





# **SANY CRAWLER CRANE** SCC5000A

# CRAWLER CRANE CONTENT

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#### SCC5000A

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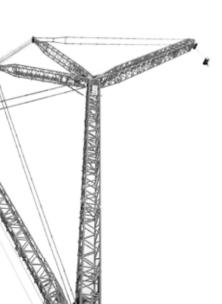
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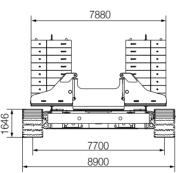
FJ Operating Condition



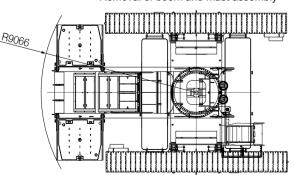


## **OUTLINE DIMENSIONS**

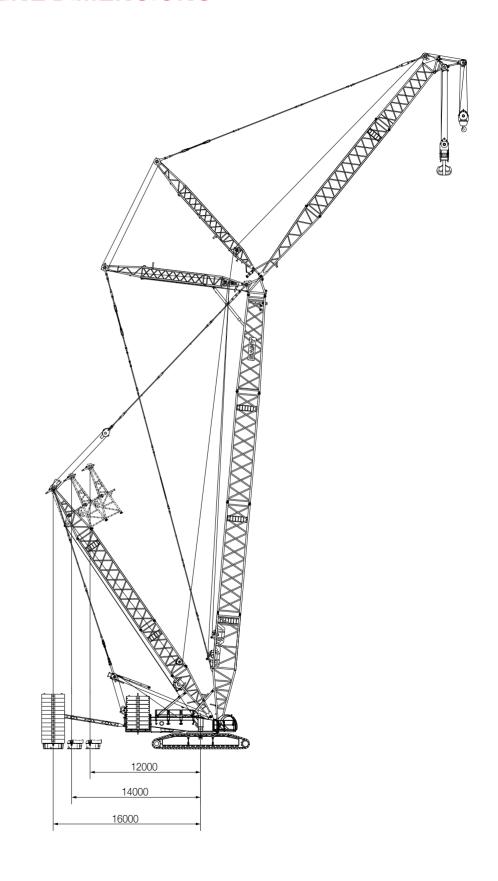
Removal of boom and mast assembly



Removal of boom and mast assembly



## **OUTLINE DIMENSIONS**



#### **TECHNICAL FEATURES**

#### 1. Highly Secured Control System:

There are two operation modes, working and assembly for your convenience. It features with grounding pressure and levelness real-time display, machine-leaving stop action, emergency electrical control, protection against lightning strike, and automatic regulation of traveling direction, with complete set of safety and monitoring device.

#### 2. Reliable Function Assurance:

All key parts adopt international well-known brands. The safety margin in structural design is sufficient; the control system is fully capable to function stably in extreme weather, such as high-and-cold, high-temperature, and high plateau weather;

#### **3.Convenient Maintenance Access:**

It takes no more than 10min/person to adjust, no more than 30 min/person for daily maintenance and no more than 2h/person to repair the machine.GPS remote monitoring system is optional for easy maintenance and management.

## 4. High-efficient assembly and disassembly technology:

Track frame has a self-assembly and disassembly and one-key erection function, and movable pump station is used, to facilitate to quickly assemble and disassemble;

#### **5.Optimized Transportation Programs:**

The whole machine adopts modular design. That is, all transport units are independent design modules, with max. transport weight of the transport unit of less than 50t, with transport width of less than 3m, and with transport height of less than 3.2m. Boom system can be transported wholly;

#### 6.Excellent wind power lifting capacity:

Fixed jib operating condition is a typical wind power lifting operating condition, which can provide most optimized mounting angle and range for lifting the large fan, and meet the installation requirement of 2.0MW and below wind turbine generator.

#### 7.Powerful system:

Imported Commins engine that complies with Europe and American non-road third-stage standard is configured, with power up to 447Kw, to provide strong power for the entire machine:

## 8.Advanced center gravity control of the entire machine:

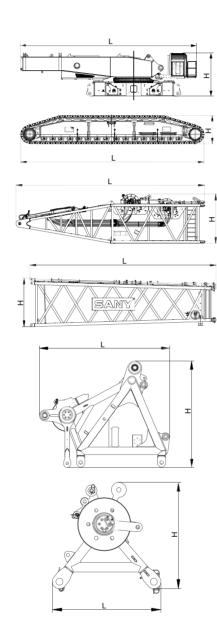
To monitor the center of gravity of the entire machine, to ensure the stable operation of entire machine under the best state at any time, and to provide the safety for lifting operation and traveling with boom system.

#### PERFORMANCE PARAMETERS

Performance Parameters of SCC5000A Crawler Crane		
Performance Index	Unit	Parameter
Max. Rated Lifting Capacity	t	500(6m working radius)
Max. Rated Lifting Capacity (with superlift)	t	500(12m working radius)
Max. Rated Lifting Torque	t•m	3000
Max. Rated Lifting Torque (with superlift)	t•m	6160
Boom Length	m	24~84
Boom Length (with superlift)	m	36~84
Combined boom length	m	48~102
Combined boom length (with superlift)	m	78~126
Luffing jib length	m	24~72
Luffing jib length (with superlift)	m	24~84
fixed short jib length	m	12
Longest boom combination (LJDB operating condition)	m	84+84
Boom luffing angle	0	30~85
Jib luffing angle	0	25~75
Max. single speed of main winch	m/min	0~115
Max. single speed of auxiliary winch	m/min	0~115
Max. boom luffing single speed	m/min	(0∼60) ×2
Max. jib luffing single speed	m/min	0~120
Max. superlift luffing single rope speed	m/min	0~126
Slewing speed (without load)	r/min	0~1
Travel speed	km/h	$0\sim1.2$ (high speed) / $0\sim0.35$ (low speed)
Gradient capability (with basic boom and with cab faced forwards)	%	30
Rated engine output power	kW/rpm	447/1800
Overall weight (including basic boom, 180t rear counterweight of basic machine, and 40t central counterweight)	t	365
Average ground bearing pressure (including basic boom, 180t rear counterweight of basic machine, and 40t central counterweigh)	MPa	0.19
Rear counterweight of basic machine	t	180(without superlift) /140 (with superlift)
Superlift counterweight	t	250
Central counterweight	t	40
Max. transportation dimension of single piece (L x W x H)	mm	13290×3000×3200
Transportation Weight of Single Piece	t	48.8 (not including mast and winch) / 64.6 (including mast and winch)

## TRANSPORTATION DIMENSIONS

D. d.	v.a
Body	×1
Length(L)	13.09m
Width(B)	2.99m
Height(H)	3.19m
Weight	48.8t
Track assembles	×2
Length(L)	10.68m
Width(B)	1.85m
Height(H)	1.6m
Weight	32.7t
Boom base	×1
Length(L)	12.34m
Width(B)	2.98m
Height(H)	3.2m
Weight (including two main hoisting winch)	23.2t
Tapered insert	×1
Tapered insert Length(L)	× <b>1</b> 10.7m
Length(L)	10.7m
Length(L) Width(B)	10.7m 2.98m
Length(L) Width(B) Height(H)	10.7m 2.98m 2.78m
Length(L) Width(B) Height(H) Weight	10.7m 2.98m 2.78m 6.5t
Length(L) Width(B) Height(H) Weight Connencting section	10.7m 2.98m 2.78m 6.5t ×1
Length(L) Width(B) Height(H) Weight Connencting section Length(L)	10.7m 2.98m 2.78m 6.5t ×1 2.9m
Length(L) Width(B) Height(H) Weight Connencting section Length(L) Width(B)	10.7m 2.98m 2.78m 6.5t ×1 2.9m 2.66m
Length(L) Width(B) Height(H) Weight Connencting section Length(L) Width(B) Height(H)	10.7m 2.98m 2.78m 6.5t ×1 2.9m 2.66m 2.37m
Length(L) Width(B) Height(H) Weight Connencting section Length(L) Width(B) Height(H) Weight	10.7m 2.98m 2.78m 6.5t ×1 2.9m 2.66m 2.37m 4.2t
Length(L) Width(B) Height(H) Weight Connencting section Length(L) Width(B) Height(H) Weight Pulley block	10.7m 2.98m 2.78m 6.5t ×1 2.9m 2.66m 2.37m 4.2t ×2
Length(L) Width(B) Height(H) Weight Connencting section Length(L) Width(B) Height(H) Weight Pulley block Length(L) Width(B)	10.7m 2.98m 2.78m 6.5t ×1 2.9m 2.66m 2.37m 4.2t ×2 1.45m
Length(L) Width(B) Height(H) Weight Connencting section Length(L) Width(B) Height(H) Weight Pulley block Length(L)	10.7m 2.98m 2.78m 6.5t x1 2.9m 2.66m 2.37m 4.2t x2 1.45m 1.32m



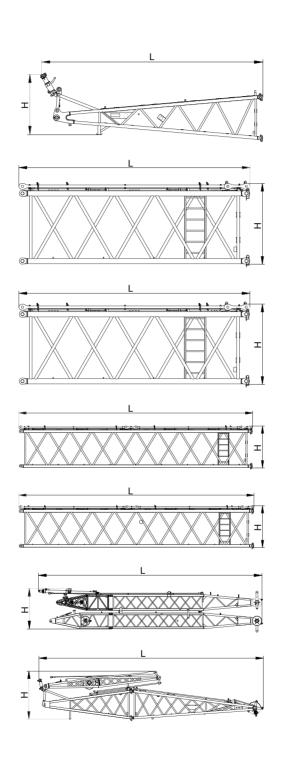
## TRANSPORTATION DIMENSIONS

6m boom insert A	×2
Length(L)	6.2m
Width(B)	2.98m
Height(H)	2.78m
Weight	2.98t
12m boom insert A	×1
Length(L)	12.2m
Width(B)	2.98m
Height(H)	2.78m
Weight	6t
12m boom insert B	×2
Length(L)	12.2m
Width(B)	2.98m
Height(H)	2.78m
Weight	5.4t
12m boom insert C	×1
Length(L)	12.2m
Width(B)	2.98m
Height(H)	2.78m
Weight	6.1t
Boom extension	×1
Length(L)	2.83m
Width(B)	1.71m
Height(H)	1.49m
Weight	0.5t
Boom luffing mast	×1
Length(L)	12.3m
Width(B)	2.19m
Height(H)	1.75m
Weight (including boom luffing winch)	15.8t
Luffing jib tip	×1
Length(L)	9.75m
Width(B)	2.54m
Height(H)	2.48m
Weight	5.4t

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## TRANSPORTATION DIMENSIONS

Luffing jib base	×1
Length(L)	9.77m
Width(B)	2.82m
Height(H)	2.67m
Weight	3.9t
6m luffing jib insert A	×2
Length(L)	6.2m
Width(B)	2.82m
Height(H)	2.16m
Weight	2.3t
6m luffing jib insert B	×1
Length(L)	6.2m
Width(B)	2.82m
Height(H)	2.16m
Weight	2.1t
12m luffing jib insert A	×2
Length(L)	12.2m
Width(B)	2.82m
Height(H)	2.16m
Weight	4.2t
12m luffing jib insert B	×2
Length(L)	12.2m
Width(B)	2.82m
Height(H)	2.16m
Weight	3.8t
Front and rear masts of luffing jib	×1
Length(L)	16.85m
Width(B)	2.13m
Height(H)	3.04m
Weight	10.5t
Fixed jib	×1
Length(L)	12.76m
Width(B)	2.43m
Height(H)	2.72m
Weight	4.8t



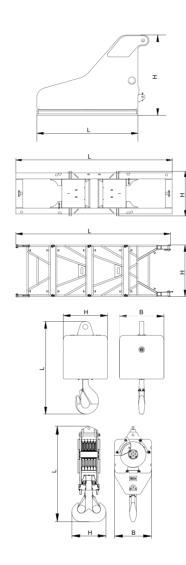
## TRANSPORTATION DIMENSIONS

Superlift mast tip	×1
Length(L)	6.45m
Width(B)	2.65m
Height(H)	3.12m
Weight	8.2t
Superlift mast base	×1
Length(L)	6.29m
Width(B)	2.82m
Height(H)	2.68m
Weight (including superlift luffing winch)	10.2t
6m superlift mast insert	×1
Length(L)	6.2m
Width(B)	2.82m
Height(H)	2.19m
Weight	2.6t
12m superlift mast insert	×1
Length(L)	12.22m
Width(B)	2.82m
Height(H)	2.18m
Weight	5.4t
Central counterweight	×2
Length(L)	6.93m
Width(B)	1.72m
Height(H)	0.6m
Weight	20t
10t counterweight blocks	×36
Length(L)	2.49m
Width(B)	2.35m
Height(H)	0.555m
Weight	10t

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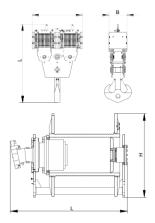
## TRANSPORTATION DIMENSIONS

Rear counterweight tray	×2
Length(L)	2.71m
Width(B)	2.91m
Height(H)	1.94m
Weight	6t
Superlift counterweight frame	×1
Length(L)	7.6m
Width(B)	2.28m
Height(H)	0.89m
Weight	7.5t
Superlift counterweight stabiliation brace	×1
Length(L)	8m
Width(B)	2.7m
Height(H)	0.39m
Weight	1.9t
16t ball hook	×1
Length(L)	1.11m
Width(B)	0.53m
Height(H)	0.53m
Weight	0.9t
160t hook	×1
Length(L)	2.64m
Width(B)	1.02m
Height(H)	0.95m
Weight	3.2t



## TRANSPORTATION DIMENSIONS

500t hook (optional)	×1
Length(L)	4.02m
Width(B)	1.02m
Height(H)	2.69m
Weight	11.1t
Jib luffing winch mechanism	×1
Length(L)	1.73m
Width(B)	1.34m
Height(H)	1.23m
Weight	4.82t



- 1. The transportation dimensions are not drawn to proportion. The
- dimensions in the sketch are design value excluding packages.

  2. The weight is design value and there may be tiny difference due to the manufacturing calibration.



# SPECIFICATION SUPERSTRUCTURE

#### 1) Engine

- Commins QSX15-C600 (EU ||| emission standard)
- Rated power: 447Kw;
- Rated speed: 1800rpm;
- Max. output torque: 2542N·m
- Speed for max. outputtorque: 1400rpm.

#### 2) Control system

Control system mainly consists of the power system, engine control system, main control system, load moment limiter system, auxiliary control syste, emergency sapre system, and closed-circuit monitoring system. CAN Bus is used between controller, display, control handle, GPS, encoder, engine, and load moment limiter for data transporation, to improve the reliability of the system.

#### 3) Hydraulic system

- Hydraulic system includes: lifting hydraulic system, traveling hydraulic system, slewing hydraulic system, luffing hydraulic system, servo hydraulic system, backstop hydraulic system, cooling, and auxiliary hydraulic system. Main hydraulic components adopt original imported products.
- Features: Lifting, traveling, luffing, and slewing hydraulic systems adopt the closed circuits, featuring with energy saving, high efficiency, fast operation response, less heating, and long life.
- Servo system adopts the electric proportional control componets, to achieve the accurate and intelligent
- Back-stop hydraulic system adopts the externally controlled external-discharge balance valve installed on the cylinder, for safety and relibility.
- Cooling hydraulic system features with large heat dissipation power and good cooling effect.

#### 4) Lifting mechanism

Variable hydraulic motor can drive the planet-gear speed reducer to control the lifting and lowering operation of the main host | and ||, having the good inching performance. Fast gear can achieve the fast power lifting of the main host | and ||. Furthermore, main host | and || have the synchronizing function, to improve the efficiency of lifting operation due to the synchronization of double lifting mechanisms. Folded drum has high precision and good reliability, to ensure the multi-layer winding is always in order. Imported well-known brand is adopted for winch reducer, featuring with low noise, high efficiency, long life, and convenient maintenance.

#### NO.1 Main hoisting mechanism

Drum diameter	630mm
Rope speed of the outermost working layer	0~115m/min
Wire rope diameter	28mm
Length of main lifting   wire rope	870m
Rated single line pull	17.8t

#### NO.2 Main hoisting mechanism II

Drum diameter	630mm
Rope speed of the outermost working layer	0~115m/min
Wire rope diameter	28mm
Length of main lifting    wire rope	870m
Rated single line pull	17.8t

#### **SUPERSTRUCTURE**

#### 5) Luffing mechanism

- Composition: Boom luffing mechanism, jib luffing mechanism, and superlift luffing mechanism;
- All luffing devices adopt the folded drum, and use the hydraulic motor to drive the planet reducer to achieve multiple combined actions, having the good inching performance.

#### NO.1 Boom luffing mechanism

Drum diameter	630mm
Rope speed of the outermost working layer	(0~60)×2m/ min
Wire rope diameter	28mm
Length of boom luffing wire rope	2×300m

#### NO.2 Jib luffing mechanism

Drum diameter	630mm
Rope speed of the outermost working layer	0~120m/min
Wire rope diameter	28mm
Length of jib luffing wire rope	730m

#### NO.3 Superlift luffing mechanism

Drum diameter	630mm
Rope speed of the outermost working layer	0~126m/min
Wire rope diameter	28mm
Length of superlift luffing wire rope	800m

#### 6) Slewing mechanism

Slewing hydraulic system adopts the double motor to drive the super gear through the planet reducer, to provide 360° rotation, with slewing speed of 0~1rpm, to achieve continuously viable speed regulation, without startup and stop impact when slewing, featuring with stable operation and mid-position free slipping function. Slewing ring: Three-row roller external-tooth slewing ring is used.

#### 7) Counterweight system

Central counterweight: 40t

■ Counterweight blocks: 20t ×2

 Rear counterweight of basic machine: 180t/140t (superlift operating condition)

■ Counterweight blocks: 10t×16

■ Tray and accessories: 20t

Sueprlift counterweight; 250t

■ Counterweight blocks: 10t×24

Tray and accessories: 10t

#### 8) Cab

The cab is of the full-closed steel frame structure, with tempered glass mounted at front and side and with international well-known plate mounted at top, featuring with good transparency, high strength, high-wearing, and low indoor noise (less than 85dB). The control system, detection instrument, fire fighting alarm device, and closed-circuit monitoring system are arranged in the cab, which are designed according to the ergonomics.

Cab can be adjusted on demand, and can pitch  $0{\sim}24^{\circ}$  upwards and rotate to the front of the platform to facilitate to transport.

#### 9) Control operation

Load moment limiter display, combined instrument display, and closed-circuit monitor shall be within the direct view of the operator; load moment display mainly monitors the moment and other parameters of the crane; combined instrument display mainly shows the operating status of the crane, control parameters of all monitoring points, and alarm; closed-circuit monitor will monitor the winch running situation, rear environment of the platform in real time; there are three control handles are on the left and right armrest boxes, which can be changed over through pressing the handle key, with selected function and handle opening displayed on the display.

#### 10) Alarm display

In case of engine or electrical control alarm, the corresponding alarm information will be shown in the display in number and text way.

#### **UNDERCARRIAGE**

#### 1) Traveling drive

Traveling system has fast and slow gears; slow gear can provide sufficient traction, to achieve 100% traveling with load; fast gear can provide the fast speed, to provide the transition efficiency. Traveling drive can achieve the infinite variable speed regulation.

#### 2) Traveling brake

Traveling brake is a normally-closed brake system built in the reducer (that is, braking state is that the traveling handle is not acted). Friction pieces can be compensated automatically without any adjustment, ensuring long life. When the traveling handle is acted, brake will release to achieve the traveling.

#### 3) Track shoe

There are 150 track shoes on the left and right crawler traveling device, with their tension adjusted by hydraulic jack to achieve ideal tension through shims.

#### 4) Base

It is the high-strength welding frame structure; connection with track frame can be applied through hydraulic cylinder drive power pin, featuring with very easy and convenient installation and dismantlement.

#### 5) Traveling speed

Two-gear speeds can be achieved through variable motor, with infinite variable speed applied for each gear; high speed:  $0\sim1.2$ km/h; low speed:  $0\sim0.35$ km/h; the equipment can run stably at high or low speed.

#### **OPERATION EQUIPMENT**

All operation devices adopt high-strength steel pipe, and plates adopt high-strength plates; pulleys on the boom tip and hooks all adopt rolled welding pulleys:

#### 1) Boom

- Boom is of the space lattice structure having constant section at center and variable sections at both ends. Steel pipes are welded and steel plate is used to strengthen the boom top and root, to facilite to transfer the load.
- Boom length is between the length of basic boom (24m) and longest length (84m).
- Composition: 12m×1 boom base, 10.5m×1 transition section, 1.5m×1 connecting section, 6m×1 boom insert, and 12m×1 boom insert.

#### 2) Boom Luffing Mast

■ The entire structure adopts the door-type supporting frame, with high-strength steel plate welded and with beam is used at cener, featuring with high strength overall structure and good rigidity.

#### 3) Luffing Jib

- Jib is of the space lattice structure having constant section at center and variable sections at both ends. Steel pipes are welded and steel plate is used to strengthen the jib top and root, to facilite to transfer the
- Length of basic jib is 24m (including 9m jib tip, 6m jib insert, and 9m jib base), and length of jib insert is 6m×2 and 12m×4. They all can be installed on 36m~84m boom. The length of available jib is 24m~84m.
- Jib luffing can be achieved by front and rear masts of the luffingjib and. Mast is of the space lattice structure having constant section at center and variable sections at both ends.
- Length of rear mast is 15m and of front mast is 15.5m of the luffing jib.

#### 4) Hooks

- There are five types of hooks for selection;
- 16t Ball hook
- 50t hook
- 160t hook
- 260t hook
- 500t hook (with two 250t hooks divided)

#### 5) Superlift mast

- Mast arm is of the space lattice structure having constant section at center and variable sections at both ends. Steel pipes are welded and steel plate is used to strengthen the arm top and root, to facilite to transfer the load.
- Length of superlift mast is 30m.
- Composition: 6m boom tip, 6m boom base, 6m×1 insert, and 12m×1 insert.

#### 6) Operating condition

- H operating condition (H)
- Boom + Sueprlift mast + Superlift counterweight operating condition (HDB)
- Combined boom operating condition (HJ)
- Combined boom + Superlift mast + Superlift counterweight operating condition HJDB)
- Boom + Luffing jib operating condition (LJ)
- Boom + Luffing jib + Superlift mast + Superlift counterweight operating condition ( LJDB)
- Boom + fixed jib operating condition (FJ)

#### Notes:

The above operation devices are complete configuration. The order contract shall prevail for specific configuration.

### **SAFETY DEVICES**

#### 1) Load Moment Indicator

- SANY developed load moment indicator is used, which constitutes the network with other controllers, to achieve the safe and reliable control. Load moment indicator can detect the load weight and boom angle automatically, and can show the rated lifting capacity and actual load, working radius, and allowed height of the hook.
- Load moment indicator system consists of largescreen color display, host, angle sensor, tension sensor, and pressure sensor.

#### 2) Main and Auxiliary Hooks Hoisting Limiter

To prevent the hook from over hoisting. When the lifting hook is raised to a certain height, the limit switch will be activated. The control system can automatically cut off the hoisting action of the lifting hook, with display and buzzer to give an alarm. At this time, lowering of the lifting hook can be only applied, to prevent the lifting hook from over hoisting.

## 3) Lowering Limiter of Main and Auxiliary Hooks

To prevent the winch wire rope from over-releasing. When the wire rope is released near the last three loops, limit switch will work. The control system can automatically cut off the lowering action of the wire rope, with display and buzzer to give an alarm. At this time, coiling of the wire rope can be only applied, to prevent the lifting hook from over releasing.

## 4) Assemble/Operation Mode Change Switch

- In assembly mode, part of safety devices will be bypassed (such as jib lower limit, load moment indicator boom angle limit, and overload etc.) for assembly of the crane.
- In operation mode, all safety limit devices will function.

#### 5) Boom angle limiter

- If the boom angle or jib angle is too larger, the corresponding limiter switch will act and the control system can cut of the lifting action of the boom automatically and the display and buzzer issue an alarm. At this time, the corresponding luffing winch can only lower rather than lifting.
- If the boom angle or jib angle is too small, the corresponding limiter switch will act and the control system can cut of the lowering action of the boom automatically and the display and buzzer issue an alarm. At this time, the corresponding luffing winch can not lower. This protection function is controlled by the load moment indicator automatically.

#### 6 Boom Back-stop Device

- A pair of back-stop cylinders is adopted for boom and superlift mast. The cylinder pressure can be changed over reasonably according to the boom angle and boom pull, to prevent the boom from tilting backwards.
- A pair of back-stop cylinders is adopted for jib fixed mast; and a pair of oil cylinders are applied for jib luffing mast, to prevent the mast from tilting backward and to tension the jib luffing wire rope.

#### 7) Hoisting mechanism brake

All hoisting brakes adopt spring-loaded normally-closed disc brake, featuring with large braking force, free-maintenance, safe and reliable operation, and long life.

#### 8) Closed-circuit monitoring system

To monitor the winding situation of the wire ropes of all hoisting mechanism, status of the superlift counterweight, and situation around the equipment.

#### 9) Fault self-diagnosis system

To facilitate to eliminate fault according to the fault code provided by the display.

#### **SAFETY DEVICES**

#### 10) Black box

It can record the driver's operation and the running data of the equipment, and analyze the remaining situation of the equipment according to the actual running situation of the equipment.

#### 11) Boom warning light

It will be installed at top of boom, to give high altitude alarm throughout the night.

#### 12) Wind indictor

It can be installed at tope of the boom, to monitor the wind speed in real time and show it on the combined instrument.

#### 13) Electronic level gauge

It can show the tilting angle and overload alarm of the crane on the monitor, to ensure the safe operation of the crane.

#### **14) Lightning Protection Device**

The entire lightning protection system consists of the electrical components having high grade to prevent surge on the boom, shielded wires, surge protector, and lightning protection device, to effectively prevent the damage to the operators and electrical system components when lightning.

#### 15) Slewing and traveling alarm

When slewing and traveling, alarm horn will sound frequently, to prompt the persons around the crane.

#### 16) Control release

When pulling up the function locking rod at right of the driver's seat or the operator leaves the seat, all control handle will not work, to prevent mis-operation due to body impact when getting on and off the vehicle.

## 17) Engine power limit load regulation and stall protection

Controller can monitor the engine power, to prevent the engine from stalling.

#### 18) Engine monitoring

To show the engine cooling water temperature, fuel level, total working time, oil pressure, engine speed, batteries charging state, and voltage etc.

#### 19) Emergency system

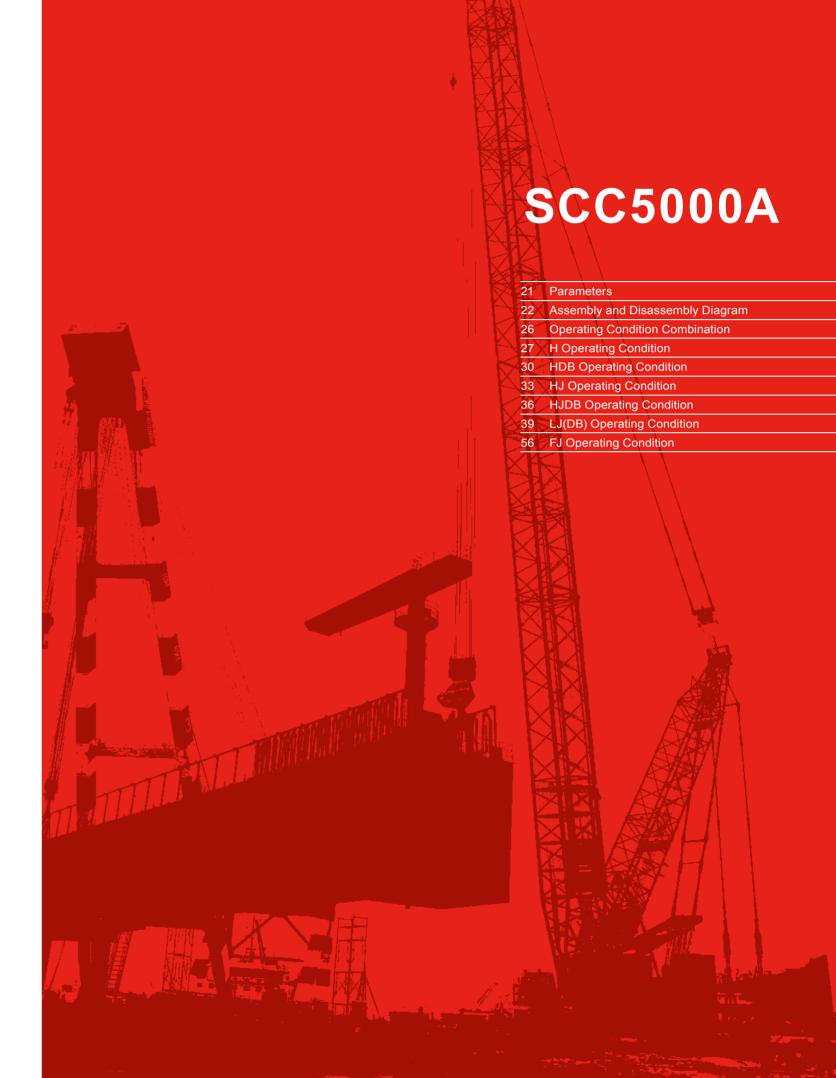
Independent-circuit emergency control box is used, to connect with the electrical control cabinet through connectors. In case of emergency, lifting, luffing, slewing, and traveling operations can be achieved.

#### 20) Remote monitoring system

To monitor the running data, and analyze the running data to carry out the fault remote diagnosis and timely solve the problem.

#### 21) Emergency stop button

In case of out-of-control situation, press the emergency stop button to stop the lifting, luffing, slewing, and traveling operation, so the engine will stop.



## **PARAMETERS**

#### Counterweight parameters

Name	Qty.	Length (m)	Width (m)	Height (m)	Weight of single piece (t)
Central counterweight	2	6.93	1.72	0.6	20
Rear counterweight tray of basic machine	2	2.71	2.91	1.94	6
Country veight blook of basis machine	16	2.49	2.35	0.534	10
Counterweight block of basic machine	2	2.49	2.35	0.318	5
Sueprlift counterweight tray	1	7.92	2.28	0.89	7.5
Superlift counterweight block	24	2.49	2.35	0.555	10

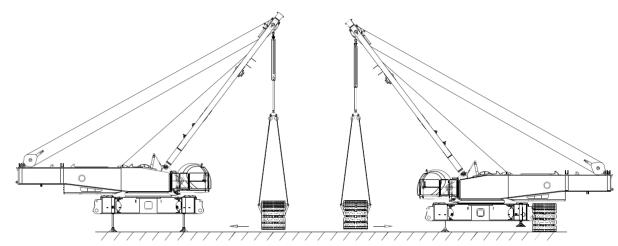
#### Hook parameters

Name of hook	Max. lifting capacity	Qty.	Number of pulleys	Weight of single piece (t)
500t hook	500t	1	2×9	9.5
260t hook	260t	1	9	5.2
160t hook	160t	1	5	3.2
50t hook	50t	1	1	1.7
16t ball hook	16t	1	-	0.9

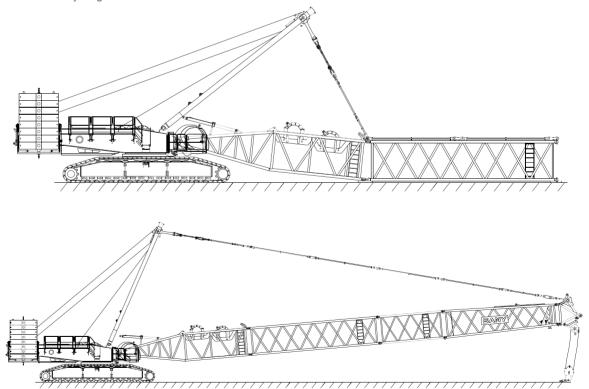
Note: 500t hook can be divided into two 250t hooks.

## **ASSEMBLY AND DISASSEMBLY DIAGRAM**

1) Self-Assembly Diagram of Track Frame

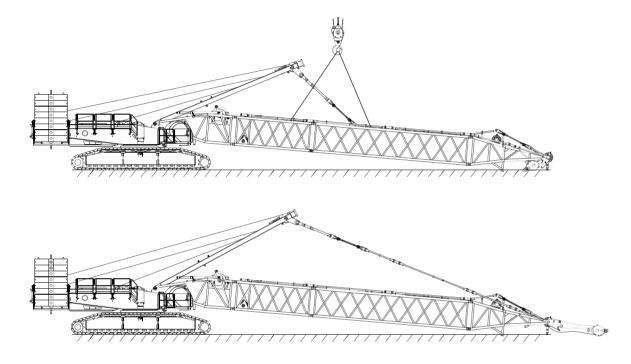


2) Boom Assembly Diagram



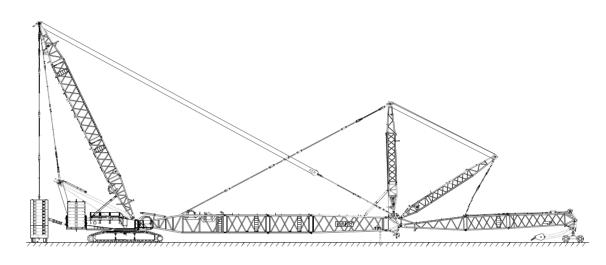
## **ASSEMBLY AND DISASSEMBLY DIAGRAM**

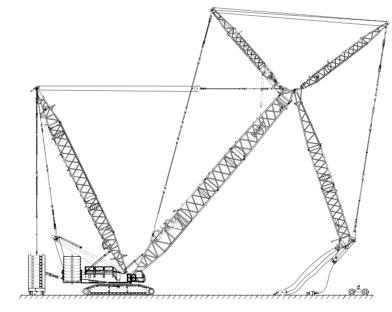
3) Superlift Mast Assembly Diagram



## **ASSEMBLY AND DISASSEMBLY DIAGRAM**

4) Luffing Jib Assembly Diagram

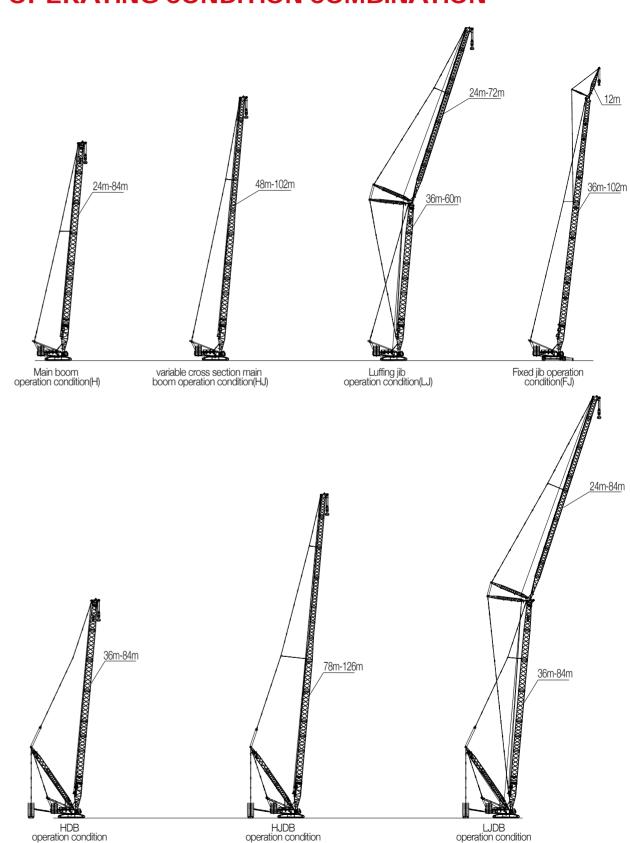




## **ASSEMBLY AND DISASSEMBLY DIAGRAM**

# 5) Fixed Jib Assembly Diagram

## **OPERATING CONDITION COMBINATION**

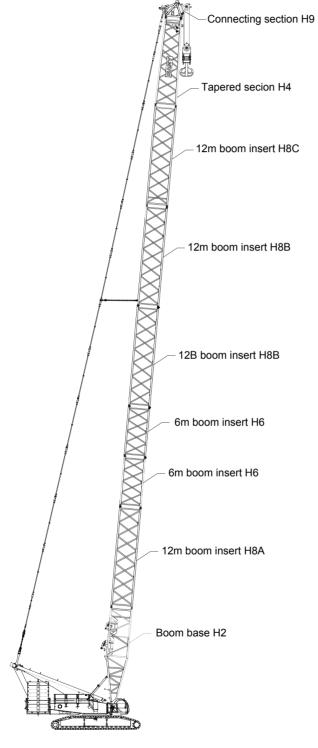


## **HOPERATING CONDITION**

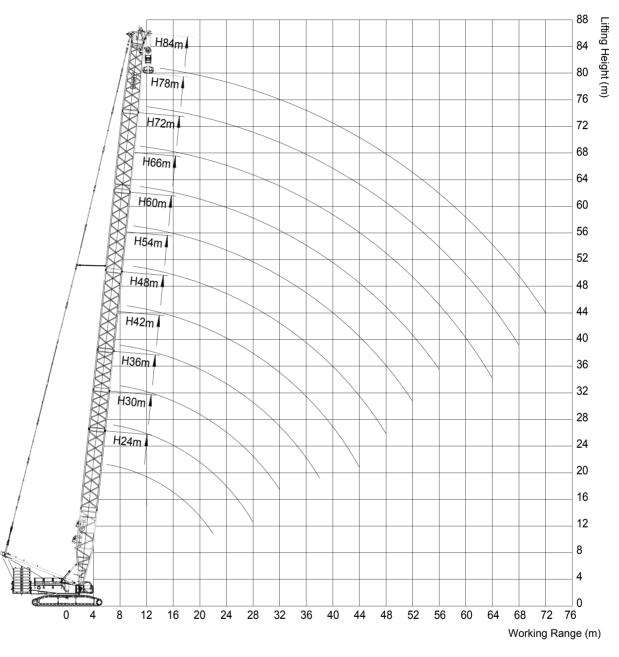
#### Boom Combination under H Operating Condition Boom length Boom insert 12mA 12mB 12mC (m) 6 m 24 30 36 42 48 54 60 66 72 78\*

Note: \* Waist rope must be used for 78 and 84m H operating condition, or the boom may break.

! Attention: If exceeding 78m (including) boom is applied for this operating condition, outrigger must be erected from the side, or the crane may tilt!



# OPERATING RANGE DIAGRAM OF HOPERATING CONDITION



Lifting Height – Working Range Curve under H Operating Condition

Load Chart of H Operating Condition (Boom length of 24~84m; rear counterweight of basic machine of 180t; central counterweight of 40t)

Main boom Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Main boom Radius(m)
6	500.0											6
7	430.2	426.3										7
8	372.4	369.5	365.5	357.7								8
9	327.3	324.4	322.4	309.7	294.0							9
10	291.1	285.6	285.2	272.4	259.7	248.9	238.1					10
11	262.6	256.7	252.8	242.1	232.3	223.4	214.6	206.8	198.9			11
12	234.2	229.7	226.4	218.5	209.7	201.9	195.0	187.2	180.3	173.5		12
14	185.2	185.2	184.2	181.3	174.4	168.6	162.7	157.8	151.9	147.0	142.1	14
16	151.9	151.9	151.9	150.9	149.0	144.1	139.2	135.2	130.3	126.4	121.5	16
18	128.4	128.4	128.4	119.6	117.4	116.5	112.8	108.0	106.7	105.3	103.7	18
20	109.8	110.7	109.8	109.8	101.0	100.1	99.2	95.4	93.3	92.7	91.4	20
22	95.9	96.4	96.1	95.6	94.8	87.4	86.5	84.3	82.4	78.7	76.0	22
24		85.1	84.9	84.3	83.5	82.9	76.1	74.4	73.6	70.2	67.7	24
26		75.6	75.6	75.0	74.2	73.6	72.6	66.0	65.7	62.9	60.7	26
28		67.6	67.7	67.1	66.4	65.9	64.9	58.9	58.5	56.7	54.5	28
30			61.0	60.5	59.8	59.2	58.3	57.5	52.4	50.7	49.2	30
32			55.2	54.8	54.1	53.5	52.6	51.8	47.1	45.5	44.4	32
34				49.8	49.1	48.6	47.6	46.8	45.8	40.9	39.9	34
36				45.4	44.7	44.2	43.3	42.5	41.5	36.9	35.8	36
38				41.5	40.9	40.4	39.4	38.6	37.6	33.4	32.3	38
40					37.3	36.8	36.0	35.2	34.2	32.8	29.2	40
44					31.4	31.0	30.1	29.3	28.2	27.0	23.8	44
48						26.1	25.2	24.5	23.4	22.1	19.3	48
52							21.1	20.4	19.3	18.0	15.6	52
56								16.9	15.9	14.6	13.4	56
60									12.8	11.6	10.5	60
64									10.2	8.9	7.8	64
68										6.6	5.5	68
72											3.4	72
Ratio	2×17	2×14	2×12	2×12	2×9	2×8	2×8	2×7	2×6	2×6	9	Ratio

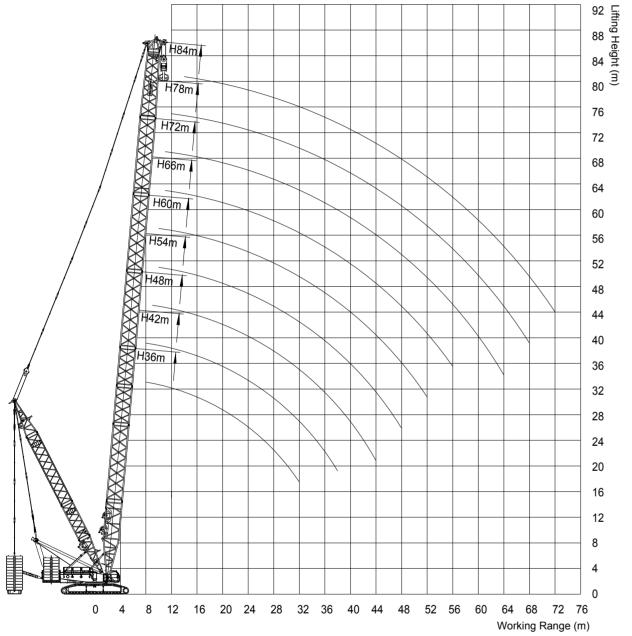
Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

## **HDB OPERATING CONDITION**

soom Combina	ation under l	-INR Operatin	ng Condition		
oom length	ation under i	Boom			
(m)	6 m	12mA	12mB	12mC	
36	2	_	_	_	
42	1	1	_	_	/ 🕮
48	2	1	_	_	Tapered secion H
54	1	1	1	_	
60	2	1	1	_	
66	1	1	2	_	
72	2	1	2	_	12m C boom inser
78	1	1	2	1	
84	2	1	2	1	
					12m B boom insert
				/	6m boom insert H6
					6m boom insert H6
					12m A boom insert H8A
					Boom base H2

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

# OPERATING RANGE OF HDB OPERATING CONDITION



Lifting Height – Working Range Curve under HDB Operating Condiion

# LOAD CHART (HDB OPERATING CONDITION)

**Load Chart of HDB Operating Condition** 

(Boom length of 36~84m; superlift mast of 30m; superlift radius of 16m; superlift counterweight:0-250t; rear counterweight:140t; central counterweight: 40t)

Main boom Radius(m)	36	42	48	54	60	66	72	78	84	Main boom Radius(m)
8	468.4	450.0								8
9	471.2	450.0	427.0							9
10	471.2	450.0	427.0	380.0	350.0					10
11	472.2	450.0	427.0	380.0	350.0	295.0	254.0			11
12	500.0	450.0	427.0	380.0	350.0	295.0	254.0	213.9		12
14	440.0	412.9	409.2	380.0	350.0	295.0	254.0	213.9	183.2	14
16	384.2	360.8	359.0	357.1	350.0	295.0	254.0	213.9	183.2	16
18	319.9	319.0	316.2	315.3	313.4	295.0	254.0	213.9	183.2	18
20	286.4	284.6	282.7	281.8	279.9	279.0	254.0	213.9	183.2	20
22	258.5	256.7	255.8	253.9	253.0	251.1	250.2	213.9	183.2	22
24	235.3	233.4	232.5	231.6	229.7	228.8	227.9	213.9	183.2	24
26	215.8	213.9	213.0	212.0	211.1	209.3	208.3	206.5	183.2	26
28	199.0	197.2	196.2	195.3	194.4	193.4	191.6	190.7	183.2	28
30	184.1	183.2	182.3	181.4	179.5	178.6	177.6	175.8	174.8	30
32	171.1	170.2	169.3	168.3	167.4	166.5	164.6	163.7	161.8	32
34		159.0	158.1	157.2	156.2	155.3	154.4	152.5	151.6	34
36		148.8	147.9	146.9	146.0	145.1	144.2	142.3	141.4	36
38		140.4	139.5	138.6	137.6	136.7	135.8	133.9	133.0	38
40			131.1	130.2	129.3	128.3	127.4	126.5	124.6	40
44			117.2	117.2	115.3	114.4	113.5	112.5	111.6	44
48				105.1	104.2	103.2	102.3	100.4	99.5	48
52					93.9	93.9	92.4	91.1	90.0	52
56						85.2	84.1	82.8	81.7	56
60							76.8	75.5	74.4	60
64							70.4	69.2	68.1	64
68								63.5	62.4	68
72									57.4	72

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minusthe total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

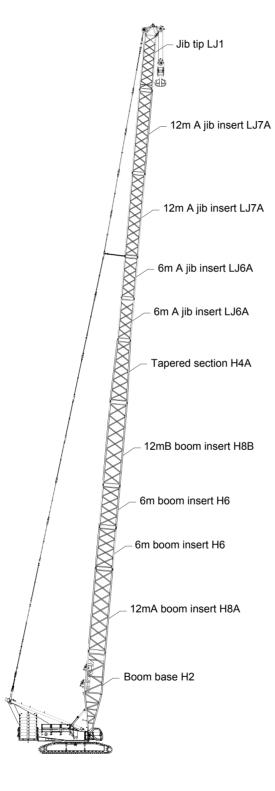
The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and fl at ground.

## HJ OPERATING CONDITION

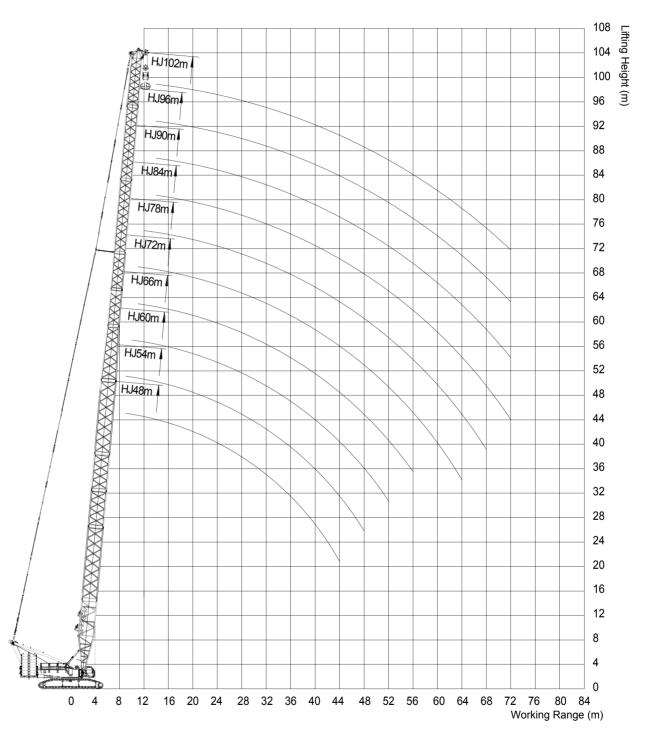
Boom Combination under HJ Operating Condition										
Boom length	E	Boom inser	t	Jib insert						
(m)	6 m	12mA	12mB	6mA	12mA					
48	2	-	-	1	-					
54	2	_	_	2	_					
60	1	1	-	2	-					
66	1	1	_	1	1					
72*	2	1	-	1	1					
78*	2	1	_	2	1					
84	1	1	1	2	1					
90*	1	1	1	1	2					
96*	2	1	1	1	2					
102*	2	1	1	2	2					

Note: \* Waist rope must be used if boom length is greater than 72m (including), or the boom may break.

! Attention: If exceeding 84m (including) boom is applied for this operating condition, outrigger must be erected from the side, or the crane may tilt!



# OPERATING RANGE DIAGRAM OF HJ OPERATING CONDITION



Lifting Height – Working Range Curve under HJ

Operating Condition

#### **Boom Load Chart(HJ Operating Condition)**

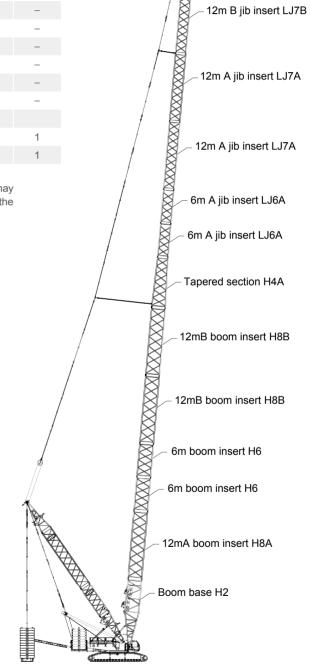
(Combined boom of 48~102m; rear counterweight of basic machine of 180t; central counterweight of 40t)

Main boom Radius(m)	48	54	60	66	72	78	84	90	96	102	Main boom Radius(m)
9	232.3	232.3									9
10	234.2	224.4	218.0								10
11	213.6	203.8	198.0	182.4	173.8						11
12	194.0	186.2	181.0	167.0	160.3	153.6					12
14	161.3	157.8	155.0	146.0	143.0	132.5	126.7	122.9	118.1	97.0	14
16	139.2	133.4	128.6	126.4	125.0	115.2	111.4	107.5	102.7	89.2	16
18	121.9	117.1	113.3	109.4	108.0	101.8	97.9	95.2	91.6	82.2	18
20	107.5	103.7	100.8	97.0	94.2	91.0	87.7	85.0	81.7	76.0	20
22	96.0	93.7	90.3	87.6	84.5	81.7	78.8	76.2	73.2	70.7	22
24	85.2	84.6	81.6	79.2	76.3	73.7	71.1	68.8	66.0	63.6	24
26	76.2	75.6	74.1	71.9	69.2	66.9	64.5	62.4	59.8	57.6	26
28	68.6	68.1	67.2	65.7	63.2	61.0	58.7	56.7	54.3	52.2	28
30	62.2	61.6	60.8	60.1	57.8	55.8	53.7	51.8	49.5	47.5	30
32	56.6	56.2	55.2	54.8	53.1	51.2	49.2	47.4	45.2	43.4	32
34	51.7	51.3	50.4	49.9	48.9	47.0	45.1	43.5	41.4	39.6	34
36	47.5	47.0	46.2	45.7	44.7	43.4	41.5	39.9	37.9	36.2	36
38	43.7	43.3	42.4	42.0	41.0	40.0	38.3	36.8	34.8	33.1	38
40	40.3	39.9	39.1	38.6	37.6	36.9	35.3	33.9	32.0	30.3	40
44	34.5	34.2	33.3	32.8	31.9	31.2	30.1	28.8	27.0	25.4	44
48		29.4	28.5	28.1	27.2	26.4	25.5	24.6	22.8	21.3	48
52			24.5	24.2	23.2	22.5	21.6	20.8	19.1	17.8	52
56				20.7	19.8	19.1	18.2	17.7	16.0	14.6	56
60					16.9	16.2	15.4	14.7	13.2	11.9	60
64					14.3	13.6	12.8	12.2	10.8	9.5	64
68						11.3	10.6	10.0	8.6	7.3	68
72							8.5	8.0	6.6	5.4	72

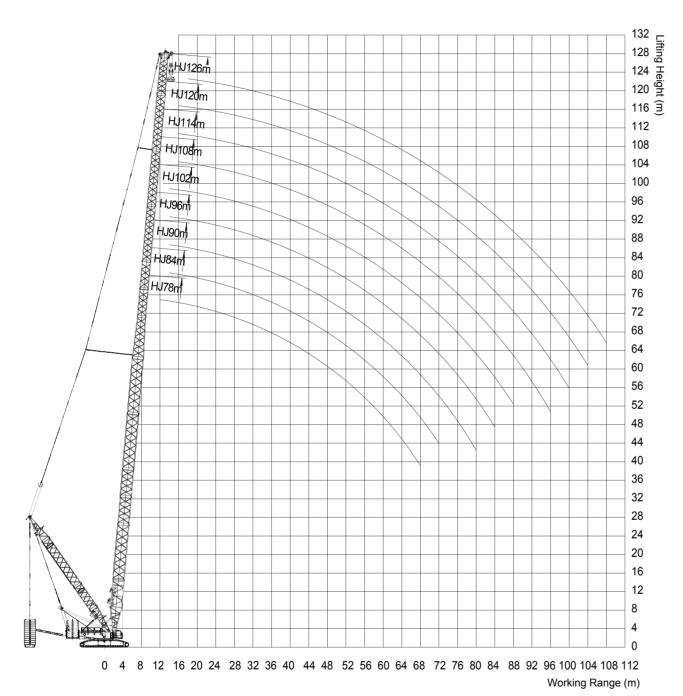
- Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.
  - 2. The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

## **HJDB OPERATING CONDITION**

(m) 6m 12mA 12mB 6mA 12mA 12mB  78* 2 1 2 84* 2 1 2 1 90* 2 1 2 2 96* 2 1 2 1 1 102* 2 1 2 2 1 - 108* 2 1 2 1 2 1 2 - 114* 2 1 2 2 2 1 1 2 1 120* 2 1 2 1 2 1 126* 2 1 2 1 126* 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Boom length		Boom inser	erating Co t	Hullon	Jib insert		
84* 2 1 2 1 — — 90* 2 1 2 2 — — 96* 2 1 2 1 1 — 102* 2 1 2 2 1 — 108* 2 1 2 1 2 — 114* 2 1 2 2 2 — 120* 2 1 2 1 2 1 126* 2 1 2 2 2 1  ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	(m)	6m	12mA	12mB	6mA	12mA	12mB	
90* 2 1 2 2 96* 2 1 2 1 1 - 102* 2 1 2 1 - 108* 2 1 2 1 2 - 114* 2 1 2 2 2 1 1 2 1 120* 2 1 2 2 2 1 120* 2 1 2 1 2 1 2 1 126* 2 1 2 2 2 1 1 126* 2 1 2 2 2 1 1 126* 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1	78*	2	1	2	_	-	-	
96* 2 1 2 1 1 —  102* 2 1 2 1 —  108* 2 1 2 1 2 —  114* 2 1 2 2 2 —  120* 2 1 2 1 2 1  126* 2 1 2 1 2 1  ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	84*	2	1	2	1	-	-	
102*         2         1         2         2         1         -           108*         2         1         2         1         2         -           114*         2         1         2         2         2           120*         2         1         2         1         2         1           126*         2         1         2         2         2         1           ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the         Indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	90*	2	1	2	2	-	-	
108*       2       1       2       1       2       -         114*       2       1       2       2       2         120*       2       1       2       1       2       1         126*       2       1       2       2       2       1         ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	96*	2	1	2	1	1	-	
114*         2         1         2         2         2           120*         2         1         2         1         2         1           126*         2         1         2         2         2         1           ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the         Indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	102*	2	1	2	2	1	-	
120* 2 1 2 1 2 1 126* 2 1 2 2 2 1  ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	108*	2	1	2	1	2	-	
126* 2 1 2 2 1  ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	114*	2	1	2	2	2		
ote: * indicates that all booms must use waist ropes, or boom may break. The waist rope shall be used strictly according to the	120*	2	1	2	1	2	1	
break. The waist rope shall be used strictly according to the	126*	2	1	2	2	2	1	
	break. Th	ne waist ro						



# OPERATING RANGE DIAGRAM OF HJDB OPERATING CONDITION



Lifting Height – Working Range Curve under HJDB

Operating Condition

# BOOM LOAD CHART (HJDB OPERATING CONDITION)

#### **HJDB** operating con;dition

(combined boom of 78~126m; superlift mast of 30m; superlift radius of 16m; superlift counterweight of 0-250t; rear counterweight of 140t; central counterweight of 40t)

Main boom Radius(m)	78	84	90	96	102	108	114	120	126	Main boom Radius(m)
12	210.0									12
14	206.0	182.0	152.1	130.5	113.4					14
16	204.0	182.0	152.1	130.5	113.4	98.1	85.1	74.1		16
18	198.0	182.0	152.1	130.5	113.4	98.1	85.2	73.6	63.0	18
20	193.0	182.0	152.1	130.5	112.5	98.1	85.2	73.5	63.0	20
22	189.0	177.0	147.6	125.1	112.5	97.2	85.2	73.4	63.0	22
24	184.0	173.0	143.1	120.6	112.5	97.2	85.2	70.8	63.0	24
26	180.0	169.0	142.3	116.1	112.5	97.2	83.3	68.1	63.0	26
28	176.0	164.0	138.6	111.6	112.5	97.2	80.6	65.7	60.6	28
30	170.0	159.0	136.8	108.0	112.5	94.5	77.9	63.4	58.3	30
32	161.5	154.0	135.0	103.5	111.6	90.9	75.8	61.3	56.2	32
34	150.3	144.9	135.0	100.8	110.7	88.7	73.5	65.9	54.6	34
36	141.3	140.4	125.4	97.2	107.1	85.3	70.7	63.9	52.8	36
38	132.3	131.4	121.6	93.6	103.5	82.9	68.2	62.0	51.1	38
40	125.1	124.2	118.8	91.8	100.8	80.5	73.5	60.2	49.5	40
44	111.6	110.7	107.1	86.7	96.3	75.8	68.9	56.9	46.6	44
48	100.8	99.9	99.0	82.4	91.8	71.9	64.9	53.9	44.0	48
52	90.9	90.9	90.0	78.8	88.3	68.2	61.3	51.5	41.7	52
56	83.5	82.8	82.1	75.9	80.6	65.3	58.2	49.1	39.5	56
60	76.5	75.9	75.1	73.4	73.7	62.9	55.6	46.8	37.7	60
64	70.4	69.7	68.9	68.4	67.6	60.6	53.7	44.7	35.9	64
68	64.9	64.3	63.5	63.0	62.2	59.0	51.5	42.7	34.2	68
72		59.4	58.7	58.1	57.3	56.8	50.1	40.8	32.5	72
76			54.4	53.8	53.0	52.4	48.7	39.0	31.0	76
80			50.4	49.9	49.1	48.5	47.7	37.4	29.7	80
84				46.3	45.5	45.0	45.8	35.8	28.2	84
88					42.3	41.7	43.7	34.1	26.8	88
92						38.7	41.6	32.5	25.4	92
96						36.0	39.1	30.8	24.0	96
100							36.3	29.3	22.8	100
104								27.6	21.6	104
108									20.4	108

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

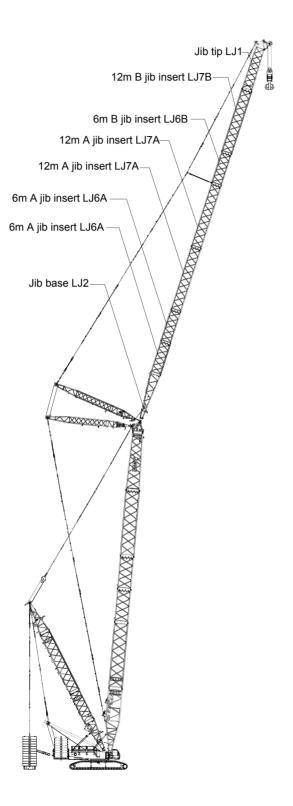
2. The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

## LJ(DB) OPERATING CONDITION

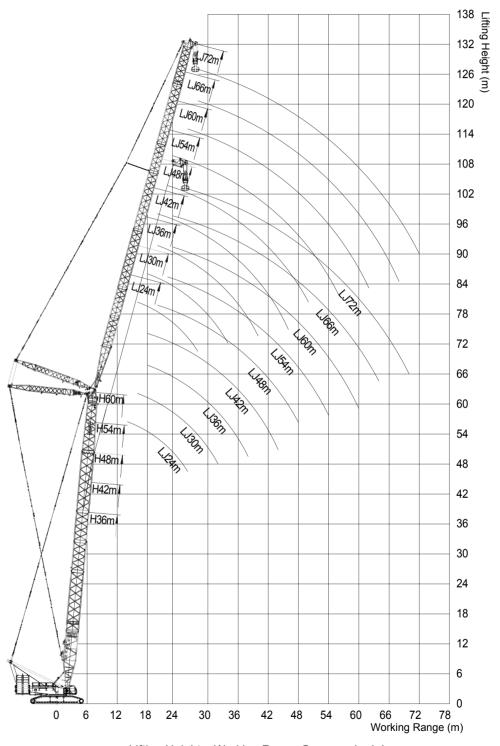
Boom Combination under LJ(DB) Operating Condition											
Jib length		Jib ii	nsert		Boom length						
(m)	6 mA	6mB	12mA	12 mB	(m)						
24	1	_	_	_							
30	2	_	_	_							
36	1	_	1	_							
42	2	_	1	_							
48	1	_	2	_	36~60(LJ)						
54	2	_	2	_	36~84(LJDB)						
60	2	1	2	_							
66*	2	_	2	1							
72*	2	1	2	1							
78*	2	_	2	2							
84*	2	1	2	2							

Note: Jib length under LJ operating condition: 24m~72m; Jib length under LJDB operating condition: 24m~84m;

\* indicates that 66m~84m jib must use waist rope.
! Attention: Erecting the boom under LJ operating condition must be applied strictly according to the Erection and Lowering Table in the manual, or the crane may tilt!



# OPERATING RANGE OF LJ OPERATING CONDITION



Lifting Height – Working Range Curve under LJ

Operating Condition

**Load Chart of LJ Operating Condition** 

(Boom length of 36m; rear counterweight of basic machine of 180t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	Jib(m) Radius(m)
14	147.6									14
16	129.6	124.2								16
18	115.2	110.7	107.1	102.6						18
20	103.5	99.9	96.3	92.7	90.0					20
22	93.6	90.9	87.9	84.7	81.9	78.9				22
24	86.1	83.2	80.5	77.5	74.9	72.2	69.7	67.4		24
26	79.2	76.5	74.0	71.2	68.9	66.3	64.0	61.9	59.7	26
28		70.7	68.4	65.8	63.5	61.2	59.0	57.2	55.0	28
30		65.6	63.5	61.0	59.0	56.7	54.6	52.8	50.9	30
32		60.9	59.1	56.8	54.8	52.7	50.8	49.1	47.2	32
34			55.3	53.0	51.1	49.1	47.3	45.6	43.8	34
36			51.7	49.7	47.9	45.9	44.1	42.6	40.8	36
38			47.9	46.6	44.9	43.0	41.3	39.8	38.1	38
40				43.8	42.2	40.4	38.7	37.3	35.6	40
42				40.9	39.7	38.0	36.3	34.9	33.3	42
44				38.1	37.4	35.7	34.1	32.8	31.2	44
46					35.2	33.7	32.1	30.8	29.3	46
48					32.9	31.8	30.2	29.0	27.5	48
50						30.1	28.5	27.3	25.8	50
52						28.3	26.9	25.7	24.3	52
54						26.5	25.5	24.3	22.9	54
56							24.0	22.9	21.5	56
58							22.7	21.6	20.3	58
60							21.3	20.3	19.0	60
62								19.3	17.9	62
64								18.2	16.8	64
66									15.8	66
68									14.9	68
70									14.0	70
Ratio	9	8	7	7	6	5	5	4	4	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

# BOOM LOAD CHART (LJ OPERATING CONDITION)

**Load Chart of LJ Operating Condition** 

(Boom length of 42m; rear counterweight of basic machine of 180t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	Jib(m) Radius(m)
14	140.4									14
16	124.2	118.8								16
18	110.7	106.2	102.6							18
20	99.9	96.3	92.7	89.6	86.5					20
22	90.0	87.7	84.7	81.5	78.8	75.9				22
24	83.2	80.2	77.6	74.6	72.1	69.5	67.0			24
26	76.5	73.9	71.5	68.7	66.3	63.9	61.6	59.5		26
28	70.8	68.3	66.1	63.5	61.3	59.0	56.8	54.9	52.7	28
30		63.5	61.4	59.0	56.9	54.7	52.7	50.9	48.8	30
32		59.2	57.2	54.9	52.9	50.9	48.9	47.2	45.3	32
34			53.5	51.3	49.4	47.4	45.5	43.9	42.0	34
36			50.1	48.1	46.3	44.3	42.5	41.0	39.2	36
38			47.2	45.1	43.4	41.5	39.8	38.3	36.5	38
40				42.4	40.8	39.0	37.3	35.8	34.2	40
42				40.0	38.3	36.6	35.0	33.6	32.0	42
44				37.7	36.2	34.5	32.9	31.5	30.0	44
46					34.1	32.5	31.0	29.6	28.1	46
48					32.3	30.7	29.2	27.9	26.4	48
50					30.5	29.0	27.5	26.2	24.8	50
52						27.4	25.9	24.7	23.2	52
54						25.9	24.5	23.3	21.9	54
56							23.1	22.0	20.5	56
58							21.9	20.7	19.3	58
60							20.6	19.5	18.2	60
62								18.4	17.0	62
64								17.4	16.0	64
66								16.4	15.0	66
68									14.1	68
70									13.2	70
Ratio	9	8	7	6	6	5	5	4	4	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

<sup>2.</sup> The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

**Load Chart of LJ Operating Condition** 

(Boom length of 48m; rear counterweight of basic machine of 180t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	Jib(m) Radius(m)
16	118.8	114.3								16
18	106.2	101.7	98.1							18
20	95.4	91.8	89.5	86.0						20
22	87.5	84.3	81.5	78.4	75.7	72.8				22
24	80.1	77.3	74.7	71.8	69.3	66.7	64.3			24
26	73.8	71.3	68.9	66.2	63.8	61.4	59.1	57.1		26
28	68.4	66.0	63.7	61.2	59.0	56.8	54.5	52.7	50.6	28
30		61.3	59.2	56.9	54.8	52.7	50.6	48.8	46.8	30
32		57.2	55.3	53.0	51.0	49.0	47.0	45.3	43.4	32
34		53.6	51.7	49.5	47.6	45.6	43.7	42.1	40.3	34
36			48.4	46.4	44.6	42.7	40.9	39.3	37.5	36
38			45.5	43.6	41.9	40.0	38.3	36.7	35.0	38
40				41.0	39.3	37.5	35.8	34.4	32.7	40
42				38.6	37.0	35.3	33.7	32.2	30.6	42
44				36.5	34.9	33.2	31.6	30.2	28.6	44
46					32.9	31.3	29.7	28.4	26.8	46
48					31.1	29.5	28.0	26.7	25.2	48
50					29.4	27.9	26.4	25.1	23.7	50
52						26.3	24.8	23.7	22.1	52
54						24.8	23.5	22.2	20.8	54
56						23.5	22.1	21.0	19.5	56
58							20.9	19.8	18.4	58
60							19.7	18.6	17.2	60
62								17.6	16.2	62
64								16.5	15.2	64
66								15.6	14.2	66
68									13.3	68
70									12.4	70
72									11.6	72
Ratio	8	7	6	6	5	5	4	4	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

# BOOM LOAD CHART (LJ OPERATING CONDITION)

**Load Chart of LJ Operating Condition** 

(Boom length of 54m; rear counterweight of basic machine of 180t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	Jib(m) Radius(m)
16	113.4									16
18	101.7	98.1	94.5							18
20	91.8	88.9	85.9	82.5						20
22	84.1	81.1	78.3	75.2	72.5					22
24	77.1	74.4	71.8	69.0	66.6	64.0	61.6			24
26	71.2	68.6	66.2	63.6	61.4	59.0	56.6	54.6		26
28	66.0	63.5	61.4	59.0	56.8	54.5	52.3	50.5	48.3	28
30		59.1	57.1	54.7	52.7	50.5	48.5	46.7	44.7	30
32		55.2	53.3	51.0	9.0	47.0	45.1	43.4	41.5	32
34		51.7	49.9	47.7	45.8	43.8	41.9	40.4	38.5	34
36			46.7	44.6	42.9	41.0	39.2	37.6	35.9	36
38			43.9	41.9	40.2	38.4	36.6	35.2	33.5	38
40			41.4	39.5	37.8	36.0	34.4	32.9	31.2	40
42				37.2	35.6	33.8	32.2	30.9	29.2	42
44				35.1	33.6	31.9	30.2	28.9	27.4	44
46					31.7	30.1	28.4	27.2	25.6	46
48					29.9	28.4	26.8	25.5	23.9	48
50					28.3	26.7	25.2	23.9	22.5	50
52						25.2	23.8	22.6	21.1	52
54						23.9	22.4	21.2	19.8	54
56						22.5	21.2	20.0	18.5	56
58							19.9	18.8	17.4	58
60							18.8	17.6	16.3	60
62							17.7	16.7	15.3	62
64								15.7	14.3	64
66								14.7	13.4	66
68									12.5	68
70									11.7	70
72									10.9	72
Ratio	7	6	6	5	5	4	4	4	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

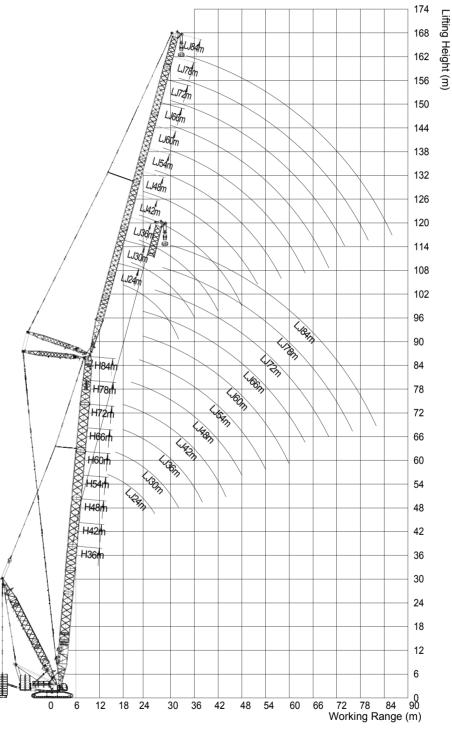
#### **Load Chart of LJ Operating Condition**

(Boom length of 60m; rear counterweight of basic machine of 180t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	Jib(m) Radius(m)
16	108.0									16
18	97.2	93.6								18
20	88.4	85.1	82.1	78.8						20
22	80.6	77.7	75.0	72.0	69.4					22
24	74.1	71.4	68.9	66.2	63.7	61.1				24
26	68.4	65.9	63.5	61.0	58.7	56.3	54.1			26
28	63.4	61.1	59.0	56.5	54.4	52.1	50.0	48.1	46.0	28
30		56.9	54.8	52.5	50.5	48.3	46.4	44.6	42.6	30
32		53.1	51.2	49.0	47.1	45.0	43.0	41.4	39.4	32
34		49.7	47.9	45.8	43.9	41.9	40.1	38.5	36.6	34
36			44.9	42.9	41.1	39.2	37.4	35.9	34.1	36
38			42.2	40.2	38.6	36.7	35.0	33.5	31.8	38
40			39.8	37.9	36.3	34.5	32.8	31.3	29.7	40
42				35.7	34.1	32.4	30.8	29.3	27.7	42
44				33.7	32.1	30.4	28.9	27.5	25.9	44
46				31.8	30.3	28.7	27.1	25.8	24.2	46
48					28.6	27.0	25.5	24.2	22.7	48
50					27.1	25.5	24.0	22.8	21.2	50
52						24.0	22.6	21.4	19.9	52
54						22.7	21.3	20.1	18.6	54
56						21.4	20.1	18.9	17.5	56
58							18.9	17.7	16.4	58
60							17.8	16.7	15.3	60
62							16.7	15.7	14.3	62
64								14.7	13.3	64
66								13.8	12.5	66
68								13.0	11.6	68
70									10.8	70
72									10.0	72
Ratio	7	6	5	5	5	4	4	3	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

# OPERATING RANGE DIAGRAM OF LIDB OPERATING CONDITION



Lifting Height – Working Range Curve under LJDB

Operating Condition

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

#### **Load Chart of LJ Operating Condition**

(Boom length of 36m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
14	226.6											14
16	233.3	221.3										16
18	240.0	218.6	182.7	153.9								18
20	226.6	206.5	176.4	150.3	127.8							20
22	200.7	194.4	170.1	146.7	125.1	108.0						22
24	190.8	185.1	162.0	141.3	122.4	105.3	90.9	79.4				24
26	163.8	176.7	153.9	135.9	118.8	103.5	89.0	78.6	67.3			26
28		162.8	146.7	130.5	115.2	100.8	87.8	77.3	66.5	58.1		28
30		144.2	138.6	125.1	111.6	98.1	85.6	76.1	65.5	57.4	49.1	30
32		127.4	131.4	118.8	106.2	95.4	83.5	74.3	64.6	56.7	48.4	32
34			120.6	113.4	102.6	91.8	81.4	72.9	63.4	56.1	47.7	34
36			108.9	107.1	98.1	88.8	78.8	71.1	62.2	55.0	46.9	36
38			97.2	100.8	94.5	85.4	76.5	69.2	60.9	53.9	46.2	38
40				91.8	89.6	82.4	74.3	67.4	59.8	52.9	45.5	40
42				83.4	85.5	78.9	71.6	65.6	58.2	51.8	44.6	42
44				75.1	81.2	75.8	69.2	63.8	56.7	50.9	43.9	44
46					74.9	72.5	67.0	62.0	55.3	49.8	42.9	46
48					68.4	69.4	64.4	59.8	53.7	48.8	42.1	48
50						66.3	62.0	58.0	52.3	47.4	41.2	50
52						61.8	59.5	55.8	50.9	46.4	40.2	52
54						56.8	56.9	54.0	49.3	45.2	39.3	54
56							54.8	52.1	47.7	43.8	38.6	56
58							51.7	50.0	46.1	42.6	37.3	58
60							47.5	48.2	44.6	41.7	34.9	60
62								46.5	43.1	40.4	32.3	62
64								43.6	41.9	39.2	30.2	64
66									40.3	37.7	28.1	66
68									38.8	36.5	26.2	68
70									36.6	35.4	23.9	70
72										34.3	22.5	72
74										33.1	20.1	74
76										30.9	18.6	76
78											17.5	78
80											15.4	80
82											14.3	82
Ratio	2×7	2×7	2×6	10	8	7	6	5	4	4	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

# BOOM LOAD CHART (LJDB OPERATING CONDITION)

#### **Load Chart of LJ Operating Condition**

(Boom length of 42m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
14	212.4											14
16	216.9	207.0										16
18	225.0	199.8	171.0									18
20	218.7	190.8	164.7	142.2	121.5							20
22	204.3	180.9	158.4	137.7	118.8	102.6						22
24	189.9	171.0	151.2	133.2	116.1	100.8	87.1					24
26	171.9	161.1	144.9	127.8	112.5	98.1	85.2	75.2				26
28	146.7	150.3	137.7	122.4	108.9	95.4	83.7	74.0	64.0	56.1		28
30		140.4	129.6	117.9	104.4	92.7	81.7	72.4	63.2	55.4	47.4	30
32		128.7	122.4	111.6	100.8	89.8	79.4	71.1	62.0	54.5	46.7	32
34			115.2	106.2	97.2	86.9	77.4	69.4	60.8	53.9	46.0	34
36			108.0	100.8	92.7	84.1	75.3	67.7	59.4	52.9	45.3	36
38			100.8	95.4	88.2	81.0	72.5	66.0	58.3	51.9	44.6	38
40				90.0	84.6	77.7	70.5	64.3	57.2	50.9	43.7	40
42				84.7	80.1	74.3	68.2	62.6	55.7	49.6	43.0	42
44				78.2	76.1	71.1	65.5	60.4	54.3	48.7	42.3	44
46					72.5	68.3	63.1	58.7	52.6	47.7	41.2	46
48					68.8	64.9	60.5	56.5	51.2	46.4	40.4	48
50					64.5	62.1	58.4	54.8	49.5	45.1	39.5	50
52						59.2	55.7	52.7	48.1	43.8	38.5	52
54						56.3	53.6	50.6	46.6	42.7	37.7	54
56							51.0	49.0	44.9	41.4	36.5	56
58							48.9	46.9	43.6	40.1	35.6	58
60							46.7	44.8	42.1	39.0	34.7	60
62								43.2	40.5	37.8	32.9	62
64								41.6	38.9	36.6	30.7	64
66								39.6	37.4	35.5	28.7	66
68									36.3	34.0	26.6	68
70									34.7	32.9	24.8	70
72										31.9	22.6	72
74										30.8	21.0	74
76										29.4	19.4	76
78											17.4	78
80											16.3	80
82											14.6	82
Ratio	2×8	2×7	11	9	8	7	6	5	4	4	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

2. The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

#### **Load Chart of LJ Operating Condition**

(Boom length of 48m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
16	214.2	184.5										16
18	205.2	178.2	153.9									18
20	194.4	171.0	149.4	128.7								20
22	182.7	162.9	143.1	125.1	108.9	94.5						22
24	170.1	153.9	136.8	121.5	106.2	92.7	80.6					24
26	158.4	144.0	131.4	117.0	103.5	90.9	79.2	69.7				26
28	146.7	135.9	124.2	111.6	99.9	88.1	77.5	68.6	59.8			28
30		126.9	117.0	106.2	96.3	85.6	75.7	67.5	58.7	51.8	44.3	30
32		118.8	110.7	101.7	91.8	82.5	73.5	66.0	57.7	50.9	43.7	32
34		110.7	104.4	96.3	88.3	79.9	71.7	64.4	56.7	50.0	43.1	34
36			98.1	91.8	84.3	77.0	69.1	62.7	55.4	49.2	42.5	36
38			91.8	86.4	80.4	74.0	66.9	60.8	54.3	48.3	41.9	38
40				81.5	76.8	70.9	64.6	59.1	52.7	47.4	41.0	40
42				77.0	72.5	68.0	62.5	57.1	51.4	46.3	40.2	42
44				72.4	69.3	64.9	59.8	55.5	49.8	45.0	39.2	44
46					65.7	61.7	57.3	53.5	48.5	43.8	38.5	46
48					62.0	59.2	55.3	51.5	46.9	42.6	37.5	48
50					58.8	56.2	52.8	49.9	45.4	41.8	36.5	50
52						53.2	50.4	47.9	44.0	40.2	35.6	52
54						50.9	48.4	45.9	42.5	39.1	34.7	54
56						48.2	46.4	43.9	41.0	38.0	33.8	56
58							44.1	42.4	39.5	36.8	32.9	58
60							41.9	40.5	37.8	35.4	31.8	60
62								38.8	36.5	34.3	31.0	62
64								37.1	35.0	33.1	29.8	64
66								35.6	33.7	31.8	28.7	66
68									32.4	30.7	26.9	68
70									31.1	29.7	25.0	70
72									29.7	28.4	22.8	72
74										27.4	21.2	74
76										26.3	19.4	76
78											17.9	78
80											16.1	80
82											15.1	82
Ratio	2×7	2×6	10	8	7	6	5	5	4	4	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

2. The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

# BOOM LOAD CHART (LJDB OPERATING CONDITION)

#### **Load Chart of LJ Operating Condition**

(Boom length of 54m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
16	192.6											16
18	183.6	160.2	138.6									18
20	173.7	153.0	135.0	117.9								20
22	162.9	145.8	129.6	114.3	99.9							22
24	153.0	138.6	124.2	110.7	97.2	85.5	75.1					24
26	142.2	129.6	118.8	106.2	94.5	83.3	73.4	64.9				26
28	132.3	122.4	112.5	101.7	91.8	81.3	71.8	63.5	55.8			28
30		114.3	106.2	97.2	88.0	78.5	70.2	62.6	54.6	48.4		30
32		107.1	99.9	92.7	84.2	76.1	68.1	61.1	53.6	47.6	41.0	32
34		99.9	94.5	87.1	80.5	73.5	66.1	59.6	52.7	46.8	40.4	34
36			88.4	83.0	76.9	70.6	63.6	57.7	51.5	45.7	39.9	36
38			82.9	78.1	73.1	67.4	61.5	56.2	50.2	44.9	38.9	38
40			78.0	73.7	69.8	64.7	59.4	54.3	48.7	43.7	38.3	40
42				69.9	66.2	61.7	57.0	52.7	47.3	42.9	37.4	42
44				65.4	62.6	58.9	54.7	50.8	46.0	41.8	36.5	44
46					59.2	56.2	52.3	48.9	44.5	40.7	35.6	46
48					56.1	53.3	50.4	47.0	43.0	39.2	34.7	48
50					52.9	50.8	48.1	45.1	41.5	38.2	33.8	50
52						48.2	46.1	43.2	40.1	37.0	32.9	52
54						46.0	43.7	41.8	38.6	35.6	32.0	54
56						43.5	41.9	39.9	37.2	34.6	31.1	56
58							40.0	38.1	35.6	33.5	30.1	58
60							37.7	36.5	34.2	32.1	29.0	60
62							35.9	34.8	32.9	31.1	28.1	62
64								33.3	31.5	29.7	27.2	64
66								31.7	30.1	28.7	26.2	66
68									28.9	27.5	25.2	68
70									27.6	26.5	24.3	70
72									26.6	25.5	23.3	72
74										24.2	21.7	74
76										23.2	19.6	76
78										22.4	18.2	78
80											16.3	80
82											15.3	82
Ratio	2×6	10	9	8	6	5	5	4	4	3	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

2. The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

#### **Load Chart of LJ Operating Condition**

(Boom length of 60m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
16	178.6											16
18	172.0	150.1										18
20	162.5	144.4	128.3	113.1								20
22	153.0	137.8	123.5	109.3	96.9							22
24	144.4	130.2	118.8	105.5	94.1	82.7						24
26	134.0	123.5	113.1	101.7	91.2	80.8	71.5					26
28	125.4	115.9	106.4	96.9	87.8	78.5	69.9	62.2	54.4			28
30		108.3	100.7	93.0	84.4	76.0	67.9	60.8	53.6	47.4		30
32		101.7	95.0	87.8	80.8	73.2	65.8	59.4	52.3	46.6	40.3	32
34		94.7	89.4	83.3	77.2	70.6	63.7	57.9	51.2	45.6	39.6	34
36			84.5	78.8	73.5	67.6	61.7	56.0	50.0	44.7	39.0	36
38			78.9	74.7	70.0	64.8	59.2	54.4	48.7	43.6	38.1	38
40			74.1	70.4	66.4	61.8	57.1	52.5	47.2	42.6	37.3	40
42				66.2	63.2	59.1	54.6	50.6	45.7	41.4	36.4	42
44				62.6	59.6	56.3	52.5	48.6	44.5	40.3	35.6	44
46				58.7	56.4	53.8	50.2	46.7	42.7	39.1	34.7	46
48					53.5	50.8	48.0	44.8	41.4	38.0	33.7	48
50					50.4	48.1	45.7	42.9	39.7	36.6	32.7	50
52						45.8	43.6	41.4	38.2	35.4	31.5	52
54						43.4	41.5	39.5	36.8	34.1	30.7	54
56						41.1	39.4	37.7	35.3	33.0	29.7	56
58							37.4	35.9	33.9	31.6	28.7	58
60							35.9	34.5	32.5	30.6	27.6	60
62							33.8	32.7	31.0	29.2	26.8	62
64								31.3	29.5	28.1	25.7	64
66								29.6	28.4	26.9	24.7	66
68								28.3	27.1	25.8	23.7	68
70									25.7	24.7	22.8	70
72									24.6	23.6	21.9	72
74										22.6	20.9	74
76										21.7	20.0	76
78										20.7	19.3	78
80											17.6	80
82											16.5	82
84											14.8	84
Ratio	12	10	8	7	6	5	5	4	4	3	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

# BOOM LOAD CHART (LJDB OPERATING CONDITION)

#### **Load Chart of LJ Operating Condition**

(Boom length of 66m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
16	155.3											16
18	149.7	132.1										18
20	142.3	126.5	113.5									20
22	134.9	120.9	108.8	97.7	86.0							22
24	126.5	115.3	104.2	93.9	83.9	74.3						24
26	118.1	108.8	99.5	90.2	81.6	72.5	64.4					26
28	110.7	102.3	93.9	86.7	78.4	70.3	62.9	55.9				28
30	103.2	95.8	89.1	82.7	75.1	68.0	61.3	54.6	48.3	42.8		30
32		89.7	83.7	78.2	71.8	65.7	59.1	53.3	47.2	42.0	36.5	32
34		83.8	79.0	74.2	68.9	63.0	57.4	51.9	46.0	41.3	35.8	34
36			74.4	70.2	65.7	60.3	55.1	50.0	44.9	40.3	35.2	36
38			70.0	66.0	62.4	57.8	53.1	48.6	43.7	39.2	34.4	38
40			65.5	62.6	59.2	55.1	51.2	46.9	42.3	38.2	33.6	40
42				59.0	56.2	52.5	48.9	45.0	40.9	37.2	32.6	42
44				55.5	52.8	50.1	46.6	43.2	39.7	36.1	31.8	44
46				52.4	50.0	47.3	44.6	41.8	38.1	35.1	31.0	46
48					47.2	45.2	42.5	40.0	36.7	33.8	30.0	48
50					44.7	42.7	40.5	38.2	35.3	32.6	29.2	50
52					42.1	40.4	38.7	36.5	33.9	31.3	28.2	52
54						38.4	36.6	34.8	32.6	30.3	27.2	54
56						36.5	35.0	33.4	31.0	29.0	26.2	56
58							33.2	31.7	29.9	28.0	25.3	58
60							31.5	30.2	28.4	26.8	24.4	60
62							29.8	28.7	27.2	25.8	23.4	62
64								27.4	25.9	24.6	22.4	64
66								25.9	24.7	23.6	21.7	66
68								24.7	23.7	22.4	20.6	68
70									22.5	21.5	19.8	70
72									21.5	20.6	19.0	72
74										19.6	18.2	74
76										18.6	17.3	76
78										17.7	16.6	78
80											15.9	80
82											15.1	82
84											14.5	84
Ratio	10	8	7	6	6	5	4	4	3	3	3	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

2. The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

#### **Load Chart of LJ Operating Condition**

(Boom length of 72m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
18	133.0	118.1										18
20	126.5	113.5	101.4									20
22	120.0	108.8	97.7	87.4								22
24	113.5	103.2	93.9	84.6	76.1	67.9						24
26	106.0	97.7	89.6	81.4	73.5	66.2	58.8					26
28	99.5	92.1	84.8	77.9	71.1	64.1	57.4	51.3				28
30	93.0	86.1	80.3	74.1	68.0	61.8	55.8	50.0	44.3			30
32		80.9	75.7	70.3	65.2	59.6	54.0	48.7	43.2	38.4	33.6	32
34		76.0	71.3	67.0	62.0	57.4	52.2	47.4	42.1	37.8	32.8	34
36		71.5	67.1	63.2	59.2	54.8	50.2	45.7	41.0	36.8	32.2	36
38			63.1	59.7	56.2	52.5	48.4	44.3	39.7	35.8	31.5	38
40			59.3	56.3	53.1	49.9	46.2	42.6	38.6	34.8	30.7	40
42				52.9	50.2	47.7	44.3	40.8	37.2	33.9	29.9	42
44				50.1	47.6	45.2	42.4	39.2	35.9	32.8	29.0	44
46				47.1	45.2	42.8	40.4	37.8	34.5	31.5	28.3	46
48					42.5	40.7	38.2	36.0	33.2	30.5	27.2	48
50					40.3	38.7	36.5	34.3	31.8	29.6	26.2	50
52					37.8	36.5	34.7	32.6	30.5	28.3	25.4	52
54						34.5	33.0	31.3	29.0	27.1	24.6	54
56						32.7	31.3	29.8	27.9	26.0	23.4	56
58						31.0	29.8	28.5	26.5	24.8	22.6	58
60							28.2	27.0	25.4	23.9	21.7	60
62							26.7	25.7	24.2	22.7	20.7	62
64								24.3	23.0	21.8	20.0	64
66								23.1	21.9	20.8	19.1	66
68								21.9	20.8	19.7	18.1	68
70									19.9	18.9	17.5	70
72									18.8	18.0	16.7	72
74									17.9	17.1	15.8	74
76										16.4	15.2	76
78										15.5	14.4	78
80											13.7	80
82											13.0	82
84											12.4	84
Ratio	9	8	6	6	5	4	4	3	3	3	2	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

# BOOM LOAD CHART (LJDB OPERATING CONDITION)

#### **Load Chart of LJ Operating Condition**

(Boom length of 78m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
18	119.0											18
20	115.3	103.2	92.0									20
22	109.7	99.5	89.4	79.8								22
24	105.1	94.9	86.0	77.7	69.8							24
26	99.5	90.4	83.0	75.0	67.7	60.7						26
28	93.9	86.2	79.1	72.5	65.4	59.1	52.5	47.2				28
30	88.2	81.6	75.2	69.3	63.4	57.3	51.5	46.0	40.9			30
32		76.7	71.4	66.0	60.7	55.3	49.9	45.2	40.0	35.6		32
34		72.5	67.7	63.2	58.3	53.4	48.5	44.1	39.1	35.0	30.4	34
36		68.4	64.0	60.0	56.0	51.4	46.9	42.5	38.2	34.1	29.9	36
38			60.5	56.9	53.3	49.1	45.2	41.3	37.0	33.5	29.3	38
40			57.2	53.8	50.6	47.2	43.5	40.1	36.1	32.6	28.6	40
42			54.1	51.2	48.1	45.2	41.9	38.5	35.1	31.7	28.0	42
44				48.5	45.8	43.0	39.9	37.3	33.9	30.8	27.2	44
46				45.9	43.6	41.0	38.2	35.7	32.6	29.9	26.4	46
48					41.2	39.2	36.6	34.2	31.4	28.9	25.7	48
50					39.2	37.0	34.8	32.8	30.2	27.8	24.8	50
52					36.8	35.2	33.4	31.4	29.2	26.9	24.0	52
54						33.4	31.6	29.9	27.8	25.8	23.3	54
56						31.8	30.1	28.7	26.8	24.8	22.4	56
58						30.2	28.6	27.3	25.5	23.7	21.5	58
60							27.2	26.2	24.5	22.9	20.7	60
62							26.0	24.8	23.3	22.0	20.0	62
64							24.7	23.7	22.2	20.9	19.2	64
66								22.5	21.3	20.1	18.3	66
68								21.4	20.3	19.3	17.6	68
70									19.3	18.2	16.8	70
72									18.4	17.4	16.2	72
74									17.5	16.7	15.3	74
76										15.9	14.8	76
78										15.2	14.0	78
80										14.5	13.3	80
82											12.7	82
84											12.1	84
Ratio	8	7	6	5	5	4	4	3	3	3	2	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

#### **Load Chart of LJ Operating Condition**

(Boom length of 84m; superlift counterweight of 0-250t; rear counterweight of basic machine of 140t; central counterweight of 40t, boom angle of 85 degrees)

Jib(m) Radius(m)	24	30	36	42	48	54	60	66	72	78	84	Jib(m) Radius(m)
18	106.0											18
20	102.3	92.0										20
22	98.6	88.9	80.4	71.9								22
24	93.9	85.2	77.5	69.9	62.9							24
26	89.2	81.7	74.8	67.8	61.2	54.7						26
28	84.4	77.6	71.5	65.6	59.4	53.6	47.8					28
30	79.8	73.4	68.4	62.6	57.6	51.8	46.6	41.9	37.0			30
32	75.3	69.4	64.8	59.9	55.1	50.2	45.4	40.7	36.4	32.2		32
34		65.6	61.5	57.3	52.8	48.4	44.1	40.0	35.6	31.6	27.5	34
36		62.0	58.1	54.4	50.6	46.5	42.5	38.8	34.7	31.1	27.1	36
38			54.9	51.5	48.2	44.6	40.9	37.4	33.8	30.2	26.5	38
40			51.9	48.7	46.0	42.8	39.3	36.2	32.6	29.4	25.9	40
42			49.0	46.3	43.6	40.7	37.8	34.8	31.5	9.0	25.2	42
44				43.8	41.5	38.9	36.2	33.6	30.6	27.7	24.6	44
46				41.6	39.2	37.1	34.6	32.1	29.4	26.8	23.8	46
48				39.2	37.3	35.1	32.9	31.0	28.3	25.9	23.2	48
50					35.3	33.4	31.6	29.5	27.3	25.1	22.2	50
52					33.3	31.7	29.9	28.1	26.0	24.0	21.4	52
54						30.1	28.6	27.0	25.0	23.2	20.7	54
56						28.5	27.1	25.6	23.8	22.1	20.0	56
58						27.2	25.9	24.6	22.9	21.3	19.2	58
60							24.6	23.3	21.8	20.5	18.3	60
62							23.3	22.1	20.7	19.4	17.7	62
64							22.1	21.2	19.8	18.6	17.0	64
66								20.1	18.8	17.9	16.2	66
68								19.0	17.9	16.8	15.3	68
70								18.0	17.0	16.1	14.7	70
72									16.3	15.3	14.0	72
74									15.4	14.6	13.4	74
76										13.9	12.6	76
78										13.2	12.2	78
80										12.5	11.4	80
82											10.9	82
84											10.3	84
86											9.8	86
Ratio	7	6	5	5	4	4	3	3	3	2	2	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

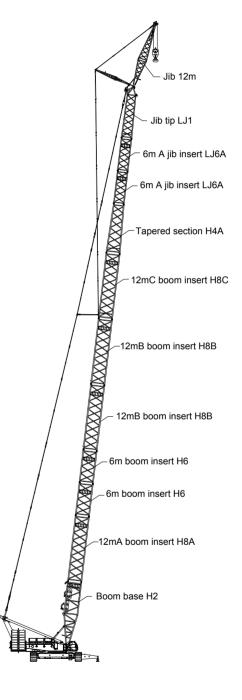
## FJ OPERATING CONDITION

#### 12m Fixed Jib Combination

Boom length			Boom Insert						
(m)	H6	H8A	H8B	H8C	H4	H4A	LJ6A	LJ1	
36	-	-	-	1	1	-	-	-	
42	1	_	-	1	1	-	_	_	
48	2	-	-	1	1	-	-	-	
54	1	1	-	1	1	-	-	-	
60	2	1	-	1	1	-	-	-	
66	1	1	1	1	1	-	-	-	
72	2	1	1	1	1	-	-	_	
78*	1	1	2	1	1	-	-	_	
84*	2	1	2	1	1	-	-	-	
90*	2	1	2	1	-	1	-	1	
96*	2	1	2	1	-	1	1	1	
102*	2	1	2	1	-	1	2	1	

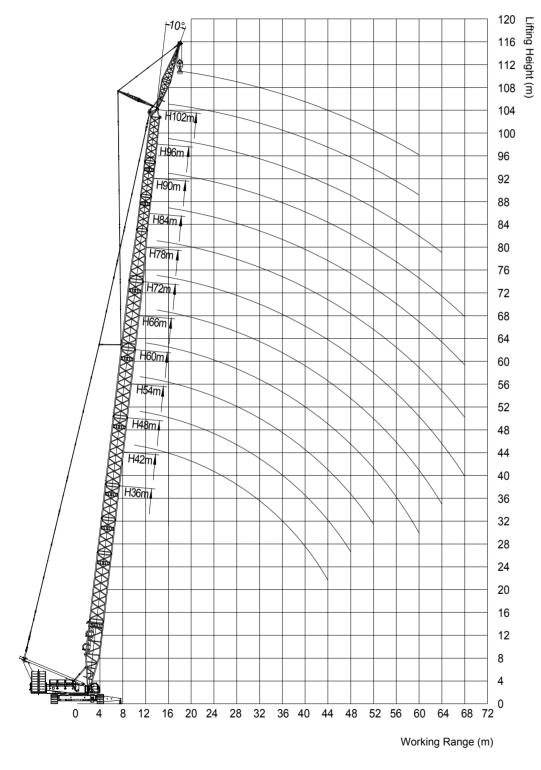
Note: \* means that waist rope must be used if boom length is greater than 78m (including), or the boom may break.

! Attention: If exceeding 78m (including) boom is applied for this operating condition, outrigger must be erected from the side, or the crane may tilt!



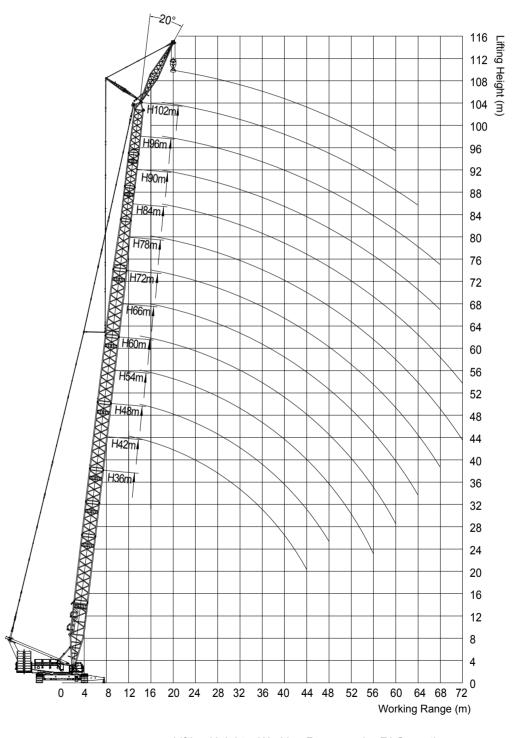
<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

# OPERATING RANGE DIAGRAM OF FJ OPERATING CONDITION



Lifting Height – Working Range under FJ Operating Condition (Jib offset is 10°)

# OPERATING RANGE DIAGRAM OF FJ OPERATING CONDITION



Lifting Height – Working Range under FJ Operating
Condition (Jib offset is 20°)

# FIXED JIB LOAD CHART (Jib Offset 10°)

(Boom 36-102m, Fixed Jib 12m, offset is 10°, rear counterweight of basic machine 180t, central counterweight 40t)

Boom(m) Radius(m)	36	42	48	54	60	66	72	78	84	90	96	102	Boom(m) Radius(m)
10	167												10
11	165	165	164										11
12	164	163	163	162									12
14	159	160	159	160	158	152	147						14
16	155	150	145	140	135	131	126	122	118	107	103		16
18	133	130	126	122	118	114	110	106	103	94.5	90.5	90	18
20	115	113	111	107	103	100	97.1	93.9	90.6	83.9	80.3	76.6	20
22	100	99.3	98.1	95.4	92.1	89.1	86	83.1	80.1	74.9	71.5	68.2	22
24	88.8	87.6	86.4	85.2	82.3	79.5	76.7	74	71.2	67.1	64	60.8	24
26	79.2	78	76.8	75.5	73.9	71.3	68.7	66.2	63.6	60.4	57.4	54.4	26
28	71.1	69.9	68.7	67.5	66.2	64.3	61.7	59.4	57	54.5	51.7	48.8	28
30	64.2	63	61.8	60.6	59.4	58.1	55.7	53.5	51.1	49.3	46.5	43.8	30
32	58.2	57.1	55.9	54.6	53.4	52.4	50.4	48.3	46	44.6	42	39.3	32
34	53	51.9	50.7	49.5	48.3	47.2	45.6	43.6	41.4	40.5	37.9	35.3	34
36	48.5	47.3	46.2	44.9	43.7	42.7	41.4	39.4	37.3	36	34.2	31.7	36
38	44.4	43.3	42.1	40.9	39.7	38.6	37.4	35.7	33.6	32	30.8	28.4	38
40	40.8	39.7	38.5	37.3	36.1	35	33.8	32.3	30.3	28.5	27.8	25.4	40
44	34.5	33.5	32.4	31.2	29.9	28.9	27.6	26.4	24.4	23.5	22.4	20	44
48		28.3	27.2	26.1	24.8	23.8	22.6	21.4	19.5	18.7	17.8	15.5	48
52			22.9	21.8	20.6	19.5	18.3	17.1	15.3	15	13.9	11.6	52
56				18.1	16.9	15.9	14.7	13.5	11.7	11.3	10.5	8.2	56
60				14.9	13.7	12.7	11.5	10.2	8.5	8.4	7.4	5.3	60
64					10.9	10	8.8	7.4	5.7	5.6			64
68						7.5	6.3	4.9	3.2				68
Ratio	11	11	11	10	10	10	9	8	8	7	6	6	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

# FIXED JIB LOAD CHART (Jib Offset 20°)

(Boom 36-102m, Fixed Jib 12m, offset is 20°, rear counterweight of basic machine 180t, central counterweight 40t)

Boom(m) Radius(m)	36	42	48	54	60	66	72	78	84	90	96	102	Boom(m) Radius(m)
12	153												12
14	150	151	150	149									14
16	148	148	148	144	139	135	131						16
18	136	133	129	125	121	117	114	110	107	97.5	93.6		18
20	117	116	114	110	107	103	100	96.9	93.7	86.6	83.1	79.5	20
22	102	101	100	97.6	94.5	91.6	88.6	85.8	82.9	77.4	74.1	70.8	22
24	90.2	89.1	88.1	87	84.4	81.8	79	76.5	73.8	69.4	66.3	63.3	24
26	80.3	79.3	78.3	77.2	75.8	73.4	70.8	68.4	65.9	62.5	59.6	56.7	26
28	72.1	71.1	70	68.9	67.8	66.2	63.7	61.5	59.1	56.4	53.7	50.9	28
30	65.1	64.1	63	61.9	60.8	59.8	57.5	55.4	53.1	51.1	48.4	45.7	30
32	59	58	57	55.9	54.8	53.8	52.1	50	47.9	46.3	43.7	41.1	32
34	53.8	52.8	51.7	50.6	49.5	48.5	47.2	45.3	43.2	42	39.5	37	34
36	49.1	48.1	47.1	45.9	44.8	43.9	42.7	41	38.9	37.9	35.7	33.3	36
38	44.9	44	42.9	41.8	40.7	39.8	38.6	37.1	35.1	34	32.3	29.9	38
40	41.2	40.3	39.3	38.2	37	36.1	34.9	33.6	31.7	30	29.1	26.8	40
44	34.8	33.9	32.9	31.9	30.7	29.8	28.6	27.6	25.7	25.1	23.6	21.3	44
48		28.6	27.7	26.6	25.5	24.6	23.4	22.4	20.6	20.3	18.9	16.7	48
52			23.2	22.2	21.1	20.2	19	18	16.3	16	14.8	12.6	52
56			19.4	18.4	17.4	16.4	15.3	14.3	12.5	12.2	11.3	9.1	56
60				15.1	14.1	13.2	12.1	10.9	9.2	8.9	8.2	6.1	60
64					11.2	10.3	9.2	8	6.3	6	5.4		64
68						7.8	6.7	5.4	3.7	3.5			68
72							4.4	3					72
Ratio	10	10	10	10	9	9	8	7	7	6	6	5	Ratio

Note: 1. The actual hoisting capacity of the crane is a value that the rated value in the table minus the total weights of hooks, slings, and wire ropes winding on the hook and boom tip.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.

<sup>2.</sup> The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.



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