

XGC75 Lattice Crawler Crane



XGC75

RONCO GROUP





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Product Highlights

01

Optimized design of transport and assembly/disassembly

- Basic machine is an integrated transport design, without disassembling track frame and boom base, greatly save transport costs and improve the assembly/disassembly efficiency.
- Unique A-frame gantry self-erection technology, no need of cylinder can achieve self- erection, to realize crane quick assembly.
- Single counterweight weighing no more than 4t, small auxiliary lifting equipment can achieve complete counterweight assembly.

02

Optimized hydraulic system design

- Integrated design to reduce failure points, while reserve open space for assembly/ disassembly and maintenance.
- Use of highly integrated LUDV main valve, with the functions of multi-complex operation, control of combined flow, high/low speed selection, to ensure operation efficiency.
- Optional unique independent bypass filtration in the industry, strong magnetic adsorption device, strengthened hydraulic system filtration, and anti-emulsifying ability.

03

Universal and modular design

- Common platform products with fixed jib, single top, both-sided counterweight hook block, luffing mechanism, hydraulic pump and main valve block can achieve universal and interchangeable use, greatly reduce purchase, transport and maintenance costs.

04

Main / auxiliary hook one-key-switch-over function

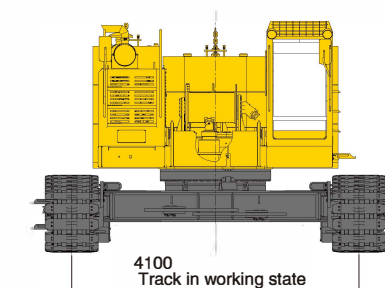
- One-key-switch is used to easily achieve main/auxiliary hook switch-over, for wider range of applications.

The Main Technical Parameters

(Item)	(unit)	(Value)	
	Boom working condition	t	75
	Boom single pulley working condition	t	6.5
Max. rated lifting capacity	Fixed jib working condition(without main hook block)	t	12
	Fixed jib working condition(with main hook block)	t	11.3
Max. load moment	t · m	286	
Boom length	m	13 ~ 58	
Boom luffing angle	°	-3 ~ 80	
Fixed jib length	m	7 ~ 19	
Angle between boom and fixed jib	°	10、30	
Hoist winch max. single line speed	m/min	128	
Boom luffing winch max. single line speed	m/min	70	
Max. slewing speed	rpm	2.4	
Max. travelling speed	km/h	1.2	
Total vehicle mass (75t hook block, 13m boom)	t	61	
Mean ground pressure	MPa	0.08	
Grade-ability	-	30%	
Max. mass of single unit in transport state	t	37 (can be disassemble to 22t)	
Max. dimension of single unit in transport state (L × W × H)	m	12.7 × 3.4 × 3.4	



A direction (main lifting boom, A-frame and luffing pulley block are removed away)



Brief Introduction

Crane Superstructure

Engine System

①Model: Shanghai diesel SC7H210.1G3.
 Rated power: 155kW/2000rpm
 Max. torque/Max. torque speed: 930N·m/1300-1600rpm
 Environmental protection: complaint with Euro III (Stage IIIA) emission standard;
 ②Optional model: Weichai WP7G270E301;
 Rated output power: 199kW/2000rpm;
 Maximum torque / maximum torque. Speed: 1200N·m/1200~1500rpm;
 Environmental protection: complaint with Euro III (Stage IIIA) emission standard
 ③Optional model: Cummins QSB6.7;
 Rated output power: 153kW/1800rpm;
 Maximum torque / maximum torque. Speed: 931N·m/1300rpm;
 Environmental protection:complaint with Euro III (Stage IIIA) emission standard;
 Fuel tank capacity: 400L.
 ④Optional engine:Model: Weichai WP6G240E330
 Rated power:176KW/2300rpm
 Max. torque/Max. torque speed: 860N·m/1200~1700rpm;
 Environmental protection: China GB III standard.

Operator's Cab

Operator's cab is designed in bionic modeling, with smooth lines without losing the sense of power. Cab has a larger glass area, side glass has more reasonable partition, more technological sense, and wider field of vision. Interior decoration is arranged as human- centered lay-out, the driver can touch all the switches and buttons without getting up, equipped with adjustable seats, air conditioner, power supply socket, radio, etc., provides the operator with a comfortable operation environment.

Electrical System

Electrical system mainly includes the following components: engine control, monitor instruments, auxiliary equipment, hydraulic system control, load moment limiter, and safety monitors.
 Electrical system composition: conventional electrical system and PLC control system.
 Conventional electrical system uses 24V parallel circuit, electric equipment wiring uses negative ground single-line system, including power supply, start control, cab air conditioner and sound, lights (lamps), wiper and so on.
 PLC control system includes control of main and auxiliary winches, slewing, boom luffing and other movements, engine condition monitoring. All the movements are used with hydraulic proportional control technology, through PLC logic control of CAN-bus technology, effectively ensure the realization of main machine functions, and fully reflects the people-oriented design.

Hydraulic System

Use of LUDV load sensing system controlled by hydraulic pilot proportional control, can achieve flow distribution independent of load, with accurate speed, sensitive operation, system stability, good fine motion. Specialized LUDV integrated main valve can achieve combined operation of any movement, compact structure, and easy maintenance. Innovative use of fine motion control technology greatly improves the stability and precision for the whole machine movements.
 Main hoist and auxiliary hoist winches have double pump confluence, easy to achieve winch high/low speed control. Specialized slewing buffer circuit design, slewing start and stop is smooth and soft, to meet the requirements of fine lifting operation.
 Hydraulic tank capacity: 400L.

Turntable

Turntable is the key load bearing structure to connect superstructure and undercarriage, the main force structure is welded with steel plate in flat box-type structure, increase the overall space by welded cantilever structure on both sides for arranging the fixed load. Turntable is connected with undercarriage by slewing ring. Boom base, gantry, hoist winch, luffing winch and counterweight are arranged on the main force structure; cab, engine system, main pump, hydraulic valve, electric cabinet and other structures arranged on cantilever structure on both sides; turntable main structure and cantilever structure of both sides are design according to the overall force condition, with reasonable structure, good overall strength and stiffness.

Luffing Winch

Luffing gear	Rated single line pull	6.3t
	Wire rope diameter	20mm
	Length	135m

Luffing winch has built-in planetary reducer, use of negative brake design, multi-plate wet type laminated constant closed brake, to achieve "spring brake/ hydraulic release" function.
 Main luffing winch drum is made of nodular cast iron with bi-fold cord multi-winding single drum for good vibration absorption, ensure no twisting of multi-winding rope, effectively prolong the rope service life. The drum has a ratchet locking device, pawl driven by a hydraulic cylinder, to achieve multiple lock protection. Luffing winch uses left-turning same-twisting anti-rotation special rope with independent steel core, high breaking force and high anti-extrusion, rated single line pull 6.3t, rope diameter ϕ 20 mm, length 135m.

Slewing Unit

Slewing unit with slewing ring is internally engaged drive type, arranged in front of the turntable, driven by constant displacement motor via a planetary gear reducer through pinion to drive slewing ring, to achieve 360 ° slewing.
 Slewing unit has built-in planetary reducer, use of negative brake design, multi-plate wet type laminated constant closed brake, to achieve "spring brake/ hydraulic release" function, to ensure slewing with high braking safety. Slewing unit also has a mechanical slewing locking device to achieve locking protection for the slewing unit.
 Eccentric mechanism can ensure better engagement between reducer and slewing ring for more stable slewing. Slewing unit has free-swing function to ensure that the lateral force on boom can be eliminated even when the hook block is not on the vertical line of center of gravity of the load in lifting operation, and furthermore to preventing the boom from damage due to large lateral force.

Gantry

Gantry is double-limb structure, with reinforced beam between the two limbs for good stability. Gantry main structure is high-quality seamless steel pipe, with less welding, little manufacturing defects, and high safety factor. Gantry is equipped with self-erection roller, can achieve self-erection function in coordination with boom base.

Brief Introduction

Hoist Winch

Main hoist gear	Rated single line pull	6.6t (optional 8t)
	Wire rope diameter	20mm (optional 22mm)
	Length	240m
Auxiliary hoist gear	Rated single line pull	6.6t (optional 8t)
	Wire rope diameter	20mm (optional 22mm)
	Length	140m

Main hoist winch and auxiliary hoist winch has built-in planetary reducer, use of negative brake design, multi-plate wet type laminated constant closed brake, to achieve "spring brake / hydraulic release" function, safe and reliable. Hoist winch also has the features of easy oil replacing, low noise, high efficiency, and long service life. It also has excellent micro-speed performance.

Hoist winch drum is made of nodular cast iron with good vibration absorption, bi-fold cord rope grooves ensure no twisting of multi-winding rope, effectively prolong the rope service life.

Main hoist winch uses left-turning same-twisting anti-rotation special rope with independent steel core, high breaking force and high anti-extrusion, rated single line pull 6.6t, rope diameter \varnothing 20 mm, length 240m.

Auxiliary hoist winch also uses left-turning same-twisting anti-rotation special rope with independent steel core, high breaking force and high anti-extrusion, rated single line pull 6.6t, rope diameter \varnothing 20 mm, length 140m.

The main and auxiliary lifting mechanism can be equipped with free falling mechanism.

Counterweight

Counterweight is total 21.6t, installed at the rear of turntable, anchored connection by pin shaft, counterweight composition is as the follows:

Counterweight tray 1x4t, left/right counterweight slab 6x2t, central counterweight slab 2x2.8t.

Crane Undercarriage

Crane undercarriage consists of car-body, crawler travel unit and etc. The inserting type connection is used between car-body and crawler travel unit.

Crawler Travel Unit

Crawler travel unit, consists of track frame, track shoe, track roller, sprocket, idle roller, carrier roller, crawler travel unit, and crawler tensioning device.

Track frame: left/right symmetrical, each of one piece, steel plate welded into box-type structure, inserting type connection with car-body, drawer type device to adjust upper and lower space, to ensure no lateral horoscope phenomenon on track frame after installation, avoid eccentric wear between track shoe and track roller.

Track shoe: high strength wear-resistant alloy steel casting, width 760mm, total $2 \times 63 = 126$ pieces.

Travel unit: constant closed planetary reducer, driven by oblique axis piston motor, with powerful travel, can achieve straight-line walk, steering at a position, single one side steering, differential steering and travel with a load and other movements, for high flexibility and mobility, with multi-plate wet type constant closed brake, spring brake, hydraulic release valve, to ensure travel with high braking safety.

Maximum travel speed: 1.2km/h.

Car-Body

Car-body is H box-type structure welded with high-strength steel plate, with good rigidity, high strength, high precision. Upper plane is by precision machining, to ensure smooth operation of slewing ring.

Safety Devices

This crane widely uses mechanical, electronic and hydraulic and other safety and warning devices to ensure the safe use of the machine. The safety devices include: load moment limiter, slewing lock device, boom backstop device, hoist limit switch, boom angle limiter, anemometer, electronic level meter, slewing warning and hydraulic system relief valve, balance valve, hydraulic lock, and etc.

Assembly Mode & Work Mode Exchange Switch

In Assembly mode, over-wound protection device, boom backstop device, load moment limiter does not work, in order to facilitate crane assembly. In Work mode, all safety devices do work.

Winch Over-Wound Protection Device

When main/auxiliary winch hoists up to a certain lifting height, a winch over-wound warning lamp on instrument panel lights up, at the same time, load moment limiter stops crane hoisting up movements.

Emergency Stop Switch

In emergency conditions, press this button to stop all the crane movements.

Brief Introduction

Winch Over-Release Protection Device

A rope-end limiter is set on main and auxiliary hoist winch to prevent wire rope from over-release. When only three turns of main and auxiliary winch rope is remained on the winch drum, a winch over-release warning lamp on instrument panel lights up, at the same time, load moment limiter stops crane hoisting down movements.

Ratchet Locking Device

It is used to lock the luffing winch drum to protect boom stowing safety at non-working state. It must be turned on when lowering boom, otherwise boom cannot be lowered.

Mechanical Safety Device

Slewing locking device is used for the mechanical limit stop when stopping the crane; it consists of boom/ jib strut backstop device to prevent the boom and strut tipping backward.

Boom Angle Limit

When boom is raised to the specified angle, the boom raising is stopped by both control of load moment limiter and hoist limit switch. When boom luffing angle is less than the specified angle, boom lowering is stopped by control of load moment limiter and which also gives a sound warning.

Hook Latch

All hook blocks are equipped with hook latch to prevent the hanging rope on the hook head from falling.

Hydraulic System

Hydraulic system is equipped with hydraulic balance valve, hydraulic relief valve and other devices to ensure the stable and safe work for the system.

Anemometer

It can detect the current wind speed and send signal to the monitor in operator's cab to remind the operator for safe operation in wind load.

Rearview Mirror

It is located outside the operator's cab for the driver easy to observe the situation behind the machine.

Height Mark Lamp

It is located on boom tip for high level operation warning

Hydraulic System

Detection function: automatic detection of boom angle and lifting load.

Display function: 7.0" large color screen display to indicate in

Chinese (English) and graphics the crane working parameters such as the percentage of load moment, actual lifting capacity, rated lifting capacity, working radius, boom length, boom angle, max. lifting height, mode code, parts of line, limit angle and information code.

Warning function: perfect pre-warning and overload cut-out functions, automatically send out warning signal and stop crane operation when detecting actual lifting load exceeding total rated lifting load and boom out of limit angle.

The system also has the fault self-diagnosis function.

Tricolor Warning Lamp

The lamp comprises 3 colors, when the percentage of load moment is below 90%, "Green Lamp" lights on to indicate that the crane is running in safety; when the percentage of load moment is in 90%~100%, "Yellow Lamp" lights on to indicate that the crane is close to total rated lifting load; when the percentage of load moment is above 100%, "Red Lamp" lights on to indicate that the crane is in overload and in dangerous area, at this time the control system can automatically cut off crane movement to dangerous direction.

Illumination Lamp

The illuminator lamp is in front of turntable, on the top of and inside operator's cab for lighting in night operation.

Audio/Video Alarm

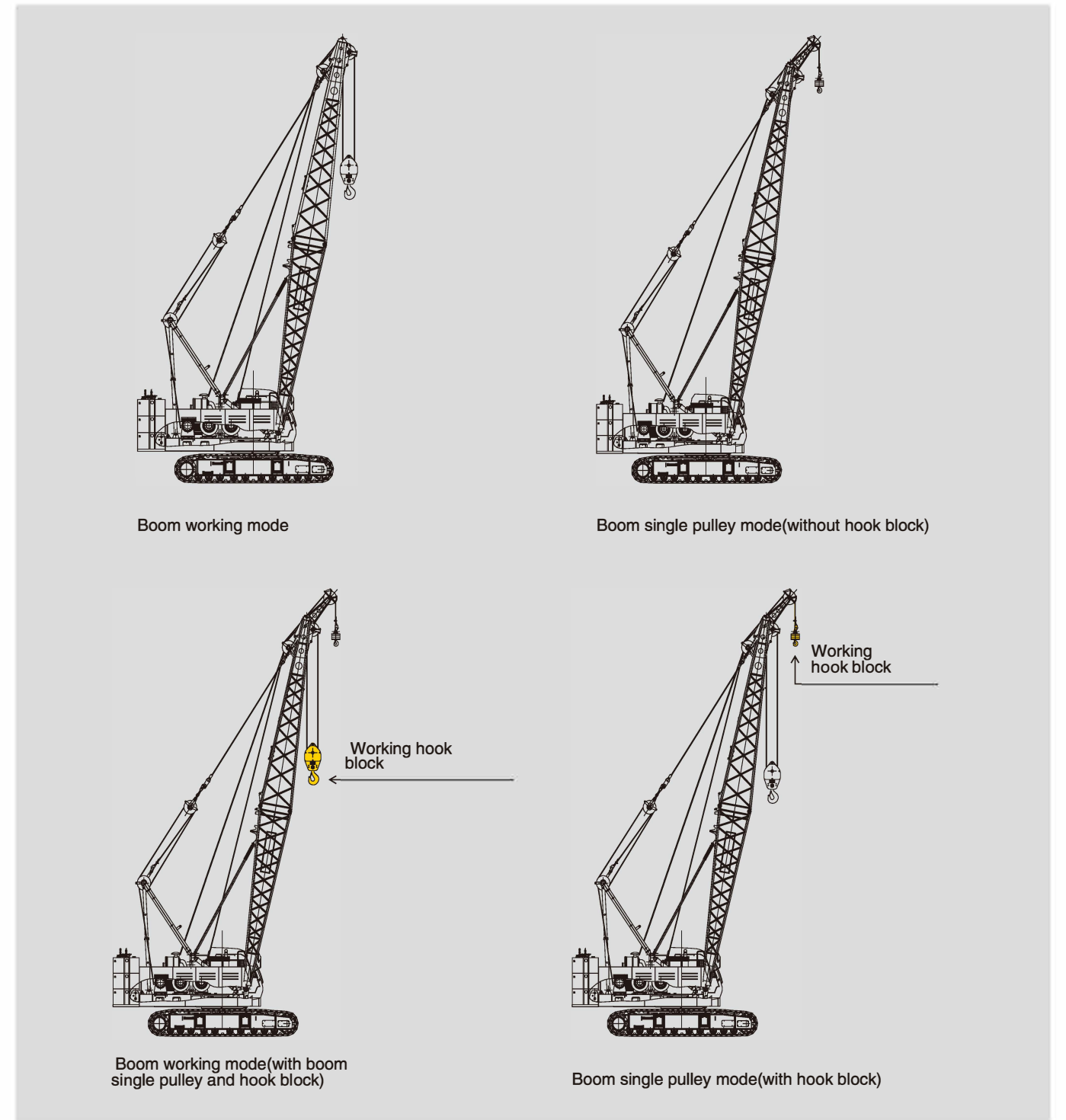
When crawler crane is slewing, the audio/video warning lamps flash and give sound for warning.

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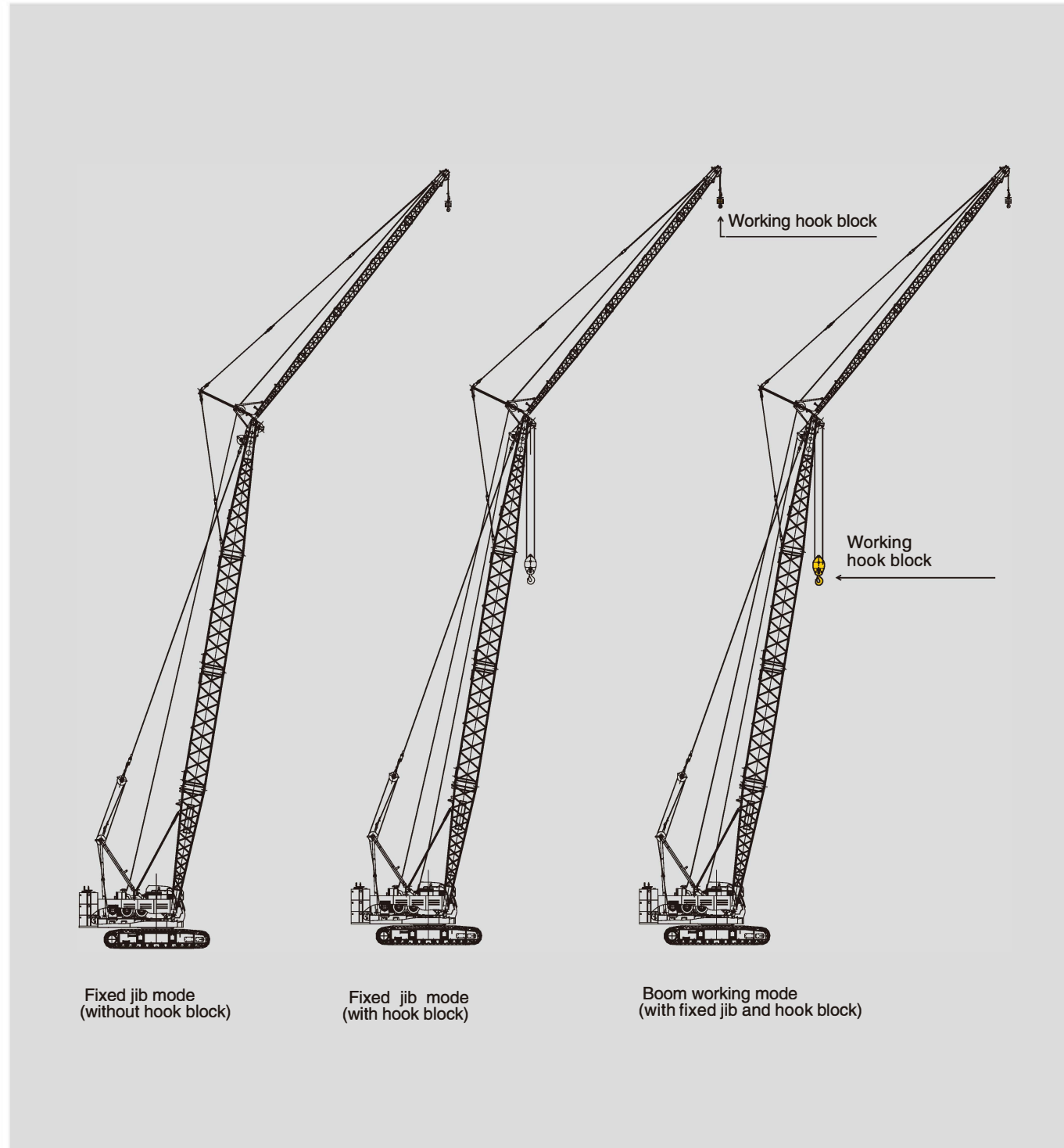
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Working Mode Illustration

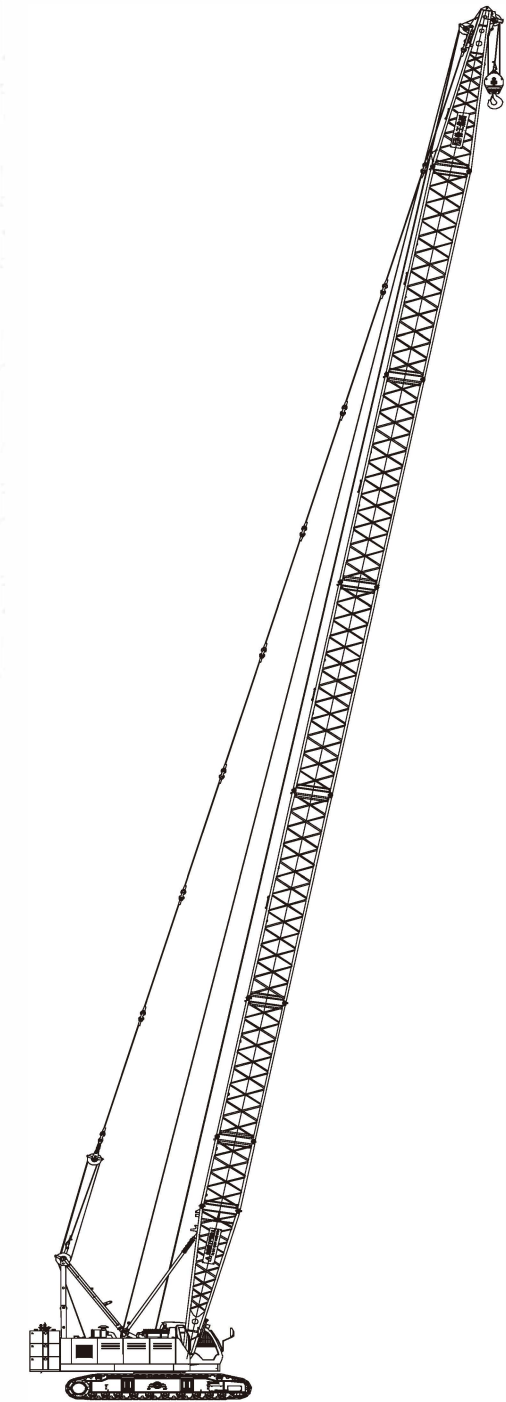


Working Mode Illustration

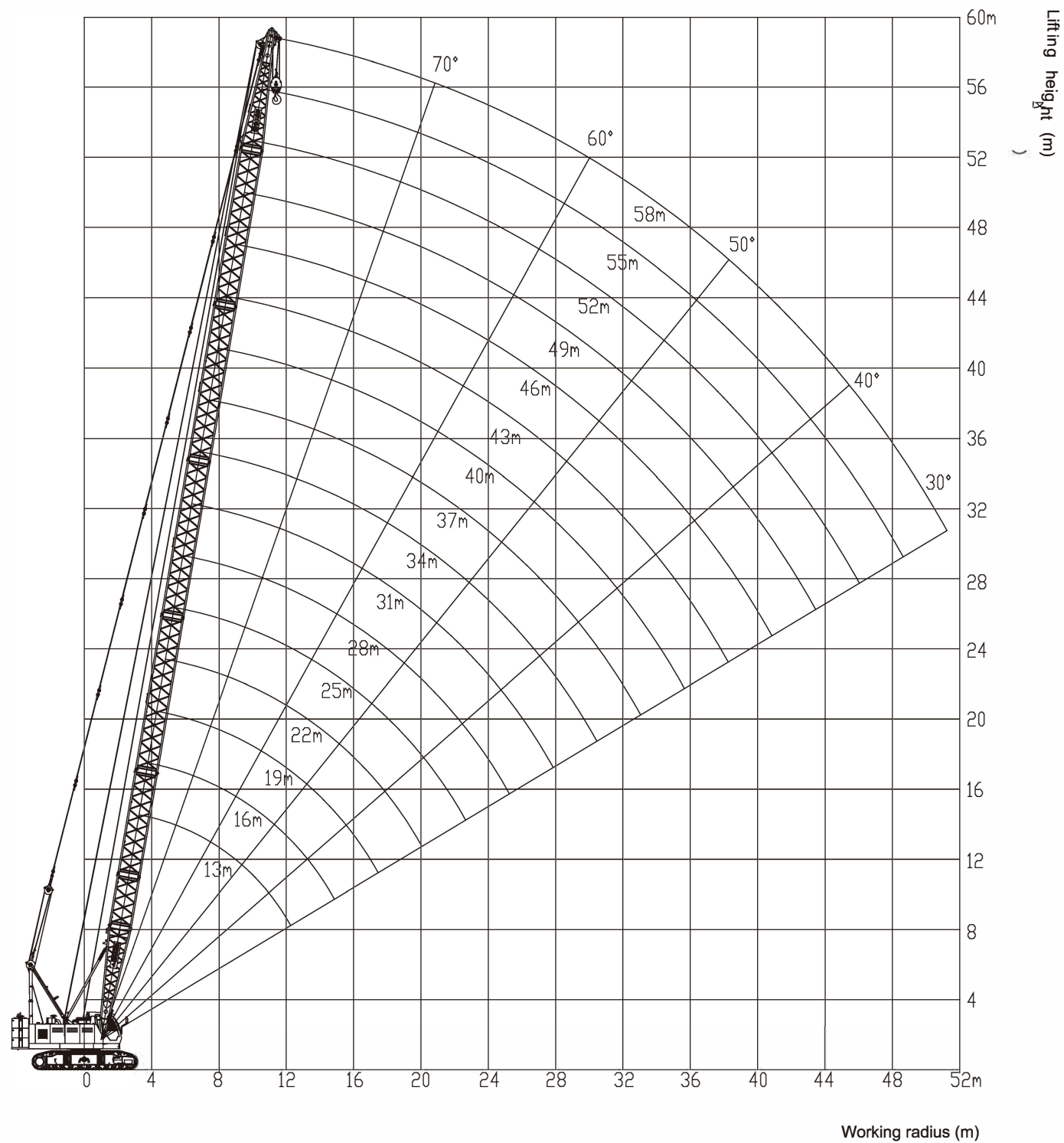


Boom Combinations

Boom length (m)	Bottom 6.5m	Middle			Top 6.5m
		3m	6m	9m	
13	1	-	-	-	1
16	1	1	-	-	1
19	1	-	1	-	1
22	1	-	-	1	1
25	1	1	1	-	1
28	1	1	1	1	1
31	1	-	-	2	1
34	1	1	1	1	1
37	1	1	-	2	1
40	1	-	-	3	1
43	1	1	1	2	1
46	1	1	1	3	1
49	1	-	-	4	1
52	1	1	1	3	1
55	1	1	1	4	1
58	1	1	1	4	1



Boom Working Area



Boom Lifting Load Chart

Radius (m)	Boom length (m)								Radius (m)
	13	16	19	22	25	28	31	34	
3.6	75								3.6
4	71.5	68.0/4.2							4
5	56.5	55.5	55	47.5/5.3					5
6	43.5	42.7	41.9	41.5	40.9	35.2/6.5			6
7	34.5	34.3	34.2	33.7	32.7	32.1	31.7	28.2/7.5	7
8	28.5	28.4	28.4	28.3	27.9	27.3	26.8	26.3	8
9	24.2	24.0	23.9	23.8	23.6	23.4	23.2	22.6	9
10	20.9	20.9	20.8	20.7	20.6	20.5	20.1	19.9	10
12	16.4	16.3	16.3	16.2	16.1	16	15.9	15.8	12
14		13.3	13.3	13.2	13.1	13	12.9	12.8	14
16			11.1	11	10.9	10.8	10.7	10.6	16
18				9.4	9.3	9.2	9.1	9	18
20				8.2	8.1	8	7.9	7.8	20
22					7.1	7	6.9	6.8	22
24						6.2	6.1	5.9	24
26							5.4	5.3	26
28								4.7	28
30								4.2	30

Radius (m)	Boom length (m)								Radius (m)
	37	40	43	46	49	52	55	58	
8	25.9								8
9	22.0	21.7	21.5						9
10	19.6	19.3	19.2	18.9	18.4	16.5/10.7	14.2/11		10
12	15.6	15.4	15.2	14.8	14.5	13.9	13.5	12.5	12
14	12.7	12.6	12.4	12.2	12.0	11.7	11.4	11.0	14
16	10.5	10.4	10.3	10.2	10.0	9.8	9.6	9.4	16
18	8.9	8.8	8.7	8.5	8.4	8.3	8.1	7.9	18
20	7.6	7.5	7.4	7.3	7.2	7	6.9	6.8	20
22	6.6	6.5	6.4	6.3	6.2	6	5.9	5.8	22
24	5.8	5.7	5.6	5.5	5.3	5.2	5.1	4.9	24
26	5.1	5	4.9	4.8	4.6	4.5	4.4	4.2	26
28	4.6	4.4	4.3	4.2	4.1	3.9	3.8	3.7	28
30	4.1	3.9	3.8	3.7	3.6	3.4	3.3	3.2	30
32	3.6	3.5	3.4	3.3	3.1	3	2.9	2.7	32
34		3.1	3	2.9	2.8	2.6	2.5	2.3	34
36			2.7	2.6	2.4	2.3	2.2	2	36
38			2.4	2.3	2.1	2	1.9	1.7	38
40				2	1.9	1.7	1.6	1.4	40
42					1.6	1.5	1.4	1.2	42
44						1.3	1.2	1	44
46							1.1	1	46

Working Radius (m)	Boom length (m)																Working Radius (m)		
	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58			
5	6.5																5		
6	6.5	6.5															6		
7	6.5	6.5	6.5	6.5													7		
8	6.5	6.5	6.5	6.5	6.5	6.5											8		
9	6.5	6.5	6.5	6.5	6.5	6.5	6.5										9		
10	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5							10		
12	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5						12		
14		6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5			14		
16		6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5		16		
18			6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	18		
20				6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	20		
22				6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.4	6.5	6.1	6	5.9	22		
24					6.5	6.5	6.1	6	5.9	5.8	5.7	5.5	5.4	5.3	5.2	5.1	24		
26						5.5	5.4	5.3	5.2	5.1	5	4.9	4.7	4.6	4.5	4.4	26		
28							4.9	4.8	4.6	4.5	4.4	4.3	4.2	4	3.9	3.8	28		
30							4.4	4.3	4.1	4	3.9	3.8	3.7	3.6	3.4	3.3	30		
32								3.8	3.7	3.6	3.5	3.4	3.2	3.1	3	2.9	32		
34									3.3	3.2	3.1	3	2.9	2.7	2.6	2.5	34		
36										2.9	2.8	2.7	2.5	2.4	2.3	2.2	36		
38											2.6	2.5	2.4	2.2	2.1	2	1.9	38	
40												2.2	2.1	2	1.9	1.7	1.6	40	
42													1.9	1.7	1.6	1.5	1.4	42	
44														1.5	1.4	1.3	1.2	44	
46															1.3	1.2	1.1	1	46
48																	1		48

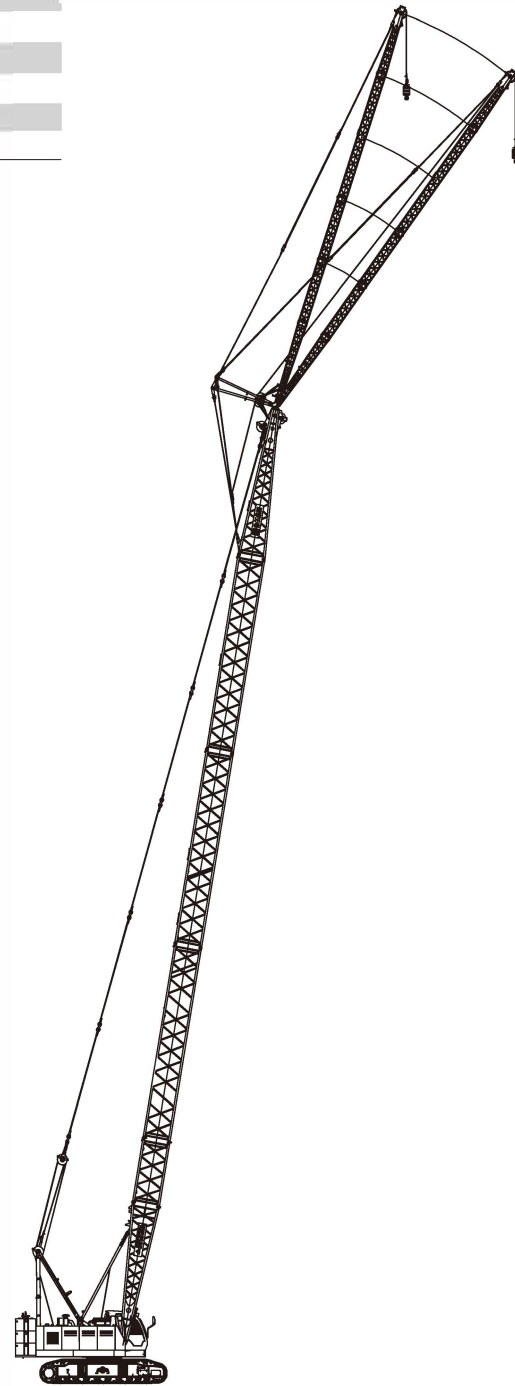


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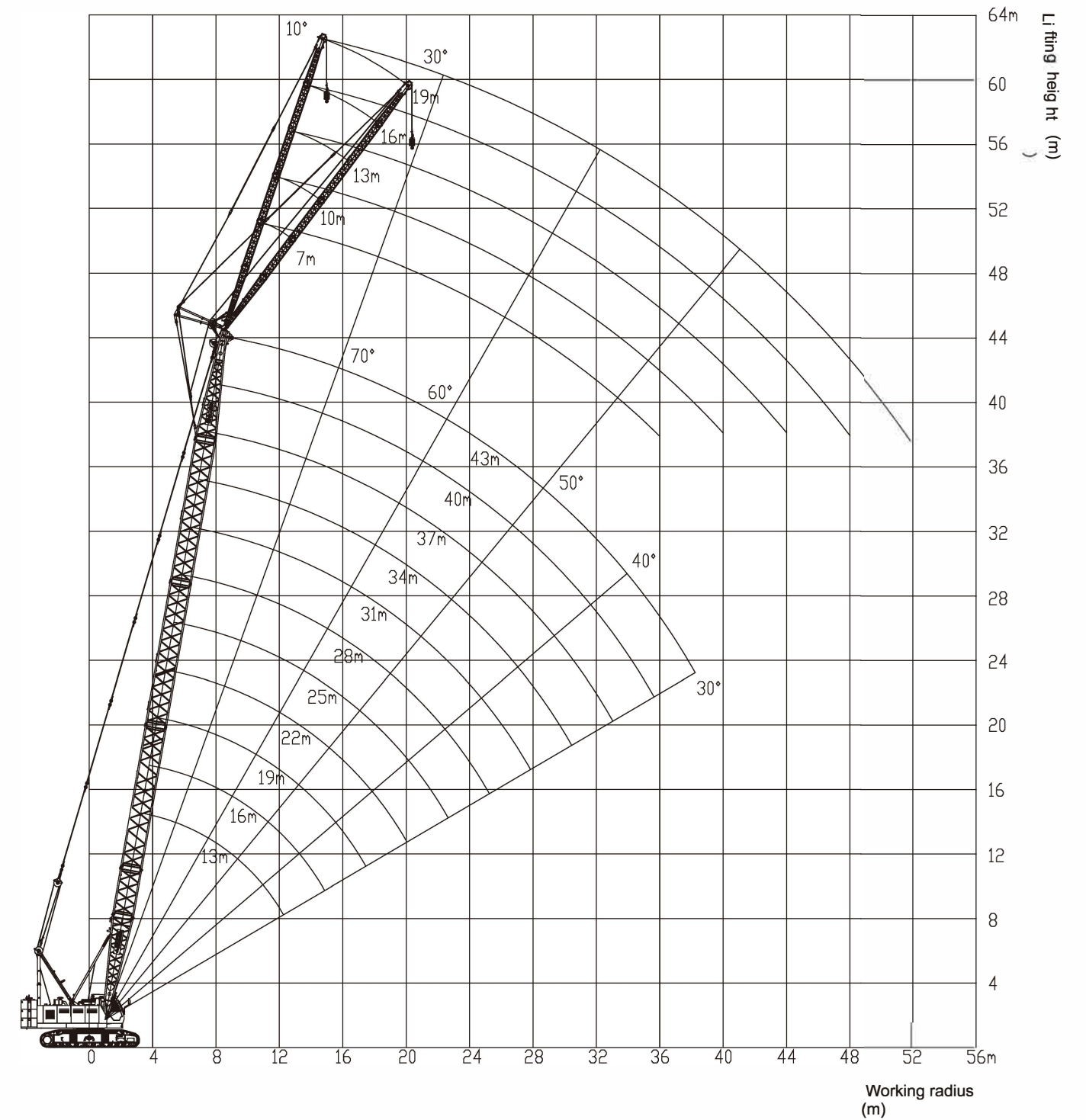
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Fixed Jib Combinations

Jib length (m)	Bottom 4m	Middle		top 3m
		3m	6m	
7	1	-	-	1
10	1	1	-	1
13	1	-	1	1
16	1	1	1	1
19	1	2	1	1



Fixed Jib Working Area



Fixed Jib Lifting Load Chart

Boom length(m)	28										Boom length(m)
Fixed jib length(m)	7		10		13		16		19		Fixed jib length(m)
Jib angle(°)	10	30	10	30	10	30	10	30	10	30	Jib angle(°)
Working radius(m)											Working radius(m)
9	12										9
10	12		9.6								10
12	12	9.9	9.1		7.2		5.6		4.2		12
14	12	9.6	8.6	6.5	6.8		5.3		3.9		14
16	10.7	9.4	8.2	6.3	6.5	4.8	5	3.7	3.7		16
18	9.1	9.2	7.8	6.1	6.1	4.6	4.7	3.5	3.4	2.5	18
20	7.8	8	7.5	5.9	5.9	4.4	4.5	3.4	3.2	2.4	20
22	6.8	6.9	6.9	5.8	5.6	4.3	4.3	3.2	3	2.3	22
24	6	6.1	6.1	5.6	5.3	4.2	4	3.1	2.8	2.2	24
26	5.3	5.4	5.4	5.5	5.1	4.1	3.8	3	2.7	2	26
28	4.8	4.8	4.8	4.9	4.9	4	3.7	2.9	2.5	1.9	28
30	4.3	4.3	4.3	4.4	4.4	3.9	3.5	2.8	2.4	1.8	30
32	3.8	3.8	3.9	3.9	3.9	3.8	3.3	2.7	2.3	1.8	32
34			3.5	3.5	3.6	3.6	3.2	2.6	2.2	1.7	34
36					3.2	3.3	3	2.6	2	1.6	36
38						2.9	2.9	2.5	1.9	1.6	38
40							2.7	2.5	1.8	1.5	40
42									1.7	1.5	42
44										1.5	44

Boom length(m)	31										Boom length(m)
Fixed jib length(m)	7		10		13		16		19		Fixed jib length(m)
Jib angle(°)	10	30	10	30	10	30	10	30	10	30	Jib angle(°)
Working radius(m)											Working radius(m)
9	12										9
10	12		9.6								10
12	12	9.9	9.2		7.2		5.6				12
14	12	9.7	8.7	6.5	6.9		5.3		4		14
16	10.6	9.5	8.3	6.3	6.6	4.8	5.1		3.7		16
18	9	9.2	8	6.1	6.3	4.6	4.8	3.6	3.5		18
20	7.7	7.9	7.6	6	6	4.5	4.6	3.4	3.3	2.4	20
22	6.7	6.8	6.8	5.8	5.7	4.4	4.4	3.3	3.1	2.3	22
24	5.9	6	6	5.7	5.5	4.2	4.1	3.2	2.9	2.2	24
26	5.2	5.3	5.3	5.4	5.3	4.1	4	3	2.8	2.1	26
28	4.6	4.7	4.7	4.8	4.8	4	3.8	2.9	2.6	2	28
30	4.1	4.2	4.2	4.3	4.3	4	3.6	2.8	2.5	1.9	30
32	3.7	3.7	3.8	3.8	3.8	3.9	3.5	2.7	2.4	1.8	32
34	3.3	3.3	3.4	3.4	3.4	3.5	3.3	2.7	2.3	1.7	34
36			3	3.1	3.1	3.2	3.1	2.6	2.2	1.7	36
38				2.7	2.8	2.8	2.8	2.6	2	1.6	38
40					2.5	2.5	2.5	2.5	1.9	1.6	40
42								2.3	2.4	1.8	42
44									2.1	1.8	44
46										1.5	46

Fixed Jib Lifting Load Chart

Boom length(m)	34										Boom length(m)
	7		10		13		16		19		
Fixed jib length(m)											Jib angle(°)
Jib angle(°)	10	30	10	30	10	30	10	30	10	30	
Working radius(m)											Working radius(m)
10	12										10
12	12	9.9	9.2		6.5						12
14	12	9.7	8.8	6.5	6.5		5.3		4		14
16	10.4	9.5	8.4	6.3	6.5	4.8	5.1		3.8		16
18	8.9	9.1	8.1	6.2	6.3	4.7	4.9	3.6	3.6		18
20	7.6	7.8	7.7	6	6.1	4.5	4.7	3.5	3.4	2.4	20
22	6.6	6.7	6.7	5.9	5.8	4.4	4.4	3.3	3.2	2.3	22
24	5.8	5.9	5.9	5.8	5.6	4.3	4.2	3.2	3	2.2	24
26	5.1	5.2	5.2	5.3	5.2	4.2	4.1	3.1	2.9	2.2	26
28	4.5	4.6	4.6	4.7	4.6	4.1	3.9	3	2.7	2.1	28
30	4	4.1	4.1	4.2	4.1	4	3.7	2.9	2.6	2	30
32	3.6	3.6	3.6	3.7	3.7	3.8	3.6	2.8	2.5	1.9	32
34	3.2	3.2	3.2	3.3	3.3	3.4	3.3	2.7	2.4	1.8	34
36	2.8	2.8	2.9	3	3	3.1	3	2.7	2.3	1.7	36
38			2.6	2.6	2.7	2.7	2.7	2.6	2.2	1.7	38
40			2.3	2.3	2.4	2.4	2.4	2.5	2.1	1.6	40
42					2.2	2.2	2.2	2.3	2	1.6	42
44							2	2	1.9	1.5	44
46								1.8	1.8	1.5	46
48									1.6	1.5	48

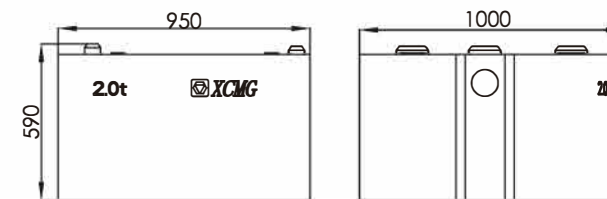
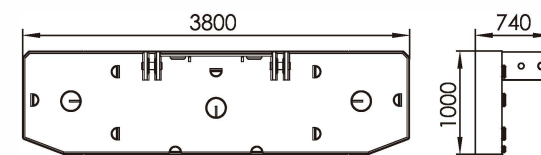
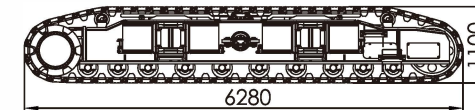
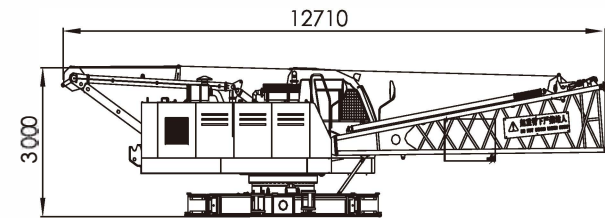
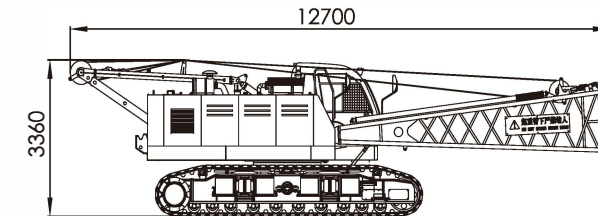
Boom length(m)	37										Boom length(m)		
	7		10		13		16		19			Fixed jib length(m)	
Fixed jib length(m)											Jib angle(°)		
Jib angle(°)	10	30	10	30	10	30	10	30	10	30		Jib angle(°)	
Working radius(m)											Working radius(m)		
10	12										10		
12	12	9.9			6.5						12		
14	12	9.7			6.5	6.5		5.4		4	14		
16	10.2	9.5			6.5	6.3	6.5	4.8	5.1	3.8	16		
18	8.7	8.9			6.5	6.2	6.4	4.7	4.9	3.6	18		
20	7.5	7.7			6.5	6	6.2	4.5	4.7	3.6	3.4	2.5	20
22	6.5	6.6			6.5	5.9	5.9	4.4	4.5	3.5	3.3	2.4	22
24	5.7	5.8			5.7	5.8	5.7	4.3	4.3	3.4	3.1	2.3	24
26	5	5.1			5	5.2	5.1	4.2	4.2	3.3	2.9	2.2	26
28	4.4	4.5			4.5	4.6	4.5	4.1	4	3.2	2.8	2.1	28
30	3.9	4			4	4.1	4	4.1	3.8	3.1	2.7	2	30
32	3.5	3.5			3.5	3.6	3.6	3.7	3.6	3	2.5	1.9	32
34	3.1	3.1			3.1	3.2	3.2	3.3	3.2	2.9	2.4	1.9	34
36	2.7	2.8			2.8	2.9	2.9	3	2.9	2.8	2.3	1.8	36
38	2.4	2.4			2.5	2.5	2.6	2.6	2.6	2.7	2.2	1.7	38
40		2.1			2.2	2.3	2.3	2.4	2.3	2.7	2.1	1.7	40
42					2	2	2	2.1	2.1	2.4	2.1	1.6	42
44							1.8	1.8	1.8	2.2	1.9	1.6	44
46								1.6	1.6	1.9	1.7	1.5	46
48									1.4	1.7	1.5	1.5	48
50										1.5	1.3	1.4	50
52												1.2	52

Fixed Jib Lifting Load Chart

Boom length(m)	40										Boom length(m)
Fixed jib length(m)	7		10		13		16		19		Fixed jib length(m)
Jib angle()	10	30	10	30	10	30	10	30	10	30	Jib angle()
Working radius(m)											Working radius(m)
12	6.5		6.5								12
14	6.5	6.5	6.5		6.5		5.3		4		14
16	6.5	6.5	6.5	6.3	6.5		5.1		3.9		16
18	6.5	6.5	6.5	6.2	6.4	4.7	5		3.7		18
20	6.5	6.5	6.5	6.1	6.2	4.6	4.8	3.5	3.5	2.5	20
22	6.4	6.5	6.4	5.9	6	4.5	4.6	3.4	3.3	2.4	22
24	5.5	5.7	5.6	5.8	5.7	4.4	4.4	3.3	3.2	2.3	24
26	4.8	5	4.9	5.1	5	4.3	4.2	3.2	3	2.2	26
28	4.3	4.4	4.3	4.5	4.4	4.2	4.1	3.1	2.9	2.1	28
30	3.8	3.8	3.8	4	3.9	4.1	3.9	3	2.7	2.1	30
32	3.3	3.4	3.4	3.5	3.5	3.6	3.5	2.9	2.6	2	32
34	2.9	3	3	3.1	3.1	3.2	3.1	2.8	2.5	1.9	34
36	2.6	2.6	2.7	2.7	2.7	2.9	2.8	2.8	2.4	1.8	36
38	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.3	1.8	38
40	2	2	2.1	2.2	2.2	2.3	2.2	2.3	2.2	1.7	40
42	1.8	1.8	1.9	1.9	1.9	2	1.9	2.1	2	1.7	42
46				1.4	1.5	1.5	1.5	1.6	1.5	1.6	46
50							1.1	1.2	1.2	1.3	50
54										1.1	54

Boom length(m)	43										Boom length(m)
Fixed jib length(m)	7		10		13		16		19		Fixed jib length(m)
Jib angle()	10	30	10	30	10	30	10	30	10	30	Jib angle()
Working radius(m)											Working radius(m)
12	6.5		6.5								12
14	6.5	6.5	6.5		6.5		5.3				14
16	6.5	6.5	6.5	6.4	6.5		5.1		3.9		16
18	6.5	6.5	6.5	6.2	6.5	4.7	4.9		3.7		18
20	6.5	6.5	6.5	6.1	6.4	4.6	4.8	3.5	3.5		20
22	6.2	6.3	6.3	6	6.2	4.5	4.6	3.4	3.4	2.4	22
24	5.4	5.6	5.5	5.8	5.9	4.4	4.5	3.3	3.2	2.3	24
26	4.7	4.8	4.8	5	5.7	4.3	4.3	3.2	3.1	2.2	26
28	4.1	4.2	4.2	4.4	5.1	4.2	4.1	3.1	2.9	2.2	28
30	3.6	3.7	3.7	3.9	4.5	4	3.8	3	2.8	2.1	30
32	3.2	3.3	3.3	3.4	4	3.5	3.4	3	2.7	2	32
34	2.8	2.9	2.9	3	3.6	3.1	3	2.9	2.6	2	34
36	2.5	2.5	2.5	2.6	3.2	2.8	2.6	2.8	2.5	1.9	36
38	2.2	2.2	2.2	2.3	2.9	2.4	2.3	2.5	2.4	1.8	38
40	1.9	1.9	2	2	2.6	2.1	2.1	2.2	2.1	1.8	40
42	1.7	1.7	1.7	1.8	2.3	1.9	1.8	2	1.8	1.7	42
46			1.3	1.3	1.8	1.4	1.4	1.5	1.4	1.6	46
50						1	1	1.1	1	1.2	50
54										1	54

Main Parts



Basic machine transport plan 1 ×1

(L)	12700mm
(W)	3460mm
(H)	3360mm
(W)	36.8 t

Basic machine transport plan 2 ×1

(L)	12710mm
(W)	3460mm
(H)	3000mm
(W)	22.0 t

Left/Right track frame ×2

(L)	6280mm
(W)	980mm
(H)	1100mm
(W)	8.51 t

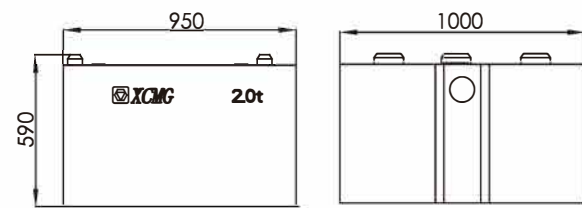
Counterweight support ×1

(L)	3800mm
(W)	1000mm
(H)	740mm
(W)	4.0 t

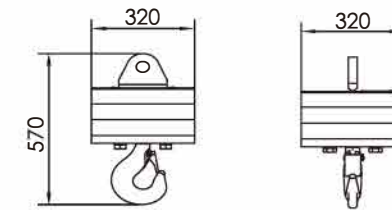
Left counterweight slab ×3

(L)	1000mm
(W)	950mm
(H)	590mm
(W)	2.0 t

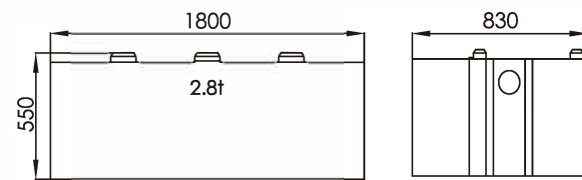
Main Parts



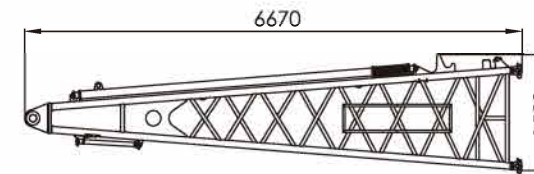
Right counterweight slab ×3	
(L)	1000mm
(W)	950mm
(H)	590mm
(W)	2.0t



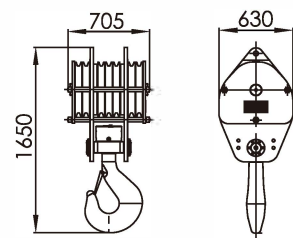
8t hook block ×1	
(L)	320mm
(W)	320mm
(H)	570mm
(W)	0.14 t



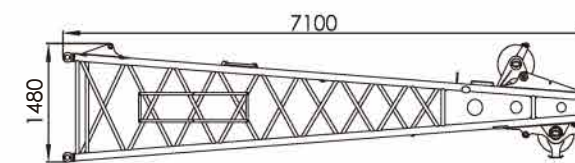
Central counterweight slab ×2	
(L)	1800mm
(W)	830mm
(H)	550mm
(W)	2.8 t



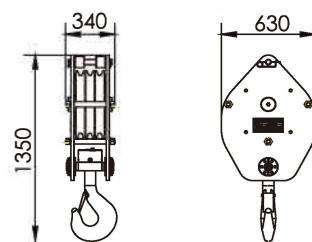
6.5m boom base ×1	
(L)	6670mm
(W)	1600mm
(H)	1520mm
(W)	1.09 t



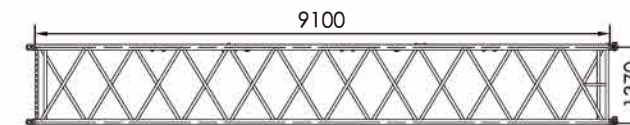
75t hook block ×1	
(L)	705mm
(W)	630mm
(H)	1650mm
(W)	0.89 t



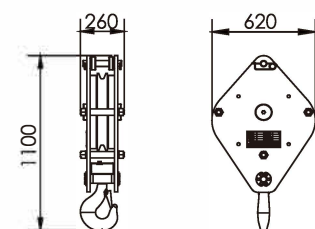
6.5m boom top ×1	
(L)	7100mm
(W)	1510mm
(H)	1480mm
(W)	0.98t



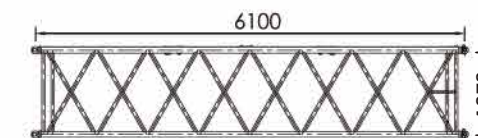
32t hook block ×1	
(L)	340mm
(W)	630mm
(H)	1350mm
(W)	0.35t



9m boom insert section ×4	
(L)	9100mm
(W)	1590mm
(H)	1370mm
(W)	0.78t

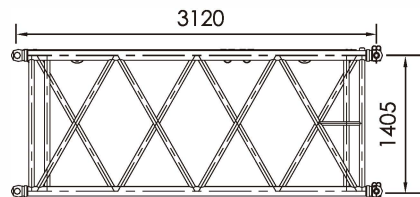


16t hook block ×1	
(L)	260mm
(W)	620mm
(H)	1100mm
(W)	0.28 t

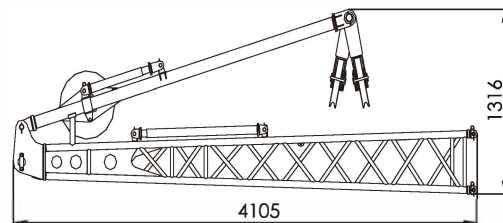


6m boom insert section ×1	
(L)	6100mm
(W)	1590mm
(H)	1370mm
(W)	0.54t

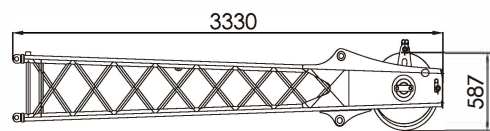
Main Parts



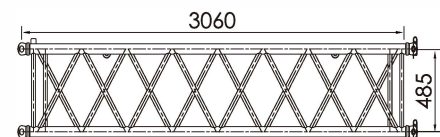
3m boom insert section	×1
(L)	3120mm
(W)	1590mm
(H)	1405mm
(W)	0.32t



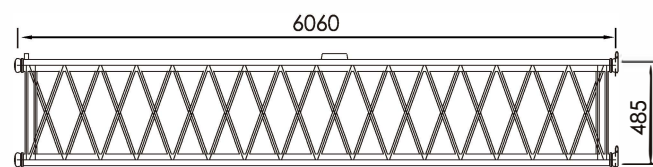
Fixed jib butt (including strut)	×1
(L)	4150mm
(W)	700mm
(H)	1316mm
(W)	0.416 t



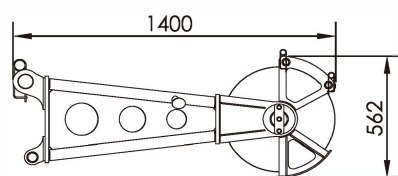
Fixed jib top	×1
(L)	3330mm
(W)	655mm
(H)	587mm
(W)	0.216 t



Fixed jib 3m	×1
(L)	3060mm
(W)	655mm
(H)	485mm
(W)	0.104t



Fixed jib 6m	×1
(L)	6060mm
(W)	655mm
(H)	485mm
(W)	0.192t



boom end pulley assembly	×1
(L)	1400mm
(W)	625mm
(H)	562mm
(W)	0.093t

Working Conditions And Cautions

Working conditions

1. The crane working conditions: boom length ≤50m when wind speed is less than 14.1m/s; boom length > 50m when wind speed is less than 9.8m/s; the ambient temperature is -20 C ~ +40 C; and the ground gradient is less than 1%.

2. The rated lifting load in the chart are the maximum lifting capacity on the condition that the given working conditions are met and the load is in the state of free suspension and lifted slowly from the solid ground. Operators should limit or reduce lifting capacity according to different conditions (such as soft or uneven ground, wind force, side loading, oscillating action, several crane cooperate-lifting).

3. The rated lifting capacity in the chart includes the weight of main hook block, wire rope and all slings. The weight of each hook block and boom single top is shown in the table below:

75t hook block	32t hook block	16t hook block	8t hook block	Boom single top
0.89 ton	0.35 ton	0.28 ton	0.14 ton	0.093 ton

4. The blank area of the chart where no rated lifting load listed is regarded as non-operation area, so crawler crane is not allowed to carry out lifting operation in this area.

5 The lifting load in the chart includes the lifting capacity of full counterweight.

6. This crawler crane is allowed to travel slowly with a suspended load, boom and boom single pulley working mode the maximum load weight is 90% of rated lifting load given in the load chart; fixed jib working mode the maximum load weight is 50% of rated lifting load given in the load chart for the crane travel.

7 . Selection of hook block and parts of line.

In any case, the selection of hook block must satisfy that the hook block rated lifting load is more than or equal to the actual lifting load (including wire rope, slings and etc.).

Parts of line is according to the table below:

Parts of line	1	2	3	4	5	6	7	8	9	10	11	12
Max. lifting load	6.5	12.7	18.9	25.0	31.0	37.0	42.9	48.6	54.3	60.0	66.0	75.0

The one part of line is used for boom single top