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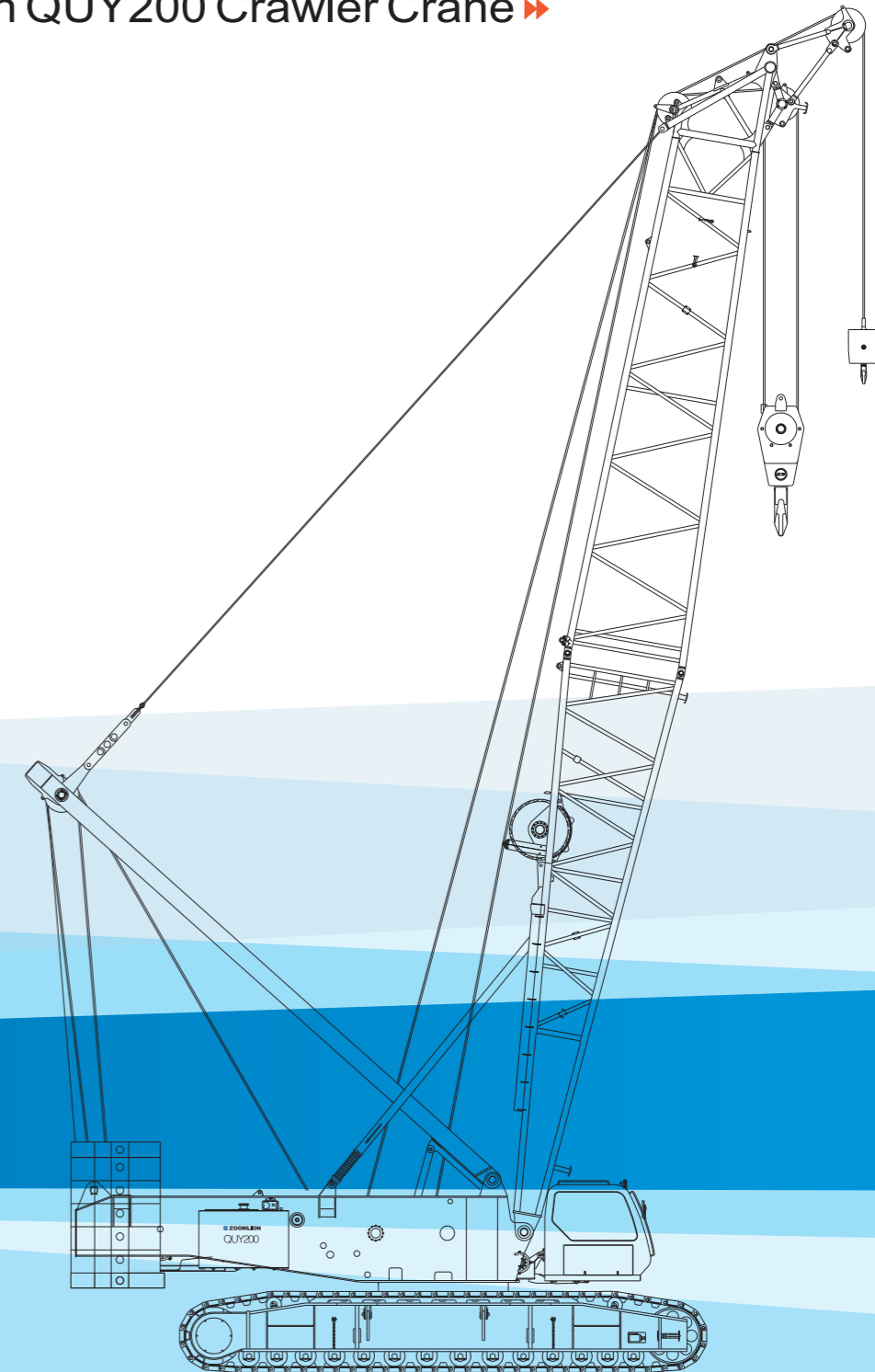
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 **ZOOMLION**

# QUY200

Zoomlion QUY200 Crawler Crane ▶▶




2010.4



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## Vision Creates the Future

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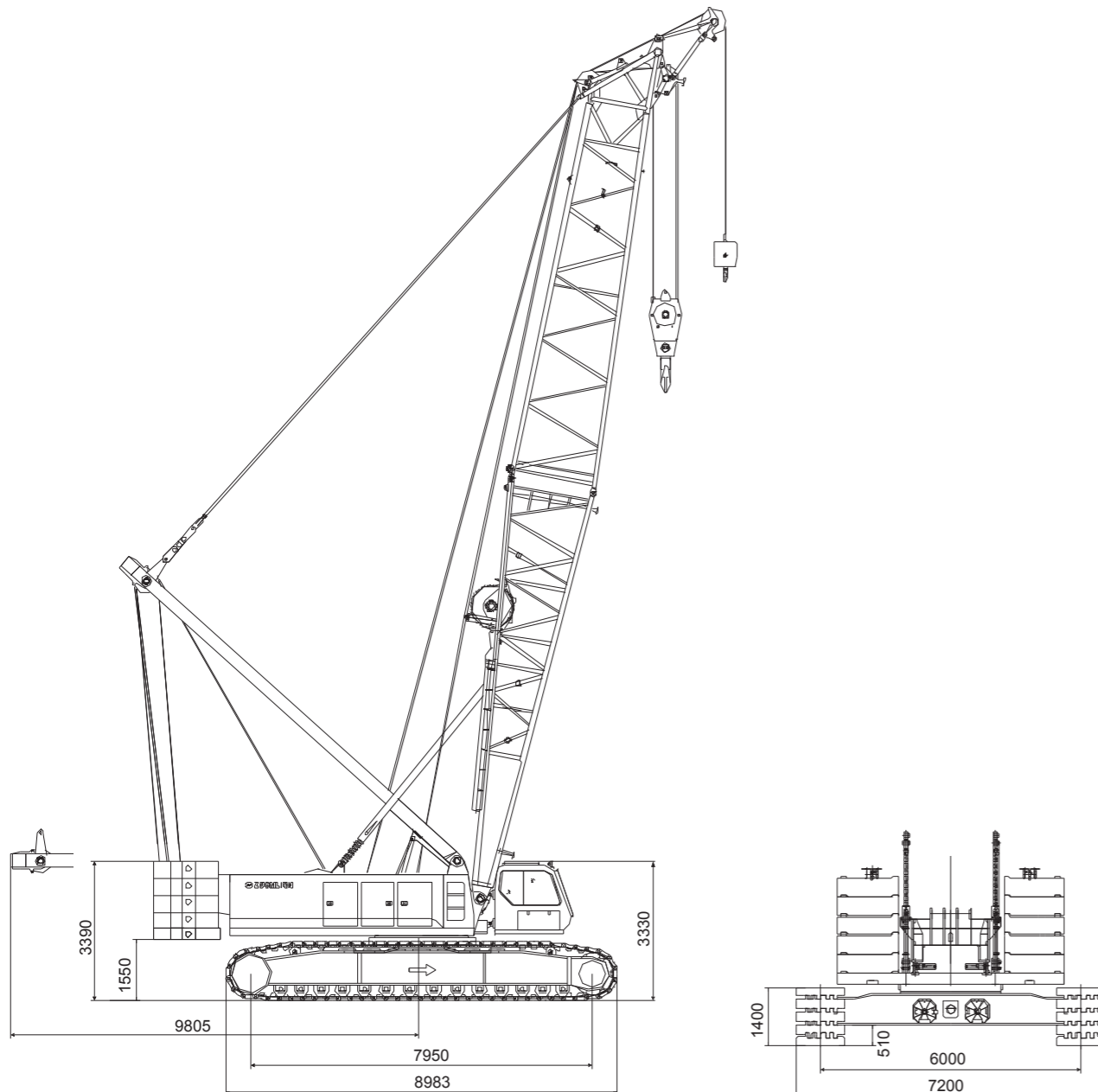


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## I. External Dimensions and Main Parameters

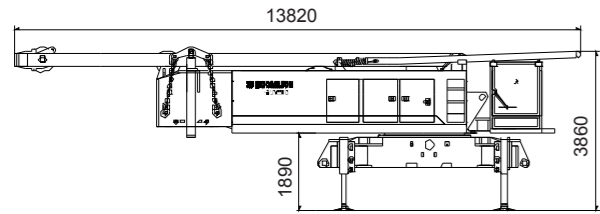
### 1. External Dimensions of Entire Crane, including Basic Boom



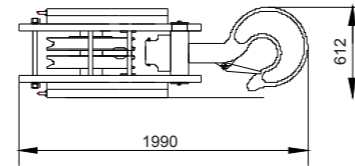
### 2. Main Performance Parameters

Items		Unit of measurement	Values	Remarks
Maximum lifting capacity x radius		t × m	200 × 5	
Deadweight of crane with basic boom		t	192	
Length of main boom		m	20~83	
Length of fixed fly jib		m	12~30	
Maximum lifting capacity with fixed fly jib		t	32	
Setting angle of fixed fly jib		°	10, 30	
Maximum length of main boom + fixed fly jib		m	71 + 30	
Length of luffing fly jib		m	21~51	
Maximum lifting capacity with luffing fly jib		t	55	
Working angle of main boom in crane operation with luffing fly jib		°	65, 75, 85	
Maximum length of main boom + luffing fly jib		m	59 + 51	
Speed of single rope on drum	Main winch	m/min	102	Outermost layer of drum
	Auxiliary winch	m/min	102	Outermost layer of drum
	Luffing winch	m/min	31 × 2	Outermost layer of drum
Swiveling speed		rpm	0~1.1	
Traveling speed		km/h	0~0.98	
Gradeability		%	30	
Ground pressure		MPa	0.1	Excluding mast boom
Overall dimensions L x W x H		m	10.7 × 7.2 × 3.3	
Manufacturer			Cummins (USA)	
Engine	Rated power/rotational speed	kW/r/min	227/2000	
	Maximum output torque/rotational speed	Nm/r/min	1505/1400	
Emissions standard			U.S. EPA Tier 3 and EU Stage III A	
Distance between track centers × crawler contact length × crawler shoe width		mm	6000 × 7935 × 1200	

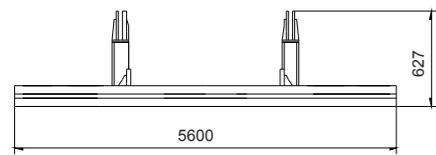
### 3. External Dimensions and Weight of Main Transport Components



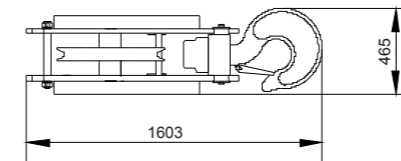
Name	Main machine
Weight (t)	46
Quantity	1
Remarks	Length of main machine without mast: 9835mm Width: 3300mm Height: 3190mm



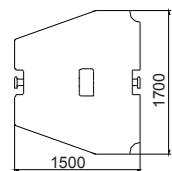
Name	Hook (65T)
Weight (t)	1.8
Quantity	1
Remarks	



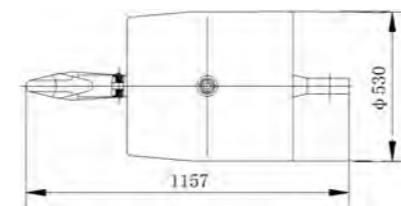
Name	Counterweight base
Weight (t)	17.06
Quantity	1 piece
Remarks	Width 1700mm



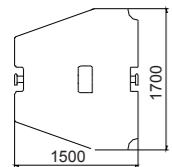
Name	Hook (30T)
Weight (t)	1.09
Quantity	1
Remarks	



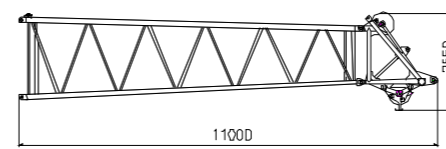
Name	Counterweight block
Weight (t)	6.6
Quantity	6
Remarks	



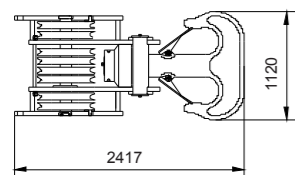
Name	Hook (16T)
Weight (t)	0.89
Quantity	1
Remarks	



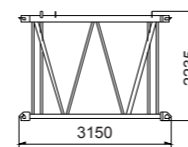
Name	Counterweight block
Weight (t)	4
Quantity	2
Remarks	



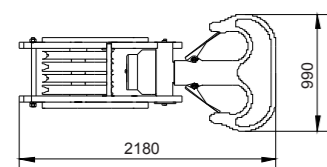
Name	Top section of main boom
Weight (t)	3.3
Quantity	1
Remarks	Width 2319mm



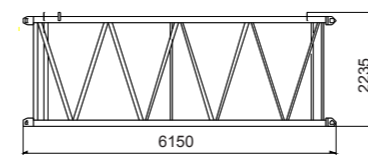
Name	Hook (200T)
Weight (t)	3.2
Quantity	1
Remarks	



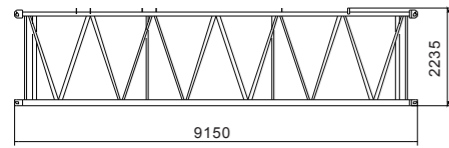
Name	3m section of main boom
Weight (t)	0.64
Quantity	1
Remarks	Width 2319mm



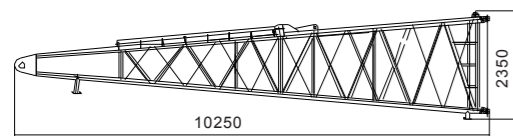
Name	Hook (130T)
Weight (t)	2.4
Quantity	1
Remarks	



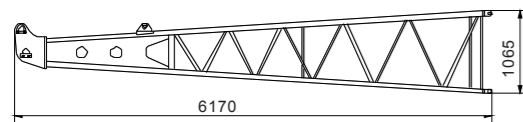
Name	6m section of main boom
Weight (t)	1.12
Quantity	1
Remarks	Width 2319mm



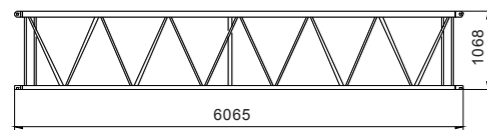
Name	9m section of main boom
Weight (t)	1.55
Quantity	6
Remarks	Width 2319mm



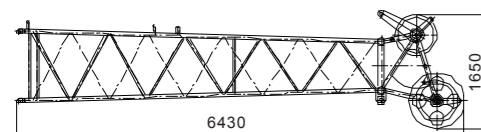
Name	Base section of main boom
Weight (t)	2.6
Quantity	1
Remarks	Width 2380mm



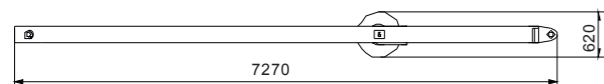
Name	Base section of fixed fly jib
Weight (t)	0.47
Quantity	1
Remarks	Width: 1470mm, it can be mounted together with main boom and luffing fly jib



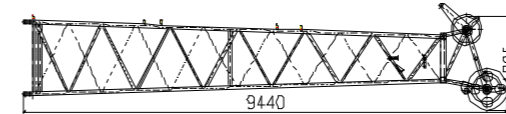
Name	6m section of fixed fly jib
Weight (t)	0.26
Quantity	3
Remarks	Width: 1268mm, it can be mounted together with main boom and luffing fly jib



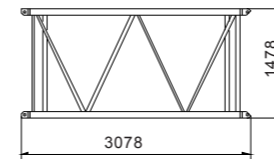
Name	Top section of fixed fly jib
Weight (t)	0.62
Quantity	1
Remarks	Width: 1268mm, it can be mounted together with main boom and luffing fly jib



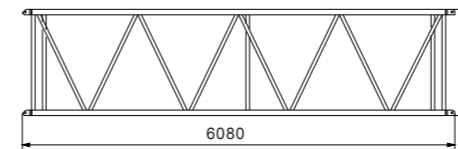
Name	Base section of fixed fly jib
Weight (t)	0.75
Quantity	1
Remarks	Width 1500mm



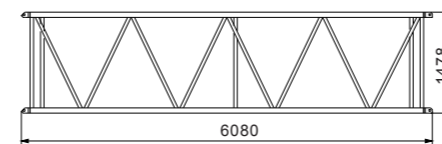
Name	Top section of luffing fly jib
Weight (t)	0.95
Quantity	1
Remarks	Width: 1480mm, it can be mounted together with main boom



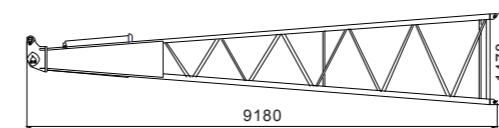
Name	3m section of luffing fly jib
Weight (t)	0.21
Quantity	1
Remarks	Width: 1480mm, it can be mounted together with main boom



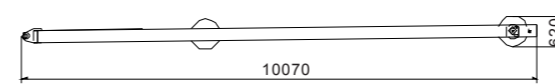
Name	6m section of luffing fly jib
Weight (t)	0.4
Quantity	2
Remarks	Width: 1480mm, it can be mounted together with main boom



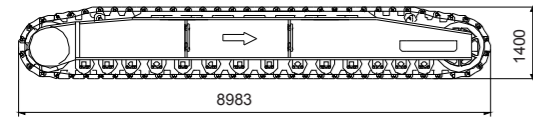
Name	9m section of luffing fly jib
Weight (t)	0.57
Quantity	2
Remarks	Width: 1480mm, it can be mounted together with main boom



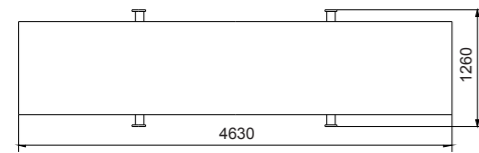
Name	Base section of luffing fly jib
Weight (t)	0.68
Quantity	1
Remarks	Width: 1480mm



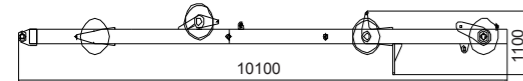
Name	Front bracing pole of luffing fly jib
Weight (t)	1.2
Quantity	1
Remarks	Width: 1360mm, it can be transported as a whole together with the base section of luffing fly jib



Name	Crawler carrier
Weight (t)	22
Quantity	2
Remarks	Width: 1200mm



Name	Ballast weight of vehicle body
Weight (t)	14
Quantity	2
Remarks	Width: 400mm



Name	Rear bracing pole of luffing fly jib
Weight (t)	1.5
Quantity	1
Remarks	Width: 1560mm, it can be transported together as a whole with the base section of luffing fly jib

## II. Technical Descriptions

### 4. Boom System

Boom system (truss-type structure, with anchoring rods made of imported high strength plates).

Main boom

Length of main boom: 20~83m

Length of intermediate section of main boom: 3m, 6m, and 9m

### Fixed fly jib

Length of fixed fly jib: 12~30m

Length of additional adjustable section of fixed fly jib: 6m

Maximum length of main boom + fixed fly jib: 71 + 30m

**Table of Fixed Fly Jib Length Combinations**

Length of fly jib (m)	Number of standard sections of fixed fly jib (piece)	
	3m	6m
12	0	2
18	1	1
24	2	0
30	3	0

**Table of Main Boom Lengths Configuration Combinations**

Length of main boom (m)	Number of standard section kits for corresponding lengths of main boom (pieces)		
	3m section	6m section	9m section
23	1	0	0
26	2	0	0
29	1	1	0
32	2	1	0
35	1	2	0
38	1	1	1
41	2	1	1
44	1	2	1
47	1	1	2
50	2	1	2
53	1	2	2
56	1	1	3
59	2	1	3
62	1	2	3
65	1	1	4
68	2	1	4
71	1	2	4
74	1	1	5
77	2	1	5
80	1	2	5
83	1	1	6

### Luffing fly jib

Length of luffing fly jib: 21~51m

Length of additional adjustable section of luffing fly jib: 3m, 6m, and 9m

Maximum length of main boom + luffing fly jib: 59+51m

**Table of Luffing Fly Jib Length Combinations**

Length of luffing fly jib (m)	Number of standard section kits for corresponding lengths of luffing fly jib (pieces)		
	3m section	6m section	9m section
21	1	0	0
24	2	0	0
27	1	1	0
30	2	1	0
33	1	2	0
36	1	1	1
39	2	1	1
42	1	2	1
45	1	1	2
48	2	1	2
51	1	2	2

## 5. Mechanisms

### Primary and secondary lifting mechanisms

These mechanisms are both comprised of an internal variable displacement axial plunger hydraulic motor, balance valve, speed reducer, normally closed brake, and wire ropes; they can be controlled independently of other mechanisms.

The wire ropes used are completely non-rotating and anti-twisting wire ropes, imported from Germany.

The primary and secondary lifting mechanisms allow for stepless speed regulation from zero all the way up to the maximum speed, thus dramatically enhancing operational efficiency.

Primary and secondary lifting mechanisms	Drum diameter	650mm
	Operating speed of the outermost layer	102m/min
	Diameter of primary and secondary lifting mechanisms' wire ropes	Φ28mm
	Length of primary and secondary lifting mechanisms' wire ropes	370m
	Rated single rope tension	14.3t

### Luffing mechanism

The luffing mechanism is comprised of an internal fixed-displacement axial plunger hydraulic motor, balance valve, speed reducer, normally closed brake, and wire ropes; it can be controlled independently of other mechanisms.

The wire ropes used are completely non-rotating and anti-twisting wire ropes, imported from Germany.

Luffing mechanism	Drum diameter	540mm
	Operating speed of the outermost layer	35m/min × 2
	Diameter of primary and secondary lifting mechanisms' wire ropes	Φ26mm × 2
	Length of primary and secondary lifting mechanisms' wire ropes	140m × 2
	Rated single rope tension	10.2t

### Slewing mechanism

The slewing mechanism is comprised of an internal dual-variable displacement axial plunger hydraulic motor, double gear speed reducers, normally closed slewing brake, pinions and slewing bearings; the pinion-driven slewing bearing allows for full 360° slewing movements, thereby providing slewing functionality to the upper machinery.

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

The slewing mechanism adopts a closed-type slewing system to reduce shock and allow for higher stability during initiation and braking of slewing operations; the controllable free slip-turn function of the slewing mechanism more fully meets operational requirements.

The slewing mechanism offers stepless speed regulation within the range of 0~1.2r/min.

During transport, the slewing mechanism is lockable through two mechanical locking devices located at the front of the rotating platform, thereby ensuring safe transportation.

### Traveling mechanism

The travel mechanism is a dual-variable motor dual-reducer type; the hydraulic motor, traveling speed reducer and traveling brake valve are all imported products. The two crawlers are controlled by two different control handles, allowing for a variety of traveling actions such as straight line traveling, unilateral steering, differential steering, pivotal steering, driving with load, etc., thus offering a high level of mobility, maneuverability and flexibility.

Traveling speed: 0.6~0.98km/h.

Gradeability: 30%.

Crawler tensioning: crawlers are tensioned through jacks, making adjustment is fast, easy and reliable.

### Mast jack-up mechanism

Comprised of the mast, mast jack-up oil cylinder, auxiliary hydraulic system, etc, this mechanism is used during self-assembling/disassembling (or relocating) of the whole machine.

Plate connection is employed between the oil cylinder and balance valve to ensure higher safety and reliability. By jacking up the mast beyond 90 degrees perpendicular from its horizontal position, the anchoring rods can be connected, the boom can be assembled, and the crawler assembly and counterweight can be mounted.

### Control room swiveling and luffing mechanism

During transport, the control room remains at the front of the rotating platform; during operation, it rotates outwards to the outer left side and is locked there using pins at two points; the control room can also tilt upwards to an angle of 20°.

### Counterweight and counterweight loading/unloading mechanism

This mechanism is comprised of a counterweight base plate, counterweight, counterweight jack-up oil cylinder, load bearing chain, and fixing pin oil cylinder.

It allows for complete self-mounting and dismounting of the counterweight, thereby dramatically improving the crane's utility and reducing the risks involved in manual installation.

### Outrigger lifting and crawler self-mounting and dismounting mechanism

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

## 6. Systems

### Hydraulic system

Hydraulic system

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

The hydraulic system employs one of the world's most advanced pump control systems and load sensitive systems; imported products are used for all major components to save energy, ensure high efficiency, high reliability, and long service life.

Capacity of hydraulic oil tank: 700L.

Cooler: aluminum radiator, with electric motor powered fan.

### Electrical system

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

The electrical components of the vehicle primarily include: power supply, engine starter, engine misfiring, indicator lights, alarms, lighting devices, fans, windshield wipers, horn, lifting height limiters, hydraulic oil cooling fans, digital display monitor, PLC controller, engine preheater, safety devices, etc.; these appliances ensure that the crane will operate safely and provide a comfortable working environment for the driver and other workers. The whole vehicle employs CAN bus technology, which connects the engine, PLC controller and digital display together with fault detection and self-diagnosis functions.

### Power system

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

Rated output power: 256kw, 2100r/min

Maximum output torque: 1750Nm, 1200r/min

Emissions standard: U.S. EPA Tier 2 and EU Stage II

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

Weichai WP12.375N engine and Cummins Model-QSL9-C305 engine are optional.

### Digitalized display system

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

### Centralized lubrication system

The German-imported Beka centralized lubrication system is incorporated to significantly prolong the service life of the whole vehicle.

## 7. Safety Devices

### Load moment limiter

The limiter is comprised of a load moment indicator and a digital LCD monitor. When the lifting load reaches 90% of the rated load moment, an alarm lamp will light up and a buzzer alarm will sound; operation of the crane will stop automatically when the lifting load moment reaches the rated load moment in order to prevent any incidents that may occur as a result of crane overloading during construction operations, thus helping to ensure normal and safe operation of the crane.

The digital LCD monitor can display the following data:

Moment ratio

Main boom elevation angle

Length of main boom

Working radius

Actual hook load

Allowed lifting load

Maximum allowed lifting height

Wind speed at top of boom

### Various overflow valves in the hydraulic system

These valves can suppress abnormally high pressures in the circuit, preventing damage to the hydraulic oil pump and motor, and preventing system overload.

### Height limiter devices

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

### Angle indicator

The boom angle indicator is located along the lower rear part of the boom's bottom section (right side of control room), allowing the driver convenient, clear visibility of the elevation angle of the boom from the control room.

### Working boom limiting position alarm and protection system

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

### Boom overturn protection device

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

**Whole machine level sensor**

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

**Hook safety latch**

This device prevents the load from unhooking when lifting heavy loads.

**Luffing winch ratchet locking mechanism**

The luffing winch ratchet locking mechanism prevents luffing decline when the vehicle is parked for long periods of time.

**Wire rope overwinding and over-release protection device**

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

**Wind speed indicator**

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

**Emergency stop button**

In case of emergency, press this button to switch off the engine and the whole machine.

**Tri-color warning light**

With three different colors, red, yellow and green, the warning light can synchronously indicate overload status. Green indicates that the load factor is below 90%, yellow informs operators that the load factor is between 90% and 100%, while the red color warns that the load factor has exceeded 100% and that the crane is in danger of overloading.

**Monitoring system (optional)**

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

**Remote GPS monitoring system (optional)**

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

**8. Control Room**

The structure of the control room is made entirely of steel, is surrounded by reinforced glass on all four sides, and has laminated glass for its sunroof and windshield. The interior is equipped with the sun shield on the right side, adjustable seat, windshield wipers, electronic control handle, load moment indicator, digitalized display monitor, various switches, auxiliary remote control box operating assembly, air conditioner, electric fan, illuminating lamps, radio (CD player and car DVD player optional), cigarette lighter, and fire extinguisher, etc. The control room offers a broad field of vision, and a spacious and comfortable interior.

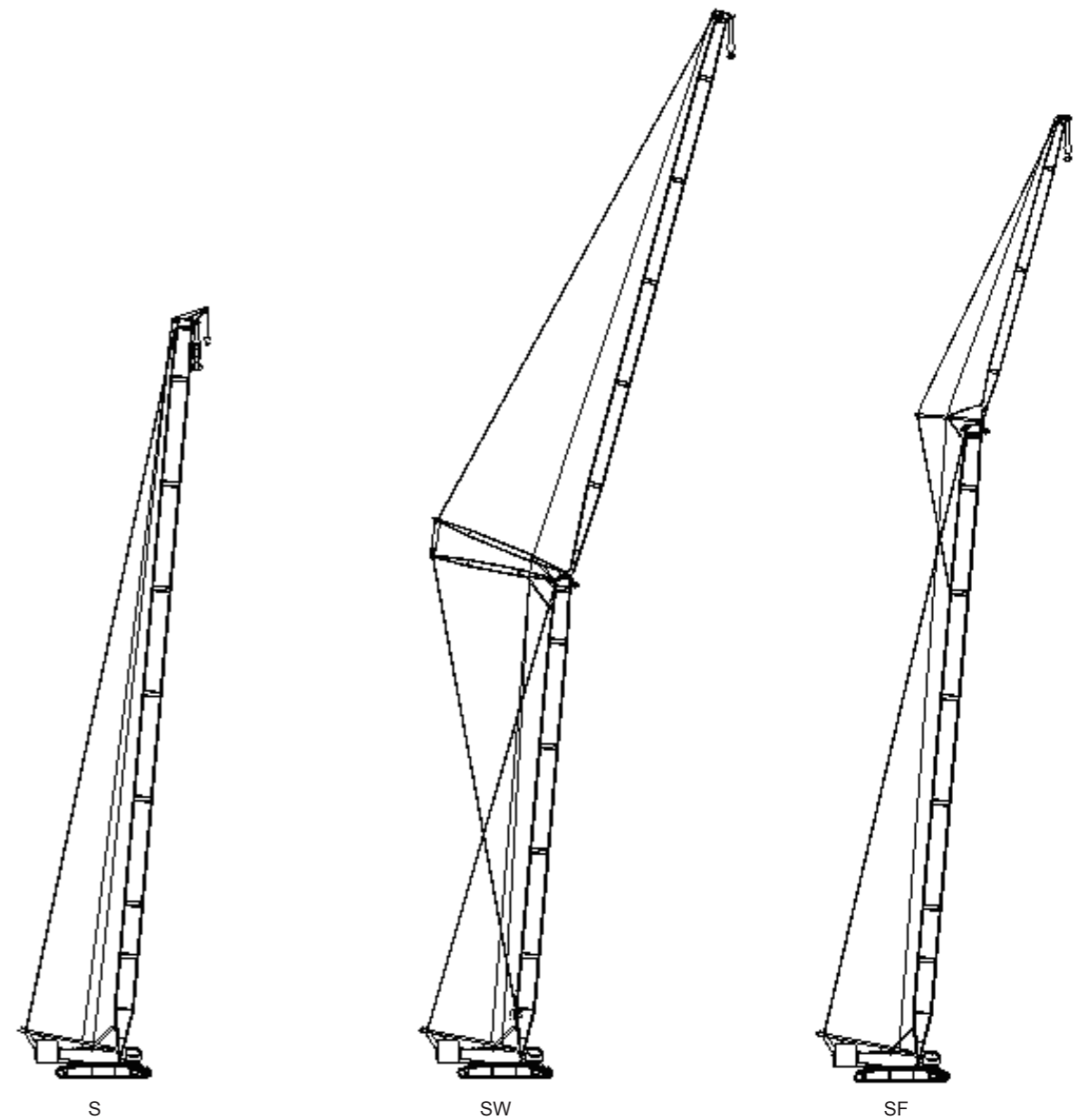
**9. Hook**

All hooks have a rotating hook and safety latch.  
 200t main hook(optional): equipped with 8 pulleys;  
 130t hook: equipped with 4 pulleys;  
 65t hook: equipped with 2 pulleys;  
 30t hook: equipped with 1 pulley;  
 16t hook (optional): single hook.

**III. Description of Boom Assembly**

**Descriptions of Boom Assembly Codes**

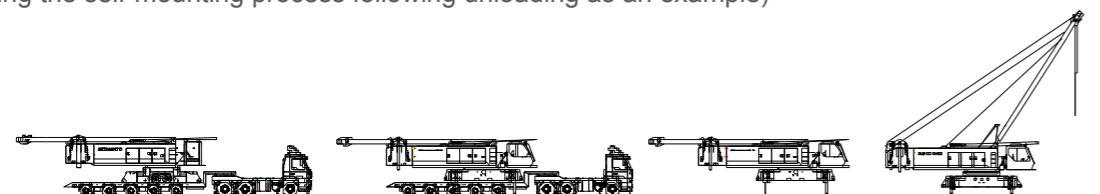
Code	Type	Operation mode parameters
S	Heavy duty boom	20 ~ 83m
SW	Luffing fly jib	Main boom: 35~59m Fly jib: 21~51m
SF	Fixed fly jib	Main boom: 47~71m Fly jib: 12~30m



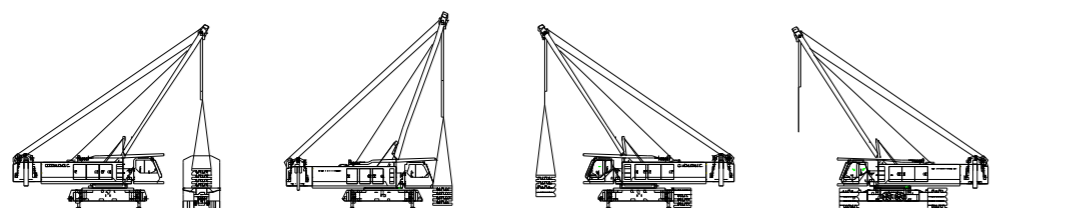


## IV. Self-Mounting and Dismounting Functions

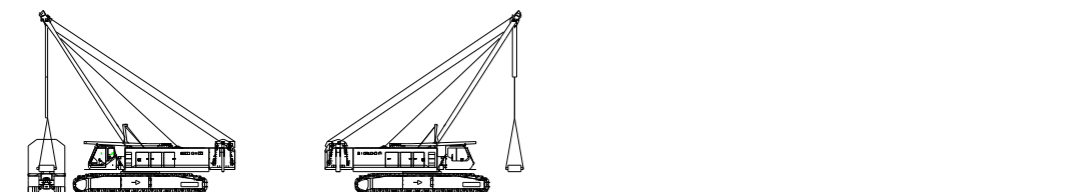
(Taking the self-mounting process following unloading as an example)



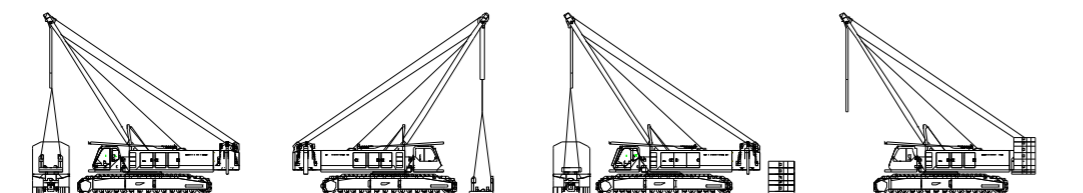
Unloading of main machine



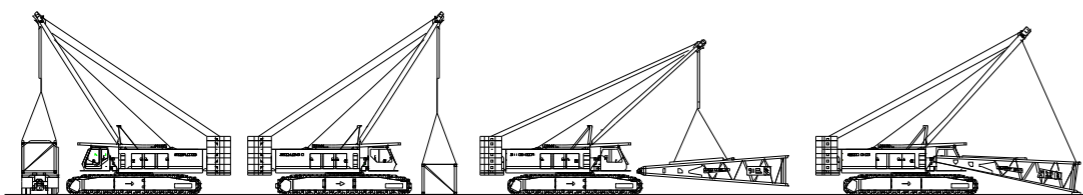
Unloading and assembling of crawler carrier



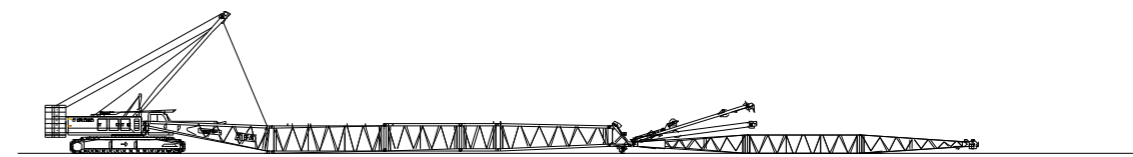
Unloading and assembling of vehicle body ballast weight



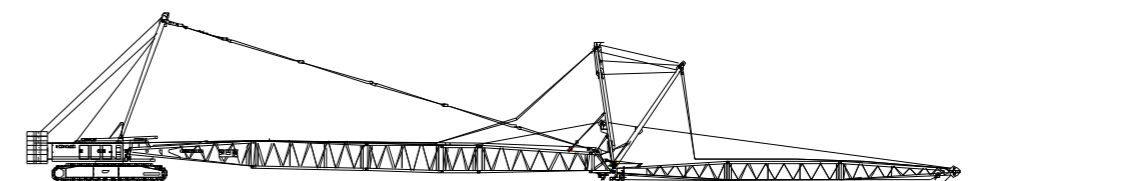
Unloading and assembling of counterweight base plate and counterweight



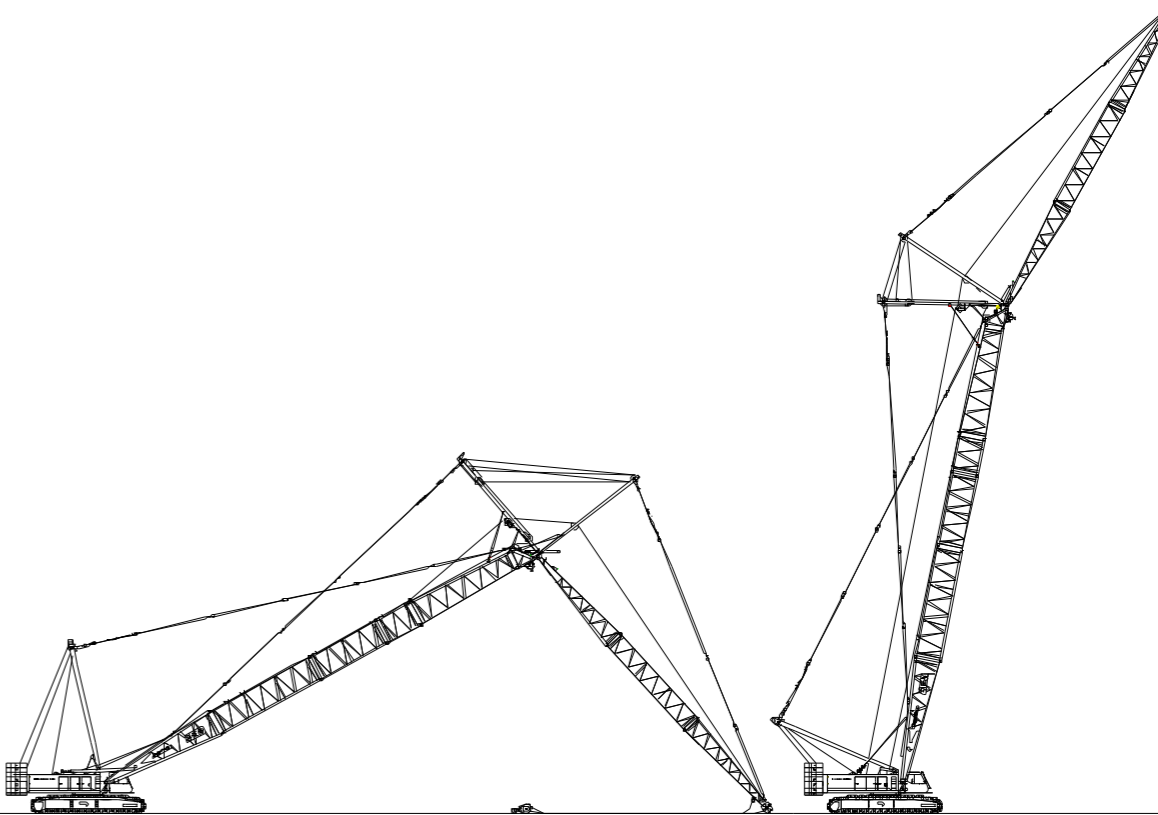
Unloading and assembling of boom



Boom and assembling



Anchoring rods and assembling



Boom and lifting

Operating mode

# V. Lifting Performance

## 10. Lifting Characteristics of Main Boom

Main Boom Lifting Height Characteristics Curve

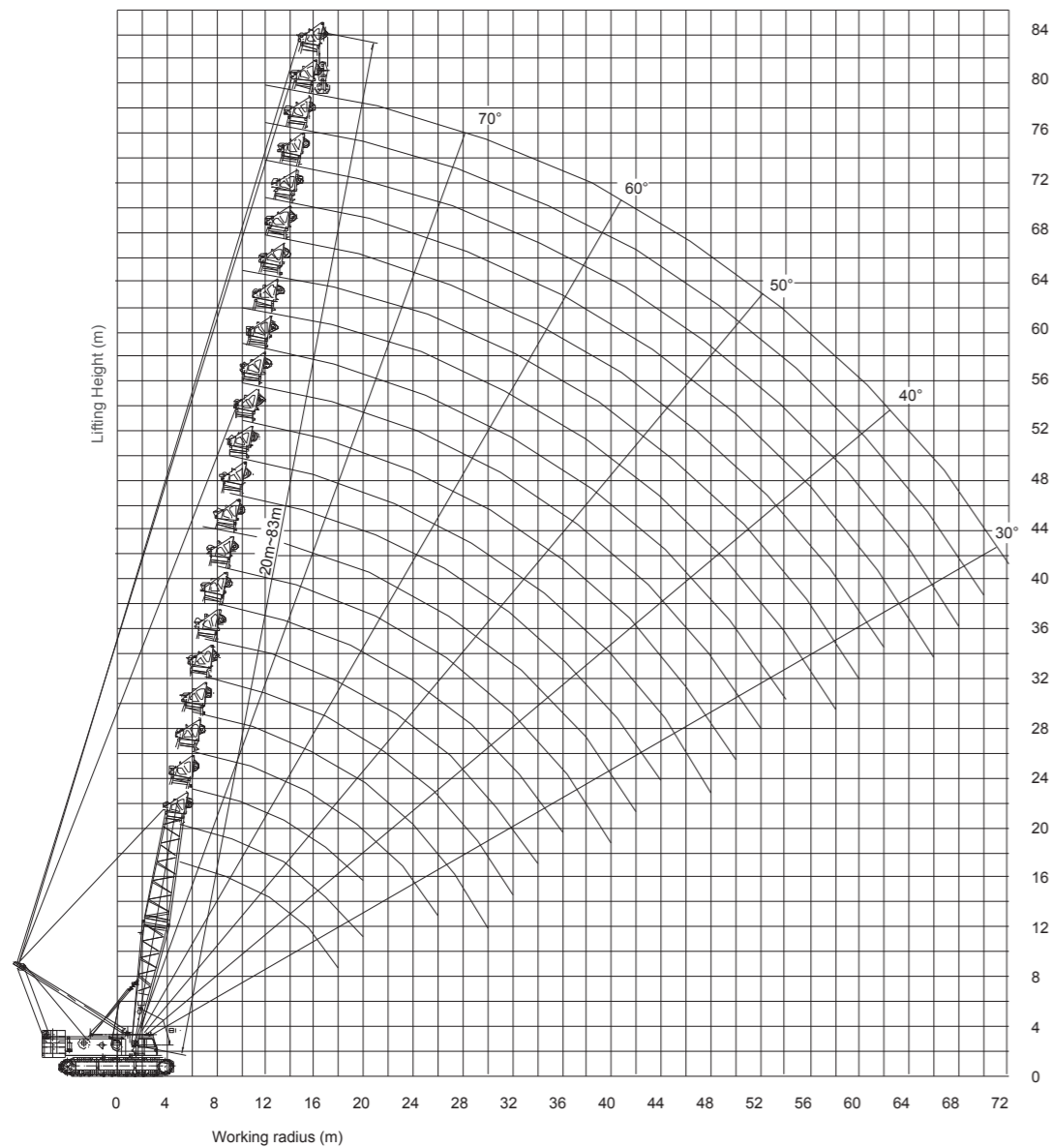


Table of Main Boom Lifting Performance (I)

Unit of measurement: t

Length of main boom (m)	20	23	26	29	32	35	38	41	44	47	50
Radius (m)											
5	200	178.0/5.4									
6	199	178.0	166.6	143.3/6.4							
7	173.3	170.4	156.6	143.3	131.3	112.5/7.5					
8	144.0	141.8	139.7	137.5	131.3	110.5	106.5	97.6/8.5			
9	121.0	119.9	118.2	116.6	115.0	106.5	106.5	95.6	93.7	85.6/9.6	
10	103.3	103.1	102.4	101.1	99.8	98.5	97.2	93.7	93.7	82.6	80.6/10.1
12	79.8	79.5	79.3	79.0	78.7	77.7	76.8	75.9	74.9	74.0	73.1
14	64.8	64.5	64.3	64.0	63.8	63.5	63.2	62.5	61.7	61.0	60.2
16	54.4	54.1	53.9	53.6	53.4	53.1	52.8	52.6	52.3	51.7	51.0
18	46.8	46.5	46.3	46.0	45.7	45.5	45.2	44.9	44.7	44.4	44.1
20		40.7	40.4	40.2	39.9	39.6	39.4	39.1	38.8	38.6	38.3
22			35.8	35.6	35.3	35.0	34.8	34.5	34.2	33.9	33.7
24			33.9	31.8	31.6	31.3	31.0	30.7	30.5	30.2	29.9
26				28.8	28.5	28.2	27.9	27.7	27.4	27.1	26.8
28					25.9	25.6	25.3	25.1	24.8	24.5	24.2
30					24.8/29	23.4	23.1	22.9	22.6	22.3	22.0
32						22.4/31	21.2	21.0	20.7	20.4	20.1
34							19.6	19.3	19.0	18.7	18.5
36								17.8	17.6	17.3	17.0
38									16.3	16.0	15.7
40									15.7/39	14.8	14.6
42										13.8	13.5
44											12.6

Table of Main Boom Lifting Performance (II)

Unit of measurement: t

Length of main boom (m)	53	56	59	62	65	68	71	74	77	80	83
Radius (m)											
10	73.7/10.6	68.6/11.1	63.3/11.6								
12	71.2	68.1	63.3	57.5/12.2	53.7/12.7	50.0/13.2	42.2/13.7				
14	60.3	59.6	59.2	55.2	53.7	50.0	42.2	37.5/14.3	35.0/14.8	30.7/15.3	28.2/15.8
16	51.1	50.5	51.2	49.4	48.8	48.2	41.8	37.5	34.0	30.7	28.1
18	43.9	43.6	43.1	42.6	42.1	41.6	39.9	36.5	33.5	30.5	27.4
20	38.0	37.8	37.5	37.2	36.8	36.3	35.9	35.4	32.0	28.8	25.8
22	33.4	33.1	32.9	32.6	32.3	32.0	31.7	31.3	30.8	26.5	24.6
24	29.7	29.4	29.1	28.8	28.6	28.3	28.0	27.7	27.4	25.2	23.0
26	26.6	26.3	26.0	25.7	25.5	25.2	24.9	24.6	24.4	24.1	21.5
28	24.0	23.7	23.4	23.1	22.9	22.6	22.3	22.0	21.8	21.5	21.0
30	21.8	21.5	21.2	20.9	20.6	20.4	20.1	19.8	20.0	19.6	19.0
32	19.8	19.6	19.3	19.0	18.7	18.5	18.2	17.9	17.8	17.8	17.6
34	18.2	17.9	17.6	17.3	17.1	16.8	16.5	16.2	16.2	16.0	16.0
36	16.7	16.4	16.2	15.9	15.6	15.3	15.0	14.8	14.5	14.6	14.5
38	15.4	15.1	14.9	14.6	14.3	14.0	13.7	13.5	13.5	13.5	13.5
40	14.3	14.0	13.7	13.4	13.1	12.9	12.6	12.6	12.3	12.2	12.1
42	13.2	13.0	12.7	12.4	12.1	11.8	11.5	11.6	11.3	11.5	11.0
44	12.3	12.0	11.7	11.5	11.2	10.9	10.6	10.7	10.4	10.5	10.3
46	11.5	11.2	10.9	10.6	10.3	10.0	9.8	9.7	9.5	9.5	9.0
48	11.1/47	10.4	10.1	9.8	9.6	9.3	9.0	8.9	8.6	8.5	8.0
50		10.0/49	9.4	9.1	8.8	8.6	8.6	8.3	8.1	8.0	7.5
52			8.8	8.5	8.2	7.9	7.7	7.6	7.5	7.3	6.9
54				7.9	7.6	7.3	7.2	7.1	6.9	6.8	6.2
56					7.0	6.8	6.6	6.6	6.3	6.2	5.8
58						6.8/57	6.5	6.7		5.8	5.2
60							5.8	5.8		5.3	4.8
62								5.3		4.8	4.4
64										4.4	3.8
66										4.0	3.5
68										3.3	2.7
70											2.7
72											2.1

**2. Lifting Characteristics of Main Boom + Fixed Fly Jib**

Main Boom + Fixed Fly Jib Lifting Height Characteristics Curve (I)

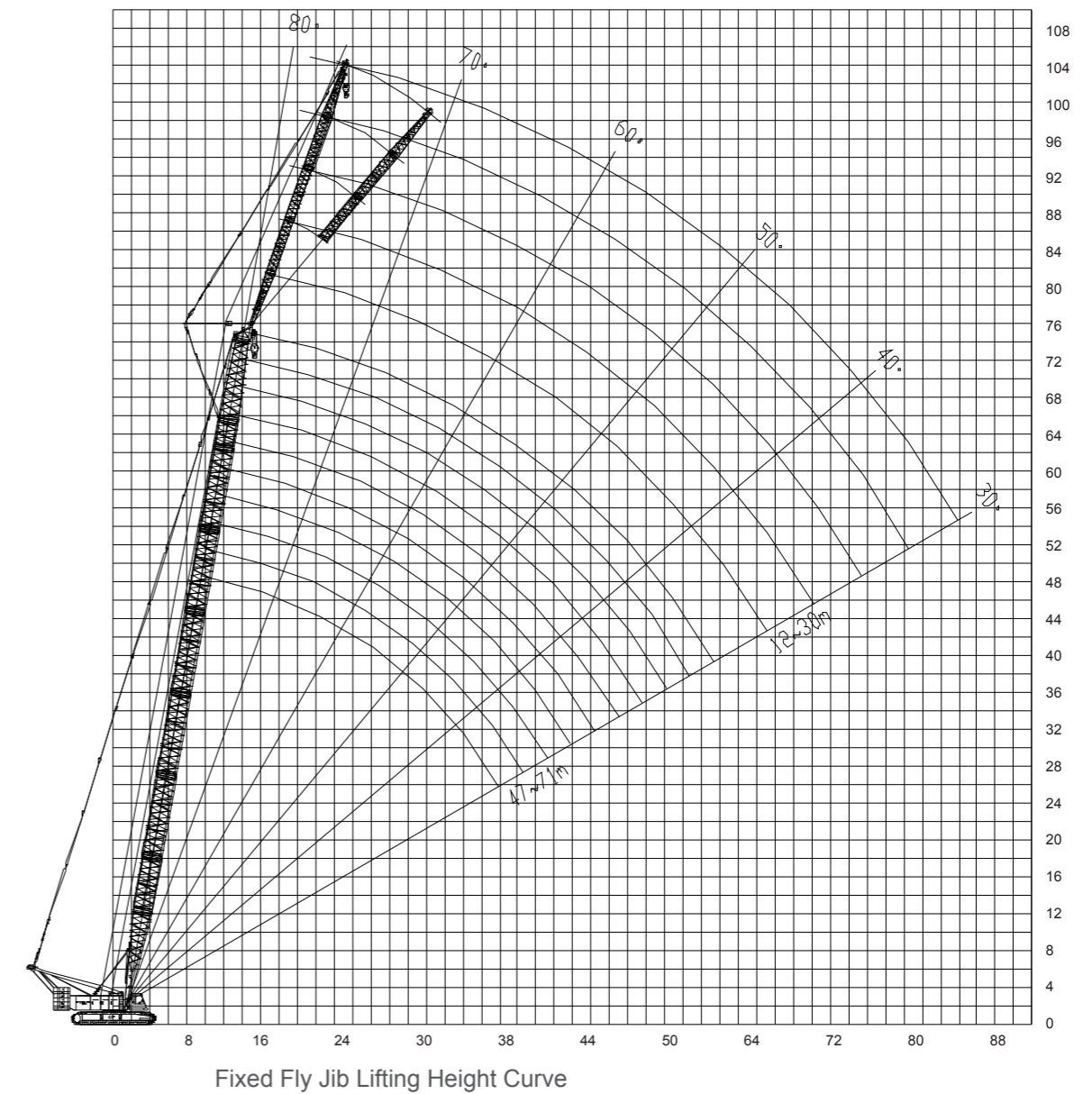




Table of Fixed Fly Jib Lifting Performance (I)

Unit of measurement: t

Length of main boom (m)	47							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
14.0	32							
16.0	31.5		23.5					
18.0	30.8	27.1	22.9		17.1			
20.0	30.2	26.7	22.4		16.8		12.3	
22.0	29.6	26.5	22.0	19.0	16.4		12.0	
24.0	28.8	26.2	21.5	18.7	16.0		11.8	
26.0	25.9	25.9	21.1	18.5	15.7	13.6	11.5	
28.0	23.4	23.8	20.7	18.3	15.3	13.4	11.2	
30.0	21.4	21.7	20.2	18.0	15.0	13.2	10.9	
32.0	19.5	19.9	19.8	17.9	14.7	13.0	10.7	
34.0	18.0	18.3	18.3	17.7	14.5	12.9	10.4	
36.0	16.7	16.9	16.9	17.4	14.2	12.7	10.2	
38.0	15.5	15.7	15.7	16.2	14.0	12.6	9.9	9.2
40.0	14.4	14.6	14.7	15.0	13.8	12.4	9.7	9.0
42.0	13.5	13.6	13.7	14.1	13.5	12.3	9.5	8.9
44.0	12.6	12.8	12.9	13.2	13.0	12.2	9.3	8.7
46.0	11.8	12.0	12.0	12.3	12.3	12.1	9.1	8.6
48.0	11.1	11.2	11.4	11.6	11.5	11.9	8.9	8.5
50.0	10.5	10.5	10.7	10.9	10.9	11.2	8.8	8.3
52.0	9.8	9.9	10.1	10.2	10.3	10.6	8.6	8.3
54.0			9.5	9.7	9.7	10.0	8.5	8.1
56.0			9.0	9.1	9.2	9.4	8.3	8.0
58.0			8.2	8.6	8.7	8.9	8.3	7.8
60.0				7.7	8.3	8.4	8.0	7.7
62.0					7.6	8.0	7.9	7.6
64.0					6.8	7.4	7.6	7.5
66.0						6.5	7.1	7.4
68.0							6.4	7.4
70.0							5.7	7.3
72.0								7.3

Table of Fixed Fly Jib Lifting Performance (II)

Unit of measurement: t

Length of main boom (m)	50							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
14.0								
16.0	32							
18.0	31.1	27.1	23.1					
20.0	30.5	26.7	22.6		16.8			
22.0	29.9	26.5	22.1	19.0	16.5		12.1	
24.0	28.6	26.3	21.7	18.9	16.2		11.9	
26.0	25.7	26.1	21.3	18.6	15.8	13.6	11.6	
28.0	23.2	23.8	20.8	18.3	15.5	13.5	11.3	
30.0	21.2	21.7	20.5	18.2	15.2	13.2	11.1	9.2
32.0	19.4	19.8	19.7	18.0	14.9	13.1	10.8	9.1
34.0	17.8	18.2	18.1	17.8	14.7	12.9	10.5	8.9
36.0	16.5	16.8	16.8	17.3	14.4	12.8	10.3	8.8
38.0	15.3	15.6	15.6	16.0	14.1	12.6	10.1	8.6
40.0	14.2	14.5	14.5	14.9	13.9	12.5	9.8	8.6
42.0	13.2	13.5	13.5	13.9	13.7	12.4	9.6	8.4
44.0	12.4	12.6	12.6	13.0	12.9	12.3	9.5	8.3
46.0	11.7	11.8	11.9	12.2	12.1	12.2	9.2	8.2
48.0	10.9	11.1	11.1	11.4	11.4	11.8	9.1	8.0
50.0	10.2	10.4	10.5	10.8	10.7	11.1	8.9	7.9
52.0	9.6	9.8	9.9	10.2	10.1	10.5	8.8	7.8
54.0	9.1	9.2	9.3	9.5	9.5	9.8	8.6	7.7
56.0	8.2	8.5	8.9	9.0	9.0	9.3	8.5	7.6
58.0			8.3	8.5	8.6	8.8	8.3	7.5
60.0			7.7	8.0	8.1	8.3	8.3	7.4
62.0				7.2	7.7	7.9	7.8	7.4
64.0					7.1	7.4	7.4	7.3
66.0					6.4	6.9	7.1	7.3
68.0						6.1	6.5	7.0
70.0							5.9	6.5
72.0							5.3	5.9
74.0								5.2



Table of Fixed Fly Jib Lifting Performance (III)

Unit of measurement: t

Length of main boom (m)	53							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
14.0								
16.0	32							
18.0	31.3		23.1					
20.0	30.7	27.1	22.6		16.8			
22.0	30.2	26.6	22.3		16.6		12.1	
24.0	28.5	26.4	21.9	18.9	16.3		12.0	
26.0	25.6	26.2	21.4	18.6	15.9		11.7	
28.0	23.1	23.6	21.1	18.4	15.6	13.5	11.4	
30.0	21.1	21.5	20.7	18.3	15.3	13.3	11.1	9.2
32.0	19.2	19.7	19.5	18.0	15.0	13.2	10.9	9.1
34.0	17.7	18.0	18.0	17.9	14.8	13.0	10.7	8.9
36.0	16.3	16.7	16.6	17.1	14.5	12.9	10.5	8.9
38.0	15.1	15.4	15.4	15.9	14.3	12.7	10.2	8.7
40.0	14.1	14.4	14.4	14.8	14.1	12.6	10.0	8.6
42.0	13.1	13.4	13.4	13.8	13.6	12.5	9.8	8.5
44.0	12.3	12.5	12.5	12.9	12.7	12.3	9.5	8.4
46.0	11.4	11.7	11.7	12.0	12.0	12.3	9.4	8.3
48.0	10.8	10.9	11.0	11.3	11.2	11.7	9.2	8.1
50.0	10.1	10.2	10.4	10.6	10.5	11.0	9.0	8.0
52.0	9.5	9.6	9.8	10.0	9.9	10.3	8.9	7.9
54.0	8.9	9.0	9.2	9.4	9.4	9.7	8.7	7.7
56.0	8.4	8.5	8.6	8.9	8.9	9.2	8.6	7.7
58.0	7.6	7.9	8.2	8.3	8.4	8.6	8.5	7.6
60.0		7.6	7.7	7.9	8.0	8.2	8.1	7.4
62.0			7.1	7.4	7.5	7.7	7.7	7.4
64.0			6.2	6.6	7.1	7.4	7.3	7.4
66.0					6.5	6.9	6.9	7.2
68.0					5.9	6.4	6.6	6.8
70.0						5.6	6.0	6.5
72.0							5.4	6.0
74.0								5.4
76.0								4.8

Table of Fixed Fly Jib Lifting Performance (IV)

Unit of measurement: t

Length of main boom (m)	56							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
16.0	32							
18.0	31.5		23.1					
20.0	30.9	27	22.6		16.8			
22.0	30.4	26.6	22.5		16.6		12.1	
24.0	28.3	26.5	22.0	18.9	16.4		12.0	
26.0	25.4	26.0	21.7	18.7	16.1		11.8	
28.0	22.9	23.5	21.3	18.6	15.8	13.5	11.5	
30.0	20.9	21.4	20.9	18.3	15.5	13.4	11.3	
32.0	19.1	19.5	19.4	18.1	15.2	13.2	11.0	9.2
34.0	17.5	18.0	17.8	18.0	15.0	13.1	10.8	9.1
36.0	16.2	16.5	16.5	17.1	14.7	12.9	10.5	8.9
38.0	15.0	15.3	15.3	15.8	14.4	12.8	10.3	8.8
40.0	13.9	14.2	14.2	14.7	14.2	12.6	10.2	8.6
42.0	12.9	13.2	13.2	13.7	13.5	12.6	9.9	8.6
44.0	12.1	12.3	12.3	12.7	12.6	12.4	9.7	8.4
46.0	11.3	11.5	11.6	12.0	11.8	12.3	9.5	8.3
48.0	10.6	10.8	10.8	11.2	11.1	11.5	9.3	8.3
50.0	9.9	10.1	10.2	10.5	10.4	10.8	9.2	8.1
52.0	9.3	9.5	9.5	9.8	9.8	10.2	9.0	8.0
54.0	8.8	8.9	9.0	9.2	9.2	9.6	8.9	7.8
56.0	8.3	8.3	8.5	8.7	8.7	9.0	8.7	7.7
58.0	7.8	7.9	8.0	8.2	8.3	8.6	8.4	7.7
60.0	6.9	7.3	7.6	7.7	7.8	8.0	8.0	7.5
62.0			7.1	7.3	7.4	7.6	7.5	7.4
64.0			6.5	6.9	7.0	7.2	7.1	7.4
66.0			5.8	6.2	6.6	6.8	6.8	7.1
68.0					6.0	6.5	6.5	6.7
70.0					5.3	5.9	6.0	6.4
72.0						5.2	5.5	6.0
74.0							5.0	5.6
76.0							4.4	5.0
78.0								4.4
80.0								



Table of Fixed Fly Jib Lifting Performance (V)

Unit of measurement: t

Length of main boom (m)	59							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
16.0	32							
18.0	31.7		23.1					
20.0	31.1	27	22.6		16.8			
22.0	30.6	26.6	22.4		16.6		12.1	
24.0	28.2	26.5	22.2	18.9	16.5		12	
26.0	25.3	25.9	21.8	18.8	16.2		11.9	
28.0	22.8	23.4	21.4	18.6	15.9	13.5	11.7	
30.0	20.7	21.2	21.1	18.4	15.6	13.4	11.4	
32.0	18.9	19.4	19.2	18.2	15.3	13.3	11.1	9.2
34.0	17.4	17.8	17.7	18.0	15.1	13.2	10.9	9.1
36.0	16.0	16.4	16.3	16.9	14.8	13.0	10.7	8.9
38.0	14.8	15.2	15.1	15.6	14.6	12.9	10.5	8.8
40.0	13.8	14.1	14.1	14.5	14.3	12.7	10.2	8.7
42.0	12.8	13.1	13.1	13.5	13.3	12.6	10.0	8.6
44.0	11.9	12.2	12.2	12.6	12.4	12.5	9.8	8.5
46.0	11.1	11.4	11.4	11.8	11.7	12.2	9.6	8.4
48.0	10.4	10.6	10.7	11.1	10.9	11.4	9.5	8.3
50.0	9.8	9.9	10.0	10.4	10.2	10.7	9.3	8.2
52.0	9.2	9.3	9.4	9.7	9.6	10.1	9.2	8.0
54.0	8.6	8.7	8.9	9.1	9.1	9.5	9.0	7.9
56.0	8.1	8.2	8.3	8.6	8.6	8.9	8.7	7.8
58.0	7.6	7.7	7.9	8.1	8.0	8.4	8.3	7.7
60.0	7.1	7.3	7.4	7.6	7.7	8.0	7.8	7.6
62.0	6.4	6.7	7.0	7.2	7.2	7.5	7.4	7.5
64.0		5.9	6.6	6.8	6.8	7.1	7.0	7.4
66.0			5.9	6.4	6.5	6.7	6.6	7.0
68.0			5.3	5.6	6.0	6.3	6.3	6.6
70.0				5.0	5.4	5.9	5.9	6.2
72.0					4.9	5.3	5.5	5.9
74.0						4.8	5.0	5.6
76.0						4.3	4.5	5.0
78.0							4.1	4.5
80.0								4.1
82.0								3.8

Table of Fixed Fly Jib Lifting Performance (VI)

Unit of measurement: t

Length of main boom (m)	62							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
16.0								
18.0	32							
20.0	31.3	27	23.1					
22.0	30.8	26.6	22.6		16.8			
24.0	28.0	26.1	22.3	18.9	16.6		12.1	
26.0	25.1	25.8	22.0	18.7	16.3		12.0	
28.0	22.6	23.2	21.6	18.6	16.0	13.5	11.7	
30.0	20.5	21.1	20.9	18.5	15.7	13.4	11.4	
32.0	18.8	19.2	19.1	18.3	15.5	13.3	11.2	9.2
34.0	17.2	17.7	17.5	18.1	15.2	13.2	11.0	9.1
36.0	15.9	16.2	16.2	16.8	15.0	13.0	10.8	9.0
38.0	14.7	15.0	15.0	15.6	14.7	12.9	10.5	8.9
40.0	13.5	13.9	13.8	14.4	14.1	12.8	10.4	8.7
42.0	12.6	12.9	12.9	13.4	13.2	12.6	10.2	8.6
44.0	11.7	12.0	12.0	12.5	12.3	12.6	9.9	8.6
46.0	11.0	11.2	11.2	11.7	11.5	12.0	9.8	8.4
48.0	10.2	10.5	10.5	10.9	10.8	11.3	9.6	8.3
50.0	9.5	9.8	9.8	10.2	10.1	10.6	9.4	8.3
52.0	9.0	9.2	9.2	9.5	9.5	9.9	9.2	8.1
54.0	8.4	8.6	8.7	9.0	8.9	9.3	9.1	8.0
56.0	7.9	8.0	8.2	8.4	8.4	8.8	8.6	7.9
58.0	7.4	7.6	7.7	8.0	7.9	8.3	8.1	7.8
60.0	7.0	7.1	7.3	7.5	7.4	7.8	7.7	7.7
62.0	6.5	6.7	6.8	7.1	7.1	7.4	7.2	7.6
64.0	5.9	6.2	6.5	6.6	6.7	6.9	6.8	7.2
66.0	5.1	5.4	6.0	6.2	6.3	6.5	6.5	6.8
68.0			5.4	5.8	5.9	6.2	6.2	6.5
70.0			4.7	5.1	5.4	5.9	5.8	6.1
72.0				4.5	4.9	5.5	5.5	5.8
74.0					4.4	4.9	5.0	5.5
76.0					4.1	4.4	4.5	5.1
78.0						4.0	4.2	4.6
80.0							3.9	4.2
82.0								3.9
84.0								3.6



Table of Fixed Fly Jib Lifting Performance (VII)

Unit of measurement: t

Length of main boom (m)	62							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
16.0								
18.0	32							
20.0	31.3	27	23.1					
22.0	30.8	26.6	22.6		16.8			
24.0	28.0	26.1	22.3	18.9	16.6		12.1	
26.0	25.1	25.8	22.0	18.7	16.3		12.0	
28.0	22.6	23.2	21.6	18.6	16.0	13.5	11.7	
30.0	20.5	21.1	20.9	18.5	15.7	13.4	11.4	
32.0	18.8	19.2	19.1	18.3	15.5	13.3	11.2	9.2
34.0	17.2	17.7	17.5	18.1	15.2	13.2	11.0	9.1
36.0	15.9	16.2	16.2	16.8	15.0	13.0	10.8	9.0
38.0	14.7	15.0	15.0	15.6	14.7	12.9	10.5	8.9
40.0	13.5	13.9	13.8	14.4	14.1	12.8	10.4	8.7
42.0	12.6	12.9	12.9	13.4	13.2	12.6	10.2	8.6
44.0	11.7	12.0	12.0	12.5	12.3	12.6	9.9	8.6
46.0	11.0	11.2	11.2	11.7	11.5	12.0	9.8	8.4
48.0	10.2	10.5	10.5	10.9	10.8	11.3	9.6	8.3
50.0	9.5	9.8	9.8	10.2	10.1	10.6	9.4	8.3
52.0	9.0	9.2	9.2	9.5	9.5	9.9	9.2	8.1
54.0	8.4	8.6	8.7	9.0	8.9	9.3	9.1	8.0
56.0	7.9	8.0	8.2	8.4	8.4	8.8	8.6	7.9
58.0	7.4	7.6	7.7	8.0	7.9	8.3	8.1	7.8
60.0	7.0	7.1	7.3	7.5	7.4	7.8	7.7	7.7
62.0	6.5	6.7	6.8	7.1	7.1	7.4	7.2	7.6
64.0	5.9	6.2	6.5	6.6	6.7	6.9	6.8	7.2
66.0	5.1	5.4	6.0	6.2	6.3	6.5	6.5	6.8
68.0			5.4	5.8	5.9	6.2	6.2	6.5
70.0			4.7	5.1	5.4	5.9	5.8	6.1
72.0				4.5	4.9	5.5	5.5	5.8
74.0					4.4	4.9	5.0	5.5
76.0					4.1	4.4	4.5	5.1
78.0						4.0	4.2	4.6
80.0							3.9	4.2
82.0								3.9
84.0								3.6

Table of Fixed Fly Jib Lifting Performance (VIII)

Unit of measurement: t

Length of main boom (m)	65							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
16.0								
18.0	32							
20.0	31.5		23.1					
22.0	31.0	27	22.6		16.8			
24.0	27.7	26.7	22.3		16.6		12.1	
26.0	25.0	25.6	22.1	18.9	16.4		12.0	
28.0	22.5	23.2	21.7	18.7	16.1	13.5	11.8	
30.0	20.4	21.0	20.8	18.6	15.9	13.4	11.6	
32.0	18.6	19.2	18.9	18.3	15.6	13.2	11.4	
34.0	17.1	17.5	17.4	18.1	15.3	13.1	11.1	9.2
36.0	15.7	16.2	16.0	16.7	15.1	12.9	10.9	9.1
38.0	14.5	14.9	14.8	15.4	14.9	12.9	10.7	8.9
40.0	13.4	13.8	13.7	14.3	14.0	12.7	10.5	8.8
42.0	12.4	12.8	12.7	13.2	13.0	12.6	10.2	8.7
44.0	11.6	11.9	11.9	12.3	12.1	12.0	10.1	8.6
46.0	10.8	11.1	11.1	11.5	11.4	11.1	9.8	8.5
48.0	10.1	10.3	10.4	10.8	10.6	10.5	9.7	8.4
50.0	9.4	9.6	9.7	10.1	9.9	9.8	9.5	8.3
52.0	8.8	9.0	9.1	9.5	9.3	9.2	9.4	8.2
54.0	8.3	8.5	8.5	8.9	8.7	8.6	8.9	8.1
56.0	7.7	8.0	8.0	8.3	8.3	8.1	8.4	8.0
58.0	7.3	7.4	7.5	7.8	7.7	7.7	8.0	7.9
60.0	6.8	7.0	7.1	7.4	7.3	7.2	7.5	7.7
62.0	6.5	6.5	6.7	6.9	6.9	6.8	7.1	7.5
64.0	5.9	6.2	6.3	6.5	6.5	6.5	6.7	7.1
66.0	5.3	5.6	5.9	6.1	6.2	6.1	6.3	6.7
68.0	4.7	4.9	5.4	5.7	5.8	5.7	5.9	6.3
70.0			4.8	5.3	5.4	5.4	5.6	6.0
72.0				4.7	4.9	4.9	5.3	5.6
74.0				4.2	4.4	4.4	4.9	5.3
76.0					4.1	4.1	4.4	5.0
78.0						3.8	4.2	4.6
80.0							3.9	4.3
82.0							3.6	4.0
84.0								3.7
86.0								3.3



Table of Fixed Fly Jib Lifting Performance (IX)

Unit of measurement: t

Length of main boom (m)	68							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
18.0	32							
20.0	31.7		23.1					
22.0	30.7	27	22.6		16.8			
24.0	27.4	26.6	22.3		16.6		12.1	
26.0	24.7	25.5	22.1	18.9	16.5		12.0	
28.0	22.3	23.0	21.9	18.7	16.2		11.9	
30.0	20.2	20.8	20.6	18.6	15.9	13.5	11.7	
32.0	18.4	19.0	18.8	18.4	15.7	13.4	11.4	
34.0	16.9	17.4	17.2	18.0	15.5	13.3	11.2	9.2
36.0	15.5	16.0	15.9	16.5	15.2	13.2	11.0	9.1
38.0	14.3	14.7	14.7	15.3	14.9	13.0	10.8	8.9
40.0	13.2	13.6	13.5	14.1	13.8	12.9	10.6	8.9
42.0	12.3	12.6	12.6	13.2	12.9	12.8	10.4	8.7
44.0	11.4	11.7	11.7	12.3	12.0	12.6	10.2	8.6
46.0	10.6	10.9	10.9	11.4	11.1	11.8	10.0	8.6
48.0	9.9	10.2	10.2	10.6	10.5	11.1	9.8	8.4
50.0	9.2	9.5	9.5	9.9	9.8	10.3	9.6	8.3
52.0	8.6	8.9	8.9	9.3	9.2	9.7	9.4	8.3
54.0	8.1	8.3	8.3	8.7	8.6	9.1	8.8	8.2
56.0	7.6	7.8	7.8	8.2	8.0	8.6	8.3	8.0
58.0	7.1	7.3	7.4	7.7	7.6	8.0	7.8	8.0
60.0	6.7	6.8	6.9	7.2	7.1	7.5	7.4	7.8
62.0	6.2	6.4	6.5	6.8	6.8	7.1	6.9	7.4
64.0	5.9	6.0	6.2	6.4	6.3	6.7	6.5	7.0
66.0	5.3	5.6	5.8	5.9	6.0	6.3	6.2	6.6
68.0	4.7	5.0	5.4	5.6	5.6	5.9	5.8	6.2
70.0	4.2	4.4	4.8	5.3	5.3	5.6	5.5	5.9
72.0		4.0	4.4	4.7	4.9	5.3	5.2	5.6
74.0			4.1	4.3	4.4	4.9	4.8	5.2
76.0			3.7	3.9	4.1	4.4	4.4	4.9
78.0				3.5	3.8	4.1	4.1	4.5
80.0					3.5	3.8	3.9	4.2
82.0						3.5	3.6	3.9
84.0						3.2	3.4	3.7
86.0								3.4

Table of Fixed Fly Jib Lifting Performance (X)

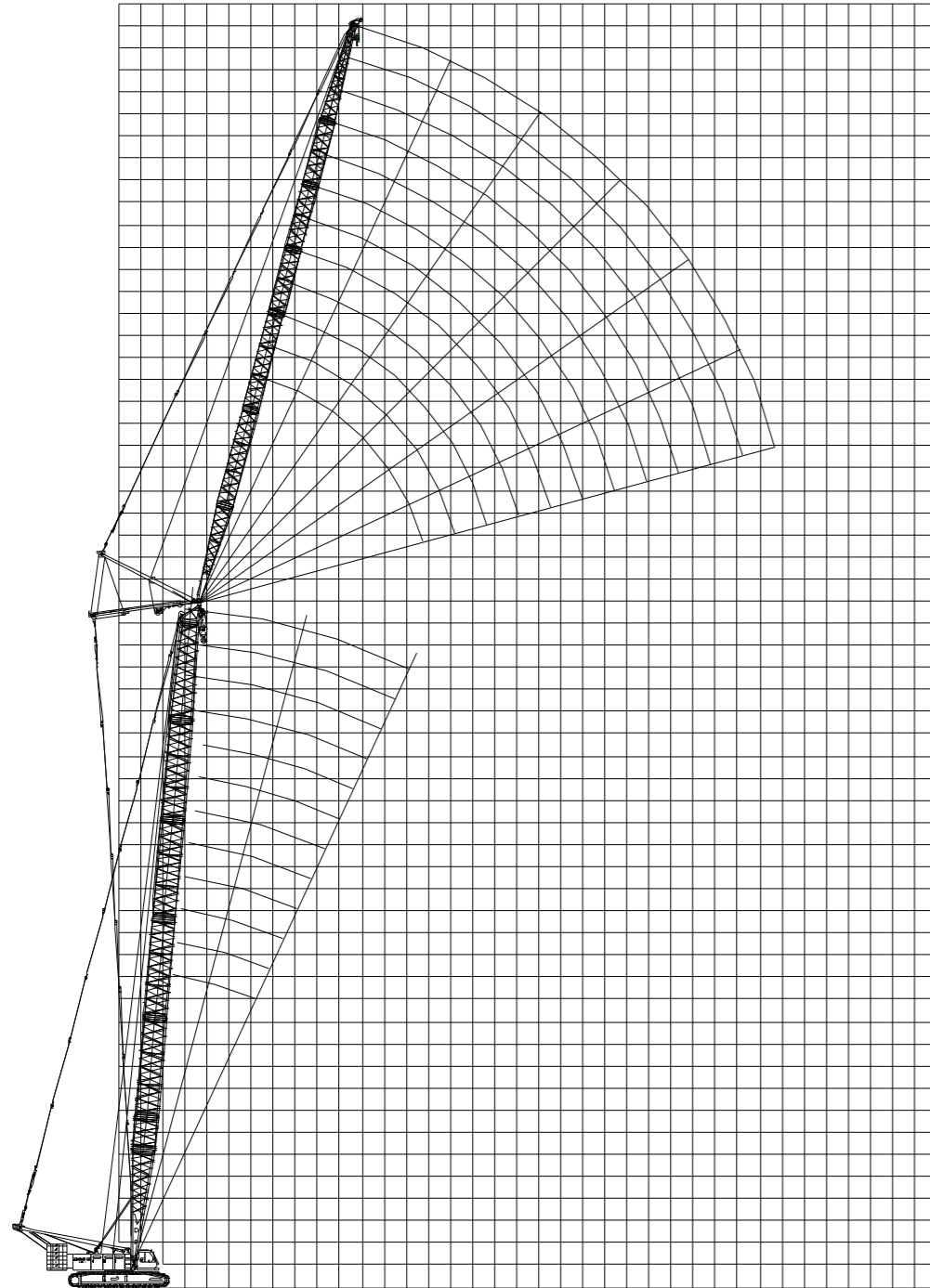
Unit of measurement: t

Length of main boom (m)	71							
	12		18		24		30	
Length of fly jib (m)	Angle (°)							
	10°	30°	10°	30°	10°	30°	10°	30°
18.0	32							
20.0	31.8		23.1					
22.0	30.4	27	22.6		16.8			
24.0	27.1	26.5	22.3		16.7			
26.0	24.5	25.3	22.1	18.9	16.5			
28.0	22.2	22.9	22.0	18.7	16.3			
30.0	20.1	20.8	20.5	18.6	16.1	13.5		
32.0	18.3	18.9	18.6	18.5	15.8	13.4		
34.0	16.8	17.3	17.1	17.9	15.6	13.3		9.2
36.0	15.3	15.9	15.7	16.5	15.3	13.2		9.1
38.0	14.1	14.6	14.5	15.2	14.7	13.1		9.0
40.0	13.1	13.5	13.4	14.1	13.7	12.9		8.9
42.0	12.1	12.5	12.4	13.0	12.7	12.9	12.1	8.8
44.0	11.3	11.6	11.6	12.1	11.8	12.6	12.0	8.6
46.0	10.5	10.8	10.8	11.3	11.0	11.7	11.7	8.6
48.0	9.8	10.1	10.0	10.5	10.3	10.9	11.5	8.5
50.0	9.1	9.4	9.4	9.8	9.6	10.2	11.3	8.4
52.0	8.5	8.7	8.8	9.2	9.0	9.5	11.1	8.3
54.0	7.9	8.2	8.2	8.6	8.4	8.9	10.8	8.3
56.0	7.4	7.7	7.7	8.0	7.9	8.4	10.7	8.1
58.0	6.9	7.1	7.2	7.5	7.4	7.9	10.5	8.0
60.0	6.5	6.7	6.8	7.1	7.0	7.4	10.3	7.7
62.0	6.1	6.2	6.3	6.6	6.5	7.0	10.1	7.3
64.0	5.7	5.9	5.9	6.2	6.2	6.5	9.9	6.8
66.0	5.3	5.5	5.6	5.9	5.8	6.2	9.8	6.5
68.0	4.7	5.0	5.3	5.5	5.5	5.8	9.2	6.1
70.0	4.3	4.5	4.8	5.1	5.2	5.4	8.6	5.7
72.0	3.9	4.1	4.4	4.7	4.7	5.1	8.1	5.4
74.0	3.6	3.8	4.1	4.3	4.4	4.8	7.7	5.1
76.0			3.8	4.0	4.1	4.4	7.2	4.8
78.0				3.6	3.8	4.1	6.8	4.4
80.0				3.3	3.5	3.8	6.4	4.2
82.0					3.3	3.5	6.0	3.9
84.0					3.0	3.2	5.6	3.7
86.0						2.9		3.5
88.0								3.2



## 2. Lifting Characteristics of Main Boom + Luffing Fly Jib

Main Boom + Luffing Fly Jib Lifting Height Characteristics Curve



During crane operations where the angle of the main boom is 85 degrees: the luffing fly jib's working angle ranges from 15°~75°;  
 During crane operations where the angle of the main boom is 75 degrees: the luffing fly jib's working angle ranges from 15°~65°;  
 During crane operations where the angle of the main boom is 65 degrees: the luffing fly jib's working angle ranges from 15°~55°;  
 The angle of the luffing fly jib must maintain an angle at least 10° smaller than that of the main boom; when the main boom is working within the individual ranges of 65°~75°~85°, the rated lifting capacity shall be based on the lifting capacity between these two points.

Table of Main Boom + Luffing Fly Jib Lifting Performance (I)

Unit of measurement: t

Length of main boom (m)	35											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
10												
12	55			46.3/13								
14	51			43.6			40.5			38.3/15		
16	47			41.6			39.3			36.1		
18	40.3			37.1			37.9			34.8		
20	31.1	41.3/21		36.3			35			34.5		
22	24.1	36.8		28.8	36.6		33			34.2		
24	18.4	33		22.9	32.9		26.7	32.8		30.1	31.5/25	
26		30		18.1	29.9		21.7	29.8		24.9	29.8	
28		27.5			27.4		17.6	27.3		20.6	27.2	
30		25.3	24.2		25.3		14	25.2		17	25.1	
32			22.4		23.4	22.3		23.3		13.9	23.3	
34			20.9			20.8		18.8	20.7		21.7	
36			19.6			19.4		14.6	19.3		17.9	19.3
38						18.3			18.2		14.3	18.1
40									17.1			17
42									16.2			16.1
44												15.3



Table of Main Boom + Luffing Fly Jib Lifting Performance (II)

Unit of measurement: t

Length of main boom (m)	35											
	33			36			39			42		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
16	32.1			27.3/17								
18	28.7			25.5			23.3			20.8		
20	28.5			23.8			22.1			19.2		
22	28.3			23.3			21.4			18.4		
24	28			23			20.2			18.1		
26	27.3	28.6		22.8			19.9			17.8		
28	23.1	27.1		22.8	23.3		19.6			17.4		
30	19.5	25		21.2	23		18.9	19.3		16.2		
32	16.3	23.2		18.2	22.9		18.3	18.9		15	15.8	
34	13.6	21.6		15.6	21.4		16.8	18.7		14.8	15.4	
36	11.1	20.2		13.2	20.1		14.6	18.4		14.8	15.3	
38		16.9	17.9	11	18.8		12.7	18.3		13.5	15.1	
40		13.9	16.9		16	16.8	10.8	17.7		11.7	14.9	
42		11.2	16		13.3	15.8	9	15.1	15.8	10.3	14.8	
44			15.1		11	15		12.8	14.9	8.9	14.1	14.8
46			14.3			14.3		10.7	14.2		12.2	14.1
48			13.7			13.6		8.9	13.2		10.4	13.3
50						12.9				11.6	8.8	12.8
52										11.3		11.6
54												10.8
56												9.8

Table of Main Boom + Luffing Fly Jib Lifting Performance (III)

Unit of measurement: t

Length of main boom (m)	35								
	45			48			51		
Length of fly jib (m)	Angle (°)								
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°
16									
18	16.8/19								
20	16.2			14.1			11.1/21		
22	15.8			14.0			10.7		
24	14.5			13.2			10.3		
26	14.2			12.6			10.1		
28	14.9			12.4			9.8		
30	13.7			12.1			9.5		
32	12.8			11.6			9.3		
34	12.2	12.9		11.3			9.1		
36	12	12.7		11.1	10.4/35		8.9	8.6	
38	11.9	12.4		10.9	10.2		8.8	8.3	
40	11.8	12.3		10.8	9.9		8.6	8.1	
42	10.8	12		10.6	9.8		8.5	7.9	
44	9.5	11.9		9.9	9.6		8.3	7.8	
46	8.3	11.9	12.3	9.6	9.5		8.3	7.6	
48		11.1	12	8.7	9.4	9.8	7.3	7.4	
50		9.7	11.9	6.7	9.3	9.7	6.9	7.3	7.8
52		8.4	11.9		8.8	9.5	6.1	7.3	7.6
54			11.5		7.7	9.4		7.3	7.4
56			11		6.7	9.3		6.9	7.3
58			10.6			8.9		6	7.2
60						8.6			7.1
62						8.2			6.8
64									6.6



Table of Main Boom + Luffing Fly Jib Lifting Performance (IV)

Unit of measurement: t

Length of main boom (m)	38											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
12	55			46.3/13								
14	51			42.9			39.8					
16	48			40.8			38.4			38.3		
18	42			38.8			37			35.9		
20	32	38.5/21		33.6			35.4			34.5		
22	25.1	36.4		29.9	36.3/23		34.2			34.2		
24	19.2	32.8		23.8	32.7		27.7	32.6		31.2		
26		29.8		18.8	29.7		22.5	29.6	20.3/35	25.7	29.5	
28		27.3			27.2		18.3	27.1	19.1	21.3	27	
30		25.2	23.8/31		25.1		14.6	25	17.9	17.6	24.8	
32			22.1		23.3	22/33		23.2	16.8	14.4	23	
34			20.6		16.9	20.5		20.5	15.9		21.5	
36			19.3			19.2		16.6			19.9	18.2/37
38						18					16	17.8
40						17					12.6	16.8
42												15.8
44												15
46												14.3

Table of Main Boom + Luffing Fly Jib Lifting Performance (V)

Unit of measurement: t

Length of main boom (m)	38											
	33			36			39			42		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
16	32.1			26.5			23.3/17					
18	28.8			25.2			22.1			19.3		
20	28.6			23.8			21.9			18.8		
22	28.3			23.3			21.5			18.4		
24	28.1			23			21.2			18.1		
26	27.8			22.9			20.9			17.8		
28	23.9	26.9		22.8	23.5/29		19.7			17.4		
30	20.1	24.8		21.9	23.1		18.9	19.3/31		17.3		
32	16.9	22.9		18.8	22.8		18.3	19.1		17.1	15.9	
34	14.1	21.3		16.2	21.3		17.3	18.8		16.9	15.6	
36	11.5	20		13.6	19.9		15	18.5		15.8	15.3	
38		18.7	17.2/39	11.4	18.7		13	18.3		13.8	15.1	
40		15.4	16.7		17.6	16.1/41	11.2	17.5		12.1	15	
42		12.5	15.8		14.7	15.6	9.4	16.5	15.1/43	10.5	14.8	
44			14.9		12.2	14.8		14	14.7	9.1	14.7	14.6
46			14.2		9.8	14		11.8	13.9		13.3	13.8
48			13.4			13.3		9.8	13.3		11.3	13.2
50						12.8			12.7		9.6	12.5
52						12.2			12.1			11.9
54									11.5			11.4
56												10.9
58												9.5



Table of Main Boom + Luffing Fly Jib Lifting Performance (VI)

Unit of measurement: t

Length of main boom (m)	38								
	33			36			39		
Length of fly jib (m)	Angle (°)								
	85°	75°	65°	85°	75°	65°	85°	75°	65°
18	16.2/19								
20	15.9			14			11.1/21		
22	15.6			13.7			10.8		
24	15.2			13.3			10.4		
26	14.9			12.9			10.2		
28	14.7			12.7			9.8		
30	14.4			12.4			9.6		
32	14.3			12.2			9.3		
34	13	13		11.9			9.1		
36	11.9	12.8		11.8	10.5		8.9		
38	11.8	12.5		10.6	10.3		8.8	8.4	
40	11.1	12.3		9.9	10		8.6	8.2	
42	9.8	12.1		9.3	9.8		8.4	8	
44	8.6	12		9.3	9.7		7.8	7.8	
46	7.4	11.9	12.3	8.9	9.6		7.6	7.7	
48		11.8	12.2	7.9	9.4	9.8	7.3	7.5	
50		10.5	12	6.9	9.3	9.8	7.1	7.3	7.8
52		9.2	11.8		9.3	9.6	6.3	7.3	7.7
54		7.9	11.3		8.3	9.5		7.3	7.5
56			10.8		7.3	9.3		7.3	7.4
58			10.4			9.1		6.6	7.3
60			10			8.6		5.7	7.2
62						8.2			7.1
64									6.8
66									6.6

Table of Main Boom + Luffing Fly Jib Lifting Performance (VII)

Unit of measurement: t

Length of main boom (m)	41											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
10												
12	55			45.3/13								
14	51			42			39.8			37.3/15		
16	48			39.9			38.4			35.9		
18	43.9			37.9			37.6			35		
20	33.7			35.2			36.5			34.6		
22	26.2	36.1		31			35.4			34.3		
24	20.2	32.5		24.7	32.4		28.7			32.3		
26		29.5		19.6	29.4		23.3	29.3		26.6	29.3/27	
28		27.1		15.1	26.9		18.9	26.8		22	26.8	
30		24.9			24.8		15.1	24.8		18.2	24.7	
32		19.6	21.8		23			22.9		14.9	22.8	
34			20.3		19.3	20.2		21.3			21.3	
36			19			18.8		18.6	18.8		19.9	
38			17.8			17.8		14.3	17.6		17.8	17.5
40						16.7			16.6		14.1	16.5
42									15.7			15.6
44									14.8			14.8
46												14



Table of Main Boom + Luffing Fly Jib Lifting Performance (VIII)

Unit of measurement: t

Length of main boom (m)	41														
	33				36				39				42		
Length of fly jib (m)	Angle (°)														
	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°			
16	31.1														
18	28.8			26.1/17			23.3			19.3/19					
20	28.6			25.1			22.2			18.8					
22	28.3			23.4			21.8			18.5					
24	28.1			23			21.3			18.2					
26	27.8			22.9			21			17.8					
28	24.6	26.7		22.8			20.7			17.5					
30	20.7	24.5		22.5	23.3		19.4	19.2		17.2					
32	17.4	22.8		19.4	22.7		18.3	18.9		16.6					
34	14.5	21.2		16.6	21.1		17.8	18.6		15.9	15.7				
36	11.9	19.8		14.1	19.7		15.5	18.3		14.8	15.3				
38		18.6		11.8	18.5		13.4	17.3		14.2	15.2				
40		17	16.3		17.4		11.6	16.3		12.5	15				
42		13.8	15.5		16.1	15.3		15.3		10.9	14.8				
44			14.7		13.4	14.5		12.8	14.4		14.8				
46			13.9		10.9	13.8		10.7	13.7		14.5	13.6			
48			13.3			13.2			13		12.4	12.9			
50			12.6			12.5			12.4		10.4	12.3			
52						11.9			11.8		8.7	11.8			
54									11.3			11.3			
56									10.8			10.8			
58												10.3			

Table of Main Boom + Luffing Fly Jib Lifting Performance (IX)

Unit of measurement: t

Length of main boom (m)	41								
	45			48			51		
Length of fly jib (m)	Angle (°)								
	85°	75°	65°	85°	75°	65°	85°	75°	65°
20	16.3			14.1/21					
22	15.9			13.7			10.8		
24	15.6			13.3			10.6		
26	15.3			13			10.5		
28	15			12.8			10.4		
30	14.8			12.5			10.1		
32	13.5			12.2			9.6		
34	12.8	13.1		11.9			9.3		
36	12	12.9		11.2	10.7		9.0		
38	11.9	12.7		10.7	10.3		8.8	8.5	
40	11.8	12.4		10.2	10.1		8.2	8.3	
42	11.4	12.2		9.4	9.9		7.6	8.1	
44	10	12		9.3	9.8		7.4	7.9	
46	8.8	11.9		9.1	9.6		7.3	7.8	
48		11.8	12.3	8.1	9.5		7.3	7.6	
50		11.5	12.1		9.3	9.8	7.2	7.4	
52		10	11.7		9.3	9.7	6.4	7.3	7.8
54		8.6	11.2		9.1	9.5	5.6	7.3	7.7
56			10.7		7.9	9.4		7.3	7.5
58			10.3		6.8	9.3		7	7.3
60			9.8			9.1		6.2	7.2
62			9.4			8.6			7.1
64						8.2			6.8
66									6.6



Table of Main Boom + Luffing Fly Jib Lifting Performance (X)

Unit of measurement: t

Length of main boom (m)	44											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
12	55			43.3/13								
14	51			41			39.8			37.3/15		
16	48.5			38.9			38.4			35.3		
18	42.6			37.1			36.6			35		
20	35.1			35.7			35.6			34.6		
22	27.2	35.6/23		32.2			34.7			34.3		
24	20.9	32.3		25.6	32.1/25		29.6			33.3		
26		29.3		20.3	29.2		24.1	29.1		27.4		
28		26.8		15.8	26.8		19.6	26.6		22.6	26.5	
30		24.8			24.6		15.7	24.5		18.8	24.4	
32		22.9			22.8			22.8		15.4	22.7	
34			19.9		21.3			21.2		12.4	21.1	
36			18.7			18.6		19.8			19.8	
38			16.5			17.4		16.1	17.3		18.5	
40			15.5			16.4			16.3		15.7	16.2
42						15.5			15.4			15.3
44									14.6			14.5
46									13.8			13.8
48												13.1

Table of Main Boom + Luffing Fly Jib Lifting Performance (XI)

Unit of measurement: t

Length of main boom (m)	44											
	33			36			39			42		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
16	29.3											
18	28.8			25.1/17			23.2			19.3/19		
20	28.6			23.8			22			18.9		
22	28.4			23.5			21.6			18.5		
24	28.2			23.1			21.3			18.3		
26	27.8			22.9			21			17.8		
28	25.4	26.4/29		22.8			20.2			17.5		
30	21.4	24.3		22.7	23.4		19.6			16.8		
32	17.9	22.5		19.9	22.4		19.1	19.3		16.1		
34	15	21		17.1	20.8		17.3	19		15.3	15.8	
36	12.3	19.6		14.4	19.5		15.9	18.7		14.8	15.5	
38		18.4		12.2	18.3		13.8	18.3		14.7	15.3	
40		17.3		10	17.3		11.9	17.2		12.7	15.1	
42		15.3	15.2		16.3			16.2		11.2	14.9	
44		12.2	14.4		14.6	14.3		15.3	13.4		14.8	
46			13.7		12.3	13.6		14	12.8		14.5	
48			13			12.9		11.7	12.2		13.8	12.7
50			12.4			12.3		9.6	11.7		11.3	12.1
52						11.8			11.1		9.5	11.5
54						11.3			10.7			11
56												10.6
58												10.1
60												9.8



Table of Main Boom + Luffing Fly Jib Lifting Performance (XII)

Unit of measurement: t

Length of main boom (m)	44								
	45			48			51		
Length of fly jib (m)	Angle (°)								
	85°	75°	65°	85°	75°	65°	85°	75°	65°
20	16.3			14.1/21					
22	16			13.8			10.8		
24	15.7			13.4			10.5		
26	15.3			13			10.2		
28	14.8			12.8			9.9		
30	14.2			12.2			9.7		
32	13.8			11.8			9.3		
34	13.1			11			9.2		
36	12.6	13		10.6			8.8		
38	12.2	12.8		10.2	10.5		8.3		
40	11.8	12.5		9.8	10.3		7.9	8.3	
42	11.7	12.3		9.4	10		7.5	8.1	
44	10.3	12		9.3	9.8		7.3	7.9	
46	9	11.9		9.3	9.7		7.3	7.8	
48		11.9		8.3	9.5		7.3	7.6	
50		11.8	12		9.4		7.3	7.4	
52		10.8	11.4		9.3	9.8	6.5	7.3	
54		9.3	10.9		9.3	9.6	5.7	7.3	7.7
56		7.8	10.4		8.5	9.5		7.3	7.5
58			10		7.4	9.4		7.3	7.3
60			9.6			9.3		6.7	7.3
62			9.3			9.1		5.8	7.2
64						8.6			7.1
66						8.2			6.8

Table of Main Boom + Luffing Fly Jib Lifting Performance (XIII)

Unit of measurement: t

Length of main boom (m)	47											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
10												
12	53											
14	51			42.2			39.8/15					
16	48.2			40.3			38.5			35.3		
18	42.6			37.3			36.5			35.1		
20	36.3			35.9			35.6			34.7		
22	28.2			33.2			33.1			34.3		
24	21	31.8		26.5			30.6			33.8		
26		29		21.1	28.9		24.9	28.7/27		28.2		
28		26.6		16.5	26.4		20.3	26.3		23.4	26.3	
30		24.5			24.4		16.3	24.3		19.3	24.2	
32		22.8			22.6			22.5		15.9	22.4	
34			19.6		21.1			21		12.8	20.8	
36			18.3		18.6	18.3/37		19.6			19.5	
38			17.3			17.1		18.1	17/39		18.3	
40			16.3			16.2			16		17.3	15.2/41
42						15.3			15.2		13.7	15
44						14.4			14.3			14.3
46									13.6			13.5
48												12.8
50												12.3



Table of Main Boom + Luffing Fly Jib Lifting Performance (XIV)

Unit of measurement: t

Length of main boom (m)	47											
	33			36			39			42		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
16	29.3											
18	28.9			24.2/17			23.3					
20	28.6			23.9			23.1			19.6		
22	28.4			23.5			22.7			18.5		
24	28.2			23.1			21.3			18.3		
26	27.9			22.9			20.6			17.9		
28	26.2			22.8			19.8			17.6		
30	21.9	24.1		22.7			18.9			17.3		
32	18.4	22.3		20.4	22.2		18.5	19.3/33		16.1		
34	15.4	20.8		17.5	20.7		18.3	19.1		15.9	16	
36	12.7	19.4		14.9	19.3		16.3	18.8		15.3	15.6	
38		18.3		12.5	18.2		14.1	18		14.7	15.3	
40		17.2		10.3	17.1		12.2	17		13	15.2	
42		16.3	14.5/43		16.1		10.2	16		11.4	15	
44		13.5	14.1		15.3	13.8/45		15.2		9.9	14.8	
46			13.4		13.2	13.3		14.4	13.2		14.3	
48			12.8		10.7	12.7		12.5	12.5		13.6	12.4
50			12.2			12.1		10.2	11.9		12.1	11.8
52			11.6			11.5			11.4		10.3	11.3
54						11			10.9		8.5	10.8
56						10.6			10.4			10.3
58									10			9.9
60												9.5

Table of Main Boom + Luffing Fly Jib Lifting Performance (XV)

Unit of measurement: t

Length of main boom (m)	47								
	45			48			51		
Length of fly jib (m)	Angle (°)								
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°
20	16.4/21			13.8					
22	16			13.4			10.8		
24	15.7			13.1			10.5		
26	15.3			12.8			10.3		
28	14.6			12.5			10		
30	14.2			11.9			9.7		
32	13.8			11.2			9.4		
34	13.3			10.8			9.2		
36	12.8	13.1		10.2			8.9		
38	12.2	12.8		9.9	10.6		8.8		
40	11.8	12.6		9.7	10.3		8.7	8.4	
42	11.8	12.3		9.5	10.1		8.5	8.2	
44	10.5	12.1		9.3	9.8		8.5	8	
46	9.2	12		8.5	9.7		8.4	7.8	
48		11.9		7.5	9.6		8.3	7.7	
50		11.8	11.8		9.4		8.1	7.5	
52		11.6	11.2		9.3	9.8	7.7	7.3	
54		10	10.7		9.3	9.7	5.9	7.3	7.8
56		8.4	10.3		9.2	9.6		7.3	7.7
58			9.8		8	9.4		7.3	7.5
60			9.4			9.3		7.2	7.4
62			9.1			8.9		6.2	7.3
64			8.7			8.6			7.2
66						8.1			7.1
68									6.8
70									6.6





Table of Main Boom + Luffing Fly Jib Lifting Performance (XVI)

Unit of measurement: t

Length of main boom (m)	50											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
12	51/13											
14	46.3			42.2			39.8/15					
16	43.8			40.6			38.2			35.3		
18	40.9			36.7			36.5			35.1		
20	36.9			34.5			35.4			34.8		
22	28.9			33.3			33.1			32.9		
24	22.3	30.4/25		27.1			30.3			30.1		
26	16.8	28.8		21.5	28.5		27.8			27.7		
28		26.3		16.9	26.2		20.6	26.1		23.7	25.8/29	
30		24.3			24.2		16.6	24		19.6	23.9	
32		22.5			22.4			22.3		16.1	22.2	
34		21			20.8			20.8		13.1	20.7	
36			18		19.5			19.4			19.3	
38			16.9			16.8		18.3			18.2	
40			15.9			15.8		15.5	15.7		17.1	
42			15.1			14.9			14.8		15.3	14.8
44						14.2			14.1			13.9
46									13.3			13.3
48									12.8			12.6
50												12

Table of Main Boom + Luffing Fly Jib Lifting Performance (XVII)

Unit of measurement: t

Length of main boom (m)	50												
	33			36			39			42			
Length of fly jib (m)	Angle (°)												
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°	
16	29.4			24.8/17									
18	29			24.3					23.2				
20	28.6			23.9					22.8		12.3		
22	28.5			23.6					21.8		11.7		
24	28.3			23.2					21.3		11.2		
26	27.5			22.9					20.6		10.7		
28	25.3			22.8					19.8		10.3		
30	22.2	23.8		22.7					18.5		9.8		
32	18.6	22.1		20.8	22				18.3		9.4		
34	15.6	20.6		17.7	20.4				18.3	19.2			
36	12.9	19.3		15	19.1				16.7	18.9		15.8	
38		18		12.6	17.9				14.4	17.8		15.4	
40		17		10.4	16.9				12.2	16.8		15.3	
42		16.1			15.9				10.3	15.8		15.1	
44		14.8	13.8		15.1				15			14.9	
46		11.8	13.2		14.3	13			14.3			14.2	
48			12.5		11.7	12.4			13.6	12.3		13.4	
50			11.9			11.8			11.2	11.7		11.8	11.6
52			11.4			11.3			9.1	11.2		11.2	11.1
54			10.9			10.8				10.7		9.1	10.6
56						10.3				10.3			10.1
58										9.8			9.7
60										9.4			9.3
62													8.9



Table of Main Boom + Luffing Fly Jib Lifting Performance (XVIII)

Unit of measurement: t

Length of main boom (m)	50								
	45			48			51		
Length of fly jib (m)	Angle (°)								
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°
20	16.4/21								
22	16.1			13.8			10.9/23		
24	15.8			13.5			10.6		
26	15.4			13.1			10.3		
28	14.9			12.8			10		
30	14.7			12.3			9.8		
32	14.5			11.8			9.4		
34	14.3			11.5			9.2		
36	13.6			10.8			9		
38	12.9	12.9		10.5			8.9		
40	11.9	12.7		10.1	10.4		8.8		
42	11.2	12.4		9.9	10.2		8.7	8.3	
44	10.8	12.2		9.6	9.9		8.6	8.1	
46	9.5	12		9.3	9.8		8.5	7.9	
48	8.3	11.9		8.7	9.6		8.3	7.8	
50		11.9		7.6	9.5		7.6	7.6	
52		11.8	10.9	6.6	9.4		6.8	7.4	
54		10.7	10.5		9.3	9.8	6.1	7.3	
56		9.1	10		9.3	9.7		7.3	7.8
58			9.6		8.6	9.5		7.3	7.6
60			9.2		7.4	9.1		7.3	7.5
62			8.8			8.8		7.1	7.3
64			8.5			8.4			7.2
66						8.1			7.1
68						7.8			6.8

Table of Main Boom + Luffing Fly Jib Lifting Performance (XIX)

Unit of measurement: t

Length of main boom (m)	53											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
12	45.6/13											
14	42.2			41			38.8/15					
16	41.5			40.3			38.2			35.3		
18	37			36.8			36.2			35.2		
20	33.3			33			32.8			32.7		
22	29.7			30			29.8			29.6		
24	22.9			27.4			27.2			27		
26	17.3	28.3		22	28.1/27		24.9			24.8		
28		26		17.2	25.9		20.9	25.7		22.8		
30		24			23.9		16.8	23.8		19.8	23.6	
32		22.3			22.2		13.2	22.1		16.3	21.9	
34		20.8			20.7			20.5		13.2	20.4	
36			17.7/37		19.3			19.3			19.1	
38			16.6		17.6	16.4/39		18.1			17.9	
40			15.7			15.5		17			16.9	
42			14.8			14.7			14.5		16	
44			14			13.9			13.8		13.2	13.7
46						13.2			13.1			13
48									12.4			12.3
50												11.8
52												11.3



Table of Main Boom + Luffing Fly Jib Lifting Performance (XX)

Unit of measurement: t

Length of main boom (m)	53											
	33			36			39			42		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
16	29.4											
18	29.1			24.3			23.1/19					
20	28.6			23.9			22.8			19		
22	28.5			23.7			22.2			18.7		
24	26.8			23.3			21.3			18.3		
26	24.6			23			20.1			17.5		
28	22.7			22.6			19.8			16.7		
30	21			20.8			18.9			16.3		
32	18.7	21.8		19.4	21.6/33		18.3			15.8		
34	15.7	20.3		17.8	20.3		17.9	19.3		15		
36	13	19		15	18.9		16.8	18.8		14.8	15.9	
38		17.8		12.6	17.8		14.3	17.7		14.7	15.6	
40		16.8		10.5	16.7		12.2	16.6		13.6	15.3	
42		15.8			15.8		10.3	15.7		11.8	15.1	
44		15			14.9			14.8		10	14.8	
46		13.1	12.8		14.2			14.1		8.5	14	
48			12.3		12.8	12.1		13.4			13.3	
50			11.7			11.6		12.8	11.4		12.7	
52			11.2			11		12.2	10.9		11.9	10.8
54			10.7			10.6			10.4		10.1	10.3
56						10.1			10			9.9
58						9.7			9.6			9.5
60									9.2			9.1
62												8.8
64												8.4

Table of Main Boom + Luffing Fly Jib Lifting Performance (XXI)

Unit of measurement: t

Length of main boom (m)	53								
	45			48			51		
Length of fly jib (m)	Angle (°)								
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°
20	16.3/21								
22	16.1			13.8				10.8/23	
24	15.8			13.5				10.6	
26	15.4			13.2				10.3	
28	15.1			12.8				10	
30	14.8			12.2				9.8	
32	13.6			11.6				9.5	
34	12.8			10.9				9.3	
36	12.2			10.2				9	
38	12	13		9.7				8.8	
40	11.9	12.8		9.6	10.5			8.7	
42	11.8	12.5		9.4	10.3			8.2	8.4
44	11	12.3		9.3	10			7.8	8.2
46	9.7	12.1		9.3	9.8			7.6	8
48	8.3	11.9		8.9	9.7			7.3	7.8
50		11.9		7.8	9.5			7.3	7.7
52		11.8	10.7	6.8	9.4			7	7.5
54		11.5	10.3		9.3	9.9		6.1	7.3
56		9.8	9.8		9.3	9.7		7.3	7.9
58		8.2	9.3		9.2	9.3		7.3	7.8
60			9		8	8.9		7.2	7.6
62			8.7			8.5		7.1	7.4
64			8.3			8.2			7.3
66			8			7.9			7.2
68						7.6			7.1
70									6.8



Table of Main Boom + Luffing Fly Jib Lifting Performance (XXII)

Unit of measurement: t

Length of main boom (m)	56											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
12	41.7/13											
14	40.4			40.5			37/15					
16	37.4			37.3			36			35.3		
18	33.3			33.1			32.8			32.7		
20	29.8			29.7			29.5			29.3		
22	27.1			26.8			26.7			26.5		
24	23.5			24.5			24.3			24.1		
26	17.8	27.8		22.5			22.3			22.1		
28		25.7		17.6	25.5		20.5	25.3/29		20.3		
30		23.8			23.7		17.1	23.4		18.8	23.3	
32		22			21.9		13.5	21.8		16.5	21.7	
34		20.5			20.4			20.3		13.3	20.2	
36		19.2			19.1			19			18.9	
38			16.3		17.9			17.8			17.8	
40			15.3			15.2/41		16.8			16.7	
42			14.5			14.3			14.3/43		15.8	
44			13.8			13.6			13.5		14.6	13.3
46						12.9			12.8			12.7
48						12.3			12.2			12.1
50									11.6			11.5
52												11
54												10.5

Table of Main Boom + Luffing Fly Jib Lifting Performance (XXIII)

Unit of measurement: t

Length of main boom (m)	56											
	33			36			39			42		
Length of fly jib (m)	Angle (°)											
Radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
18	29.1/17			24.4			22.6/19					
20	28.7			24			21.1			19		
22	26.3			23.7			19.8			18.8		
24	24			23.3			19.4			18.3		
26	21.9			21.8			19.2			18.1		
28	20.2			20			18.9			17.7		
30	18.7			18.5			18.3			16.8		
32	17.3	21.4		17.2			17			16.2		
34	15.7	20.1		15.9	19.9		15.8			15.5		
36	13	18.8		14.9	18.7		14.8	18.5		14.8		
38	10.5	17.7			17.5		13.8	17.4		13.7	15.7	
40		16.6			16.5		12.2	16.4		12.8	15.3	
42		15.7			15.6		10.1	15.5		11.6	15.2	
44		14.8			14.8			14.7		9.9	14.6	
46		14.1	12.2/47		14			13.9			13.8	
48			11.9		13.3	11.8		13.3			13.2	
50			11.4		11.2	11.3		12.6	11.2		12.5	
52			10.9			10.8		11.1	10.7		11.9	10.6
54			10.4			10.3			10.2		10.9	10.1
56			10			9.8			9.8		8.9	9.7
58						9.5			9.3			9.3
60									9			8.8
62									8.7			8.5
64												8.2



Table of Main Boom + Luffing Fly Jib Lifting Performance (XXIV)

Unit of measurement: t

Length of main boom (m)	56								
	45			48			51		
Length of fly jib (m)	Angle (°)								
	85°	75°	65°	85°	75°	65°	85°	75°	65°
20	16.2/21								
22	16			13.8					
24	15.8			13.3			10.7		
26	15.5			12.8			10.3		
28	15.1			12.3			10.1		
30	14.9			11.8			9.8		
32	14.7			11.6			9.5		
34	14.1			11.5			9.3		
36	13.2			11.2			9.1		
38	12.3	13.1		10.9			8.8		
40	11.9	12.8		10.8	10.6		8.7		
42	11.8	12.6		10.6	10.3		8.6	8.5	
44	11.1	12.4		9.8	10.1		8.5	8.3	
46	9.6	12.2		9.6	9.9		8.5	8.1	
48		12		9.2	9.8		8.4	7.8	
50		11.9		7.9	9.6		8.2	7.7	
52		11.8			9.4		7.6	7.5	
54		11.3	10		9.3		6.3	7.4	
56		10.5	9.5		9.3	9.4		7.3	
58		8.9	9.2		9.3	9		7.3	7.8
60			8.8		8.6	8.7		7.2	7.7
62			8.4		7.3	8.3		7.1	7.5
64			8.1			8		7	7.4
66			7.8			7.7			7.3
68			7.5			7.4			7.2
70						7.2			7
72									6.8

Table of Main Boom + Luffing Fly Jib Lifting Performance (XXV)

Unit of measurement: t

Length of main boom (m)	59											
	21			24			27			30		
Length of fly jib (m)	Angle (°)											
	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
18	29.2			24.4			22.7/19					
20	26.3			24			20.8			18.2		
22	23.7			23.6			19.9			17.8		
24	21.5			21.3			19.4			17.4		
26	19.7			19.5			19.2			16.8		
28	18			17.9			17.8			16.3		
30	16.7			16.5			16.3			15.8		
32	15.4			15.3			15.1			15.2		
34	14.3	19.8		14.2			14			13.9		
36	12.9	18.6		13.2	18.4		13	18.3		12.9		
38		17.4		12.3	17.3		12.2	17.2		12	15.8	
40		16.4			16.3		11.3	16.2		11.3	15.5	
42		15.5			15.4		10.1	15.3		10.5	15.2	
44		14.7			14.6		8.1	14.5		9.5	14.3	
46		13.9			13.8			13.8			13.7	
48		12.5	11.7		13.2			13.1			12.9	
50			11.1		12.3	11		12.4			12.3	
52			10.6			10.5		11.2	10.4		11.8	
54			10.2			10.1		9.8	9.9		11.3	9.8
56			9.8			9.6			9.5		9.6	9.4
58			9.3			9.3			9.1			9
60						8.8			8.8			8.7
62									8.4			8.3
64									8.1			8
66												7.7



Table of Main Boom + Luffing Fly Jib Lifting Performance (XXVI)

Unit of measurement: t

Length of main boom (m)	56								
	45			48			51		
Length of fly jib (m)	Angle (°)								
	85°	75°	65°	85°	75°	65°	85°	75°	65°
22	16.2			13.8/23					
24	15.9			13.6			10.7		
26	15.5			12.9			10.3		
28	15.2			12.6			10.1		
30	14.9			12.1			9.8		
32	14.2			11.7			9.6		
34	13.4			11.5			9.5		
36	12.6			11.2			9.3		
38	11.9			10.9			8.9		
40	11.1	12.9		10.6			8.8		
42	10.4	12.8		10.3	10.5		8.6		
44	9.8	12.5		9.8	10.2		8.4	8.3	
46	9.2	12.3		9.1	9.9		8.3	8.1	
48	8	12		8.5	9.8		8.1	7.9	
50		11.9		7.6	9.7		7.9	7.8	
52		11.7			9.5		7.8	7.6	
54		11.2			9.4		6.2	7.4	
56		10.7	9.3		9.3			7.3	
58		9.5	8.9		9.3	8.8		7.3	
60		7.9	8.5		9.2	8.4		7.2	7.8
62			8.2		7.8	8.1		7.1	7.6
64			7.9			7.8		7	7.4
66			7.6			7.5			7.3
68			7.3			7.2			7.1
70						6.9			6.8
72						6.7			6.6
74									6.3