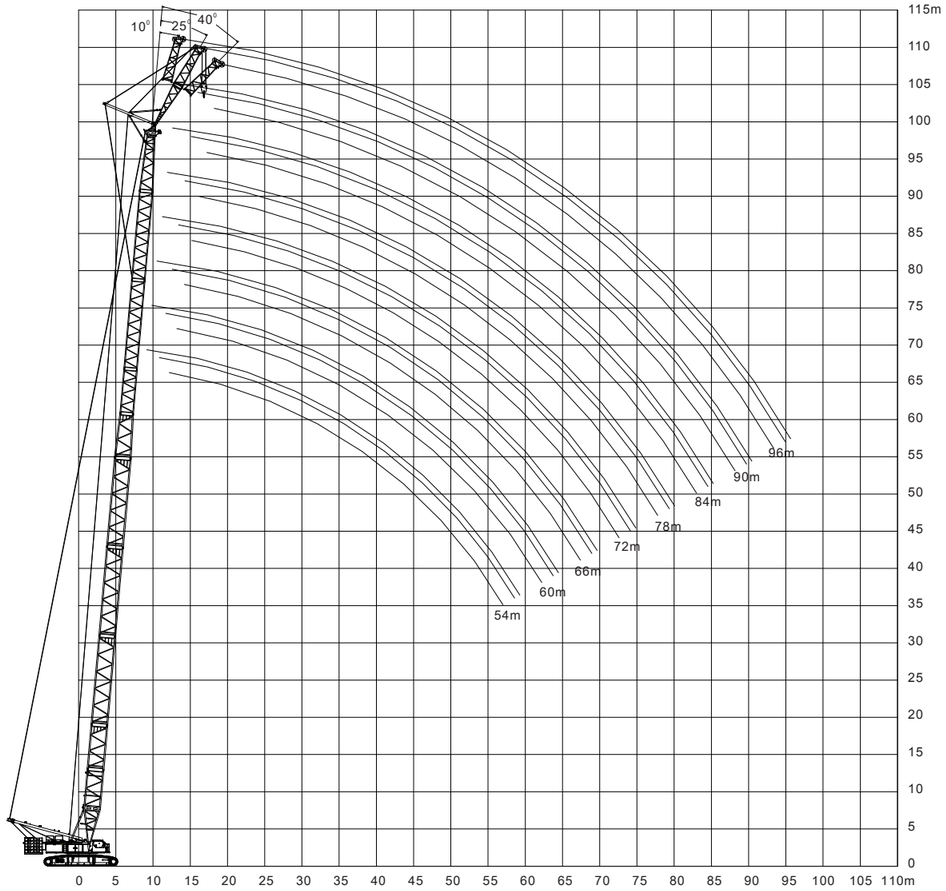
Table of Lifting Capacity of Heavy Duty Boom + Fixed Jib (II)

Counterweight 125t Ballast weight of vehicle body 50t Length of fixed jib 12m

Unit of measurement: t

Length of main boom (m)	72			78			84		
Radius (m)	Jib set angle			Jib set angle			Jib set angle		
	10°	25°	40°	10°	25°	40°	10°	25°	40°
16.0	80.0			75.5			72.0		
18.0	77.4	43.3		72.0			69.0		
20.0	68.6	42.9	27.1	66.8	40.7		64.0	38.7	
22.0	61.2	40.2	25.9	59.9	38.2	25.4	58.0	36.2	24.9
24.0	55.1	38.8	25.9	54.1	36.9	25.4	52.0	35.0	24.9
26.0	49.9	37.9	24.8	49.1	36.0	24.3	48.0	34.2	23.8
28.0	45.5	35.2	24.8	44.7	33.4	24.3	43.0	31.8	23.8
30.0	41.8	34.3	23.5	41.0	32.6	23.1	39.7	31.0	22.6
32.0	38.5	33.4	23.5	37.6	31.7	23.1	35.9	30.1	22.6
34.0	35.5	30.7	23.0	34.5	29.2	22.5	32.8	27.7	22.1
36.0	33.0	28.0	22.4	31.7	26.6	22.0	30.3	25.2	21.5
38.0	30.5	25.3	22.4	29.0	24.0	22.0	27.5	22.8	21.5
40.0	28.2	23.5	21.7	26.0	22.3	21.3	24.0	21.2	20.9
44.0	24.2	19.9	21.2	23.1	18.9	20.8	21.9	17.9	20.3
48.0	20.9	17.1	19.3	19.5	16.3	18.9	18.5	15.5	18.5
52.0	18.1	15.3	16.7	16.6	14.6	16.3	15.7	13.8	16.0
56.0	14.8	13.4	13.4	14.0	12.8	13.2	13.2	12.1	12.9
60.0	13.0	11.8	11.5	12.0	11.2	11.3	10.7	10.6	11.1
64.0	11.2	10.2		10.1	9.7	9.6	9.1	9.2	9.4
68.0	9.4	8.8		8.3	8.4		7.5	7.9	8.2
72.0				6.8	6.8		5.9	6.5	
76.0							4.8	5.0	

15. Lifting Characteristics of Light Duty Boom + Fixed Jib



Notes:

1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The length of the SLFV-type main boom during crane operations is 54~96m, and the length of the fixed jib is 12m.

Table of Lifting Capacity of Light Duty Boom + Fixed Jib (I)

Counterweight 125t Ballast weight of vehicle body 50t Length of fixed jib 12m

Unit of measurement: t

Length of main boom (m)	54			60			66			72		
Radius (m)	Jib set angle			Jib set angle			Jib set angle			Jib set angle		
	10°	25°	40°	10°	25°	40°	10°	25°	40°	10°	25°	40°
12.0	80.0											
14.0	69.4			67.5								
16.0	65.6	50.3		63.7	50.5		62.7			61.8		
18.0	61.8	47.8	29.7	60.8	47.5		59.9	45.1		58.9	42.9	
20.0	59.9	46.6	28.5	58.0	47.0	27.9	58.0	44.7	27.4	57.0	42.4	26.8
22.0	57.0	44.1	27.2	56.1	44.1	26.7	56.0	41.9	26.1	55.0	39.8	25.6
24.0	55.1	42.9	27.2	54.2	42.6	26.7	53.2	40.4	26.1	52.3	38.4	25.6
26.0	52.3	41.7	26.0	51.3	41.6	25.5	51.3	39.5	25.0	50.4	37.5	24.5
28.0	50.4	39.2	26.0	49.4	38.6	25.5	49.4	36.7	25.0	48.5	34.8	24.5
30.0	47.5	38.0	24.8	47.0	37.6	24.3	45.6	35.7	23.8	44.7	34.0	23.3
32.0	43.7	37.3	24.8	43.0	36.6	24.3	41.8	34.8	23.8	40.9	33.1	23.3
34.0	39.9	34.5	24.2	39.9	33.7	23.7	39.0	32.0	23.2	38.0	30.4	22.7
36.0	37.1	31.8	23.6	36.6	30.7	23.1	36.1	29.2	22.6	35.2	27.7	22.2
38.0	34.7	29.2	23.6	33.3	27.7	23.1	33.7	26.3	22.6	32.3	25.0	22.2
40.0	32.3	27.0	22.9	31.4	25.7	22.4	31.4	24.5	22.0	30.4	23.2	21.5
44.0	27.6	23.2	22.3	27.0	21.8	21.8	26.6	20.7	21.4	26.6	19.7	21.0
48.0	24.7	20.0	20.3	23.8	18.8	19.9	23.8	17.9	19.5	22.8	17.0	19.1
52.0	21.9	17.3	17.5	20.9	16.8	17.2	20.9	16.0	16.8	20.0	15.2	16.5
56.0				18.5		13.9	18.1	14.0	13.6	17.5	13.3	13.3
60.0						11.9	16.2	12.3	11.6	15.2	11.7	11.4
64.0								10.6		13.8	10.1	
68.0										12.4	8.7	

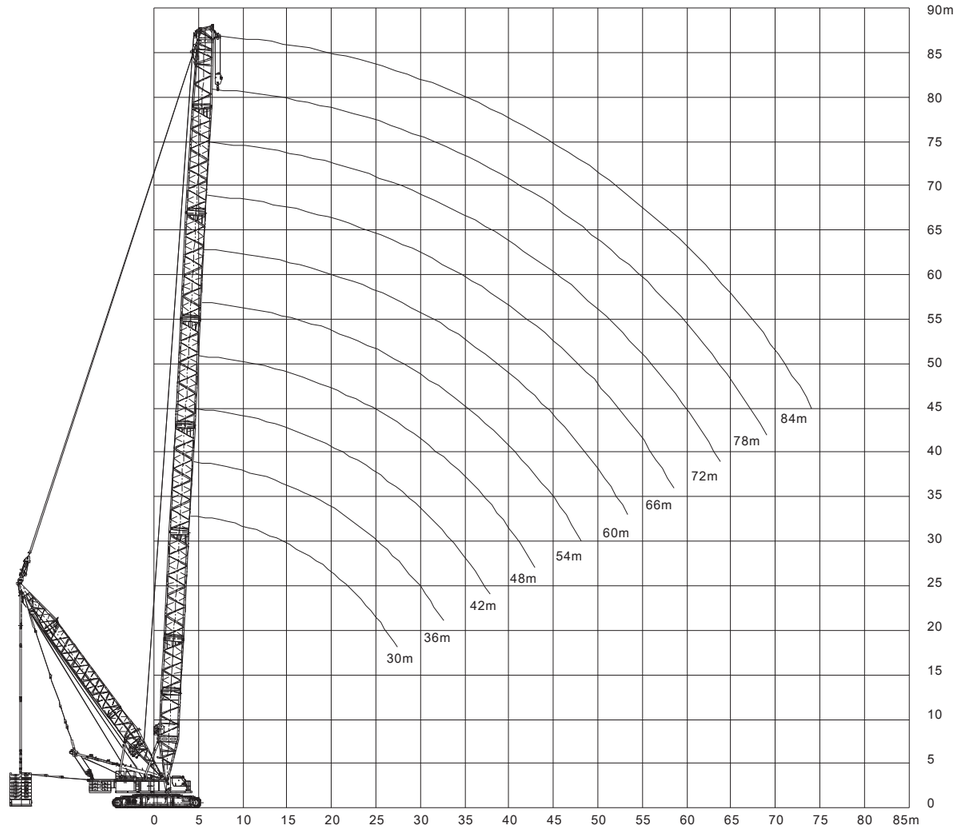
Table of Lifting Capacity of Light Duty Boom + Fixed Jib (II)

Counterweight 125t Ballast weight of vehicle body 50t Length of fixed jib 12m

Unit of measurement: t

Length of main boom (m)	78			84			90			96		
Radius (m)	Jib set angle			Jib set angle			Jib set angle			Jib set angle		
	10°	25°	40°	10°	25°	40°	10°	25°	40°	10°	25°	40°
16.0	61.0			60.0								
18.0	58.5			58.0			58.0			51.0		
20.0	57.0	40.3		57.0	38.3		56.0	37.5		50.0	36.8	
22.0	54.0	37.8	25.1	53.0	35.9	24.6	52.0	35.2	24.4	49.0	34.5	23.9
24.0	52.0	36.5	25.1	51.0	34.7	24.6	50.0	34.0	24.4	47.5	33.3	23.9
26.0	49.5	35.6	24.0	49.0	33.9	23.5	49.0	33.2	23.3	44.0	32.5	22.8
28.0	48.5	33.1	24.0	47.0	31.4	23.5	47.0	30.8	23.3	41.0	30.2	22.8
30.0	43.7	32.3	22.8	43.0	30.6	22.4	43.0	30.0	22.1	38.0	29.4	21.7
32.0	40.7	31.4	22.8	40.0	29.8	22.4	40.0	29.2	22.1	35.0	28.7	21.7
34.0	37.1	28.9	22.3	36.0	27.4	21.8	35.0	26.9	21.6	33.0	26.3	21.2
36.0	35.2	26.3	21.7	34.5	25.0	21.3	34.0	24.5	21.1	31.0	24.0	20.7
38.0	32.3	23.8	21.7	31.0	22.6	21.3	30.0	22.1	21.1	28.0	21.7	20.7
40.0	30.4	22.1	21.1	30.0	21.0	20.7	29.0	20.5	20.5	26.5	20.1	20.1
44.0	25.7	18.7	20.5	25.0	17.7	20.1	25.0	17.4	19.9	23.0	17.0	19.5
48.0	22.8	16.1	18.7	21.5	15.3	18.3	21.0	15.0	18.2	20.0	14.7	17.8
52.0	20.0	14.4	16.2	19.0	13.7	15.8	19.0	13.4	15.7	18.0	13.2	15.4
56.0	17.0	12.6	13.0	16.5	12.0	12.8	16.0	11.8	12.7	15.0	11.5	12.4
60.0	15.0	11.1	11.2	14.5	10.5	11.0	14.0	10.3	10.8	13.5	10.1	10.6
64.0	13.3	9.6	9.5	13.0	9.1	9.3	13.0	8.9	9.2	12.5	8.7	9.0
68.0	12.0	8.3		11.5	7.9	8.1	11.0	7.7	8.0	11.0	7.6	7.8
72.0	10.9	6.7		10.0	6.4		10.0	6.3	7.5	9.5	6.1	7.4
76.0				9.5	5.0		8.5	4.9		8.0	4.8	6.5
80.0							7.5	4.0		7.0	3.9	

16. Lifting Characteristics of Heavy Duty Boom in Superlift Operations



Notes:
1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The working length of the SDB-type main boom during crane operations is 30~84m.

Heavy duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t; when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	30					36				
Radius (m)	Superlift counterweight					Superlift counterweight				
	0	50	100	150	200	0	50	100	150	200
6	204.2	282								
7	192.2	280.9	300.0			187.4	266.1	300.0		
8	171.7	255.7	300.0			167.7	235.8	300.0	300.0	
9	155.1	214.2	294.2	294.2		151.6	206.4	281.1	292.5	
10	141.2	205.8	231.1	291.6		138.2	190.2	220.6	290.0	
11	129.5	190	209.7	289.5		126.9	180.5	211.5	287.8	
12	119.5	174.1	195.2	251.3	287.7	117.2	162.8	201.0	239.0	285.8
14	103.4	148.3	184.1	241.2	265.0	101.3	141.4	170.5	228.0	272.0
16	85.9	128	167.4	210.6	230.0	85.7	127.5	161.0	204.9	245.4
18	72.8	111.2	151.1	188.4	202.0	72.5	109.4	150.2	184.0	219.2
20	62.9	98.5	135.1	166.8	178.0	62.6	97.4	132.8	165.9	193.9
22	55.2	88.3	121.8	149.8	159.0	54.8	87.1	121.0	147.1	173.7
24	49	80.7	106.8	142.0	142.0	48.6	78.7	110.3	128.7	155.5
26	43.9	72.9	99.8	126.0	126.0	43.5	71.4	102.4	118.8	140.4
28	39.6	66.1	93.3	107.0	107.0	39.2	65.9	91.5	113.2	127.3
30						35.6	60.6	81.5	110.2	115.1
32						32.4	55.7	74.8	101.0	104.0
34						29.7	51.3	73.2	89.9	89.9

Note: this table only includes the lifting performance for when the superlift counterweight radius is 15m, and for other lifting performance, please see the Table of Lifting Performance for QUY350.

Heavy duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	42					48				
Radius (m)	Superlift counterweight					Superlift counterweight				
	0	50	100	150	200	0	50	100	150	200
8	164	219.1	288.1			159.8	210.1	268.4		
9	148.5	199.6	266.4	285.7		144.9	201.2	266.0	266.0	
10	135.6	189.1	211.4	283.3		132.2	179.9	220.8	263.8	
11	124.6	174.4	205.1	281.1		121.5	165	194.3	261.6	
12	115.1	158.4	197.3	235.5	279.4	112.4	154.3	184.8	257.0	
14	99.7	143.8	180.4	235.9	267.0	97.4	135.1	156.7	212.3	255.8
16	84.6	126.1	158.1	201.7	239.0	83.0	120.1	135.1	179.3	243.4
18	72.8	109.8	142.3	177.0	215.0	70.9	108	139.6	174.0	220.2
20	62.8	97.3	127.8	156.0	197.0	61.5	95.1	127.9	164.1	200.0
22	55	87.1	116.2	151.5	182.0	53.6	85.2	116.5	145.9	182.8
24	48.8	78.4	107.7	134.0	162.0	47.4	77.1	105.8	132.5	166.7
26	43.0	71.6	97.6	124.2	148.0	42.0	70.6	95.3	123.8	150.5
28	39.4	65.5	90.3	113.3	135.0	38.3	64.6	87.9	113.4	139.4
30	35.7	60.9	80.5	110.2	123.0	34.8	59.4	81.8	103.8	130.3
32	32.5	55.8	77.7	96.7	112.0	31.7	55	74.8	98.5	119.2
34	29.8	51.4	71.2	92.3	102.0	29.3	49.9	69.0	93.2	110.1
36	27.3	46.8	64.4	87.4	93.0	26.9	45.7	64.0	88.3	102.0
38	25.2	42.9	61.4	83.0	83.0	24.7	41.9	59.6	81.3	93.9
40						22.8	39.1	56.1	76.2	86.9
42						21	36.8	53.3	72.7	72.7

Heavy duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	54					60				
Radius (m)	Superlift counterweight					Superlift counterweight				
	0	50	100	150	200	0	50	100	150	200
9	142.7	190.3	248.5			139.4	202.9	211.1		
10	130.5	183.6	245.4	245.4		127.5	170.1	209.1		
11	120	166.3	212.2	242.4		117.4	162.9	207.1	207.1	
12	111	149.6	177.2	240.4		108.6	157.2	205.0	205.0	
14	96.3	135.2	163.0	217.1	236.3	94.2	130.4	153.6	202.0	
16	82.0	120.1	140.9	183.9	232.3	80.1	118	158.3	199.0	199.0
18	70.1	109.2	129.7	164.4	214.1	68.8	105.9	132.4	148.5	195.9
20	60.9	94.4	126.0	163.2	197.0	59.7	92.3	125.8	153.0	190.9
22	53.1	84.2	115.8	143.6	181.8	52.4	82.8	114.1	141.4	179.8
24	46.9	76.3	105.0	130.9	165.6	46.0	74.8	104.6	127.2	165.6
26	41.6	69.6	95.7	120.3	151.5	40.8	68.3	95.3	116.9	151.5
28	37.9	63.8	87.7	111.2	139.4	37.2	62.6	87.3	108.1	139.4
30	34.4	58.9	80.5	103.7	128.3	33.7	57.8	80.1	100.9	128.3
32	31.4	53.8	74.1	97.6	118.2	30.7	53.4	74.2	94.0	119.2
34	28.7	49.3	68.4	92.3	109.1	28.0	48.3	68.8	88.0	111.1
36	26.3	45.1	63.7	86.6	102.0	26.0	44.2	64.2	82.4	104.0
38	24.5	41.3	59.0	81.1	93.9	23.8	40.6	59.4	78.9	96.0
40	22.6	38.6	55.5	76.0	88.9	21.9	37.9	55.9	73.8	90.9
44	19.2	34.1	50.1	67.5	77.8	18.5	33.4	49.1	67.0	79.8
48	16.3	30.1	44.3	60.3	66.7	15.8	29.5	43.2	60.0	69.7
52						13.4	26.1	38.8	54.1	60.6
56						11.3	23.3	35.0	47.4	51.5

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Heavy duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	66					72				
Radius (m)	Superlift counterweight					Superlift counterweight				
	0	50	100	150	200	0	50	100	150	200
10	124.8	178.8	178.8			121.8	158.6	158.6		
11	114.9	162.3	176.8			112.3	157.6	157.6		
12	106.3	145.2	175.7			103.9	150	156.6		
14	92.3	134.9	173.7	173.7		90.2	128.1	154.5	154.5	
16	78.3	116.1	136.9	171.7		76.4	113.6	153.5	153.5	
18	67.3	102.6	136.0	168.7	168.7	66.0	103.3	121.5	149.5	
20	58.6	92.3	117.9	145.2	165.6	57.2	89.7	119.7	146.5	146.5
22	51.5	83.9	102.5	123.3	162.6	50.5	80.3	109.5	139.5	143.4
24	45.2	74.5	99.3	132.2	156.6	44.4	73.9	94.1	112.9	140.4
26	40.1	67.5	92.8	117.4	147.5	39.5	65.8	94.2	110.1	136.4
28	36.5	61.7	85.9	107.1	137.4	36.0	61	82.0	110.4	130.3
30	33.1	56.9	79.3	99.2	127.3	32.6	56	76.7	99.9	123.2
32	30.1	52.6	73.3	92.5	118.2	29.7	51.6	71.8	91.5	116.2
34	27.4	47.3	67.9	86.7	110.1	27.1	46.6	67.1	84.9	109.1
36	25.4	43.3	63.4	81.2	103.0	25.0	42.6	62.8	78.8	103.0
38	23.2	39.9	59.3	76.2	97.0	22.9	39.5	58.3	74.7	96.0
40	21.3	37.2	55.4	72.0	90.9	20.9	37.1	54.9	69.9	90.9
44	18.1	32.8	49.0	64.5	80.8	17.7	32.4	48.3	62.6	80.8
48	15.3	28.9	43.4	58.7	71.7	14.8	28.6	42.9	56.8	71.7
52	13	25.6	38.7	52.6	63.6	12.3	25.3	38.1	52.2	63.6
56	10.9	22.9	34.7	46.5	56.6	10.3	22.7	34.3	46.7	57.6
60	9.3	20.3	31.6	41.0	49.0	8.7	20.2	30.9	40.9	51.5
64						7.3	17.7	27.8	37.2	44.9

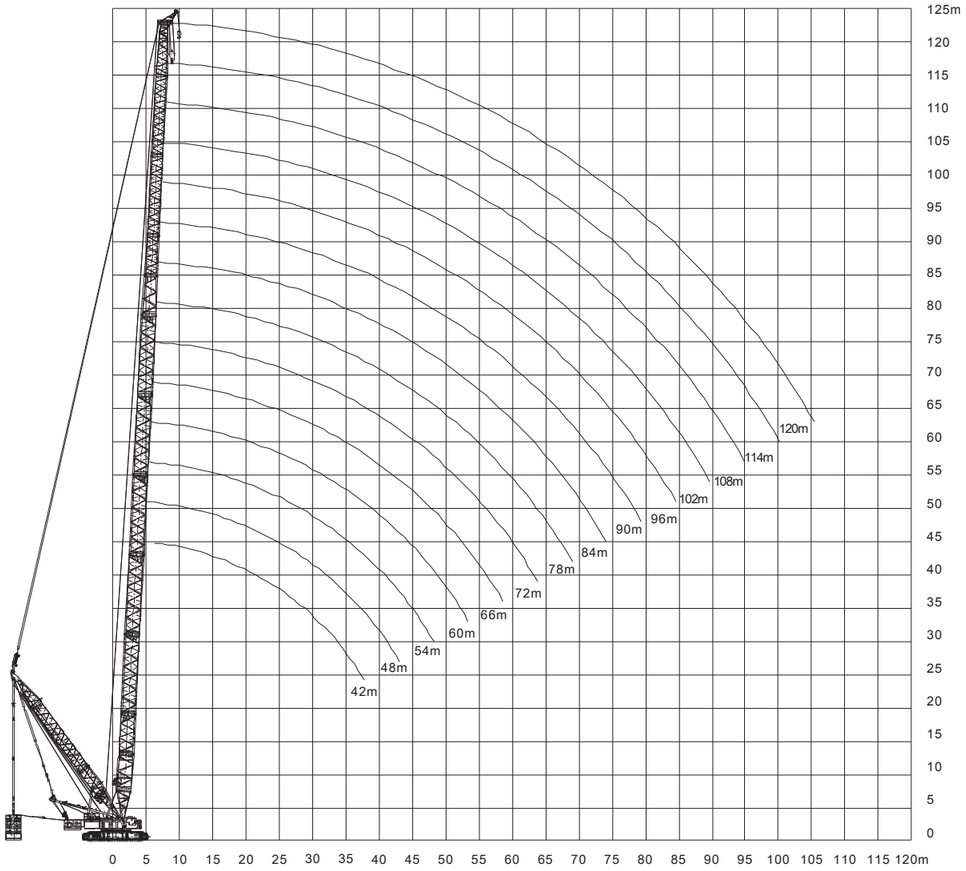
Heavy duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	78					84				
Radius (m)	Superlift counterweight					Superlift counterweight				
	0	50	100	150	200	0	50	100	150	200
10	119.1	136.4								
11	109.7	135.3	135.3			107.1	117.2			
12	101.7	134.3	134.3			99.2	116.2	116.2		
14	88.2	127.2	133.3			85.0	114.1	114.1		
16	74.5	111.6	131.3	131.3		72.5	112.1	112.1		
18	64.3	99.5	129.3	129.3		62.5	97.2	110.1	110.1	
20	55.7	88.7	115.5	126.3		54.1	88.5	107.1	107.1	
22	49.0	80.4	101.2	123.2	123.2	47.6	77.7	105.0	105.0	
24	43.1	71	101.0	120.2	120.2	41.7	70.3	95.6	102.0	
26	38.4	65.3	88.8	116.2	116.2	37.3	64.7	83.7	99.0	
28	34.9	59.6	83.7	103.1	113.1	33.8	58.3	83.5	97.0	97.0
30	31.6	54.8	77.5	88.7	110.1	30.5	53.7	75.9	93.9	93.9
32	28.6	49.6	70.7	90.3	107.1	27.6	48.3	68.5	90.9	90.9
34	26.1	45.1	64.5	87.0	104.0	25.1	43.9	62.8	87.0	87.9
36	24.0	41.2	60.8	80.1	99.0	23.1	40.2	60.0	77.8	84.8
38	21.9	38.3	57.1	74.4	93.9	21.0	37.3	57.8	69.1	82.8
40	20.0	35.9	53.8	69.5	88.9	19.1	35.0	52.4	69.0	79.8
44	16.7	31.3	47.3	62.4	78.8	15.8	30.4	45.4	64.3	73.7
48	13.9	27.5	42.1	56.1	70.7	13.3	26.6	41.0	55.6	68.7
52	11.7	24.5	37.8	50.1	64.6	11	23.7	36.6	50.4	61.6
56	9.9	21.6	33.8	45.2	57.6	9.1	20.8	32.8	43.7	55.6
60	8.2	19.1	30.4	39.8	51.5	7.5	18.3	29.6	38.7	49.5
68	5.6	14.9	24.9	32.7	40.9	5.0	14.1	24.2	32.0	39.9
76						2.8	10.6	20.1	27.1	32.8

17. Lifting Characteristics of Light Duty Boom in Superlift Operations



Notes:
1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The working length of the SLDB-type main boom during crane operations is 42~120m.

Light duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t; when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	42				48			
Radius (m)	Superlift counterweight				Superlift counterweight			
	50	100	150	200	50	100	150	200
7	180.0							
8	171.9				169.6			
9	171.9				169.3			
10	171.9	171.9			169.1	169.1		
11	171.9	171.9			169.0	169.0		
12	162.0	171.9			156.2	168.9		
14	135.2	171.9	171.9		134.0	168.9	168.9	
16	124.4	168.9	171.9		122.0	165.1	168.9	
18	111.1	145.9	171.9		108.8	142.0	168.9	
20	101.4	131.9	146.1	171.9	100.6	133.0	140.9	168.9
22	91.3	113.6	113.6	166.0	89.3	110.4	110.4	168.0
24	82.8	109.6	109.6	160.0	81.9	99.3	99.3	167.7
26	74.9	97.8	97.8	151.0	74.7	94.7	94.7	151.5
28	68.3	93.1	93.1	138.0	68.0	88.3	88.3	140.4
30	62.7	89.8	89.8	126.0	62.4	82.1	82.1	131.3
32	57.9	81.9	87.9	115.0	57.6	76.7	76.7	123.2
34	53.7	76.6	87.0	105.0	53.4	74.7	74.7	113.1
36	50.0	68.8	87.1	96.0	49.7	68.5	72.1	105.0
38	46.8	64.4	87.0	87.0	46.5	66.9	70.7	97.0
40					43.6	60.3	69.6	89.9
44					38.6	53.7	70.7	70.7

Note: this table only includes the lifting performance for when the superlift counterweight radius is 15m, and for other lifting performance, please see the Table of Lifting Performance for QUY350.

Light duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	54				60			
Radius (m)	Superlift counterweight				Superlift counterweight			
	50	100	150	200	50	100	150	200
9	159.5				156.4			
10	159.0	159.0			156.0	156.0		
11	158.6	158.6			155.6	155.6		
12	151.6	158.3			155.3	155.3		
14	133.0	157.9			125.7	154.9		
16	120.6	157.9	157.9		118.6	154.7	154.7	
18	108.3	143.5	157.9		105.6	137.9	154.8	
20	98.7	129.0	137.8	157.9	96.4	125.1	155.4	155.4
22	88.1	109.1	109.1	157.9	90.1	120.0	147.5	147.5
24	81.1	98.9	98.9	157.2	81.2	102.3	126.2	140.4
26	75.3	91.4	91.4	148.6	75.6	100.6	112.0	132.3
28	67.9	85.9	85.9	140.3	67.6	89.8	101.8	124.2
30	62.3	81.7	81.7	129.3	61.9	83.5	94.3	116.2
32	57.4	78.3	78.3	119.2	57.1	78.2	87.9	109.1
34	53.3	75.5	75.5	110.1	52.9	74.6	83.3	102.0
36	49.6	68.3	72.0	103.0	49.2	66.4	80.3	94.9
38	46.3	64.2	70.8	94.9	46.0	63.4	77.1	88.9
40	43.4	60.8	67.1	89.9	43.1	60.8	73.6	83.8
44	38.5	53.5	62.5	79.8	38.1	53.2	69.9	73.7
48	34.4	48.1	59.6	70.7	34.1	49.6	64.6	64.6
52					30.6	43.2	56.6	56.6
56					27.7	39.3	47.5	47.5

Light duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	66				72			
Radius (m)	Superlift counterweight				Superlift counterweight			
	50	100	150	200	50	100	150	200
10	147.5				129.3			
11	147.5	147.5			129.3			
12	147.5	147.5			129.3	129.3		
14	129.1	147.5			129.3	129.3		
16	113.4	147.5	147.5		113.4	126.3		
18	104.8	139.8	144.4		99.3	124.2	124.2	
20	95.9	127.8	137.4		93.4	122.2	122.2	
22	86.3	110.3	130.3		85.7	112.0	120.2	
24	79.2	99.7	124.2	124.2	77.6	96.8	117.2	
26	73.8	93.8	116.2	116.2	73.0	94.2	116.2	116.2
28	67.3	88.1	109.1	109.1	67.3	90.3	111.2	114.1
30	61.7	82.6	102.0	102.0	60.9	77.0	91.9	113.1
32	56.9	77.7	96.0	96.0	56.5	73.3	82.9	108.1
34	52.7	73.1	89.9	89.9	52.2	72.7	72.7	106.1
36	49.0	68.0	83.8	83.8	47.7	65.7	65.7	103.0
38	45.7	64.3	78.8	78.8	44.1	61.5	61.5	98.0
40	42.8	61.2	74.7	74.7	41.1	58.3	58.3	92.9
44	37.9	54.3	65.7	65.7	37.9	53.7	53.8	83.8
48	33.8	48.4	57.6	57.6	33.4	47.1	49.3	74.7
52	30.4	43.4	50.5	50.5	30.25	43.95	46.95	67.15
56	27.5	39.7	44.4	44.4	27.1	38.8	44.6	59.6
60	24.9	358	38.4	38.4	24.7	35.6	42.5	50
64					22.3	32.4	40.4	40.4

Light duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	78				84			
Radius (m)	Superlift counterweight				Superlift counterweight			
	50	100	150	200	50	100	150	200
11	112.1				101.0			
12	110.8	110.8			100.0			
14	108.1	108.1			98.0	98.0		
16	105.6	105.6			96.0	96.0		
18	103.0	103.0			94.9	94.9		
20	88.7	101.0			92.8	92.9		
22	81.0	98.0	98.0		78.7	91.9	91.9	
24	76.1	94.9	94.9		74.3	90.9	90.9	
26	71.3	91.9	91.9		69.7	88.9	88.9	
28	66.2	88.9	88.9		63.8	87.5	87.9	
30	59.7	78.7	86.9		58.1	76.2	86.9	
32	54.6	69.7	83.8	83.8	53.1	68.5	84.8	84.8
34	50.7	66.2	81.8	81.8	49.0	67.6	83.8	83.8
36	46.7	64.5	79.8	79.8	45.2	65.7	81.8	81.8
38	43.1	62.7	77.8	77.8	41.7	62.6	78.5	80.8
40	40.3	59.3	75.8	75.8	39.1	56.5	70.1	78.8
44	36.1	51.3	62.9	72.7	34.9	48.0	58.1	74.7
48	32.3	44.5	51.3	70.7	31.2	44.4	49.7	70.7
52	29.0	41.2	45.8	65.7	28.0	39.9	45.4	64.6
56	26.2	37.3	42.9	59.6	25.4	36.4	42.4	58.6
60	24.2	34.9	40.1	54.5	23.0	33.9	40.7	52.5
64	21.7	31.7	39.8	48.0	21.1	30.9	40.8	46.0
68	19.5	29.8	39.2	42.9	18.9	28.5	37.4	37.4
72					16.9	26.3	28.9	28.9

Light duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	90				96			
Radius (m)	Superlift counterweight				Superlift counterweight			
	50	100	150	200	50	100	150	200
12	86.9				79.8			
14	85.9				77.8			
16	82.8	82.8			76.8			
18	79.8	79.8			75.8	75.8		
20	77.8	77.8			73.7	73.7		
22	75.8	75.8			72.7	72.7		
24	73.7	73.7			71.7	71.7		
26	66.3	72.7	72.7		66.5	69.7		
28	61.7	71.7	71.7		60.2	68.7	68.7	
30	57.0	71.7	71.7		56.6	66.7	66.7	
32	52.0	69.7	69.7		51.1	65.7	65.7	
34	48.0	68.7	68.7		46.7	64.6	64.6	
36	44.2	62.1	67.7		43.0	62.6	62.6	
38	40.7	55.8	65.7	65.7	39.6	58.4	61.6	
40	38.1	52.7	64.6	64.6	37.1	51.9	60.6	60.6
44	34.0	50.0	62.6	62.6	33.1	47.4	58.6	58.6
48	30.4	44.1	58.1	59.6	29.4	44.0	55.6	55.6
52	27.3	40.0	50.3	55.6	26.4	40.2	53.5	53.5
56	24.8	36.7	45.0	51.5	24.0	35.5	46.5	51.5
60	22.5	33.9	41.7	47.0	21.8	32.3	42.5	47.5
64	20.0	30.8	41.4	41.4	19.4	29.6	38.5	44.4
68	17.8	28.0	34.8	34.8	17.2	27.2	36.5	40.4
76	14.1	19.9	19.9		13.6	23.5	30.3	35.9
84					10.7	19.8	27.5	29.3

Light duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	102				108			
Radius (m)	Superlift counterweight				Superlift counterweight			
	50	100	150	200	50	100	150	200
12	68.7							
14	68.7				60.6			
16	68.7				60.6			
18	67.7	67.7			60.6			
20	66.7	66.7			59.6	59.6		
22	65.7	65.7			59.6	59.6		
24	63.6	63.6			58.6	58.6		
26	61.6	61.6			57.6	57.6		
28	59.7	61.6			56.6	56.6		
30	55.0	60.6	60.6		53.4	54.5		
32	49.9	60.6	60.6		49.0	53.5	53.5	
34	45.7	59.6	59.6		44.8	52.5	52.5	
36	42.0	59.6	59.6		41.1	51.5	51.5	
38	38.8	57.6	57.6		38.2	50.0	50.0	
40	36.4	55.6	55.6		36.0	49.0	49.0	
44	32.3	45.9	52.5	52.5	31.7	47.0	47.0	
48	28.7	41.1	50.0	50.0	28.2	41.5	44.9	44.9
52	25.7	38.2	47.5	47.5	25.5	36.2	43.4	43.4
56	23.3	34.9	45.5	45.5	22.8	33.6	41.4	41.4
60	21.2	31.7	42.1	43.9	20.5	31.2	38.9	38.9
64	18.7	29.0	37.8	41.4	18.1	28.8	34.7	34.7
72	14.7	24.6	33.1	36.9	14.1	24.3	29.5	29.5
80	11.6	21.0	28.5	28.5	11.0	20.5	26.0	26.0
88					8.7	17.0	22.7	22.7

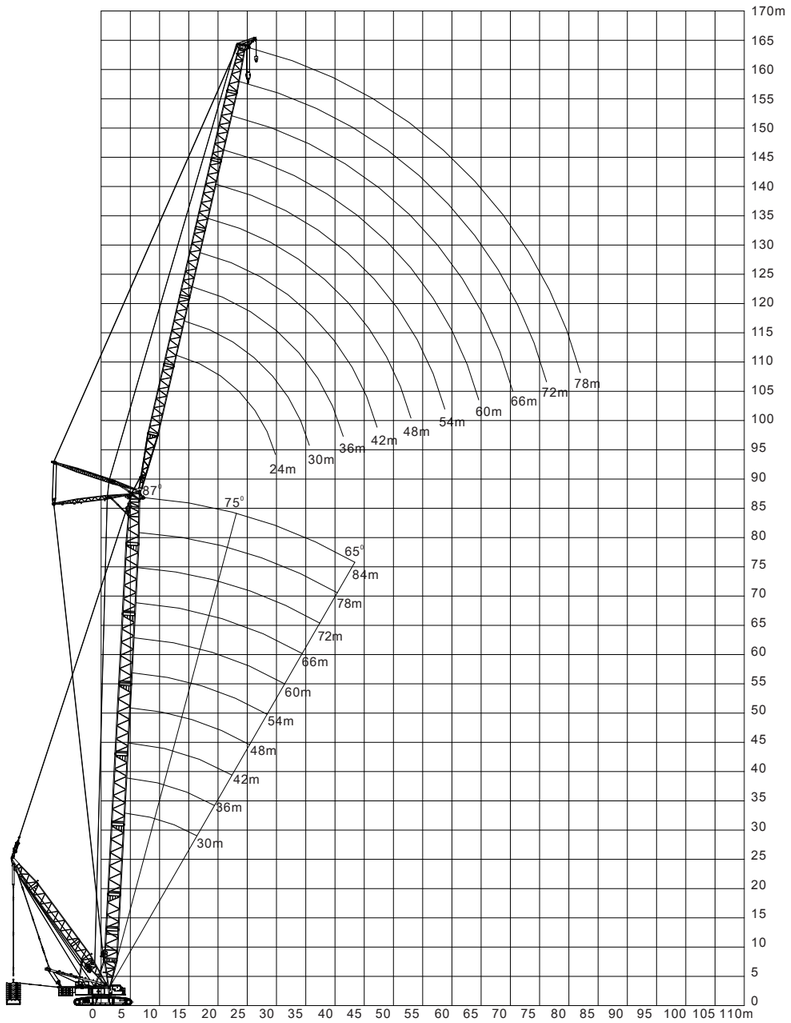
Light duty boom Superlift mast 27m Superlift counterweight radius 15m Rear counterweight 85t

(When the superlift counterweight is 0~150t, the ballast weight of vehicle body is 50t;
when the superlift counterweight is 200t, the ballast weight of vehicle body is 30t)

Unit of measurement: t

Length of main boom (m)	114				120			
Radius (m)	Superlift counterweight				Superlift counterweight			
	50	100	150	200	50	100	150	200
14	54.0				50.0			
16	52.0				49.0			
18	51.0				48.5			
20	51.0				48.0			
22	50.0	50.0			47.5	47.5		
24	49.0	49.0			47.0	47.0		
26	48.0	48.0			46.0	46.0		
28	46.0	46.0			45.0	45.0		
30	45.0	45.0			44.0	44.0		
32	43.5	43.5			42.5	42.5		
34	42.0	42.0			41.0	41.0		
36	41.0	41.0			40.0	40.0		
38	37.4	40.0	40.0		36.9	39.0		
40	35.1	39.0	39.0		34.3	38.0	38.0	
44	30.8	37.0	37.0		30.1	36.0	36.0	
48	27.3	35.0	35.0		26.7	34.0	34.0	
52	24.6	33.0	33.0		23.9	32.0	32.0	
56	21.9	31.5	31.5		21.2	30.5	30.5	
60	19.8	30.0	30.0		19.1	28.4	28.4	
64	17.4	27.9	28.8		16.7	26.4	26.4	
68	15.3	24.6	27.5	27.5	14.7	24.0	24.4	
76	11.9	21.2	26.0	26.0	11.3	19.4	19.4	
84	9.3	18.1	22.3	22.3	8.8	16.6	16.6	
92					6.9	14.0	14.7	

18. Lifting Characteristics of Luffing Jib in Superlift Operations



Notes:

1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The length of the SWDB-type main boom in crane operations is 30~84m, and the length of the luffing jib is 24~72 (84) m; or the length of the main boom is 30~72m, and the length of the luffing jib 10is 24~78 (84)m.

Crane superlift operations with luffing jib Main boom 30m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
12	160										
14	147	133									
16	140	126	114								
18	132	119	108	100	92						
20	125	114	103	95	88	80					
22	116	109	98	91	84	78	68				
24	100	100	94	87	80	75	66	58			
26	82	97	90	84	77	72	65	57	49		
28		90	87	81	74	69	64	56	48	42	
30		81	81	78	71	67	62	55	47	41	
32			75	73	69	64	60	54	46	39	
34			70	68	67	62	58	53	45	37	
36			63	63	62	60	56	52	43	35	
38				59	58	57	54	50	41	33	
40				53	55	54	52	49	40	31	
44					46	46	46	45	36	28	
48					41	41	41	41	33	25	
52						38	37	36	31	23	18
56							33	33	28	22	16.5
60							29	29	26	20	15
64								26	24	19	13.5
68									22	17.5	11.7
72										16	11
76										14.5	9.7
80											9

Note: this table only includes the lifting performance parameters for crane superlift operation with luffing jib when the superlift counterweight is 100t, the superlift counterweight radius is 15m, and the main boom angle is 87°. For lifting performance in other operating modes, please see the Table of Lifting Performance for QUY350.

Crane superlift operation with luffing jib Main boom 36m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
14	142	130									
16	135	124	112								
18	127	117	105	98							
20	120	114	101	94	86	78					
22	110	107	97	88	82	76	66				
24	100	97	92	86	78	73	64	56			
26	80	94	90	82	75	70	63	55	47		
28		88	86	79	72	67	62	54	46	40	
30		80	80	76	69	65	60	53	45	39	
32		78	73	70	67	62	58	52	44	37	
34			70	66	65	60	56	51	43	35	
36			62	61	60	58	54	50	41	33	
38				57	56	55	52	48	39	31	
40				52	53	52	50	47	38	29	
44					44	44	44	43	34	26	
48					39	39	39	39	31	23	
52						36	35	34	29	21	
56							31	31	26	20	
60							27	27	24	18	
64								24	22	17	
68									20	15.5	
72										14	
76										12.5	

Crane superlift operation with luffing jib Main boom 42m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
14	137										
16	132	121	109								
18	124	114	102	95							
20	117	111	98	91	84						
22	107	104	94	85	80	74					
24	97	94	89	83	76	71	62	54			
26	77	91	87	79	73	68	61	53	45		
28		85	83	76	70	65	60	52	44		
30		77	77	73	67	63	58	51	43	37	
32		75	70	67	65	60	56	50	42	35	
34			67	63	63	58	54	49	41	33	
36			59	58	58	56	52	48	39	31	
38				54	54	53	50	46	37	29	
40				49	47	50	48	45	36	27	
44					42	42	42	41	32	24	
48					37	37	37	37	29	21	
52						34	33	32	27	19	
56							29	29	24	18	
60							25	25	22	16	
64								22	20	15	
68									18	13.5	
72										12	
76										10.5	
80											

Crane superlift operation with luffing jib Main boom 48m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
12											
14	127										
16	122	108									
18	115	105	93								
20	110	100	89	80	72						
22	105	95	86	78	69	61					
24	100	91	83	76	67	60	53				
26	94	87	80	74	65	59	51.5	45			
28		83.7	77	72	63	57	51	44			
30		75.8	74	68	61	56	50	43	37		
32		73	70	65	59	54	48.5	42	36		
34			66	61	57	53	48	41	36		
36			60	56	55	51	47	40	35	30.5	
38			55	53	52	50	45	40	35	30.5	
40				50	50	48	44	39	34	30.5	25
44				45	45	45	42	38	33	30	22
48					40	42	40	36	32	28	20
52						39	38	34	30	26	18.5
56							35	31	28	24	16.5
60							31	28	25	23	15.5
64								25	23	22	14
68									21	21	12
72									19	18	11
76										16	10
80										14.5	9

Crane superlift operation with luffing jib Main boom 54m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
12											
14											
16	109	95									
18	104	91	82								
20	98	88	80	72							
22	92	85	77	69	61	56					
24	86	81	74	67	59	53	47				
26	82	77	70	65	58	51	46	42			
28		74	67	62	56	50	45	41			
30		70	65	60	55	49	44	40			
32		67	62	58	53	48	42.5	39	33		
34			59	57.7	51	46	41.5	38	33	29.5	
36			56	53.2	49	44.5	40.5	37	32	28	
38			54	49.5	47	43	39.5	36	32	27.5	
40				47	46	41.5	38.5	35	31	26	
44					44	40	37.5	34	30	25	22
48					41	38	35.5	32	29	25	21
52						35	33.5	30	28	24	20.5
56							31.5	28	26	22.5	20
60							28.5	25	24	20.5	19
64								23	22	18.5	17.5
68									20	16.5	15.5
72										15	14
76										13	12.5
80											11

Crane superlift operation with luffing jib Main boom 60m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
16	96										
18	92	81	73								
20	87	78	70	63							
22	84	75	68	61	55						
24	78	71	66	59	53	48					
26	74	68	63	57	51	47					
28		65	60	55	50	46	40				
30		63	57	53	48.5	45	39	35			
32		60	55	50	46.5	43	38	34	31		
34			53	49	45.5	41	37	33	30		
36			51	47	44	40	36	33	29		
38			48	45	42	39	35	32	29	26	
40				43	41	37	34	31	28.5	25	
44				41	38	35	33	30	27	25	20
48					36	33	31	28	26	23	19.5
52						31	29	27	25	22	18.5
56							27	25	23	21	17.5
60							25	23	21	20	16.5
64								21	20	19	15
68									18	17	13.5
72									16	15	12
76										13	10
80											9
84											8

Crane superlift operation with luffing jib Main boom 66m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
16	85										
18	81	72									
20	78	69	61								
22	74	66	60	54							
24	71	63	58	52							
26	68	60	55	50	45	42					
28	65	58	53	48	44	41					
30		55	51	47	42	40	35				
32		53	49	45	41	39	34				
34			47	43	40	38	33	29			
36			45	41.5	39	37	32	28			
38			43	40	37	35	31	28	25		
40				38.5	36	34	30	27	25		
44				36.5	34	31	29	26	24	20	
48					32	30	27	25	23	19	16.5
52						28	26	23	22	18	16
56						26	24.5	22	20	17	15
60							22	21	19	16	14
64								20	18	14.5	13
68									17	13	11.5
72									16	11.5	10.5
76										10	9
80											8
84											6.5

Crane superlift operation with luffing jib Main boom 72m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

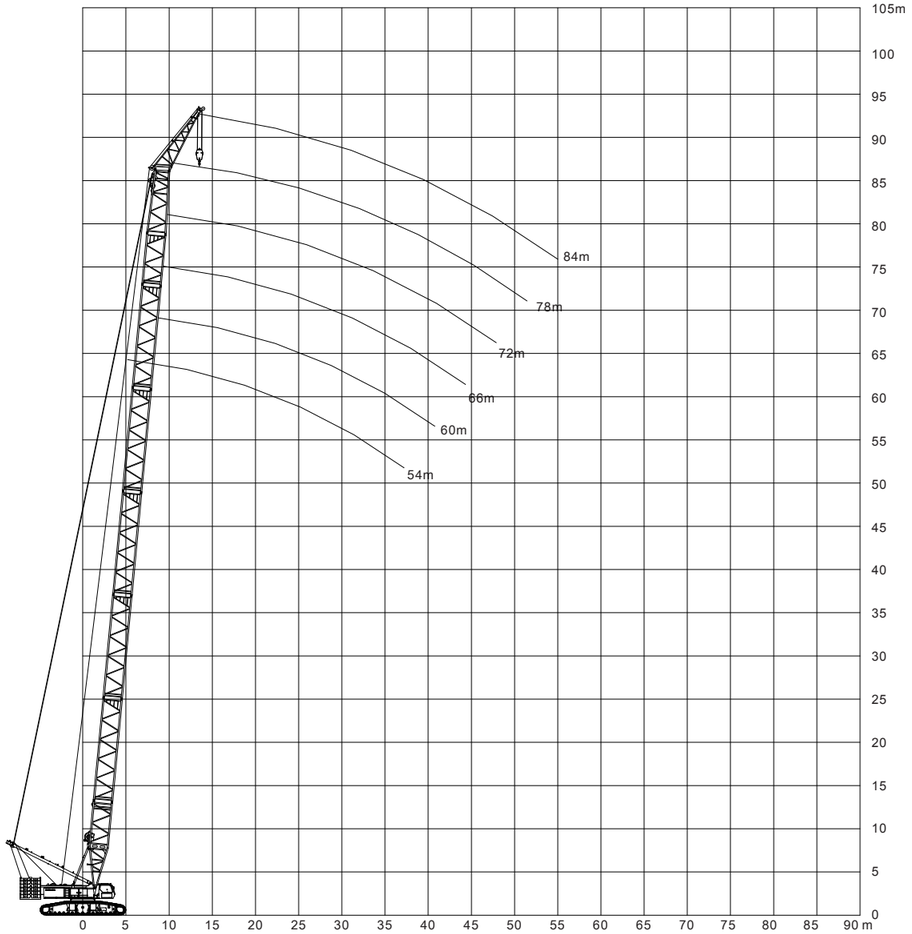
Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
18	71										
20	68	62									
22	65	59	54								
24	62	57	52								
26	59	55	50	44							
28	56	52	48	42	39						
30		49	46	41	38						
32		47	44	40	37	33					
34			42	38	35	32					
36			40	37	34	31	28				
38				36	33	30	27				
40				34	32	29	26	24			
44					30	27	25	23	20		
48					29	25	23	22	19		
52						24	22	21	18	14.7	
56							21	19	17	13.9	
60							19.5	18	16	12.4	11.5
64								17	15	11.7	10.5
68									14	10.5	10
72										9.4	8.9
76										8.2	7.8
80											6.8

Crane superlift operation with luffing jib Main boom 78m
Superlift counterweight radius 15m Superlift counterweight 100t
Ballast weight of vehicle body 50t Counterweight 85t Main boom 87°

Unit of measurement: t

Radius (m)	Length of jib (m)										
	24	30	36	42	48	54	60	66	72	78	84
26			43								
28			42	38.5							
30			40	36.5					21		
32			38	35					20.5		
34			36	34	30.5				20		
36			35	32	29.5	27			19.5		
38		35		31	28	26			19		
40				29	27	25			18.5		
44					25.5	23	21.5		17.5		
48					24	21	20	18	16.5		
52						20	19	17	15.5		
56							18	16	14.5	13	
60							17	15	13.5	12	
64								14	12.5	11	
68									11.5	9.2	
72										8.3	
76										7.2	
80											

19. Lifting Characteristics of Crane with Boom Head Used for Wind Power Setup



Notes:
1. The height curve diagram does not include the influence of boom deflection.
2. The working radius is shown along the horizontal axis, the lifting height is shown along the vertical axis, and unit of measurement is meter (unit: m).
3. The working length of the SHS-type main boom during crane operations is 54~84m, and the length of the boom head used for wind power setup is 7m.

Table of Lifting Capacity in Crane Operating Mode with Boom Head Used for Wind Power Setup
Counterweight 125t Ballast weight of vehicle body 50t
Length of boom head used for wind power setup 7m

Unit of measurement: t

Radius (m)	Length of main boom (m)					
	54	60	66	72	78	84
12	85.0	85.0	85.0			
13	85.0	85.0	85.0	85.0	85.0	80.0
14	84.0	83.0	83.0	82.7	80.2	77.1
15	83.5	82.5	81.5	81.4	77.8	74.6
16	83.0	82.0	80.0	80.0	75.5	72.0
18	80.0	79.0	78.8	77.4	72.0	69.0
20	72.4	71.2	69.8	68.6	66.8	64.0
22	64.7	63.6	62.3	61.2	59.9	58.0
24	58.3	57.3	56.1	55.1	54.1	52.0
26	52.9	52.0	50.8	49.9	49.1	48.0
28	48.3	47.5	46.4	45.5	44.7	43.0
30	44.2	43.6	42.6	41.8	41.0	39.7
32	40.5	40.2	39.2	38.5	37.6	35.9
34	37.3	37.0	36.3	35.5	34.5	32.8
36	34.5	34.1	33.5	33.0	31.7	30.3
38	32.0	31.7	30.5	30.5	29.0	27.5
40	29.8	28.5	28.8	28.2	26.0	24.0
42	25.4	24.6	23.9	23.2	22.4	21.5
44	23.4	22.7	22.0	21.2	20.4	19.5
46	21.8	21.1	20.2	19.4	18.6	17.6
48	20.2	19.4	18.6	17.7	16.8	16.1