

XLC180 Lattice Crawler Crane



RONCO GROUP





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XLC180 CRAWLER CRANE

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Product introduction

Boom combination

XLC180 crawler crane boom and jib are the chord and lacing member of large cross-section, thick-walled large diameter, high-strength seamless steel pipe, supplemented by high-strength steel welded into the middle of sub-section, tapered cross-section at both ends of the four chord space lattice structure.

Under heavy duty boom working condition, the Max. lifting load is 180t@5m (16 parts of line), the Max. lifting moment is 175t×6m=1050t.m. main boom length is 17m ~ 83m, boom composition: boom butt 1×6m, transition section 1×6m, top section: 1×5m, insert section 1×3mA and 1×3mB, insert section 1×6mA and 1×6mB, insert section 2×12mA and 2×12mB. Boom can be equipped with boom single pulley.

Under tower jib working condition, the Max. lifting load is 75t@10m (6 parts of line), tower jib length is 18m ~ 51m, boom composition: boom butt 1×1.5m, transition section 1×4.5m, top section 1×3m, insert section 1×3mB and 1×3mC, insert section 1×6mB and 1×6mC, insert section 1×12mB and 1×12mC, front strut 1×5.8m, rear strut 1×5.5m. tower jib can be equipped with tower jib single pulley.

The length of light duty boom is 40.5m ~ 88.5m, composed of boom sections and tower jib sections.

Under fixed jib working condition, the Max. lifting load is 58t@12m (5 parts of line). Fixed jib length is 9m ~ 30m, jib composition: jib butt 1×1.5m, transition section 1×4.5m, jib top 1×3m, insert section 1×3mB and 1×3mC, insert section 1×6mB and 1×6mC, insert section 1×12mB, strut 1×5.8m.

Boom luffing components

Boom luffing component is made of high-strength pendant structure with high safety factor. Pendant transition with balance beam can efficiently bear the load of two-group pendant for equal force distribution. Single pendant with "Peach" -shaped connection holes, easy assembly, saving labor and high efficient.

Mast

Mast is a box-type two-limb structure, with strengthened beam between two limbs for good stability. Mast lifting cylinder can rotate around the cylinder center and turntable connection pivot, to realize mast erection raising and lowering.

Turntable

Turntable is a key load bearing structural component to connect crane superstructure and crane undercarriage, use of high-strength steel plate welded in "工" box-type composite box beam structure on both sides, through the slewing ring coupled with undercarriage, with good overall strength and stability. Cab, main luffing winch, engine system, main pump, hydraulic valve, cabinet, mast, boom base section, superstructure counterweight and self-assembly/disassembly jacking cylinder can be respectively connected with different parts of the turntable.

Mechanism composition

Crane mechanism and configuration refer to the table below:

No.	Name	Application	Location
1	Main hoist winch	Used for main winch in heavy boom, boom single top, fixed jib, tower jib, tower jib single top and light boom working conditions.	On boom butt, near the root position
2	Auxiliary hoist winch	(1) Used for aux. hook in boom single top and fixed jib working conditions; (2) Used as tower jib luffing winch in tower jib (include tower jib single top) working condition	On boom butt, near the top position
3	Single top winch (optional)	Used for aux. hook in tower jib single top working condition	Front side of turntable
4	Main luffing winch	Boom luffing	Middle part of turntable
5	Slewing unit	Superstructure slewing	Front side of turntable
6	Travel unit	Crane travel	Crawler drive sprocket

Hoist winch

Hoist winch includes main hoist winch, auxiliary hoist winch and single pulley hoist mechanism (optional), hoist winch consists of planetary reducer driven by variable motor, through drum, guide pulley and hoist pulley block to achieve main or auxiliary hook block hoisting up/down.

Hoist winch

The planetary reducer is built in the hoisting mechanism, and the normally closed brake is adopted to realize the function of "spring brake / hydraulic release", which is safe and reliable. The hoist drum is made of ductile iron with double line multilayer winding, with good vibration absorption, to ensure rope rotation-resistance for multilayer rope winding, effectively increasing the wire rope service life.

The hoisting mechanism uses independent steel core, high breaking force, high extrusion resistance of anti rotation special steel wire rope, rated single rope.

Tensile force 14.1t, wire rope diameter ϕ 26mm. The length of main, auxiliary and single pulley lifting ropes are 400m, 290m and 200m respectively.

Luffing mechanism

The luffing mechanism includes main luffing mechanism and tower jib luffing mechanism. The main luffing mechanism is independently driven by the double drum and is installed in the middle of the turntable through the pin shaft.

The main luffing mechanism is a planetary gear reducer driven by a motor, and the luffing of the main boom is realized through the drum and the luffing pulley block. The main luffing mechanism is equipped with a planetary reducer and a normally closed brake to realize the function of "spring braking / hydraulic release", which is safe and reliable.

The luffing drum has a ratchet lock device in which the pawl is driven by hydraulic cylinder to realize multiple protection.

The main luffing drum is made of ductile iron with double line multilayer winding, with good vibration absorption, to ensure rope rotation-resistance for multilayer rope winding, effectively increasing the wire rope service life.

The main luffing mechanism uses steel wire rope with high breaking force, the rated single line pull is 11t, and the diameter of steel wire rope ϕ 22mm, 330m in length.

The luffing mechanism and the auxiliary hoisting mechanism are the same device, installed on boom butt, tower jib luffing is realized through function switching.

Product introduction

Slewing Mechanism

The slewing mechanism and slewing bearing is outer meshed driven, it is placed in the front of the inner side of turntable, it is the motor drive the planetary gear reducer and slewing bearing to realize 360° slewing.

There is a planetary reducer inside the slewing mechanism which adopted constant closed brake to realize “spring brake/hydraulic release” function, it is reliable and safe.

Slewing mechanism is set with slewing lock device to realize the locking protection to slewing mechanism.

The slewing mechanism has free sliding function.

Slewing bearing

The 3-row roller type straight tooth external meshing slewing bearing or elliptical raceway double row ball slewing bearing is adopted, with high strength, large bearing moment, high precision, long service life and convenient maintenance.

Cylinder assembly

The connection of boom and turntable, car-body and crawler track, counterweight tray and turntable, are all power-pin connected driven by cylinder. The mast raising cylinder, outrigger cylinder, crawler track tightening cylinder make the assembly and dismantling more convenient; the cab cylinder helps vertical turning-over and horizontal turning-over of cab.

Operator's cab

The leopard head-shaped control room designed by ergonomic principles has a gorgeous appearance, wide field of vision, and comfortable and convenient operation.

Car-body

The car-body is a box-type radial structure, which is welded by high-strength steel plate, and has good overall rigidity and high strength.

Crawler track travel device

There are two crawler tracks, each of the two is composed of track beam, track shoe, bearing roller, a driving roller, a guiding roller, an upper roller, and a tensioning device.

Crawler track: Symmetrically placed both at left side and at right side, and with one at each side. The box-type structure welded by high-strength steel plate, the parallel iron is set at the connection position between track and car-body for guiding and wear-resistance.

Drive roller: High-strength wear-resistant alloy steel, connected to the planetary reducer housing with high-strength bolts.

Bearing roller: High-strength wear-resistant alloy steel with double flange design, built-in floating seal and self-lubricating.

Tensioning roller: adjust the tension of the track through the oil cylinder and adjusting pad.

The upper roller: high-strength wear-resistant alloy steel, built-in floating seal o, self-lubricating.

Track shoes: high-strength wear-resistant alloy steel.

Travel mechanism: constantly closed planetary gear reducer with strong driving power and high flexibility and maneuverability. Multi-plate wet constantly closed brake, spring brake, hydraulic release.

Hydraulic system

Load-sensitive LUDV system with hydraulic pilot proportional control, precise speed, sensitive operation and fine movement. The main valve can realize combined operations of multiple operations, compact structure and convenient maintenance.

Special rotary closed system design, smooth start and stop, good fine-motion, good proportional characteristics, strong anti load change interference ability, meet the requirements of fine lifting operation.

Electrical system

The electrical system mainly includes the following parts: engine control, monitoring instruments, auxiliary equipment, hydraulic system control, load moment limit and safety monitoring.

The composition of the electrical system: conventional electrical system and PLC control system.

Conventional electrical system includes power supplies, start controls, cab air conditioning and audio, lighting, wipers, and more.

The PLC control system includes the control of main and auxiliary winches, slewing, main boom luffing, engine condition monitoring, and all actions that are controlled by PLC logic of CAN-bus bus technology.

Engine system

Model: Shanghai diesel SC9DF330G3

Type: in-line, six-cylinder, water-cooled, supercharged inter-cooled, four-stroke diesel engine

Environmental protection: in line with national III standard and European III emission standard.

Rated power: 243kw/2000rpm;

Max. output torque: 1380N.m;

Fuel oil tank: 600L.

Counterweight

Counterweight is composed of car-body counterweight and turntable counterweight.

Car-body counterweight is 12t totally, car-body counterweight can realize self-assembly/dismantling by using mast crane, car-body counterweight is installed at the front side and rear side of crawler tracks. Its composition is: car-body counterweight 2 × 6t.

There are 2 kinds of turntable counterweight to chose: 65t and 55t. For different lifting needs, in the design, independent performance tables are provided according to the grading counterweight, which makes the working conditions of customers more practical, economical, convenient and fast. In addition, according to the best number of counterweights in use conditions, it can also save more transportation costs and purchase costs for customers.

Turntable counterweight is installed at the rear side of turntable. Available counterweight composition is as the following:

(1)Turntable counterweight 65t: counterweight tray 1 × 15t, turntable counterweight block 10 × 5t;

(2)Turntable counterweight 55t: counterweight tray 1 × 15t, turntable counterweight block 8 × 5t;

Hook block

Hook block configuration is as the follows:

	80T	13.5T	160T (option)	32T (option)
Hook name				
Weight (t)	0.95	0.5	2.18	0.7
Qty.	1	1	1	1
Number of pulleys	2	0	8	1

In case of special requirements, the contract shall specify the terms of 160t and 32t hook.

Safety protection measures

The crane uses a variety of mechanical, electronic and hydraulic safety and alarm devices to ensure the safe use. Safety devices include load moment limiter, slewing locking device, boom backstop device, lifting height limit device, boom angle limit device, anemometer, level gauge, camera, slewing warning, travel warning, hydraulic system relief valve, balance valve, hydraulic locks, etc.

Mode switch

In the installation mode, the over-reeving protection device, the boom limit device, the load moment limiter, etc. do not work, so as to facilitate the installation of the crane; in the working mode, all the safety devices work.

Emergency stop

With emergency stop function, it can quickly stop all actions in an emergency.

Mis-operation protection

The handle has mis-operation protection function, and a safety protection switch is arranged on the front side of the handle. When the switch is not pressed, all the action signals are shielded, and the handle does not work to prevent mis-operation.

Over reeving protection

There is an over-reeving protection device on the boom head to prevent rope from over-reeved. When it comes to a certain height, the over-reeving indicator is light, meanwhile hoisting movement stops automatically.

Over-releasing protection

For each hoisting mechanism, there is a rope end limiter to prevent the rope from over released. When the rope is only 3 loops remained, the over-released indicator is light, meanwhile, the lowering movement automatically stops.

Ratchet lock

There is a ratchet lock device used for luffing winch locking to guarantee the safe placing of boom while non-working.

Slewing lock

The slewing and locking of superstructure when crane stops.

Backstop function

There are backstop devices on main boom and auxiliary jib to prevent boom and struts from backstop.

Boom angle limitation

When the boom is hoisted up to specified angle, the hoisting movement stops, and the load moment limiter and stroke switch provides a dual control. When boom angle is smaller than the specified angle, the lowering movement stops, it is controlled by the load moment sound warning is sent out.

Hook latch protection

Hook latch is installed to prevent the sling from slipping out from the hook.

Hydraulic system protection

Equipped with hydraulic balance valve, hydraulic relief valve and other devices to ensure the stability and safety of the system.

Load moment limiter

Detection function: the LML can automatically detect the angle and load of the boom.

Display function: color large screen touch LCD (10.4 inches). The lifting operation parameters such as load moment percentage, actual lifting capacity, rated lifting capacity, working radius, boom length, angle, maximum lifting height, working condition code, parts of line, limiting angle and information code are displayed in Chinese (or English) and graphics.

Warning function: it has complete pre alarm and overload stop function. If it is detected that the actual load exceeds the limit load and the boom exceeds the limit angle, the load moment limiter will give an alarm and limit the current action.

The system has the function of fault self diagnosis.

Audio/video warning

There are triple-color warning light and audio/video alarm provide warning to the driver and other personnel outside the cab.

Illuminating light

Illuminating lights are placed in front of the turntable, above the cab and in the cab to provide illumination.

Rearview mirror

Located outside cab, it is convenient for the driver to observe the situation behind the crane.

Height indicating light

The height indicating light is installed on the top of the boom for high altitude warning.

Wind instrument

The current wind speed is detected in real time and transmitted to the monitor in the cab to alert the operator to the safety of the wind load.

Level gauge

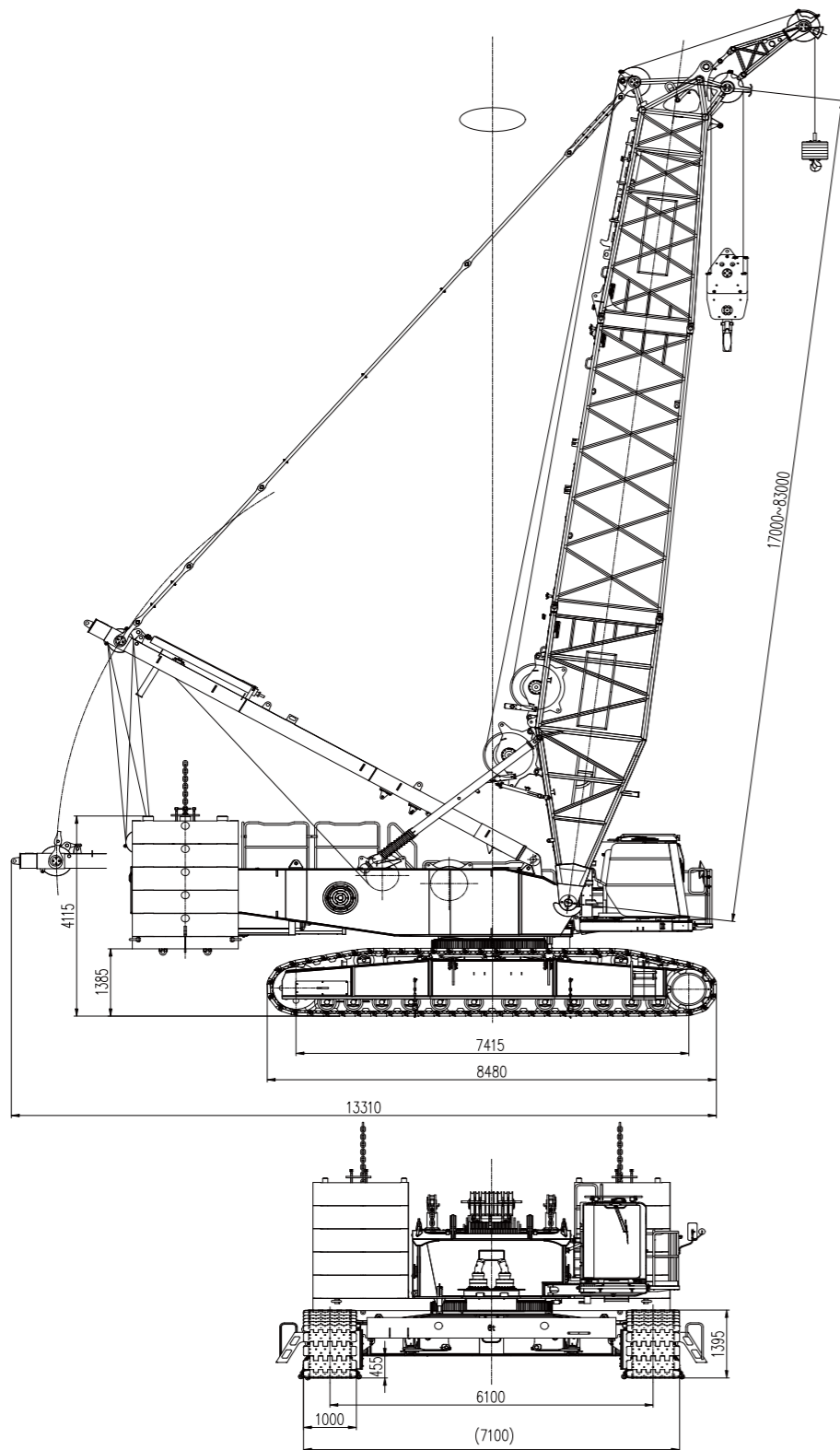
It is equipped with a mechanical level gauge that shows the degree of inclination of the road surface used and provides the operator levelness of crane for reference.

Monitoring system

It is composed of three cameras (one of the three is optional) and a monitor, which can monitor the rope arrangement of main winch, auxiliary winch and luffing winch and the safety situation of the rear of the car body (optional).

Main parameters

Outline Dimensions



XLC180 crawler crane outline dimension

Technical Parameters

Item	Unit	Data	
Max. rated lifting capacity	Boom working condition	t	180
	Tower jib working condition	t	75
	Fixed jib working condition	t	58
Max. load moment	t.m	1050	
Dimensions	Boom length	m	17~83
	Tower jib length (optional)	m	18~51
	Fixed jib length (optional)	m	9~30
Speed	Hoist winch max. single line speed	m/min	120
	Boom luffing winch max. single line speed	m/min	2×35
	Tower jib luffing winch max. single line speed	m/min	120
	Max. slewing speed	rpm	0.9
Engine	Max. travel speed	km/h	1.2
	Rated power	kW	243
	Emission standard	-	National III off-road
Total mass (17m boom, 160t hook block)		t	153
Mean ground pressure		MPa	0.11
Grade-ability		-	30%
Max. mass of single unit in transport state		t	29.7
Max. dimension of single unit in transport state (L × W × H)		m	10 × 3.0 × 3.3

Notes:

1. The wire rope speed refers to the calculated value of the outermost working layer of the drum when the engine is running without load, which will vary according to the load and operating conditions.
2. Travel speed, gradeability, average ground pressure and turning speed are calculated theoretical value based on the plane, smooth and solid ground.
3. The table values are the configuration parameters based on 55t turntable counterweight and 12t car-body counterweight.
4. We reserve the right to update and change the technical parameters without prior notice.



XLC180 CRAWLER CRANE

P12-P20 Heavy boom working condition

P21-P34 Tower jib working condition

P35-P47 Fixed jib working condition

P48-P54 Transport parameters of main components

C. Boom raising table in boom working condition

Boom raising table in boom working condition without boom single top (HB/1)

HB/1	Counterweight combination: turntable counterweight (t)+car-body counterweight (t)	
	65+12	55+12
HB17	×	○
HB20	×	○
HB23	○	○
HB26	○	○
HB29	○	○
HB32	○	○
HB35	○	○
HB38	○	○
HB41	○	○
HB44	○	○
HB47	○	○
HB50	○	○
HB53	○	○
HB56	○	○
HB59	○	○
HB62	○	○
HB65	○	○
HB68	○	○
*HB71	○	○
*HB74	○	○
*HB77	○	○
*HB80	○	○
*HB83	○	×

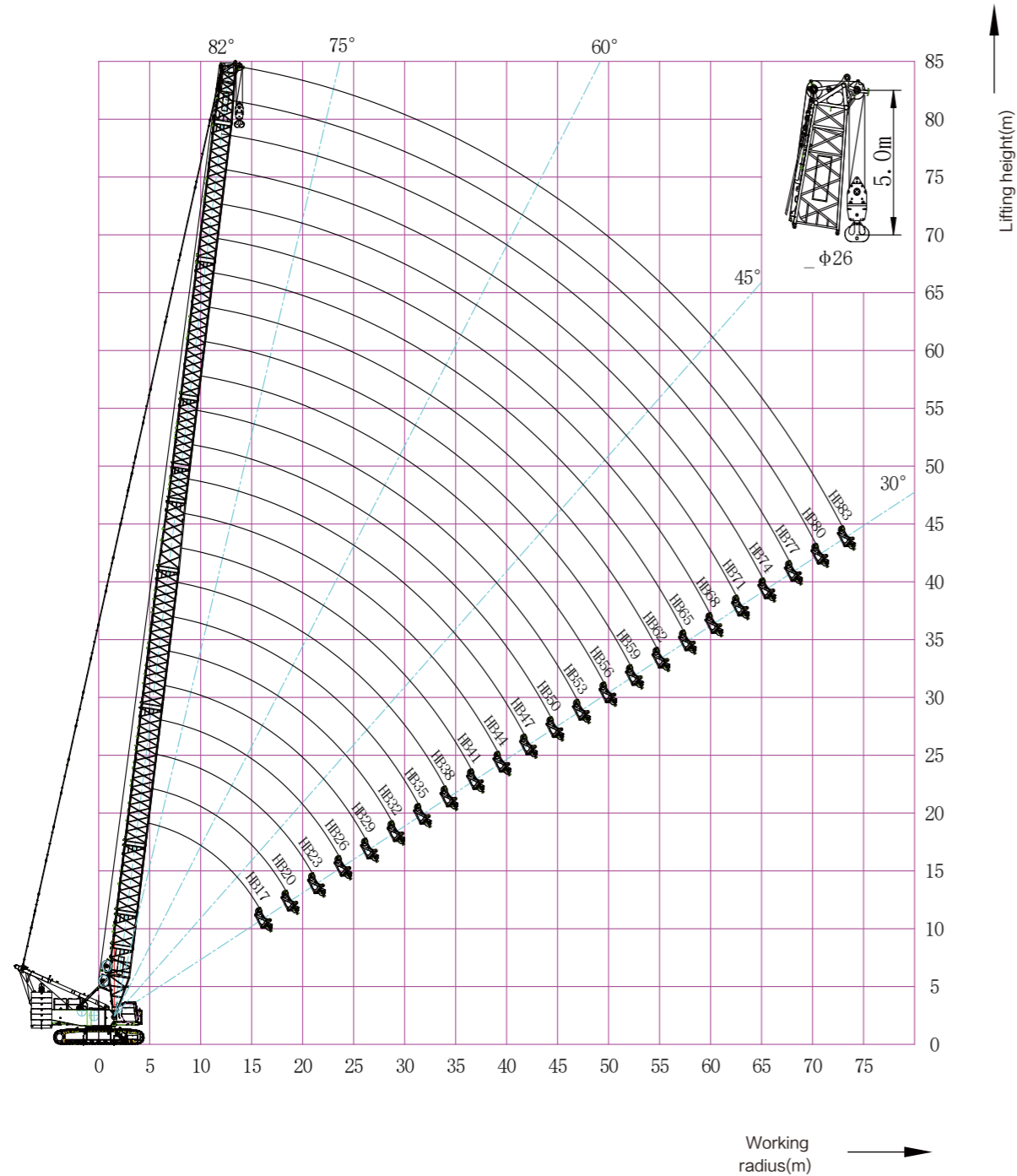
Notes:

1. “○” - boom can be raised; “●” -- wedge required to raise boom; “×” - boom cannot be raised, this working condition cannot be used.
2. “*” Boom length needs to use center hitch.
3. When boom raising, place crawler drive roller at the rear of the crane.

Typical Working Conditions

1.1 characteristics of main boom main hook under main boom working condition without boom single pulley (HB/1)

Working range of main boom main hook under main boom working condition without boom single pulley (HB/1)



Boom working condition _ boom main hook working range (without boom single top, HB/1)

1.1 Boom working condition _ boom main hook (without boom single top, HB/1)

Performance of main boom main hook under main boom working condition without boom single pulley (HB/1_65t+12t)

Working radius (m)	Boom length (m)											
	23	26	29	32	35	38	41	44	47	50	53	
8				125	119	117						
9		114	111	108	106	103	101	98.6	93.1			
10	97.6	97.7	97.8	96.1	93.9	91.8	89.8	87.8	85.9	80.6	76.8	
12	74.5	74.5	74.6	74.6	74.5	74.4	73.2	71.7	70.3	69	68.1	
14	59.8	59.9	59.9	59.9	59.8	59.7	59.6	59.5	59.3	58.2	57.6	
16	49.7	49.7	49.8	49.7	49.7	49.5	49.5	49.3	49.2	49.1	49.3	
18	42.3	42.3	42.4	42.3	42.2	42.1	42	41.9	41.8	41.6	41.8	
20	36.6	36.6	36.7	36.6	36.6	36.4	36.3	36.2	36.1	35.9	36.1	
22		32.1	32.2	32.1	32.1	31.9	31.9	31.7	31.6	31.4	31.6	
24		28.4	28.6	28.5	28.4	28.3	28.2	28.1	27.9	27.8	28	
26			25.5	25.5	25.4	25.3	25.2	25.1	24.9	24.8	25	
28				22.9	22.9	22.8	22.7	22.6	22.4	22.2	22.5	
30					20.7	20.6	20.6	20.4	20.3	20.1	20.3	
32					18.8	18.8	18.7	18.5	18.4	18.2	18.5	
34						17.1	17.1	16.9	16.8	16.6	16.9	
36							15.6	15.5	15.4	15.2	15.4	
38								14.2	14.1	13.9	14.2	
40								13.1	12.9	12.8	13	
42									11.9	11.8	12	
44										10.8	11.1	
46											10.3	
Parts of line	8	10	10	10	10	9	8	8	7	6	6	

Notes:

1. The actual weight of hook, sling, and rope on hook and boom head must be deducted from the rated lifting capacity in the table.
2. The rated lifting capacity in the table is the value of the crane on level and solid ground, slowly lifting a load and without travel.
3. The rated lifting capacity in the table is the calculation value based on the boom sections without tower jib rear pendant, tower jib guide pulley and boom single top.
4. Tower jib rear pendant need to be removed from boom sections, tower jib guide pulley need to be removed from boom top.
5. Boom length exceeds 71m with “*”, center hitch must be used; boom length exceeds 74m, a wedge block must be used for boom raising.

Typical Working Conditions

1.1 Boom working condition _ boom main hook (without boom single top, HB/1)

Performance of main boom main hook under main boom working condition without boom single pulley (HB/1_65t+12t) (continuous)

Working radius (m)	Boom length (m)									
	56	59	62	65	68	71*	74*	77*	80*	83*
12	66.8	65.5	63.9	55.2	52.5					
14	56.6	55.6	54.6	53.7	50	49.7	45.4	41.4	37.8	34.5
16	48.9	48.1	47.2	46.5	45.8	45	44	40.1	36.7	33.5
18	41.7	41.6	41.4	40.7	40.2	39.5	39	38.4	35.5	32.4
20	36	35.8	35.7	35.5	35.5	35	34.7	34.1	33.6	31.3
22	31.5	31.3	31.2	31	30.9	30.7	30.7	30.5	30.1	29.5
24	27.8	27.7	27.5	27.3	27.3	27.1	27.1	26.9	26.8	26.6
26	24.8	24.7	24.5	24.3	24.2	24	24.1	23.9	23.8	23.6
28	22.3	22.1	22	21.8	21.7	21.5	21.5	21.3	21.2	21
30	20.1	20	19.8	19.6	19.6	19.3	19.3	19.2	19.1	18.9
32	18.3	18.1	17.9	17.8	17.7	17.5	17.5	17.3	17.2	17
34	16.7	16.5	16.3	16.1	16.1	15.8	15.9	15.7	15.6	15.4
36	15.2	15.1	14.9	14.7	14.6	14.4	14.4	14.2	14.1	13.9
38	14	13.8	13.6	13.4	13.4	13.1	13.2	13	12.9	12.7
40	12.9	12.7	12.5	12.3	12.2	12	12	11.8	11.7	11.6
42	11.8	11.7	11.5	11.3	11.2	11	11	10.8	10.7	10.5
44	10.9	10.8	10.6	10.4	10.3	10.1	10.1	9.9	9.8	9.6
46	10.1	9.9	9.7	9.6	9.5	9.3	9.3	9.1	9	8.8
48	9.3	9.2	9	8.8	8.7	8.5	8.5	8.3	8.2	8
50	8.6	8.5	8.3	8.1	8	7.8	7.8	7.6	7.5	7.3
52		7.8	7.6	7.5	7.4	7.2	7.2	7	6.9	6.7
54			7	6.9	6.8	6.6	6.6	6.4	6.3	6.1
56				6.3	6.2	6	6	5.9	5.8	5.6
58				5.8	5.7	5.5	5.5	5.3	5.3	5.1
60					5.2	5	5.1	4.9	4.8	4.6
62						4.6	4.6	4.4	4.3	4.1
64							4.2	4	3.9	3.7
66								3.6	3.5	3.3
68								3.3	3.2	3
70									2.8	2.6
72										2.3
Parts of line	5	5	5	5	4	4	4	3	3	3

Notes:

1. Boom length exceeds 71m with “*”, center hitch must be used; boom length exceeds 74m, a wedge block must be used for boom raising.
2. Tower jib rear pendant need to be removed from boom sections, tower jib guide pulley need to be removed from boom top.

1.1 Boom working condition _ boom main hook (without boom single top, HB/1)

Performance of main boom main hook under main boom working condition without boom single pulley (HB/1_55t+12t)

Working radius (m)	Boom length (m)												
	17	20	23	26	29	32	35	38	41	44	47	50	
5	180												
6	175	172	169	158									
7	145	145	145	141	136	132							
8	123	123	122	119	115	112	109	106					
9	103	103	103	102	100	97.7	95.2	92.9	90.6	88.4	86.3		
10	87.3	87.6	87.7	87.8	87.9	86.2	84.2	82.3	80.5	78.7	77	75.3	
12	66.4	66.7	66.8	66.8	66.9	66.9	66.8	66.8	65.5	64.2	62.9	61.7	
14	53.2	53.4	53.6	53.6	53.6	53.6	53.5	53.4	53.4	53.3	52.9	51.9	
16	43.9	44.3	44.4	44.4	44.5	44.4	44.4	44.3	44.2	44.1	43.9	43.8	
18		37.5	37.7	37.7	37.8	37.7	37.6	37.5	37.4	37.3	37.2	37	
20			32.5	32.6	32.6	32.6	32.5	32.4	32.3	32.2	32	31.9	
22				28.5	28.6	28.5	28.5	28.5	28.3	28.3	28.1	28	27.8
24				25.2	25.3	25.2	25.2	25	25	24.8	24.7	24.5	
26					22.5	22.5	22.5	22.3	22.3	22.1	22	21.8	
28						20.2	20.2	20	20	19.8	19.7	19.5	
30							18.2	18.1	18	17.9	17.7	17.6	
32							16.5	16.4	16.3	16.2	16	15.9	
34								14.9	14.9	14.7	14.6	14.4	
36									13.5	13.4	13.3	13.1	
38										12.3	12.1	12	
40										11.2	11.1	10.9	
42											10.2	10	
44												9.2	
Parts of line	16	14	14	13	12	11	10	9	8	7	7	6	

Notes:

1. Boom length exceeds 71m with “*”, center hitch must be used; boom length exceeds 74m, a wedge block must be used for boom raising.
2. Tower jib rear pendant need to be removed from boom sections, tower jib guide pulley need to be removed from boom top.

Typical Working Conditions

1.1 Boom working condition _ boom main hook (without boom single top, HB/1)

Performance of main boom main hook under main boom working condition without boom single pulley (HB/1_55t+12t) (continuous table)

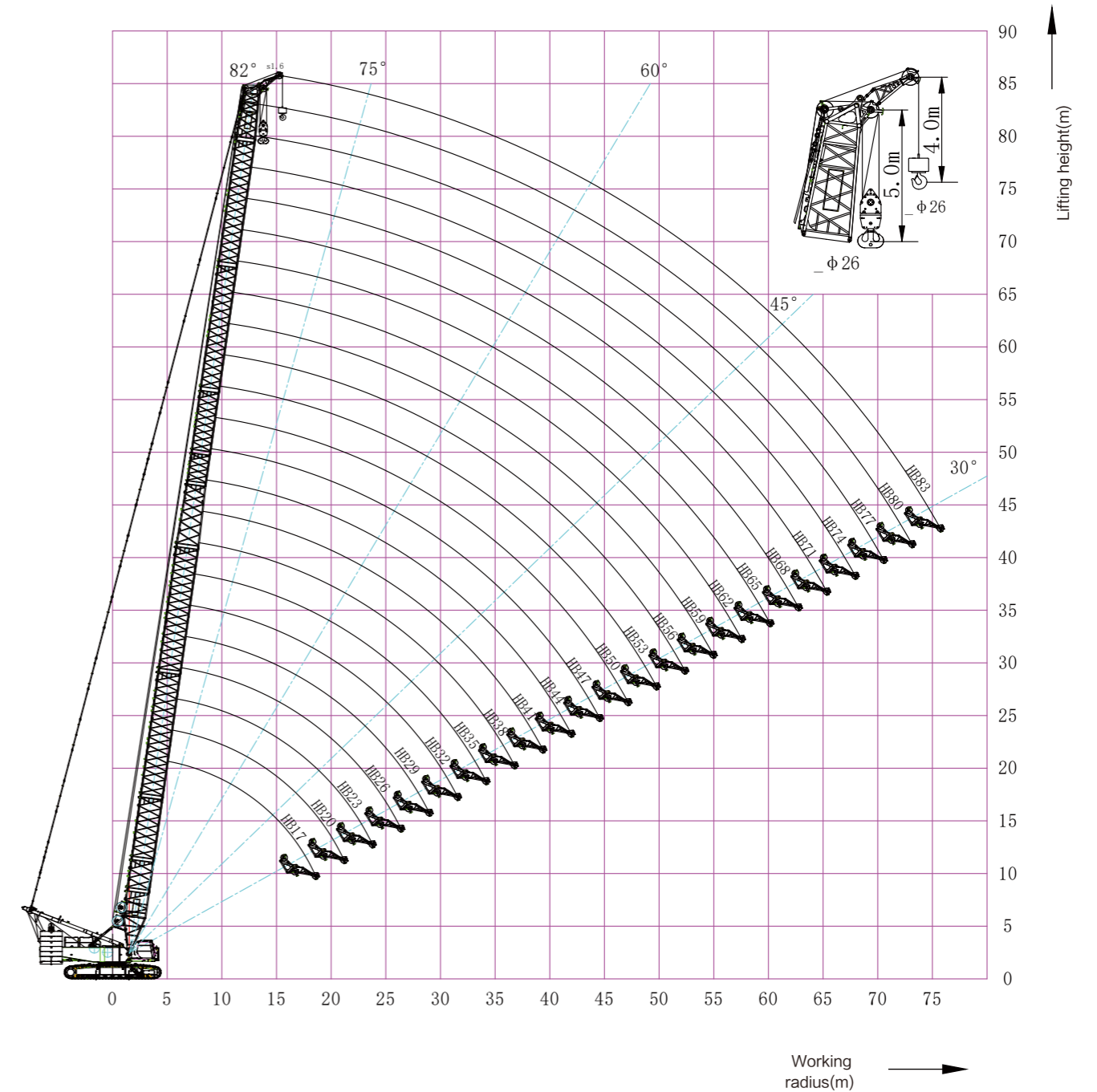
Working radius (m)	Boom length (m)									
	53	56	59	62	65	68	71*	74*	77*	80*
10	74									
12	60.9	59.7	58.5	57.4	55.2	52.5				
14	51.4	50.5	49.6	48.7	47.8	47	46.1	45.4	41.4	37.8
16	44	43.5	42.7	42	41.3	40.6	39.9	39.4	38.7	36.7
18	37.3	37.1	37	36.7	36.1	35.6	34.9	34.5	33.9	33.4
20	32.1	31.9	31.8	31.6	31.5	31.4	30.9	30.6	30	29.6
22	28	27.9	27.7	27.5	27.4	27.3	27.1	27.1	26.8	26.4
24	24.7	24.6	24.4	24.2	24.1	24	23.8	23.8	23.6	23.5
26	22	21.8	21.7	21.5	21.3	21.3	21	21.1	20.9	20.8
28	19.7	19.6	19.4	19.2	19	19	18.8	18.8	18.6	18.5
30	17.8	17.6	17.4	17.3	17.1	17	16.8	16.8	16.6	16.5
32	16.1	15.9	15.8	15.6	15.4	15.3	15.1	15.1	14.9	14.8
34	14.6	14.5	14.3	14.1	13.9	13.9	13.6	13.7	13.5	13.4
36	13.4	13.2	13	12.8	12.6	12.6	12.3	12.4	12.2	12.1
38	12.2	12	11.9	11.7	11.5	11.4	11.2	11.2	11	10.9
40	11.2	11	10.8	10.6	10.5	10.4	10.2	10.2	10	9.9
42	10.3	10.1	9.9	9.7	9.6	9.5	9.2	9.3	9.1	9
44	9.4	9.2	9.1	8.9	8.7	8.6	8.4	8.4	8.2	8.1
46	8.7	8.5	8.3	8.1	8	7.9	7.7	7.7	7.5	7.4
48		7.8	7.6	7.4	7.3	7.2	7	7	6.8	6.7
50		7.2	7	6.8	6.6	6.6	6.3	6.4	6.2	6.1
52			6.4	6.2	6.1	6	5.8	5.8	5.6	5.5
54				5.7	5.5	5.4	5.2	5.3	5.1	5
56					5	4.9	4.7	4.8	4.6	4.5
58					4.5	4.5	4.3	4.3	4.1	4
60						4	3.8	3.9	3.7	3.6
62							3.4	3.5	3.3	3.2
64								3.1	2.9	2.8
66									2.5	2.5
68									2.2	2.1
Parts of line	6	5	5	5	5	4	4	4	3	3

Notes:

1. Boom length exceeds 71m with “**”, center hitch must be used; boom length exceeds 74m, a wedge block must be used for boom raising.
2. Tower jib rear pendant need to be removed from boom sections, tower jib guide pulley need to be removed from boom top.

1.3 Characteristics of boom single pulley auxiliary hook under main boom working condition with main boom main hook (HBS/2)

working radius of boom single pulley auxiliary hook under main boom working condition with main boom main hook (HBS/2)



Working radius of boom single pulley auxiliary hook under main boom working condition without main boom main hook (HBS/2)

Typical Working Conditions

1.3 Characteristics of boom single pulley auxiliary hook under main boom working condition with main boom main hook (HBS/2)

Performance of boom single pulley auxiliary hook under main boom working condition with main boom main hook (HBS/2_65t+12t)

Working radius (m)	Boom length (m)										
	23	26	29	32	35	38	41	44	47	50	53
10			13.5	13.5	13.5	13.5	13.5	13.5	13.5		
12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
14	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
16	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
18	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
22	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
24		13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
26		13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
28			13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
30				13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
32					13.5	13.5	13.5	13.5	13.5	13.5	13.5
34						13.5	13.5	13.5	13.5	13.5	13.5
36							13.5	13.5	13.5	13.4	13.5
38								12.5	12.4	12.3	12.3
40									11.2	11.1	11
42										10.1	9.9
44										9.1	9
46											8.1
48											
Parts of line	1	1	1	1	1	1	1	1	1	1	1

Notes:

1. Boom length exceeds 71m with “**”, center hitch must be used; boom length exceeds 74m, a wedge block must be used for boom raising.
2. Tower jib rear pendant need to be removed from boom sections, tower jib guide pulley need to be removed from boom top.

1.3 Characteristics of boom single pulley auxiliary hook under main boom working condition with main boom main hook (HBS/2)

Performance of boom single pulley auxiliary hook under main boom working condition with main boom main hook (HBS/2_65t+12t)

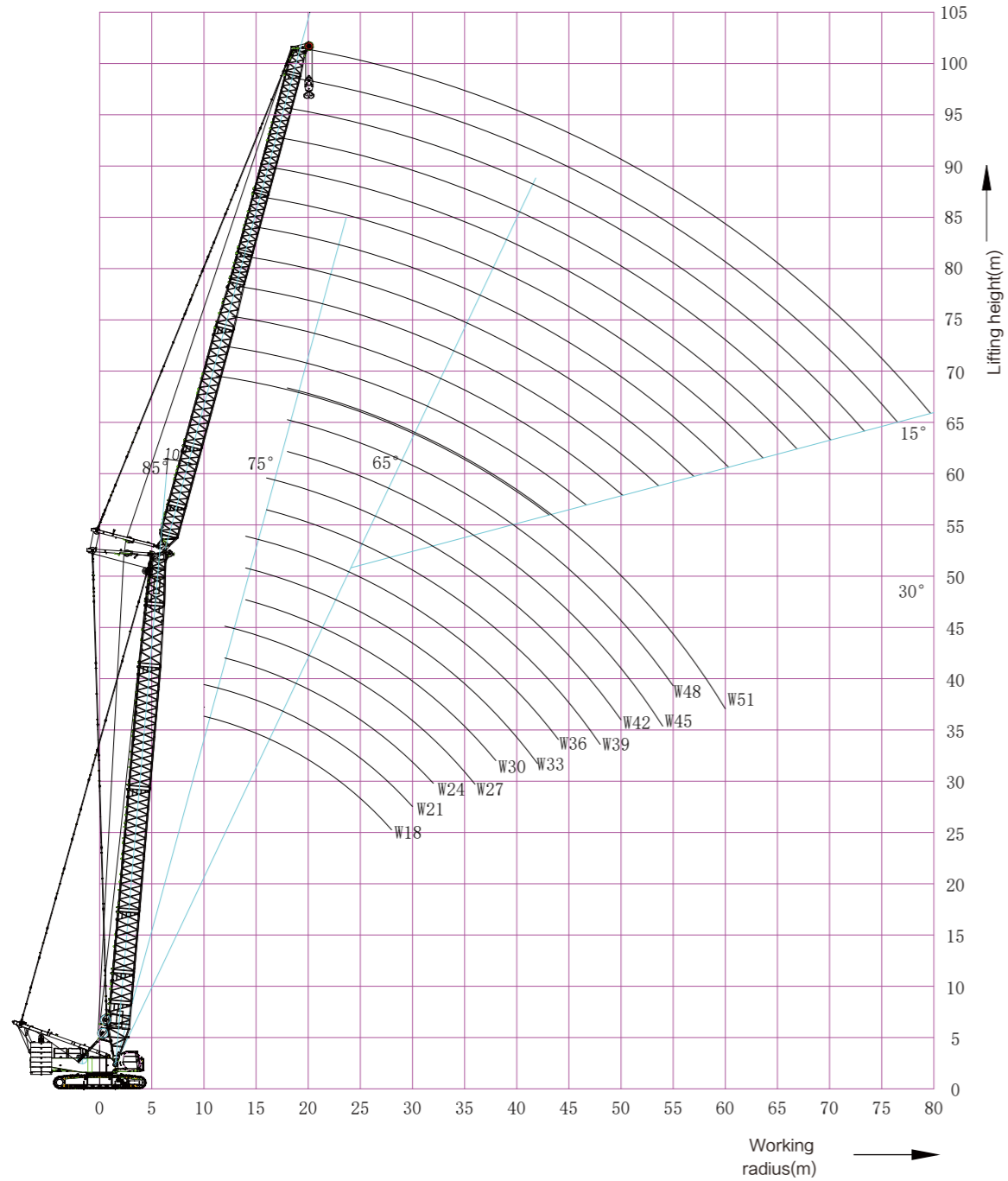
Working radius (m)	Boom length (m)										
	53	56	59	62	65	68	71*	74*	77*	80*	83*
12	13.5	13.5									
14	13.5	13.5	13.5	13.5	13.5	13.5	13.5				
16	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
18	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
22	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
24	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
26	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
28	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
30	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
32	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
34	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
36	13.5	13.5	13.3	13.1	13	12.9	12.7	12.7	12.5	12.4	12.2
38	12.3	12.2	12	11.8	11.7	11.6	11.4	11.4	11.2	11.1	10.9
40	11.2	11	10.9	10.7	10.5	10.4	10.2	10.2	10	9.9	9.8
42	10.2	10	9.8	9.6	9.5	9.4	9.2	9.2	9	8.9	8.7
44	9.2	9	8.9	8.7	8.5	8.5	8.2	8.3	8.1	8	7.8
46	8.4	8.2	8	7.8	7.7	7.6	7.4	7.4	7.2	7.1	6.9
48	7.6	7.4	7.3	7.1	6.9	6.8	6.6	6.6	6.4	6.3	6.2
50		6.7	6.5	6.4	6.2	6.1	5.9	5.9	5.7	5.6	5.4
52			6	5.9	5.7	5.5	5.2	5.3	5.1	5	4.8
54				5.3	5.1	4.9	4.6	4.7	4.5	4.4	4.2
56					4.5	4.4	4	4.1	4.1	3.9	3.6
58						3.8	3.1	3.6	3.6	3.4	3.1
60							3.3	2.3	3.1	2.9	2.6
62								1.5	2.6	2.6	2.2
64									2.2	2.2	1.7
66										1.8	1.5
Parts of line	1	1	1	1	1	1	1	1	1	1	1

Notes:

1. Boom length exceeds 71m with “**”, center hitch must be used; boom length exceeds 74m, a wedge block must be used for boom raising.
2. Tower jib rear pendant need to be removed from boom sections, tower jib guide pulley need to be removed from boom top.

Typical Working Conditions

2.4 Working radius of tower jib working condition (HW)



Working radius of tower jib working condition (HW)

2.5 Partial lifting performance of tower jib working condition (HW)

Notes:

1. The actual lifting weight is the remained weight after the weights of hook, slings and wire ropes reeved on hook and boom (jib) head are subtracted from the rated lifting load in table.
2. The rated loads in the table are the lifted values when the loads are lifted slowly and stably in non-travelling state on plane and solid ground with the gradient no more than 1%.
3. The load values given in the table are the load hanging freely without consideration of the influence of wind load to the lifted load, the ground condition, gradient, operation speed and nay other factors negatively impact on the safe operation of the crane. Thus, the operator is responsible for the current situation judgment, reducing the lifted load correspondingly and reducing the speed.
4. When tower jib length exceeds 48m, a center hitch must be used; When the combination length of the main boom and jib exceeds 71m, a wedge block is recommended to be used to raise the boom (jib).

Typical Working Conditions

A、Main boom working angle is 85°

Radius/m	Boom 20m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
10	75	74.5											10
12	68.3	66.3	64.3	62.2									12
14	60.3	58.9	57.4	55.7	54	52.2	50.5						14
16	49.4	51.1	51.6	50.3	48.9	47.5	44.7	42	38.2				16
18	39.8	42	43.2	43.8	44.2	43	38.7	36.6	33.5	31.6	28.7	26.9	18
20	31.4	34.8	36.4	37.1	37.6	37.5	34	32.3	29.7	28	25.5	23.8	20
22		28.8	30.8	31.8	32.4	32.8	30.2	28.8	26.4	25	22.7	21.2	22
24		21	26.1	27.5	28.2	28.7	27	25.8	23.7	22.4	20.4	19	24
26			21.1	23.7	24.6	25.2	24.4	23.2	21.4	20.1	18.4	17	26
28				20.2	21.5	22.2	22.1	21	19.4	18.2	16.6	15.3	28
30					18.7	19.6	20.2	19.1	17.7	16.5	15.1	13.8	30
32					15	17.3	18.1	17.5	16.2	15	13.7	12.5	32
34						14.6	16.1	16.1	14.8	13.7	12.5	11.4	34
36							14.1	14.8	13.6	12.6	11.4	10.3	36
38								11.1	13.2	12.5	11.5	10.4	38
40									10.9	11.6	10.6	9.5	40
42										10.6	9.8	8.7	42
44											8.4	9	44
46												8.2	46
48													48
50													50
52													52
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

A、Main boom working angle is 85°

Radius/m	Boom 23m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
10	74.5												10
12	64.4	62.6	60.8	58.8									12
14	56.5	55.2	53.8	52.3	50.7	49.1							14
16	49.5	49.1	48.1	46.9	45.7	44.4	43.2	41.8	38.5				16
18	41.1	43.2	43.4	42.4	41.4	40.4	39.2	37	33.8	31.8	28.9	26.9	18
20	32.9	35.8	37.3	38.1	37.8	36.9	34.4	32.7	30	28.3	25.7	24	20
22		29.7	31.7	32.6	33.2	33.6	30.5	29.1	26.7	25.2	22.9	21.4	22
24			23.1	26.9	28.1	28.8	29.4	27.3	26	24	22.6	20.6	24
26				22.5	24.3	25.2	25.9	24.6	23.5	21.6	20.3	18.6	26
28					20.8	22	22.8	22.3	21.2	19.6	18.4	16.8	28
30						16.3	19.2	20.2	20.4	19.3	17.8	16.7	30
32							16.3	17.7	18.5	17.7	16.3	15.2	32
34								15.4	16.4	16.2	14.9	13.9	34
36									12	14.5	14.9	13.7	36
38										12.1	13.5	12.7	38
40											11.8	11.7	40
42												10.8	42
44													44
46													46
48													48
50													50
52													52
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

Typical Working Conditions

A. Main boom working angle is 85°

Radius/m	Boom 26m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
10	72.4												10
12	62.3	60.6	58.8	56.8									12
14	54.4	53.1	51.9	50.4	48.9	47.3							14
16	48	47.1	46.2	45.1	43.9	42.7	41.5	40.1	38.9				16
18	40.7	42.2	41.5	40.6	39.7	38.7	37.7	36.6	34.2	32.1	29.1		18
20	34.1	36.5	37.5	36.8	36.1	35.3	34.5	33	30.2	28.5	25.9	24.2	20
22		30.6	32.5	33.4	33	32.3	30.9	29.4	27	25.5	23.1	21.6	22
24		24.8	27.6	28.8	29.6	29.7	27.6	26.3	24.2	22.8	20.8	19.3	24
26			23.2	24.9	25.9	26.4	24.9	23.7	21.8	20.5	18.7	17.3	26
28				21.4	22.6	23.3	22.6	21.4	19.8	18.5	16.9	15.6	28
30				17.7	19.7	20.6	20.6	19.5	18	16.8	15.4	14.1	30
32					16.9	18.1	18.8	17.8	16.5	15.3	14	12.8	32
34						15.8	16.8	16.4	15.1	14	12.7	11.6	34
36							13	14.8	15.1	13.9	12.8	11.6	36
38								12.9	13.8	12.8	11.8	10.6	38
40									12.2	11.8	10.8	9.7	40
42										9.8	10.9	10	42
44											9.9	9.2	44
46												8.5	46
48													48
50													50
52													52
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

A. Main boom working angle is 85°

Radius/m	Boom 29m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
10	70.7												10
12	60.6	58.9	57.1										12
14	52.8	51.5	50.3	48.8	47.3	45.8							14
16	46.5	45.6	44.7	43.6	42.4	41.2	40	38.8					16
18	39.5	40.7	40	39.2	38.3	37.3	36.4	35.3	34.4	32.3	29.3		18
20	33.9	35.3	36.1	35.5	34.7	34	33.2	32.3	30.5	28.7	26.1	24.4	20
22	26.2	30.8	32	32.3	31.7	31.1	30.4	29.7	27.2	25.7	23.3	21.8	22
24		25.7	28.2	29.1	29.1	28.5	27.9	26.6	24.4	23	21	19.5	24
26			23.9	25.6	26.4	26.3	25.1	24	22	20.7	18.9	17.5	26
28				22	23.1	23.7	22.8	21.7	20	18.7	17.1	15.8	28
30					18.5	20.2	21	20.8	19.7	18.2	17	15.5	30
32						17.4	18.5	19	18	16.6	15.5	14.1	32
34							16.2	17.2	16.5	15.2	14.1	12.8	34
36								13.8	15.2	15.2	14	12.9	36
38									13.3	14	12.9	11.9	38
40										12.5	11.9	10.9	40
42											10.5	11	42
44												10.2	44
46													46
48													48
50													50
52													52
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

Typical Working Conditions

A. Main boom working angle is 85°

Radius/m	Boom 32m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
12	59.7	57.9	56.1										12
14	51.9	50.6	49.3	47.9	46.4								14
16	45.6	44.7	43.8	42.7	41.5	40.3	39.2	37.9					16
18	38.8	39.9	39.2	38.4	37.5	36.5	35.6	34.5	33.6	32.4	28.9		18
20	33.4	34.6	35.4	34.7	34	33.2	32.4	31.6	30.8	28.9	26.3	24.4	20
22	28.3	30.2	31.2	31.5	31	30.3	29.7	29	27.5	25.9	23.5	22	22
24		26.6	27.6	28.4	28.3	27.8	27.3	26.7	24.6	23.2	21.1	19.7	24
26			24.6	25.3	26	25.6	25.2	24.2	22.2	20.9	19.1	17.7	26
28			20	22.5	23.4	23.7	23	21.9	20.2	18.9	17.2	15.9	28
30				19	20.6	21.5	21	19.9	18.3	17.2	15.6	14.4	30
32					17.8	19	19.2	18.2	16.8	15.6	14.2	13	32
34						16.6	17.5	16.7	15.4	14.3	13	11.8	34
36						14.3	15.5	15.3	14.1	13.1	11.8	10.7	36
38							13.6	14.2	13	12	10.8	9.8	38
40								12.7	12	11	9.9	8.9	40
42								11	11.1	10.2	9.1	8.1	42
44								10.3	9.4	8.3	7.4	7.4	44
46									8.7	7.6	6.7	6.7	46
48									8	7	6.1	6.1	48
50										6.4	5.6	5.6	50
52											5	5	52
54												4.6	54
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

A. Main boom working angle is 85°

Radius/m	Boom 35m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
12	58.9	57.1											12
14	51.1	49.9	48.6	47.1	45.6								14
16	44.8	44	43.1	42	40.8	39.6	38.4	37.1					16
18	37.9	39.2	38.5	37.7	36.8	35.8	34.9	33.8	32.9	31.8			18
20	32.6	33.7	34.7	34	33.3	32.5	31.8	30.9	30.2	29.1	26.4	24.3	20
22	28.4	29.5	30.4	30.9	30.4	29.7	29.1	28.4	27.7	26.1	23.7	22.1	22
24		26	26.9	27.6	27.8	27.3	26.8	26.1	24.9	23.4	21.3	19.8	24
26			24	24.6	25.2	25.1	24.7	24.2	22.4	21.1	19.2	17.8	26
28			20.7	22.2	22.7	23.1	22.8	22.1	20.3	19.1	17.4	16.1	28
30				19.5	20.6	21	21.2	20.1	18.5	17.3	15.8	14.5	30
32					18.3	19.2	19.4	18.4	16.9	15.8	14.4	13.1	32
34					15.3	17	17.8	16.8	15.5	14.4	13.1	11.9	34
36						14.6	15.8	15.5	14.2	13.2	11.9	10.8	36
38							13.9	14.3	13.1	12.1	10.9	9.9	38
40								13	12.1	11.1	10	9	40
42									11.3	11.2	10.3	9.2	42
44									10.4	9.5	8.4	7.5	44
46										8.7	7.7	6.8	46
48										8.1	7.1	6.2	48
50											6.5	5.6	50
52												5.1	52
54												4.6	54
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

Typical Working Conditions

A、Main boom working angle is 85°

Radius/m	Boom 38m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
12	58.2	56.3											12
14	50.5	49.2	47.8	46.3	44.8								14
16	44.1	43.4	42.5	41.3	40.1	38.9	37.7						16
18	37.3	38.5	38	37.1	36.2	35.2	34.2	33.2	32.2	31.1			18
20	32.2	33.2	34.2	33.5	32.8	32	31.2	30.4	29.6	28.6	26.3	24	20
22	28.1	29.1	29.9	30.4	29.8	29.2	28.6	27.9	27.2	26.2	23.8	22.2	22
24		25.7	26.5	27.1	27.3	26.8	26.3	25.7	25.1	23.6	21.4	20	24
26			23.7	24.2	24.7	24.6	24.2	23.7	22.6	21.3	19.4	18	26
28			21.3	21.8	22.3	22.7	22.4	21.9	20.5	19.2	17.5	16.2	28
30				19.8	20.2	20.6	20.8	20.3	18.7	17.5	15.9	14.6	30
32					18.5	18.8	19.1	18.5	17.1	15.9	14.5	13.3	32
34					15.8	17.3	17.6	17	15.6	14.5	13.2	12	34
36						15	16.1	15.6	14.4	13.3	12.1	10.9	36
38							14.1	14.4	13.2	12.2	11	10	38
40							12.1	13.2	12.2	11.2	10.1	9.1	40
42								11.5	11.3	10.3	9.3	8.3	42
44									10.5	9.5	8.5	7.5	44
46									9.5	8.8	7.8	6.9	46
48										8.2	7.2	6.2	48
50											6.6	5.7	50
52												5.2	52
54												4.7	54
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

A、Main boom working angle is 85°

Radius/m	Boom 41m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
12	57.4	55.4											12
14	49.9	48.5	47.1	45.6									14
16	43.2	42.8	41.8	40.7	39.5	38.2	37						16
18	36.5	37.6	37.4	36.5	35.6	34.6	33.6	32.6	31.6	30.5			18
20	31.6	32.4	33.3	33	32.2	31.4	30.7	29.8	29	28.1	26	23.7	20
22	27.6	28.4	29.2	29.8	29.4	28.7	28.1	27.4	26.7	25.9	23.9	22.2	22
24		25.2	25.8	26.4	26.8	26.3	25.8	25.2	24.7	23.8	21.6	20.1	24
26		22.4	23.1	23.6	24.1	24.2	23.8	23.3	22.8	21.4	19.5	18.1	26
28			20.8	21.3	21.7	22	22	21.5	20.7	19.4	17.7	16.3	28
30				19.3	19.7	20	20.3	20	18.8	17.6	16	14.8	30
32					18	18.3	18.6	18.6	17.2	16	14.6	13.4	32
34					16.2	16.8	17.1	17.2	15.8	14.7	13.3	12.1	34
36						15.3	15.8	15.8	14.5	13.4	12.2	11	36
38							14.4	14.6	13.4	12.3	11.1	10	38
40							12.4	13.5	12.3	11.3	10.2	9.2	40
42								11.9	11.4	10.4	9.3	8.3	42
44									10.6	9.6	8.6	7.6	44
46									9.8	8.9	7.9	6.9	46
48										8.3	7.2	6.3	48
50											6.7	5.8	50
52											6.1	5.2	52
54												4.8	54
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

Typical Working Conditions

A、Main boom working angle is 85°

Radius/m	Boom 44m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
12	56.6												12
14	49.2	47.8	46.4	44.8									14
16	42.6	42.3	41.2	40	38.8	37.5	36.3						16
18	36.1	37.1	36.9	36	35	34	33	32	31				18
20	31.2	32	32.8	32.5	31.7	30.9	30.1	29.3	28.5	27.4	25.6	23.4	20
22	27.4	28.1	28.7	29.3	28.9	28.2	27.6	26.9	26.2	25.4	23.9	21.9	22
24		24.9	25.5	26	26.4	25.9	25.4	24.7	24.2	23.5	21.7	20.2	24
26		22.2	22.9	23.3	23.7	23.8	23.4	22.9	22.4	21.6	19.6	18.2	26
28			20.6	21	21.4	21.7	21.6	21.2	20.8	19.5	17.8	16.4	28
30				19.1	19.4	19.7	20	19.6	19	17.7	16.1	14.9	30
32				17.4	17.8	18	18.3	18.3	17.3	16.2	14.7	13.5	32
34					16.3	16.6	16.8	17	15.9	14.8	13.4	12.2	34
36						15.3	15.5	15.5	14.6	13.5	12.3	11.1	36
38							14.2	14.2	13.5	12.4	11.2	10.1	38
40								12.8	12.9	12.4	11.4	10.3	40
42									11.8	11.5	10.5	9.4	42
44										10.7	9.7	8.7	44
46										9.9	9	8	46
48											8.3	7.3	48
50												6.7	50
52												6.2	52
54												4.8	54
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

A、Main boom working angle is 85°

Radius/m	Boom 47m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
12	55.2												12
14	48.6	47.1	45.6	44									14
16	41.9	41.7	40.6	39.4	38.1	36.8							16
18	35.5	36.4	36.3	35.4	34.4	33.4	32.4	31.1	29.2				18
20	30.8	31.5	32.2	32	31.2	30.4	29.6	28.7	27.6	25.9	24.2		20
22	27	27.6	28.2	28.7	28.4	27.8	27.1	26.4	25.7	24.4	23	21.5	22
24		24.6	25.1	25.5	25.9	25.5	24.9	24.3	23.8	22.9	21.7	20.3	24
26		22	22.5	22.8	23.2	23.4	23	22.4	22	21.3	19.7	18.3	26
28			20.3	20.7	20.9	21.2	21.3	20.8	20.4	19.7	17.9	16.5	28
30				18.8	19.1	19.3	19.5	19.3	18.9	17.9	16.3	15	30
32				17.2	17.5	17.7	17.9	17.7	17.4	16.3	14.8	13.6	32
34					16.1	16.3	16.4	16.2	16	14.9	13.5	12.3	34
36						15	15	14.8	14.7	13.7	12.4	11.2	36
38							13.6	13.6	13.5	13.4	12.5	11.3	38
40								12.4	12.4	12.3	11.5	10.4	40
42									11.3	11.3	10.6	9.5	42
44										10.4	9.8	8.7	44
46											9.5	9.1	46
48												8	48
50												8.4	50
52												6.8	52
54												6.3	54
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

Typical Working Conditions

A. Main boom working angle is 85°

Radius/m	Boom 50m, Boom angle 85° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
12	52.9												12
14	47.9	46	43.9										14
16	41.3	41	39.9	38.7	37.1	35.2							16
18	35.1	35.9	35.8	34.8	33.8	32.8	31	29.1	27.4				18
20	30.4	31	31.7	31.5	30.7	29.8	28.9	27.3	25.9	24.3	22.8		20
22	26.7	27.3	27.8	28.3	28	27.3	26.6	25.4	24.2	22.9	21.6	20.3	22
24		24.3	24.7	25.1	25.4	25	24.5	23.5	22.5	21.5	20.4	19.2	24
26		21.8	22.2	22.5	22.8	23	22.4	21.6	20.9	20	19.1	18.1	26
28			20.1	20.4	20.6	20.8	20.4	19.9	19.3	18.6	17.8	16.6	28
30				18.6	18.8	19	18.6	18.2	17.8	17.2	16.4	15.1	30
32				17	17.2	17.2	17	16.6	16.3	15.9	14.9	13.7	32
34					15.8	15.6	15.4	15.2	15	14.6	13.6	12.4	34
36						14.2	14.1	13.9	13.7	13.5	12.5	11.3	36
38						12.9	12.8	12.7	12.6	12.4	11.4	10.3	38
40							11.7	11.6	11.6	11.4	10.5	9.4	40
42								10.6	10.6	10.5	9.6	8.6	42
44								9.7	9.7	9.7	8.8	7.8	44
46									8.9	8.9	8.1	7.1	46
48										8.2	7.5	6.5	48
50											6.9	5.9	50
52											6.3	5.4	52
54												4.9	54
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

C. Main boom working angle is 65°

Radius/m	Boom 50m, Boom angle 65° , Tower jib length/m												Radius/m
	18	21	24	27	30	33	36	39	42	45	48	51	
36	13.2	12.9											36
38	12.2	12	11.8										38
40	11.4	11.2	11	10.8									40
42		10.4	10.3	10	9.8								42
44			9.6	9.4	9.1	8.8							44
46			9	8.8	8.5	8.3	8.1						46
48				8.2	8	7.7	7.6	7.3	7.2				48
50					7.5	7.3	7.1	6.9	6.7	6.5			50
52						6.8	6.7	6.4	6.3	6.1	5.9		52
54							6.4	6.2	6	5.9	5.7	5.2	54
56								5.9	5.6	5.5	5.3	4.9	56
58									5.5	5.3	5.2	5	58
60										4.9	4.9	4.6	60
62											4.6	4.3	62
64												4	64
66												3.8	66
68													68
70													70
72													72
Countweight	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	65+12	Countweight
Parts of line	6	6	6	6	5	5	4	4	3	3	3	3	Parts of line

Typical Working Conditions

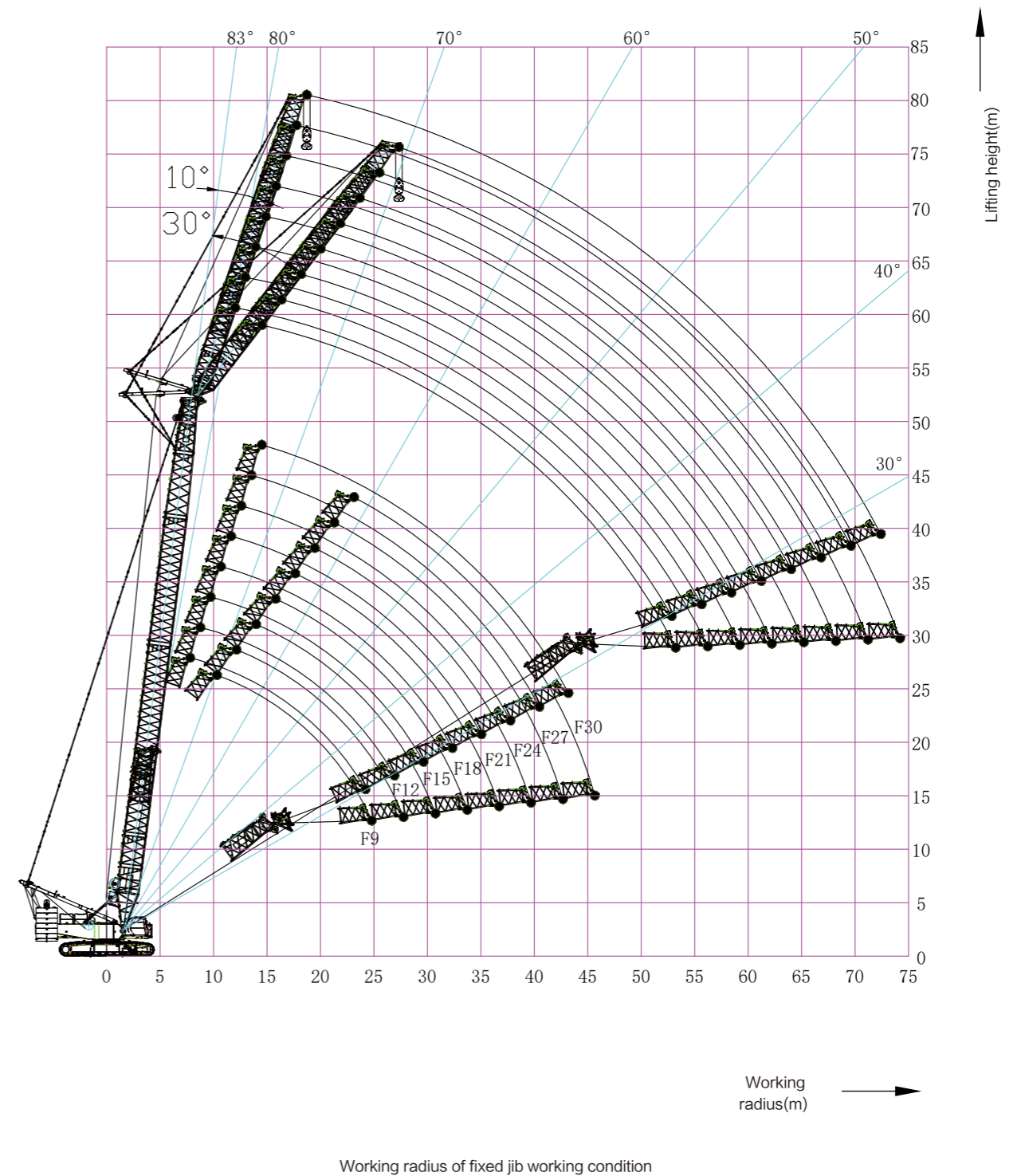
3.3 Boom raising table of fixed jib working condition (HF) (counterweight combination 75t+21t)

Main boom	HB32	HB35	HB38	HB41	HB44	HB47	HB50	HB53	HB56	HB59	HB62
Tower jib											
F9	●	●	●	●	●	●	●	●	●	●	●
F12	●	●	●	●	●	●	●	●	●	●	×
F15	●	●	●	●	●	●	●	●	●	●	×
F18	●	●	●	●	●	●	●	●	●	×	×
F21	●	●	●	●	●	●	●	●	×	×	×
F24	●	●	●	●	●	●	●	●	×	×	×
F27	●	●	●	●	●	●	●	×	×	×	×
F30	●	●	●	●	●	●	×	×	×	×	×

Notes:

1. When raising boom, place the drive roller of crawler tracks at the rear of the crane body.
2. "●" —means boom raising is allowable, "×" —means boom raising is not allowable, this working condition cannot be used.
3. Tower jib rear pendants need to be removed from boom sections; jib guide pulley needs to be installed on boom top section.
4. For the combinations which the length of boom plus the length of jib exceeds 71m, if it is available, a wedge block is recommended to be used to ensure the safety of boom (jib) raising and lowering.

3.4 Working radius of fixed jib working condition (HF)



Typical Working Conditions

3.5 Partial lifting performance of fixed jib working condition (HF)

Notes:

- 1.The actual lifting weight is the remained weight after the weights of hook, slings and wire ropes reeved on hook and boom (jib) head are subtracted from the rated lifting load in table.
- 2.The rated loads in the table are the lifted values when the loads are lifted slowly and stably in non-travelling state on plane and solid ground with the gradient no more than 1%.
- 3.The load values given in the table are the load hanging freely without consideration of the influence of wind load to the lifted load, the ground condition, gradient, operation speed and nay other factors negatively impact on the safe operation of the crane. Thus, the operator is responsible for the current situation judgment, reducing the lifted load correspondingly and reducing the speed.
- 4.When the combination length of the main boom and jib exceeds 71m, a wedge block is recommended to be used to raise the boom (jib).

A.Off-set angle of main boom and jib is 10°

Radius/m	10° Off-set angle, Jib 9m, Boom length/m										
	32	35	38	41	44	47	50	53	56	59	62
12	58	57.9	57.7	57.5	57.2						
14	54.4	54.3	54.3	54.2	54.1	53.4	52.3	38.4	38	37.5	
16	49.3	49.1	48.7	47.8	46.8	45.9	45	36.6	36.4	36	35.1
18	41.6	41.5	41.3	41.2	40.8	40	39.3	35.1	34.9	34.7	34
20	35.7	35.6	35.4	35.3	35.1	35	34.6	33.7	33.6	33	32.4
22	31.1	30.9	30.8	30.6	30.5	30.3	30.1	30.3	29.9	29.3	28.8
24	27.3	27.2	27	26.9	26.7	26.5	26.4	26.5	26.3	26.1	25.7
26	24.2	24.1	23.9	23.8	23.6	23.4	23.2	23.3	23.2	23	22.8
28	21.6	21.5	21.3	21.1	21	20.8	20.6	20.7	20.5	20.4	20.2
30	19.4	19.2	19	18.9	18.7	18.5	18.4	18.5	18.3	18.1	17.9
32	17.4	17.3	17.1	17	16.8	16.6	16.4	16.6	16.4	16.2	16
34	15.7	15.6	15.4	15.3	15.1	14.9	14.7	14.9	14.7	14.5	14.3
36	14.2	14.1	13.9	13.8	13.6	13.4	13.3	13.4	13.2	13	12.8
38	12.8	12.8	12.6	12.5	12.3	12.1	11.9	12.1	11.9	11.7	11.5
40		11.5	11.4	11.3	11.1	11	10.8	10.9	10.7	10.5	10.3
42			10.3	10.2	10	9.9	9.7	9.8	9.6	9.5	9.3
44				9.2	9.1	8.9	8.7	8.9	8.7	8.5	8.3
46				8.3	8.2	8	7.9	8	7.8	7.6	7.4
48					7.4	7.2	7.1	7.2	7	6.8	6.6
50						6.5	6.3	6.5	6.3	6.1	5.9
52							5.6	5.8	5.6	5.4	5.2
54							5	5.2	5	4.8	4.6
56								4.6	4.4	4.2	4
58									3.9	3.7	3.5
60										3.2	3
62											2.5
64											2.1

Typical Working Conditions

A. Off-set angle of main boom and jib is 10°

Radius/m	10° Off-set angle, Jib 15m, Boom length/m									
	32	35	38	41	44	47	50	53	56	59
14	41.2	41	40.6	40.3	39.9					
16	37.9	37.6	37.4	37.2	37	36.8	36.5	27	27	26.9
18	34.9	34.8	34.6	34.5	34.4	34.3	34.2	25.6	25.7	25.7
20	32.4	32.3	32.2	32.2	32.2	32.1	32.1	24.4	24.5	24.5
22	30.1	30.1	30.1	30.2	30.2	30.2	30.2	23.3	23.4	23.4
24	27.8	27.6	27.4	27.3	27.1	26.9	26.8	22.3	22.4	22.5
26	24.6	24.5	24.3	24.1	24	23.8	23.6	21.3	21.5	21.6
28	22	21.8	21.7	21.5	21.3	21.1	20.9	20.5	20.6	20.7
30	19.8	19.6	19.4	19.2	19	18.9	18.7	18.7	18.6	18.4
32	17.8	17.6	17.5	17.3	17.1	16.9	16.7	16.8	16.6	16.4
34	16.1	16	15.8	15.6	15.4	15.2	15	15.1	14.9	14.7
36	14.6	14.5	14.3	14.1	13.9	13.7	13.5	13.6	13.4	13.2
38	13.3	13.1	12.9	12.8	12.6	12.4	12.2	12.3	12.1	11.9
40	12.1	11.9	11.7	11.6	11.4	11.2	11	11.1	10.9	10.7
42	11	10.8	10.7	10.5	10.3	10.1	9.9	10	9.8	9.6
44	10	9.9	9.7	9.5	9.3	9.2	8.9	9	8.8	8.7
46		8.9	8.8	8.6	8.4	8.3	8.1	8.2	8	7.8
48			8	7.8	7.6	7.5	7.3	7.4	7.2	7
50				7.1	6.9	6.7	6.5	6.6	6.4	6.2
52					6.2	6	5.8	5.9	5.7	5.6
54					5.5	5.4	5.2	5.3	5.1	4.9
56						4.8	4.6	4.7	4.5	4.3
58							4	4.2	4	3.8
60								3.7	3.5	3.3
62									3.2	2.8
64										2.5
66										2.4
68										2

A. Off-set angle of main boom and jib is 10°

Radius/m	10° Off-set angle, Jib 21m, Boom length/m							
	32	35	38	41	44	47	50	53
16	30	29.6	29.3	29.1	28.8			
18	27.6	27.3	27.1	27	26.8	26.7	26.5	20.2
20	25.5	25.3	25.2	25.1	25	24.9	24.9	19.1
22	23.7	23.6	23.5	23.5	23.5	23.4	23.4	18.2
24	22.1	22.1	22	22	22	22	22	17.3
26	20.7	20.7	20.7	20.7	20.8	20.8	20.8	16.5
28	19.5	19.5	19.5	19.6	19.6	19.7	19.7	15.8
30	18.4	18.4	18.5	18.5	18.6	18.7	18.8	15.1
32	17.4	17.4	17.5	17.5	17.3	17.2	17	14.5
34	16.4	16.2	16	15.8	15.6	15.4	15.2	13.9
36	14.9	14.7	14.5	14.3	14.1	13.9	13.7	13.4
38	13.5	13.4	13.1	13	12.8	12.6	12.4	12.4
40	12.3	12.2	12	11.8	11.6	11.4	11.2	11.2
42	11.3	11.1	10.9	10.7	10.5	10.3	10.1	10.1
44	10.3	10.1	9.9	9.7	9.5	9.3	9.1	9.2
46	9.4	9.2	9	8.8	8.6	8.4	8.2	8.3
48	8.5	8.4	8.2	8	7.8	7.6	7.4	7.5
50		7.6	7.4	7.3	7.1	6.9	6.7	6.7
52		6.9	6.7	6.6	6.4	6.2	6	6
54			6.1	5.9	5.7	5.5	5.3	5.4
56				5.3	5.1	4.9	4.7	4.8
58					4.6	4.4	4.2	4.3
60						4	3.9	3.8
62							3.4	3.3
64								2.7
66								2.4
68								2

Typical Working Conditions

A. Off-set angle of main boom and jib is 10°

Radius/m	10° Off-set angle, Jib 27m, Boom length/m						
	32	35	38	41	44	47	50
16	25.7						
18	23.6	23.3	23.1	22.9	22.7	22.6	
20	21.7	21.5	21.4	21.3	21.1	21	20.9
22	20.1	20	19.9	19.8	19.7	19.7	19.6
24	18.7	18.6	18.6	18.5	18.5	18.5	18.4
26	17.5	17.4	17.4	17.4	17.4	17.4	17.4
28	16.4	16.4	16.4	16.4	16.4	16.4	16.4
30	15.4	15.4	15.4	15.4	15.5	15.5	15.5
32	14.5	14.5	14.5	14.6	14.6	14.7	14.7
34	13.7	13.7	13.8	13.8	13.9	13.9	14
36	13	13	13.1	13.1	13.2	13.3	13.3
38	12.3	12.3	12.4	12.5	12.5	12.6	12.5
40	11.7	11.7	11.8	11.9	11.7	11.5	11.3
42	11.1	11.2	11.1	10.9	10.7	10.5	10.3
44	10.5	10.3	10.1	9.9	9.7	9.5	9.3
46	9.6	9.4	9.2	9	8.8	8.6	8.4
48	8.8	8.6	8.4	8.2	8	7.8	7.6
50	8	7.8	7.6	7.5	7.2	7	6.8
52	7.3	7.2	6.9	6.8	6.5	6.3	6.1
54	6.7	6.5	6.3	6.1	5.9	5.7	5.5
56		5.9	5.7	5.5	5.3	5.1	4.9
58		5.3	5.1	5	4.8	4.6	4.3
60			4.6	4.4	4.2	4	3.8
62				4	3.8	3.6	3.3
64					3.3	3.1	2.9
66						2.7	2.5
68						2.3	2.1

A. Off-set angle of main boom and jib is 10°

Radius/m	10° Off-set angle, Jib 30m, Boom length/m					
	32	35	38	41	44	47
18	21.6	21.3	21			
20	19.9	19.7	19.5	19.3	19.2	19.1
22	18.4	18.3	18.1	18	17.9	17.8
24	17.1	17	16.9	16.8	16.8	16.7
26	16	15.9	15.8	15.8	15.8	15.7
28	15	14.9	14.9	14.8	14.8	14.8
30	14.1	14	14	14	14	14
32	13.2	13.2	13.2	13.2	13.2	13.3
34	12.5	12.5	12.5	12.5	12.5	12.6
36	11.8	11.8	11.8	11.8	11.9	11.9
38	11.2	11.2	11.2	11.2	11.3	11.4
40	10.6	10.6	10.7	10.7	10.8	10.8
42	10.1	10.1	10.1	10.2	10.3	10.3
44	9.6	9.6	9.7	9.7	9.7	9.5
46	9.1	9.2	9.2	9	8.8	8.6
48	8.7	8.6	8.4	8.2	8	7.8
50	8.1	7.9	7.7	7.5	7.3	7.1
52	7.4	7.2	7	6.8	6.6	6.4
54	6.7	6.6	6.3	6.2	5.9	5.7
56	6.1	6	5.7	5.6	5.3	5.1
58	5.6	5.4	5.2	5	4.8	4.6
60		4.9	4.7	4.5	4.3	4.1
62			4.2	4	3.8	3.6
64				3.5	3.3	3.1
66				3.1	2.9	2.7
68					2.5	2.3

Typical Working Conditions

B. Off-set angle between main boom and jib is 30°

Radius/m	30° Off-set angle, Jib 9m, Boom length/m										
	32	35	38	41	44	47	50	53	56	59	62
14	35.8	36.3	36.8	37.2							
16	33.7	34.3	34.8	35.3	35.7	36.2	37.2	27.9	27.8		
18	31.9	32.5	33.1	33.6	34.1	34.5	35.5	27.1	27	26.9	26.7
20	30.3	31	31.6	32.1	32.6	33.1	34.1	26.3	26.2	26.2	26
22	28.9	29.6	30.2	30.8	31.2	31.1	31	25.6	25.6	25.5	25.4
24	27.7	27.7	27.6	27.5	27.3	27.2	27.1	25	24.9	24.9	24.8
26	24.6	24.5	24.4	24.3	24.1	24	23.9	24	23.8	23.7	23.6
28	21.9	21.8	21.7	21.6	21.4	21.3	21.1	21.3	21.1	21	20.8
30	19.6	19.5	19.4	19.3	19.1	19	18.8	19	18.8	18.7	18.5
32	17.6	17.5	17.4	17.3	17.1	17	16.8	17	16.8	16.7	16.5
34	15.8	15.8	15.6	15.5	15.4	15.3	15.1	15.2	15.1	14.9	14.8
36	14.3	14.2	14.1	14	13.9	13.7	13.6	13.7	13.5	13.4	13.2
38	12.8	12.8	12.7	12.6	12.5	12.4	12.2	12.4	12.2	12	11.9
40		11.5	11.5	11.4	11.3	11.1	11	11.1	11	10.8	10.6
42			10.3	10.3	10.2	10	9.9	10	9.9	9.7	9.5
44				9.3	9.1	9	8.9	9	8.9	8.7	8.6
46				8.3	8.2	8.1	8	8.1	8	7.8	7.7
48					7.3	7.3	7.1	7.3	7.2	7	6.8
50						6.5	6.3	6.5	6.4	6.2	6.1
52							5.6	5.8	5.7	5.5	5.4
54							4.9	5.2	5	4.9	4.7
56								4.5	4.4	4.3	4.1
58									3.8	3.7	3.5
60										3.2	3
62											2.7
64											

B. Off-set angle between main boom and jib is 30°

Radius/m	30° Off-set angle, Jib 15m, Boom length/m									
	32	35	38	41	44	47	50	53	56	59
18	24.2	24.5	24.8	25.1						
20	22.8	23.2	23.5	23.8	24.4	24.6	24.9	17.9	17.9	
22	21.6	22	22.3	22.7	23.2	23.5	23.8	17.4	17.3	17.3
24	20.5	20.9	21.3	21.7	22.2	22.5	22.8	16.8	16.8	16.8
26	19.5	20	20.4	20.8	21.3	21.6	21.9	16.4	16.3	16.3
28	18.7	19.1	19.5	19.9	20.5	20.8	21.1	15.9	15.9	15.9
30	17.9	18.3	18.8	19.2	19.7	19.7	19.6	15.5	15.5	15.5
32	17.2	17.7	18.1	18	17.8	17.7	17.6	15.1	15.1	15.1
34	16.6	16.5	16.3	16.2	16.1	15.9	15.8	14.7	14.8	14.8
36	15	14.9	14.7	14.6	14.5	14.3	14.2	14.3	14.1	14
38	13.6	13.5	13.3	13.2	13.1	12.9	12.8	12.9	12.7	12.6
40	12.3	12.2	12.1	12	11.8	11.7	11.5	11.6	11.5	11.3
42	11.1	11.1	10.9	10.8	10.7	10.6	10.4	10.5	10.3	10.2
44	10	10	9.9	9.8	9.7	9.5	9.4	9.5	9.3	9.2
46		9	8.9	8.9	8.7	8.6	8.4	8.6	8.4	8.2
48			8	8	7.9	7.7	7.6	7.7	7.5	7.4
50				7.2	7	6.9	6.8	6.9	6.8	6.6
52					6.4	6.3	6.2	6	6.2	5.9
54						5.6	5.5	5.4	5.5	5.2
56							4.8	4.7	4.9	4.6
58								4.1	4.3	4.1
60									3.5	3.7
62										3.2
64										
66										

Typical Working Conditions

B. Off-set angle between main boom and jib is 30°

Radius/m	30° Off-set angle, Jib 21m, Boom length/m							
	32	35	38	41	44	47	50	53
22	17.3	17.6	17.9	18.1	18.3			
24	16.4	16.6	17	17.2	17.4	17.6	17.5	12.5
26	15.5	15.8	16.1	16.4	16.6	16.8	16.9	12.1
28	14.7	15	15.4	15.6	15.9	16.1	16.3	11.7
30	14	14.3	14.7	15	15.2	15.4	15.7	11.4
32	13.4	13.7	14.1	14.3	14.6	14.8	15.2	11
34	12.8	13.1	13.5	13.8	14	14.3	14.6	10.7
36	12.3	12.6	13	13.2	13.5	13.8	14.1	10.4
38	11.8	12.1	12.5	12.8	13	13.3	13.3	10.2
40	11.4	11.7	12	12.3	12.3	12.2	12	9.9
42	11	11.3	11.4	11.3	11.2	11	10.9	9.7
44	10.6	10.5	10.4	10.3	10.1	10	9.8	9.5
46	9.7	9.6	9.4	9.3	9.2	9	8.9	8.9
48	8.7	8.7	8.5	8.4	8.3	8.1	8	8.1
50	7.8	7.8	7.7	7.6	7.5	7.3	7.2	7.3
52		7	6.9	6.9	6.7	6.6	6.4	6.5
54			6.2	6.1	6	5.9	5.7	5.8
56				5.5	5.4	5.2	5.1	5.2
58				4.8	4.7	4.6	4.5	4.6
60					4.1	4	3.9	4
62						3.5	3.4	3.5
64							2.8	3
66							2.3	2.5
68								2

B. Off-set angle between main boom and jib is 30°

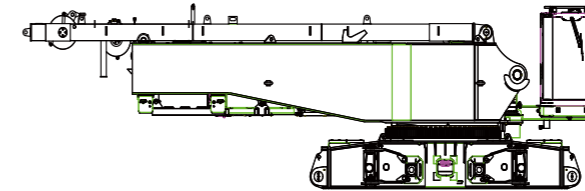
Radius/m	30° Off-set angle, Jib 27m, Boom length/m							
	32	35	38	41	44	47	50	
24	14.3							
26	13.4	13.7	13.9	14	14	13.8		
28	12.7	13	13.2	13.3	13.4	13.2	13.1	
30	12	12.3	12.5	12.7	12.9	12.7	12.6	
32	11.4	11.7	11.9	12.1	12.4	12.3	12.1	
34	10.8	11.1	11.3	11.5	11.8	11.8	11.7	
36	10.3	10.6	10.8	11	11.3	11.4	11.3	
38	9.8	10.1	10.4	10.6	10.8	11	11	
40	9.4	9.7	9.9	10.1	10.4	10.6	10.6	
42	9	9.3	9.5	9.7	10	10.2	10.3	
44	8.6	8.9	9.2	9.4	9.6	9.8	10	
46	8.3	8.6	8.8	9	9.3	9.5	9.3	
48	8	8.3	8.5	8.7	8.7	8.6	8.4	
50	7.7	8	8.2	8.1	7.9	7.8	7.6	
52	7.5	7.6	7.4	7.3	7.1	7	6.8	
54	6.9	6.8	6.7	6.6	6.4	6.3	6.1	
56	6.2	6.2	6	5.9	5.8	5.6	5.5	
58		5.5	5.4	5.3	5.2	5	4.9	
60			4.8	4.7	4.6	4.5	4.3	
62				4.1	4	3.9	3.8	
64					3.6	3.5	3.4	3.2
66						3	2.9	2.8
68							2.4	2.3

Typical Working Conditions

B. Off-set angle between main boom and jib is 30°

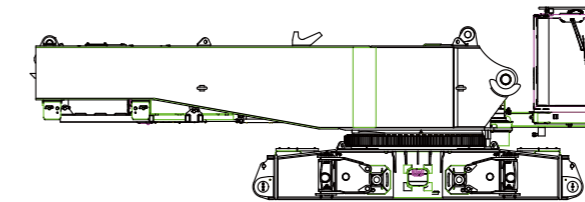
Radius/m	30° Off-set angle, Jib 30m, Boom length/m					
	32	35	38	41	44	47
26	12.3					
28	11.6	11.7	11.9	12.1	12	11.9
30	10.9	11.1	11.2	11.5	11.5	11.4
32	10.3	10.5	10.7	10.9	11.1	11
34	9.8	10	10.1	10.4	10.5	10.6
36	9.3	9.5	9.7	9.9	10.1	10.2
38	8.8	9	9.2	9.5	9.6	9.8
40	8.4	8.6	8.8	9	9.2	9.4
42	8	8.2	8.4	8.7	8.8	9
44	7.7	7.9	8.1	8.3	8.5	8.7
46	7.3	7.5	7.7	8	8.2	8.3
48	7	7.2	7.4	7.7	7.8	8
50	6.8	7	7.2	7.4	7.6	7.7
52	6.5	6.7	6.9	7.1	7.3	7.1
54	6.3	6.5	6.7	6.7	6.6	6.4
56	6.1	6.3	6.2	6.1	5.9	5.8
58	5.7	5.7	5.6	5.5	5.3	5.2
60		5.1	5	4.9	4.7	4.6
62		4.4	4.4	4.3	4.2	4
64			3.8	3.8	3.6	3.5
66				3.2	3.1	3
68					2.6	2.5
70					2.1	2.1

Transport parameters of main components



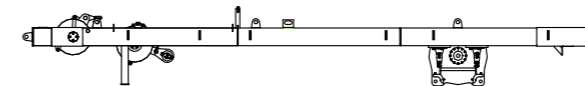
Basic machine transport plan A		× 1
L	12.60 m	
W	3.00 m	
H	3.30 m	
W	34.6 t	

With main luffing winch and wire rope, cab, mast and sheave block, etc., without turntable counterweight self-assembly and disassembly device, tower jib single top winch and etc.



Basic machine transport plan B		× 1
L	10.7 m	
W	3.00 m	
H	3.30 m	
W	29.7 t	

Without main luffing winch and wire rope, mast, luffing sheave block, turntable counterweight self-assembly and disassembly device, tower jib single top winch and other optional devices etc.



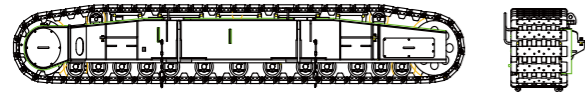
Mast separate transport parts (optional)		× 1
L	9.92 m	
W	1.72 m	
H	1.28 m	
W	4.9 t	

Include main luffing winch and wire rope, mast, luffing sheave block and some boom pendants, this is used when it is not transported with basic machine

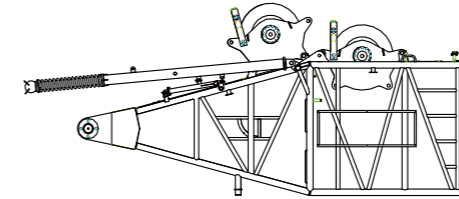


Left track frame		× 1
L	8.48 m	
W	1.38 m	
H	1.39 m	
W	17.8 t	

Transport parameters of main components

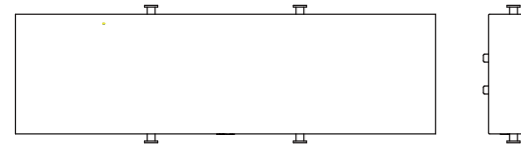


Right track frame	× 1
L	8.48 m
W	1.38 m
H	1.39 m
W	17.8 t

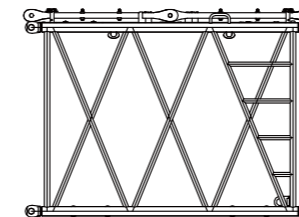


Boom butt	× 1
L	7.08 m
W	2.96 m
H	3.03 m
W	8.98 t

Including main winch, aux. winch and wire rope, boom pendants, tower jib pendants, backstop stop device and etc.

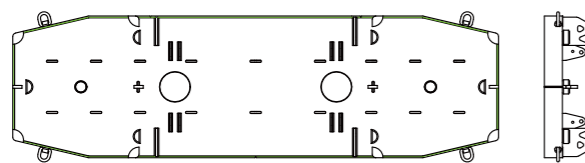


Car-body counterweight block	× 2
L	4.7 m
W	1.14 m
H	0.48 m
W	6 t

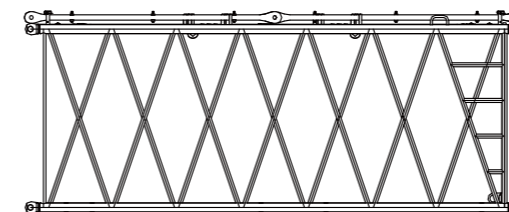


Boom insert 3mA	× 1
L	3.17 m
W	2.5 m
H	2.26 m
W	0.8 t

Include boom and tower jib pendants

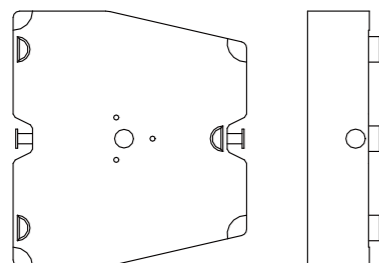


Turntable counterweight tray	× 1
L	6.74 m
W	2.00 m
H	0.61 m
W	15.0 t

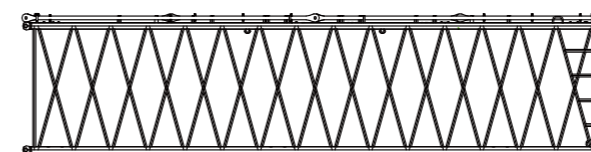


Boom insert 6mA	× 1
L	6.17 m
W	2.5 m
H	2.26 m
W	1.35 t

Include boom and tower jib pendants



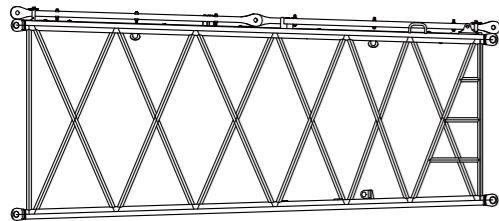
Turntable counterweight block	× 10
L	1.80 m
W	2.00 m
H	0.57 m
W	5.0 t



Boom insert 12mA	× 2
L	12.18 m
W	2.5 m
H	2.26 m
W	2.43 t

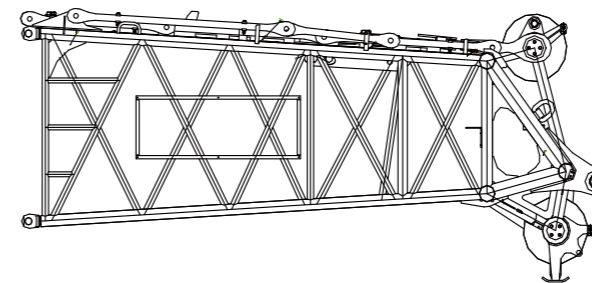
Include boom and tower jib pendants

Transport parameters of main components



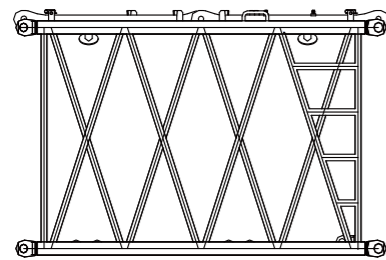
6m boom transition section	× 1
L	6.17 m
W	2.5 m
H	2.26 m
W	1.23 t

Include boom and tower jib pendants



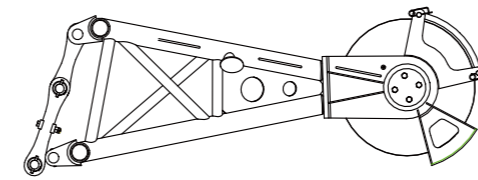
Boom top	× 1
L	5.58 m
W	2.2 m
H	2.47 m
W	3.0 t

Include boom and tower jib pendants

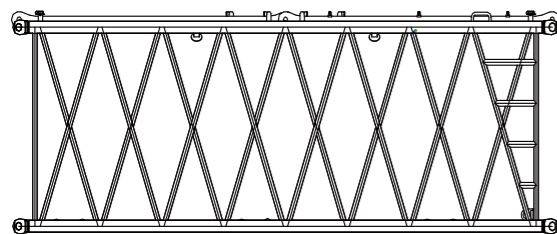


Boom insert 3mB	× 2
L	3.13 m
W	2.12 m
H	1.89 m
W	0.52 t

Include boom and tower jib pendants

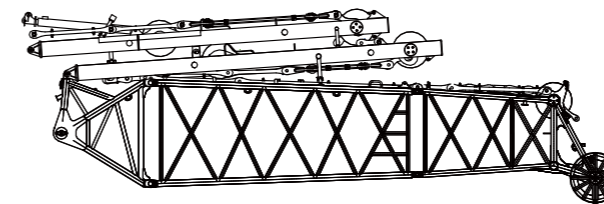


Tower jib four-piece set	× 1
L	2.065 m
W	1.16 m
H	0.7 m
W	0.26 t



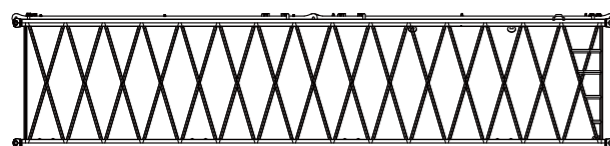
Boom insert 6mB	× 1
L	6.13 m
W	2.12 m
H	1.89 m
W	0.9 t

Include boom and tower jib pendants



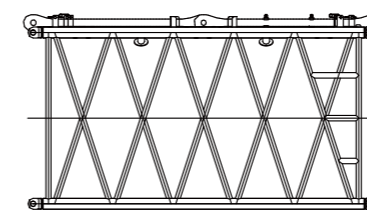
Tower jib four-piece set	× 1
L	10.04 m
W	2.18 m
H	3.22 m
W	6.0 t

Include tower jib butt, transition section, front strut, rear strut, pendant, backstop device and etc.



Boom insert 12mB	× 2
L	12.13 m
W	2.12 m
H	1.89 m
W	1.6 t

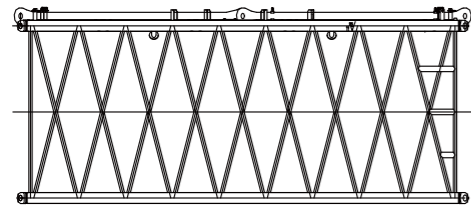
Include boom and tower jib pendants



Tower jib 3m insert C	× 1
L	3.17 m
W	1.79 m
H	1.59 m
W	0.45 t

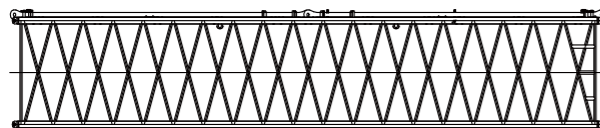
Include pendant

Transport parameters of main components



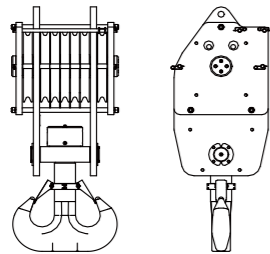
Tower jib 6m insert C	× 1
L	6.17 m
W	1.79 m
H	1.59 m
W	0.75 t

Include pendant

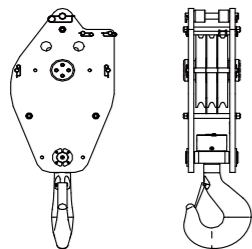


Tower jib 12m insert C	× 1
L	12.17 m
W	1.79 m
H	1.59 m
W	1.40 t

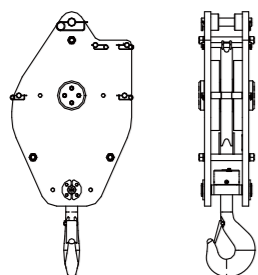
Include pendant



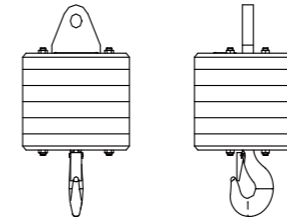
160t hook block assy	× 1
L	0.866 m
W	0.76 m
H	2.35 m
W	2.20 t



80t hook block assy	× 1
L	0.76 m
W	0.418 m
H	1.998 m
W	0.96 t



32t hook block assy	× 1
L	0.76 m
W	0.35 m
H	1.628 m
W	0.73 t



13.5t hook block assy	× 1
L	0.485 m
W	0.485 m
H	0.787 m
W	0.50 t

Note:

1. The parts weight which are not listed above include some clips, small size pin shafts, bolts, several small pendants or sling connectors, and etc., total weight is not more than 3t.
2. Slight difference is ineluctable during product manufacture, and dimension and weight of some parts are variable due to continuous improvement in products.
3. Various pendants are easy confused, so before transportation, customers should make marks on corresponding pendants.