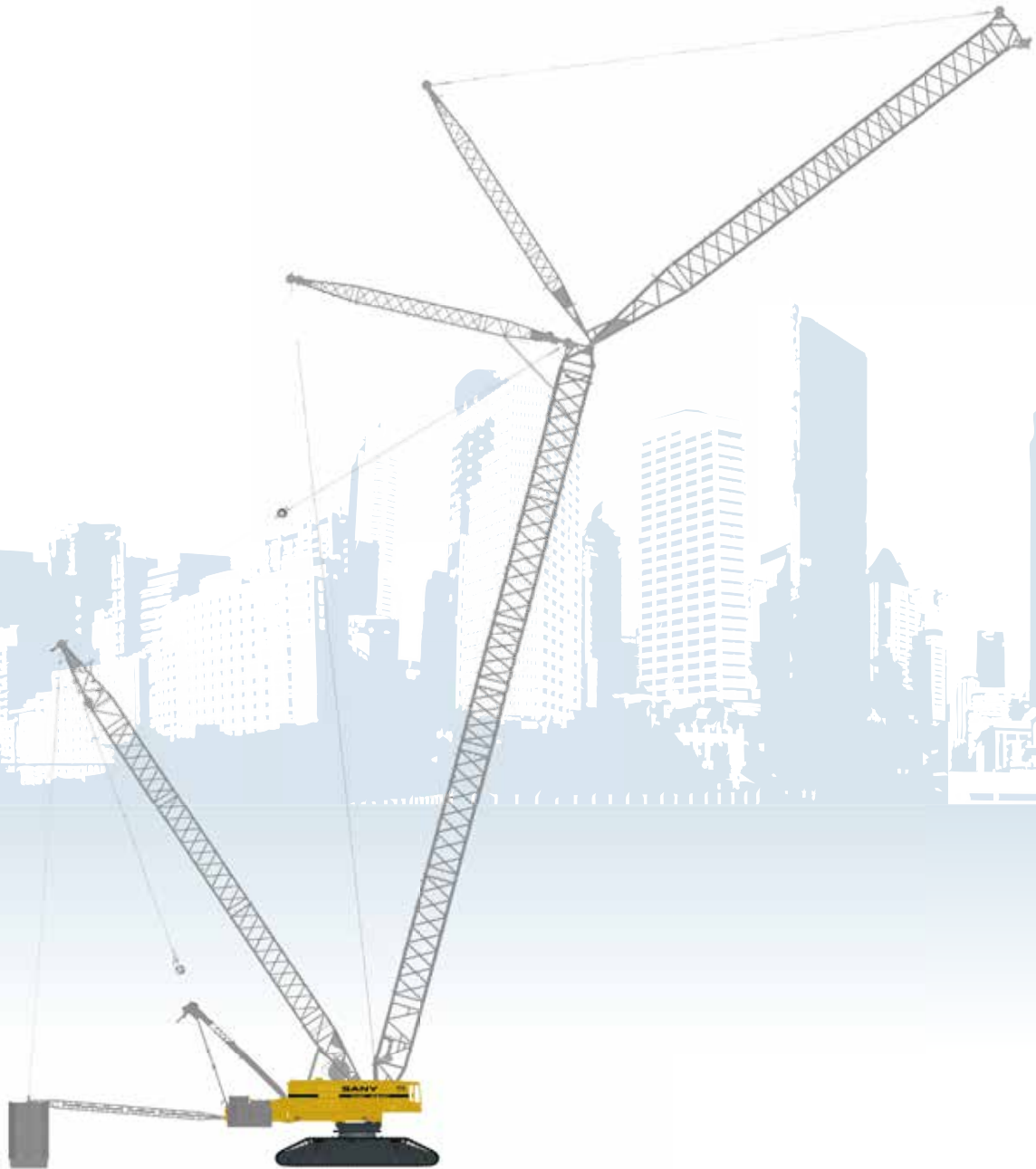




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SANY CRAWLER CRANE SCC 16000

CRAWLER CRANE

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SCC16000 Crawler Crane

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Operating condition combination

HDB operating condition

HJDB Operating Condition

LJDB Operating Condition

FJhDB Operating Condition



SCC16000

02 Outline Dimension

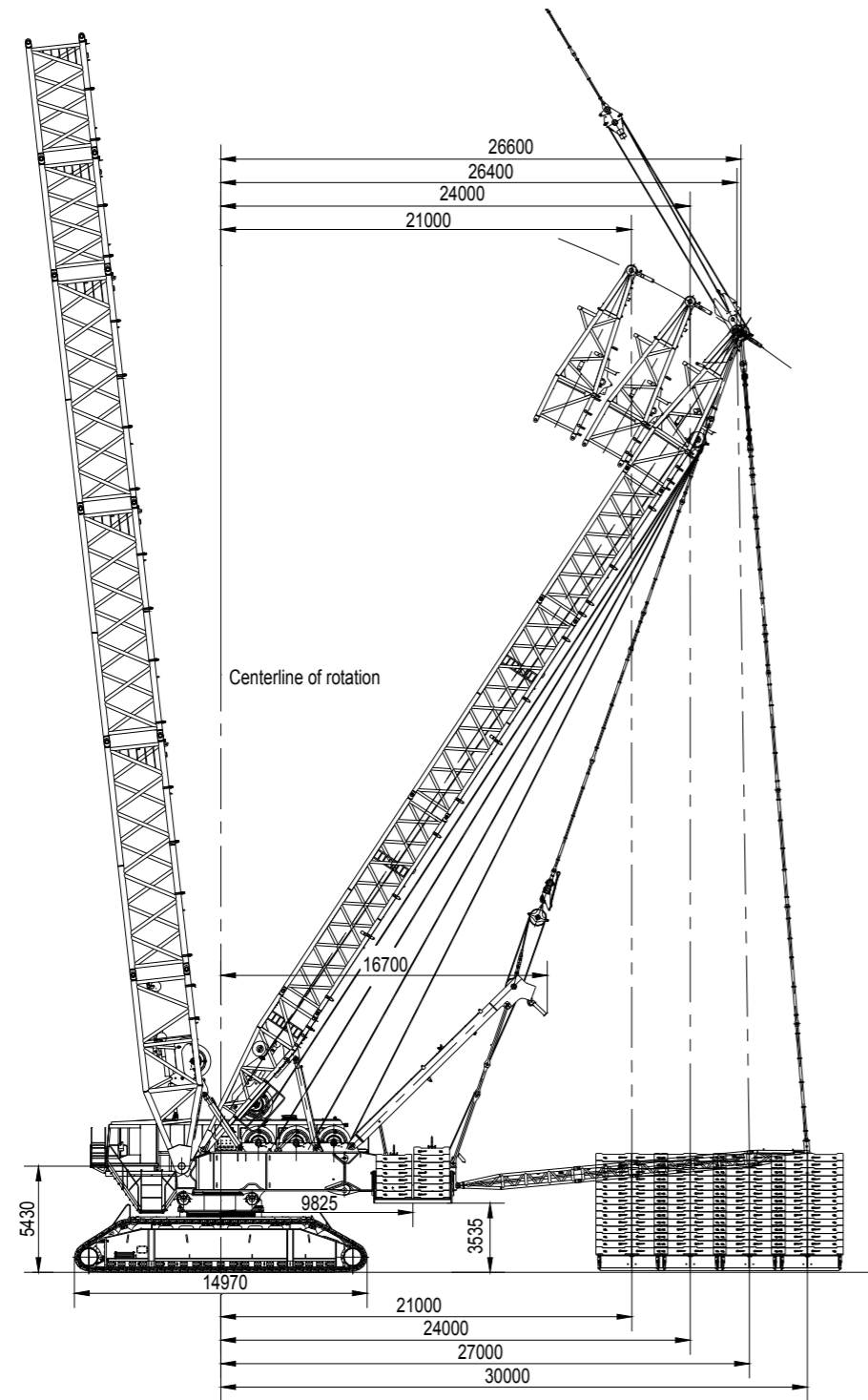
04 Main Technical Features

05 Main Performance Parameters Table

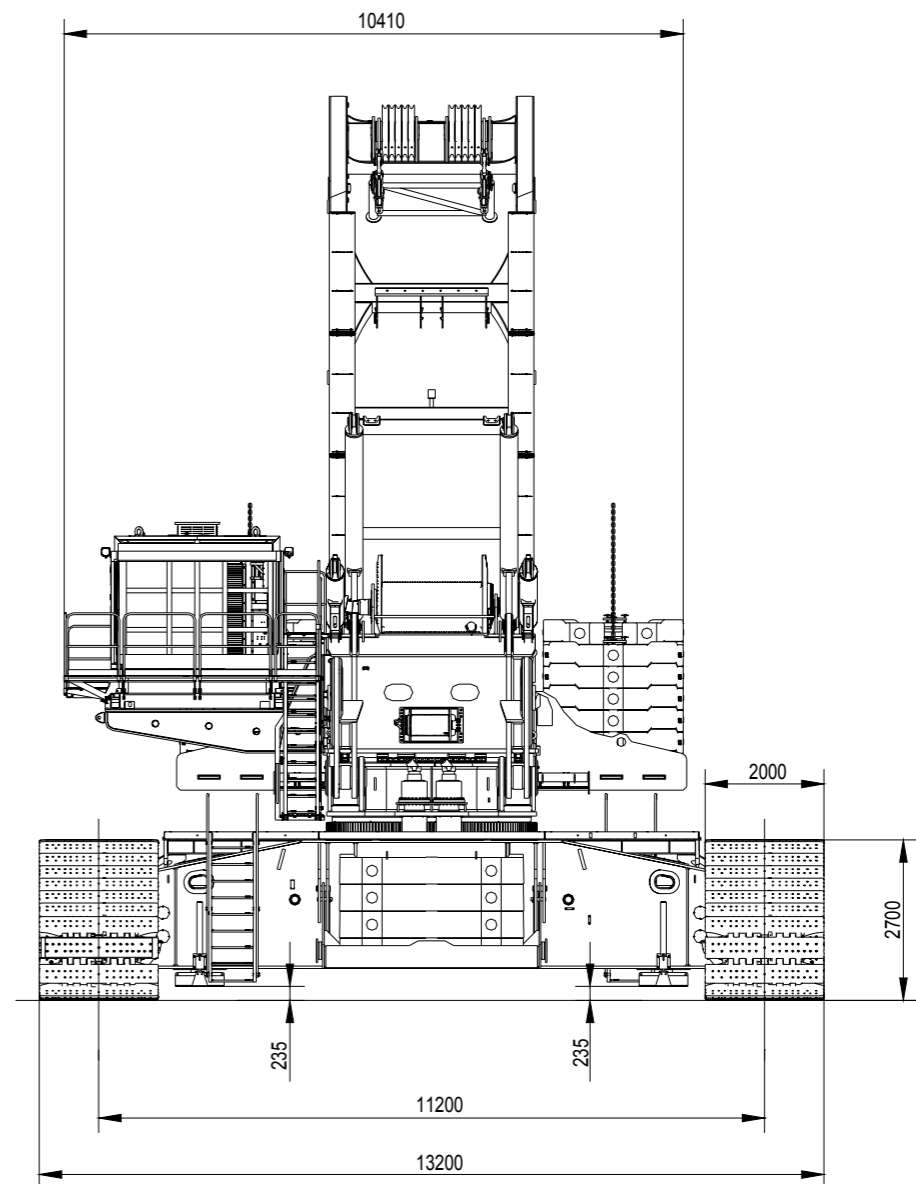
06 Transport Dimension



OUTLINE DIMENSION



OUTLINE DIMENSION



MAIN TECHNICAL FEATURES

1. Modular Design:

Modules are designed based on transport unit to ensure the effective electro-hydraulic connection and the fast connection between modules;

2. Application of High-strength Plate:

The main structure adopt 960MPa high-strength steel plate, to reduce the transport weight of single part; the pendant bar is made of 1100MPa high-strength steel plate, reducing the section size and the weight significantly;

3. Standard Container Power Unit:

All power systems, control systems, hydraulic systems and cab are installed in the standard container, which is characterized by the compact structure, easy repair and maintenance and convenient transport;

4. Generator Group:

220V generator group is equipped to supply the power to the civil air conditioning in the cab and overall crane lighting system;

5. Safe Control System:

There are two working and assembly modes for convenience and reliability; it is equipped with the ground pressure real-time display and over-speed calculation software system, having the levelness real-time display, machine-leaving stop action, emergency electrical control, lightning protection, automatic adjustment of traveling direction and closed circuit monitoring functions, as well as all safety and monitor systems, and also equipped with 250G storage hard drive that can save the 120h video data (with a large wide-angle camera);

6. New Materials Applications:

The aluminum alloy pedals are employed for boom system and platform, thus greatly reducing the boom weight and improving the load capacity;

7. New Technology Application:

Replacing the traditional superlift counterweight lifting cylinder with new technology to lift the counterweight based on accurate calculation. It also gives unitization information before the superlift counterweight being lifted from the ground.

8. Powerful Lifting Capacity:

With the maximum lifting weight of 1600t/11m, the maximum lifting torque of 25000t·m, the longest boom of 156m and the longest luffing jib combination of 108m +108 m;

9. High Efficient Self-assembly Technology:

The track frame can be self assembled and the whole machine can be self erected for quick assembly and disassembly. (The installation for the typical 66m +60 m luffing jib operating condition can be completed for 6~7 days using a 250T auxiliary crane based on 8 working hours per day);

10. Convenient Maintenance Technology:

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

11. Traveling with 100% Load:

Four-wheel drive; powerful traveling traction and smoothness can play the advantage of crawler crane to maximum;

12. Wireless Remote Control Device:

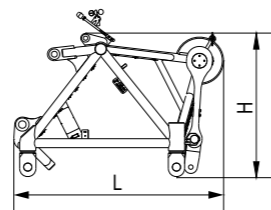
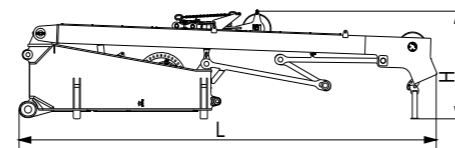
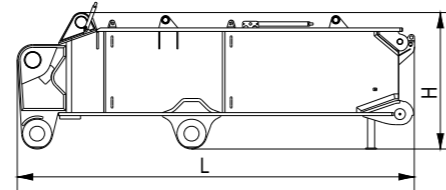
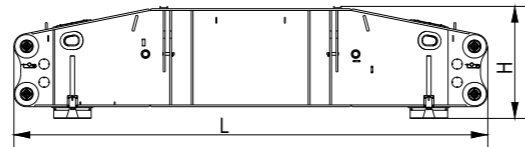
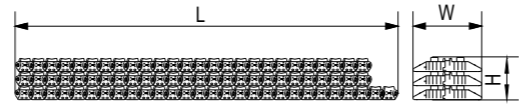
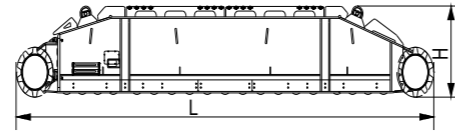
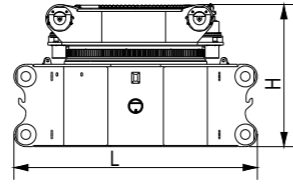
The wireless remote control can be realized for the installation of undercarriage base, beam and track frame as well as the front and rear platforms of superstructure, A-frame, Winch mechanism and superlift mast.

MAIN PERFORMANCE PARAMETERS TABLE

Main performance parameters Table for SCC16000 crawler crane		
Performance index	Unit	Parameters
Maximum rated lifting capacity (HDB)	t	1600
Maximum rated lifting moment (HDB)	t·m	25000
Boom length	m	54~108
Jib length	m	36~108
Length of superlift mast	m	50
Superlift radius	m	21 / 24 / 27 / 30
Longest boom + longest jib	m	108+108
Wire speed of main hoisting mechanism (outmost)	m/min	121
Wire speed of auxiliary hoisting mechanism (outmost)	m/min	76.6
Wire speed of main luffing mechanism (outmost)	m/min	58.3
Wire speed of auxiliary luffing mechanism (outmost)	m/min	85.2
Wire speed of superlift luffing mechanism (outmost)	m/min	98.1
Swing speed	r/min	0~0.8/0~0.41
Travel speed	km/h	1.02
Maximum gradient capability	%	10
Maximum engine power	kw	746(1800r/min)
Maximum engine torque	N·m	4629 (1300rpm)
Overall weight (without superlift counterweight)	t	1169 (Basic boom/jib, with 1600t hook)
Average ground bearing pressure	MPa	0.255 (Basic boom/jib, with 1600t hook)
Max. transport weight of single part	t	68.1
Max. transport dimension of single part	m	6.1×3.7×3.5

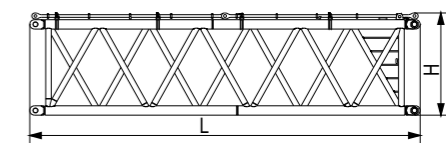
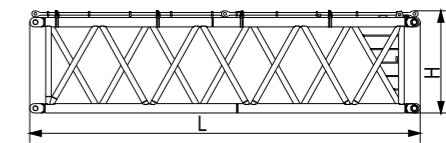
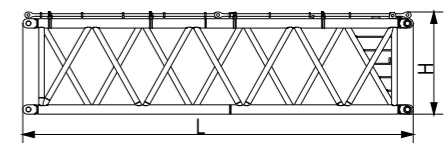
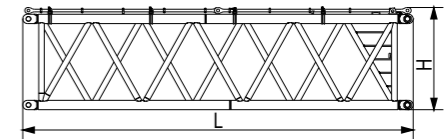
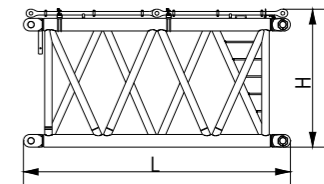
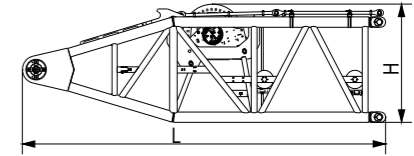
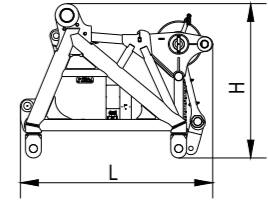
TRANSPORT DIMENSION

Central Swing Mechanism	×1
Length	6.1m
Width	3.65m
Height	3.5m
Weight	67t
Track Frame Assembly (without track)	×2
Length	14.8m
Width	1.8m
Height	2.4m
Weight	54.3t
Track Shoe Assembly	×2
Length	11.2m
Width	2m
Height	0.84m
Weight	44t
Beam (front/rear)	×2
Length	10.4m
Width	1.9m
Height	2.5m
Weight	28.4t
Front Platform	×1
Length	9.0m
Width	3.5m
Height	3.1m
Weight	46.6t
Rear Platform Assembly	×1
Length	13.0m
Width	3.6m
Height	3.2m
Weight	46.9t
Boom/Jib Point	×1
Length	3.9m
Width	3.5m
Height	2.7m
Weight	10.1t



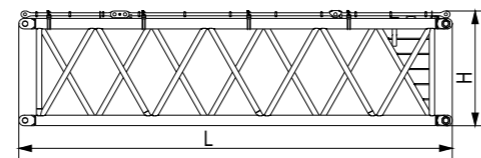
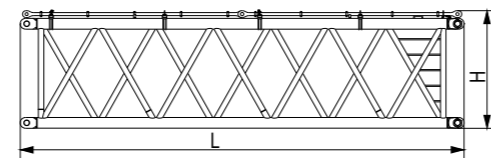
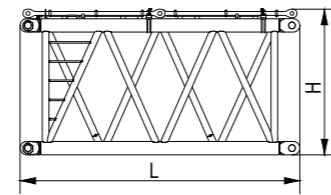
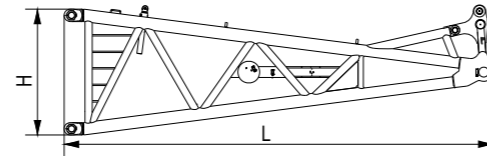
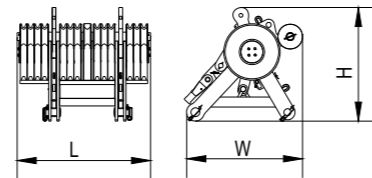
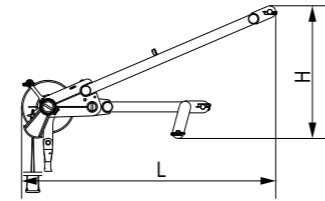
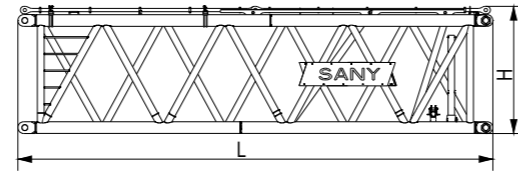
TRANSPORT DIMENSION

Boom and Jib Connecting Head	×1
Length	3.6m
Width	3.5m
Height	3.0m
Weight	12.3t
10m Boom Base (including 16.8t winch)	×1
Length	10.6m
Width	3.8m
Height	3.5m
Weight	41.6t
6m Boom Insert(36)	×2
Length	6.4m
Width	3.7m
Height	3.3m
Weight	10.9t
12m Boom Insert (45)	×2
Length	12.4m
Width	3.7m
Height	3.3m
Weight	20.5t
12m Boom Insert (40)	×1
Length	12.4m
Width	3.7m
Height	3.3m
Weight	19.9t
12m Boom Insert (36)	×2
Length	12.4m
Width	3.7m
Height	3.3m
Weight	19.3t
12m Boom Insert (30)	×1
Length	12.4m
Width	3.7m
Height	3.3m
Weight	17.8t



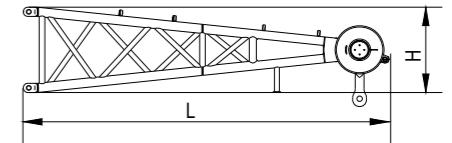
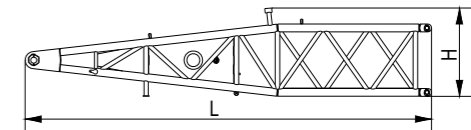
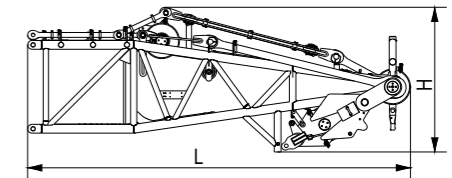
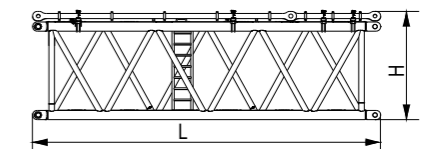
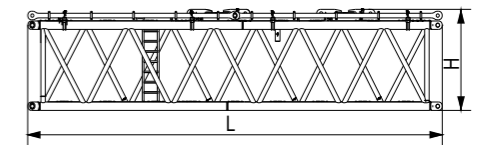
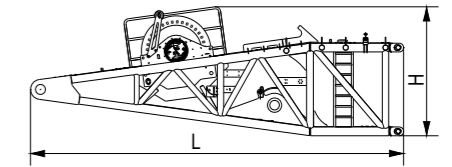
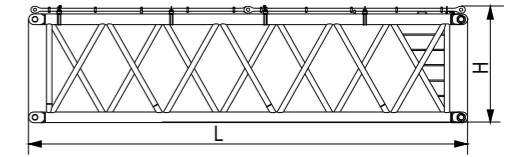
TRANSPORT DIMENSION

12m Boom Transitional Insert	×1
Length	12.4m
Width	3.7m
Height	3.3m
Weight	17.7t
Boom/Jib Extension	×1
Length	4.3m
Width	1.7m
Height	2.2m
Weight	1.8t
Pulley Block (left / right)	×2
Length	2.1m
Width	1.8m
Height	1.8m
Weight	5.4t
4.5m Jib Base	×1
Length	10.5m
Width	3.6m
Height	3.1m
Weight	12.8t
6m (20) Jib Insert (A/B)	×2
Length	6.4m
Width	3.6m
Height	3.3m
Weight	7.5t
12m (20) Jib Insert	×1
Length	12.4m
Width	3.6m
Height	3.3m
Weight	12.9t
12m (17.5) Jib Insert (A/B)	×2
Length	12.4m
Width	3.6m
Height	3.3m
Weight	11.8t



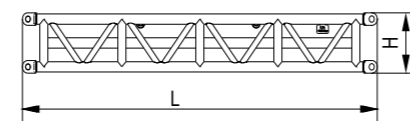
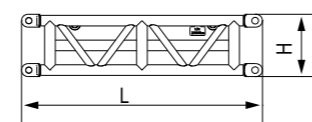
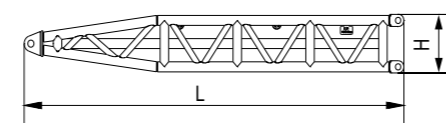
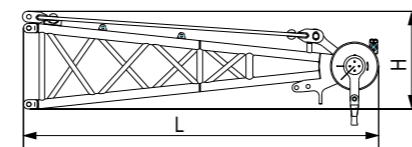
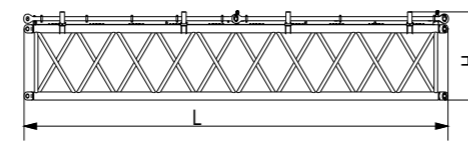
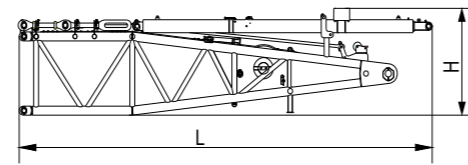
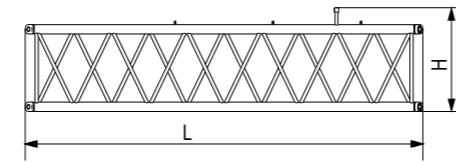
TRANSPORT DIMENSION

12m (12.5) Jib Insert (A/B)	×1
Length	12.4m
Width	3.6m
Height	3.3m
Weight	10.2t
Superlift Mast Base (including 20.6t winch)	×1
Length	9.4m
Width	3.5m
Height	3.2m
Weight	33.5t
12msuperlift Mast Base (A / B)	×2
Length	12.3m
Width	3.5m
Height	2.6m
Weight	13.4t
8m Superlift mast Base	×1
Length	8.3m
Width	3.5m
Height	2.6m
Weight	9.0t
Superlift Mast Top	×1
Length	9.6m
Width	3.5m
Height	3.6m
Weight	24.5t
Luffing Jib Front Mast Base	×1
Length	8.8m
Width	2.6m
Height	1.9m
Weight	4.8t
Luffing Jib Front Mast Top	×1
Length	6.6m
Width	2.5m
Height	1.6m
Weight	4.5t



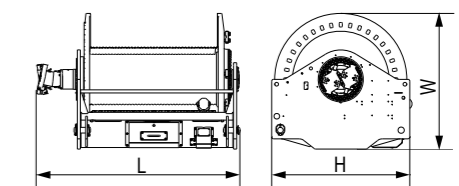
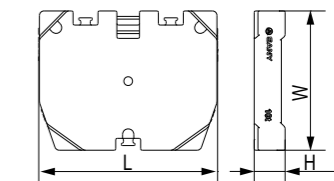
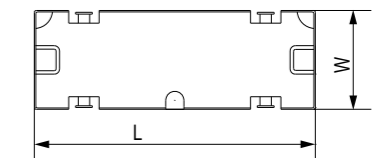
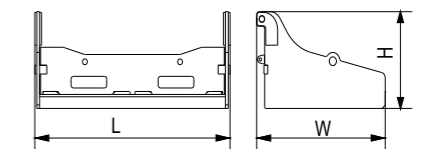
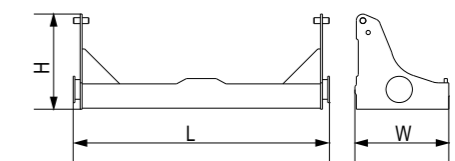
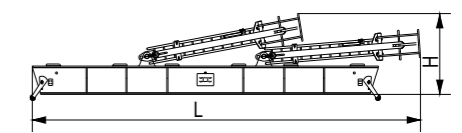
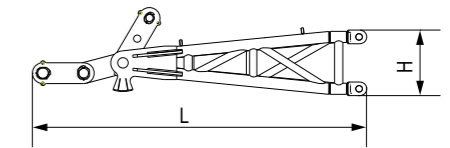
TRANSPORT DIMENSION

Luffing Jib Front Mast Insert	×1
Length	12.2m
Width	2.5m
Height	1.9m
Weight	3.5t
Luffing Jib Rear Mast Base	×1
Length	8.5m
Width	3.0m
Height	2.0m
Weight	7.4t
Luffing Jib Rear Mast Insert	×1
Length	12.2m
Width	2.9m
Height	1.8m
Weight	5.4t
Luffing Jib Rear Mast Top	×1
Length	6.6m
Width	2.8m
Height	1.8m
Weight	5.9t
Superlift Counterweight Rear Bracket Base	×1
Length	6.3m
Width	3.3m
Height	0.85m
Weight	2.2t
2.95m Superlift Counterweight Rear Bracket Arm	×1
Length	3.2m
Width	3.3m
Height	0.85m
Weight	1.3t
5.95m Superlift Counterweight Rear Bracket Arm	×1
Length	6.2m
Width	3.3m
Height	0.85m
Weight	2.2t



TRANSPORT DIMENSION

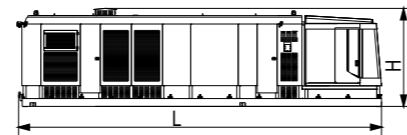
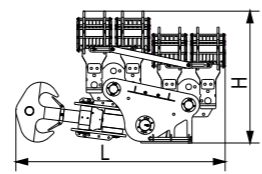
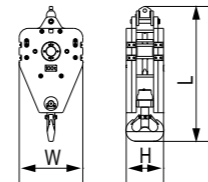
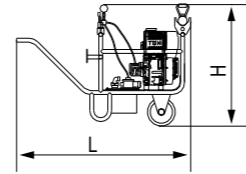
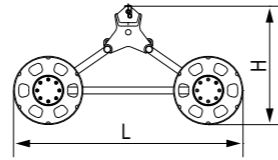
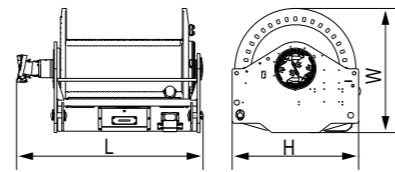
Superlift Counterweight Rear Bracket Tip	×1
Length	4.2m
Width	3.5m
Height	0.85m
Weight	2.5t
Superlift Counterweight Tray	×1
Length	10.5m
Width	3.5m
Height	2.0m
Weight	14.2t
Carbody Counterweight Frame	×2
Length	3.8m
Width	1.4m
Height	1.5m
Weight	2.2t
Basic Crane Rear Counterweight Tray	×2
Length	4.1m
Width	2.7m
Height	1.7m
Weight	8.94t
Carbody Counterweight Block	×8
Length	3.1m
Width	1.1m
Height	0.50m
Weight	10t
10t Counterweight Block	×91
Length	2.4m
Width	1.9m
Height	0.41m
Weight	10t
Main Lifting Mechanism	×2
Length	2.7m
Width	1.8m
Height	1.8m
Weight	21.2t



TRANSPORT DIMENSION

Auxiliary Lifting Mechanism	×1
Length	2.8m
Width	1.8m
Height	1.8m
Weight	14.9t
Dolly	×1
Length	3.7m
Width	3.0m
Height	1.8m
Weight	1.5t
Mobile Hydraulic Power Unit	×1
Length	1.6m
Width	0.66m
Height	1.1m
Weight	0.22t
100t Hook	×1
Length	2.3m
Width	0.84m
Height	0.90m
Weight	8t
1600t Hook	×1
Length	6.5m
Width	1.8m
Height	4.2m
Weight	49.3t
Note: it can be divided into two 800t hooks that can be sub-divided into two 400t hooks.	
Power Container (with cab)	×1
Length	12.2m
Width	2.9m
Height	3.2m
Weight	29.5t

Notes: 1.The transport dimensions of the parts are marked on schematic diagrams, but not drawn by scale; the dimensions indicated are the design values excluding package.
2.The weight is the design value and there may be tiny difference due to the manufacturing calibration.



SCC16000

14	Superstructure
16	Undercarriage
17	Operating Devices
18	Electrical Control Device
20	Positioning and Advantages of Electrically Control System



SUPERSTRUCTURE

1) Engine

- 12-cylinder, water-cooled turbocharging engine, with the rated power of 746kW, the rated speed of 1800rpm, the maximum output torque of 4629N·m and the maximum output torque speed of 1300rpm.
- The diesel oil tank with the volume of 2000L is also employed.

2) Electrical System

The distributed, centralized control system with bus communication is adopted for the electrical control system of SCC series crane; Advancement: ①CAN communication is a most appropriate field bus used for construction machinery; ② The distributed layout + centralized control way is adopted, simplifying the system line, which is characterized by the high reliability; ③ The extensive use of CAN intelligent node can improve the advancement of the whole electrically control system.

3) Hydraulic System

- Hydraulic system includes the lifting hydraulic system, traveling hydraulic system, rotary hydraulic system, luffing hydraulic system, servo hydraulic system, back-stop hydraulic system, cooling system, and auxiliary hydraulic system etc.
- Features: The closed circuits are employed for all main systems, which is characterized by the energy-saving, high efficiency, good controllability as well as smooth startup, stop and directional control, impact-free, fast operation response, less heat and long service life. Moreover, the electric proportional control components can be widely used to achieve the precise and intelligent control. A variety of alarm and filter clogging alarm are set in the hydraulic system, improving the reliability of hydraulic system. To prevent the risk cause by the burst closed circuit, in addition to the automatic response of electronic control system, the pipeline is also equipped with the pipeline anti-blast valve, further improving the safety.

4) Main and Auxiliary Lifting Devices

The variable hydraulic motor can drive the planetary gear reducer to control the lifting and lowering of boom and jib winches. The stepless speed regulation is available based on the user's needs, with the maximum speed within the range of 0-121 m / min. It is characterized by the excellent micro-speed performance; the fastest gear can achieve the fast power lifting operation; the maximum magnification is 52; high quality wire rope is used, ensuring the multi-layer winding of the drum is always in order. The reducer is embedded, having the advantage of space-saving, low noise, high efficiency and long life.

NO.1 Main lifting mechanism

Drum diameter	870mm
Rope speed of the outermost layer	0~121m/min
Diameter of wire rope	40mm
Length of steel wire rope of main winch	1570m
Rated single line pull	36.7t

NO.2 Auxiliary lifting mechanism

Drum diameter	870mm
Rope speed of the outermost layer	0~80.9m/min
Diameter of steel wire rope	40mm
Length of auxiliary winch wire rope	770m
Rated single line pull	36.7t

5) Slewing Mechanism

- Slewing part: It is driven by four motor reducers, with the smooth slewing speed of 0 ~ 0.41r/min, and neutral position free sliding function, which can provide 360 ° rotation.
- slewing ring device: Three-row roller slewing ring.

6) Luffing Mechanism

It consists of boom luffing device, jib luffing device, and superlift luffing device. The fold-line drum, embedded reducer, high quality wire rope and closed circuit are adopted. And the power can be provided through the switching over of direction change valve; many complex actions can be achieved. Moreover, the stepless regulation is adopted, for good micro-speed performance.

NO.3 Boom luffing mechanism

Drum diameter	830mm
Rope speed of the outermost layer	0~58.3m/min
Diameter of wire rope	40mm
Length of boom luffing wire rope	410m×2
Rated single line pull	36.7t×2

NO.4 Jib luffing mechanism

Drum diameter	870mm
Rope speed of the outermost layer	0~89.5m/min
Diameter of wire rope	40mm
Length of jib luffing wire rope	1100m
Rated single line pull	36.7t

NO.5 Superlift luffing mechanism

Drum diameter	870mm
Rope speed of the outermost layer	0~98.1m/min
Diameter of wire rope	40mm
Length of superlift luffing wire rope	1570m
Rated single line pull	36.7t

7) Counterweight System

- Basic crane carbody counterweight: 80t; 8 pieces of counterweights and 2 trays.
- Basic crane rear counterweight: 280t; 26 pieces of counterweight and 2 trays.
- Superlift counterweight: 660t; 65 pieces of counterweights and 1 tray.

8) Cab

The cab is located at the front of power container and is of full-closed steel-frame structure, with tempered glass equipped at front and sides and with structural plate for top, which is characterized by the good light transmission, high strength, high wear resistance and low indoor noise (less than 85dB). The control device, instruments, fire alarms and closed-circuit surveillance system are installed in the cab. It adopts ergonomic design.

9) Control Operation

The load moment indicator, closed-circuit monitor, monitor display and instruments are within the driver's direct view; the load moment indicator mainly monitor the moment and other parameters of crane; monitor display main show the operating situation of crane as well as the control parameters and alarm of all monitoring points; there are three control handles for left and right armrest boxes, with handle action changed through pressing the key on the monitor display; the single action and allowed complex action can be shown in text and graphics way.

10) Alarm Display

When an error occurs, all alarm information, including wind speed, water temperature, oil temperature, oil volume, oil pressure, working time, and engine speed, will be shown on the display in the cab.

UNDERCARRIAGE

1) Traveling Drive

There are two speeds for traveling system; the traction is strong, which can achieve the steering travel with 100% load; each travel device can be drive independently, to flexibly achieve the forward, backward or in-situ steering.

2) Traveling Brake

The traveling brake is a normally closed brake embedded in the reducer (i.e. it is at brake state if the traveling handle is not acted). It can be automatically compensated, without any adjustment. When the traveling handle is acted, the brake releases to achieve the traveling operation.

3) Track Shoe

There are 160 left and right crawler shoes with 2000mm width in total. The tension of track shoe can be adjusted by the hydraulic tension cylinder embedded in the track traveling device, or add the spacer sleeve between track frame and track tension cylinder, to achieve the desired tension.

4) Beam

It is of high-strength welded frame structure and connected with the track frame and base through the hydraulic cylinder drive power pin, for convenient installation and dismantlement.

5) Base and Transition Platform

The bolts connection is adopted between the base and transition platform, to improve the connection reliability of slewing ring. However, the power pin connection is adopted between transition platform and platform, for convenient installation. The base is of high-strength welded frame structure, and connected with the beam through the hydraulic cylinder power pin, for convenient installation and dismantlement.

6) Platform

It is divided into front and rear platforms that are transported separately, thus reducing the transport weight. The power pin connection is adopted between front and rear platforms. The rear platform, A-frame and boom luffing mechanism can be as a whole functional module for transportation, thus reducing the operating time of disassembly of boom luffing rope.

7) Traveling Speed

The variable displacement motor can achieve two speeds, with the infinitely variable speed for each gear. High speed: 0 ~ 1.02km / h; low speed: 0 ~ 0.52 km / h; therefore, the smooth operation of equipment can be ensured.

OPERATING DEVICES

The pipes of all operating devices adopt the seminiferous low-alloy high-strength pipes; the high-strength plate is adopted for steel plate; and the luffing support is made of high-strength steel plate; pulley material: the rolled welding pulleys are adopted for boom/jib frames and hooks.

1) Boom

- Boom is of lattice structure with uniform cross section at middle and variable cross section at two ends. The steel pipe is of welded structure and the top and root of boom frame are strengthened using the steel plate to facilitate load transfer.
- The boom length is between the basic boom length (54m) and maximum length (156m).
- Boom combination: 10m boom base, 6m×2 boom insert, 12m(45)×2 boom insert, 12m(40)×1 boom insert, 12m(36)×2 boom insert, 12m(30)×1 boom insert, 12m tapered insert and 2m boom head of 1600t.

2) Luffing Jib

- Jib is of lattice structure with uniform cross section at middle and variable cross section at two ends. The steel pipe is of welded structure and the top and root of boom frame are strengthened using the steel plate to facilitate load transfer.
- 36m Basic jib length (10m jib base, 12m (20) jib insert, 6m(20)×2 jib insert, and 2m jib head of 1600t), 12m(17.5)×1 jib insert, and 12m(12.5)×4 jib insert; the available luffing jib length is 36m ~ 108m and the mountable length on the boom is 54m ~108m.
- The jib luffing can be achieved through the front and rear masts of luffing jib. The mast is of lattice structure with uniform cross section at middle and variable cross section at two ends. The length of front mast of luffing jib is 26.5m and of rear mast of luffing jib is 25.5m.

3) Hook

- Standard configuration: 100t hook. 1600t hook. (Note: it can be divided into two 800t hooks that can be sub-divided into two 400t hooks).

4) Superlift Mast

- Mast arm frame is of lattice structure with uniform cross section at middle and variable cross section at two ends. The steel pipe is of welded structure and the top and root of boom frame are strengthened using the steel plate to facilitate load transfer.
- Length of superlift mast is 50m.
- Combination: 9m mast base, 12m×2 mast insert, 8m×1 mast insert, and 9m mast top.

5) Hook Latch

Each lifting hook is fitted with baffle to avoid the wire rope falling-off.

6) Operating Conditions

- HDB: Boom + superlift mast + superlift counterweight (the weight can be zero) operating condition.
- HJDB: Variable-section boom + superlift mast + superlift counterweight (the weight can be zero) operating condition.
- LJDB: Boom + luffing jib + superlift mast + superlift counterweight (the weight can be zero) operating condition.
- FJhDB: Boom + fixed jib + superlift mast + superlift counterweight (the weight can be zero) operating condition.

Notes: Above operation devices are for full configuration and the special configuration should be subject to order contract.

ELECTRICALLY CONTROL DEVICE

1) Display

- Used to show the system parameters, such as wind speed and level state etc.
- Used to set the system parameters.

2) A Module

- To receive the input signals of all switches in cab and send them to the controller through the CAN bus.
- Output the switching value signals according to the controller's command (such as alarm lights and buzzers)

3) GPS Module

- Remotely monitor the crane running state (including the uploading and physical location of crane running parameters).
- Lock the crane.

4) Control Panel

- Mainly equipped with selector switch, ignition electronic control, emergency stop switch, and hand throttle etc. parts.
- Main function: To provide the main switches for operating the crane.

5) RC Controller

The controller is the brain of the crane for handling all kinds of data.

6) B Module

- To receive all controller's command and output the signal to control the solenoid valve.
- To receive all input signals and send to the controller through the bus.

7) Brake of Winch Mechanism

Spring-loaded, normally engaged disk type brake is employed for all the winch brakes, which is characterized with the large brake force, maintenance-free, safe and reliable usage and long service life.

8) Data Recorder

- To record and save the key running parameters of crane.
- These data can be saved for 10 years.

9) Engine ECU

To control the opening of engine throttle and check the engine parameters.

10) Engine Power Limit Load Regulation and Stall Protection

The controller can monitor the engine power, to prevent the engine stall.

11) Engine Monitoring Instruments

It can show the water temperature, fuel volume, total working time, oil pressure, engine speed, battery charge status and voltage.

12) Level Indicator

To check the level state at front and back, left and right sides of crane.

13) Boom Warning Light

Function: Aviation safety alerts.

14) Anemometer

To measure the real-time wind speed at the boom/jib head.

15) Main and Auxiliary Hoisting Limiter

To limit the over-hoist of hook, thus preventing the damage of boom system or pulley block.

16) Load Moment Indicator

This indicator is to limit the front tipping moment of crane and display the relative parameters in real-time way, which is of safety limit device.

ELECTRICALLY CONTROL DEVICE

17) Lowering Limiter of Main and Auxiliary winch

When the wire rope is rolled out near the last loops, it will send out and the electrically controlled system will automatically cut off the hook-lowering action and give an alarm via buzzer and display.

18) Assembly/Operation Mode Change-over Switch

- Under installation model, the over-hoist limit switch, boom limiter and moment limiter can not work, to facilitate the crane installation.
- Under working model, all safety devices will be working.

19) Boom Angle Limiter

When the boom angle is more than 88° (more than 83.5° under boom operating condition) and the jib angle is more than 75° , the corresponding limit switch will be activated, to give an alarm via buzzer. At the sametime, the boom should automatically stop.

20) Boom Back-stop Device

- The boom and superlift mast have a pair of back-stop cylinder respectively. The high pressure of back-stop cylinder should be overcome when the boom titles backwards. When the boom extends forwards, the hydraulic system can automatically add the high-pressure oil, to tension the boom pendant bar, thus preventing the vibration and back-stop in working process.
- There is a cylinder back-stop device for the rear mast of luffing jib. And there is also a pair of cylinder for the jib base, to prevent the back-stop of front mast of luffing jib and to tension the jib luffing wire rope.
- If the jib angle is 75° , the back-stop device can prevent it back-stop.

21) Closed-circuit Monitoring System

To monitor the winding situation of wire ropes of all winches, the superlift counterweight state and the surrounding situation of equipment.

22) Self-diagnostic System

To conveniently eliminate the fault according to fault code.

23) Black Box

To record the driver's operation and the running parameters of equipment, for analyzing the cause of the accident.

24) Lightning Protective Device

It includes the lightning ground device and surge protective device, which can effectively prevent the damage to the electrical system components and staff when lightning strike.

25) Swing and Traveling Alarm

There is sound and light alarm when slewing and traveling, to warn the relevant personnel to leave the work area.

26) Operation Release

When pressing the operation release switch, all control handles are deactivated, to avoid the mishandling caused by the body impact when getting on or off the crane.

27) Emergency Operating System

The independent emergency operation box of circuit can be connected with the solenoid valve through the connector. In case of emergency situation, the major operations, such as lifting, luffing and slewing, can be achieved.

28) Remote Monitoring System

To monitor and analyze the operating data so as to diagnosis the fault remotely for timely solution of the problem.

29) Emergency Stop Button

In case of emergency, press the emergency stop button, the actions, such as lifting, luffing, slewing and traveling, can be urgently braked, thus the engine stops.

POSITIONING AND ADVANTAGES OF ELECTRICALLY CONTROL SYSTEM

Positioning in Industry:

- High configuration: High quality electrically control components.
- Intelligent: The CAN intelligent node is adopted, to improve the self-diagnostic capabilities of system for convenient maintenance;
- Energy-saving: The engine energy-saving technology is adopted, to decrease the engine oil consumption and to reduce the customer's use cost;
- High safety: Sany adopts the moment limiter, all kinds of limit switches, GPS positioning and other safety control system, to ensure the safety operation of crane.
- In summary, the safety of our electrical control system is in the leading position in the industry, as well as the intelligence and reliability compared with that of domestic rivals.

Advantages of Products:

- Advantage 1. The Chinese and English optional interface and panel are adopted, to facilitate the customer's operation.
- Advantage 2. The data memory is equipped, to provide the data support to customers during service life, thus the customer can make the life and fault analysis;
- Advantage 3. To meet the customized demands in timely way.
- Advantage 4. It has the video system recording function, with the recording time of not less than 120h, to effectively restore the real time situation of monitoring points of crane;
- Advantage 5. Add the shock function for electrically control handle, to ensure that the customer can feel the action speed of mechanism.
- Advantage 6. The boom operating area limit technology is adopted, significantly increasing the safety control performance and flexibility of crane;
- Advantage 7. Improve the energy-saving of start engine, to reduce the customer's use cost and to upgrade the subsequent technology to old customer.

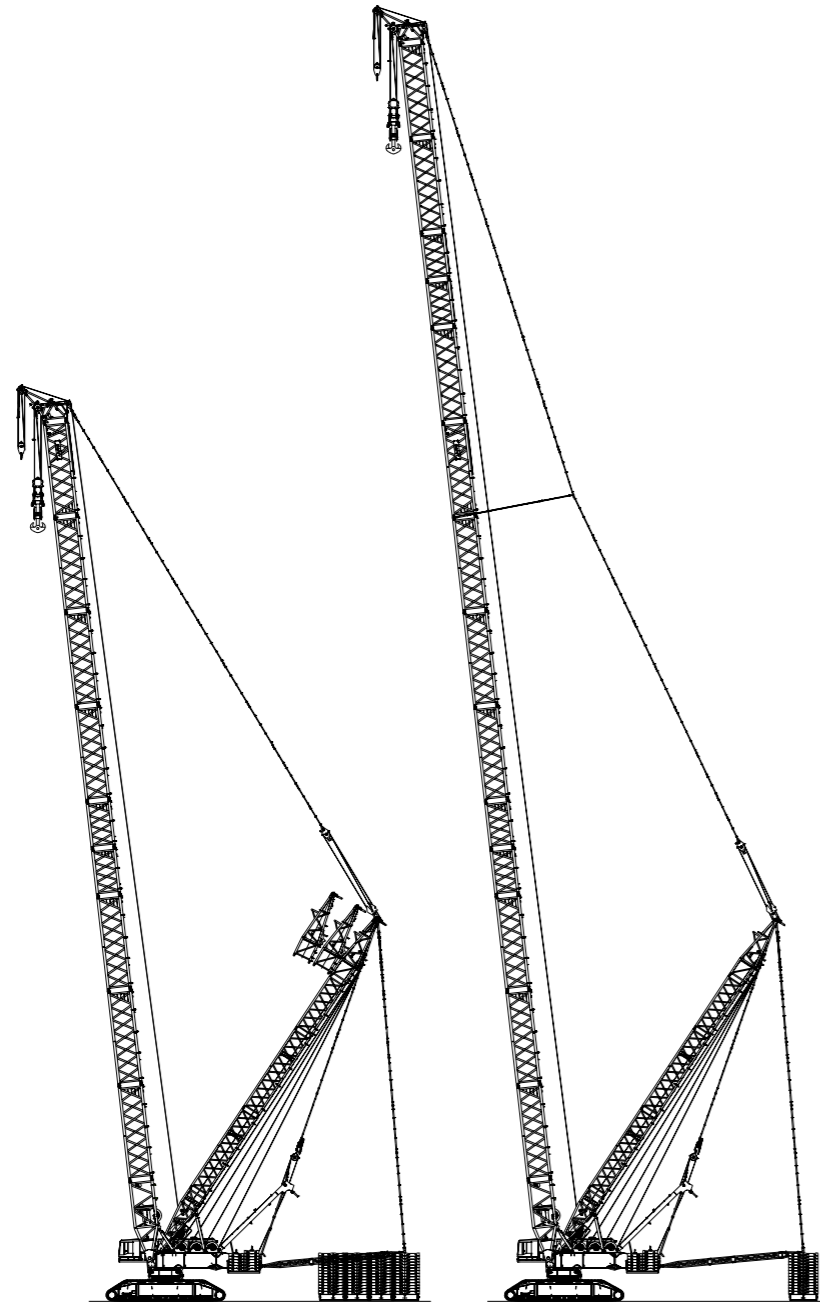
Due to the continuous improvement of technology, the specifications are subject to actual machine!

SCC16000

22	Operating Condition Combination
24	HDB Operating Condition
28	HJDB Operating Condition
32	LJDB Operating Condition
38	FJhDB Operating Condition



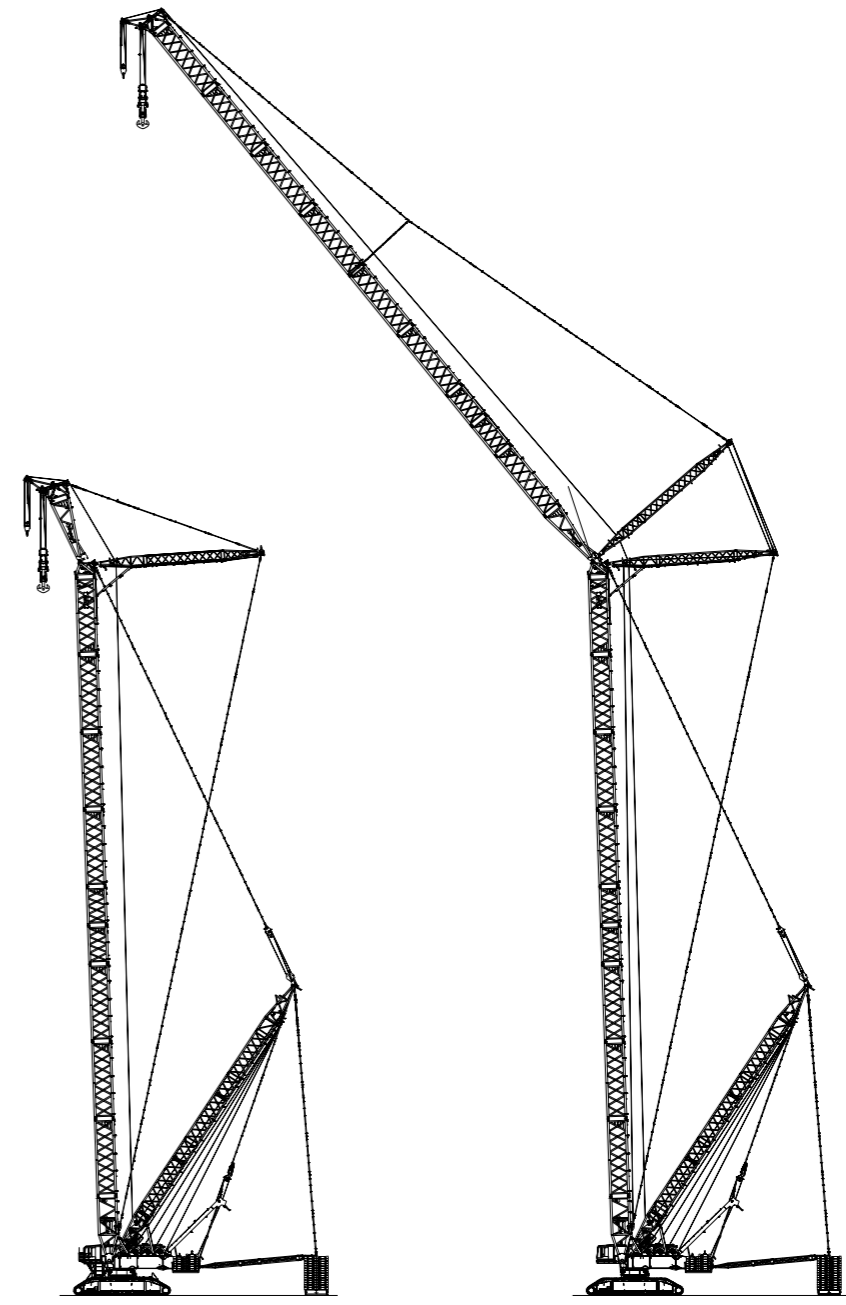
OPERATING CONDITION COMBINATION



Boom + superlift mast + superlift counterweight operating condition (HDB)
 Boom 54m~108m
 Superlift radius 30m

Variable-section boom + superlift mast + superlift counterweight operating condition (HJDB)
 Combined boom 114m~156m
 Superlift radius 30m

OPERATING CONDITION COMBINATION

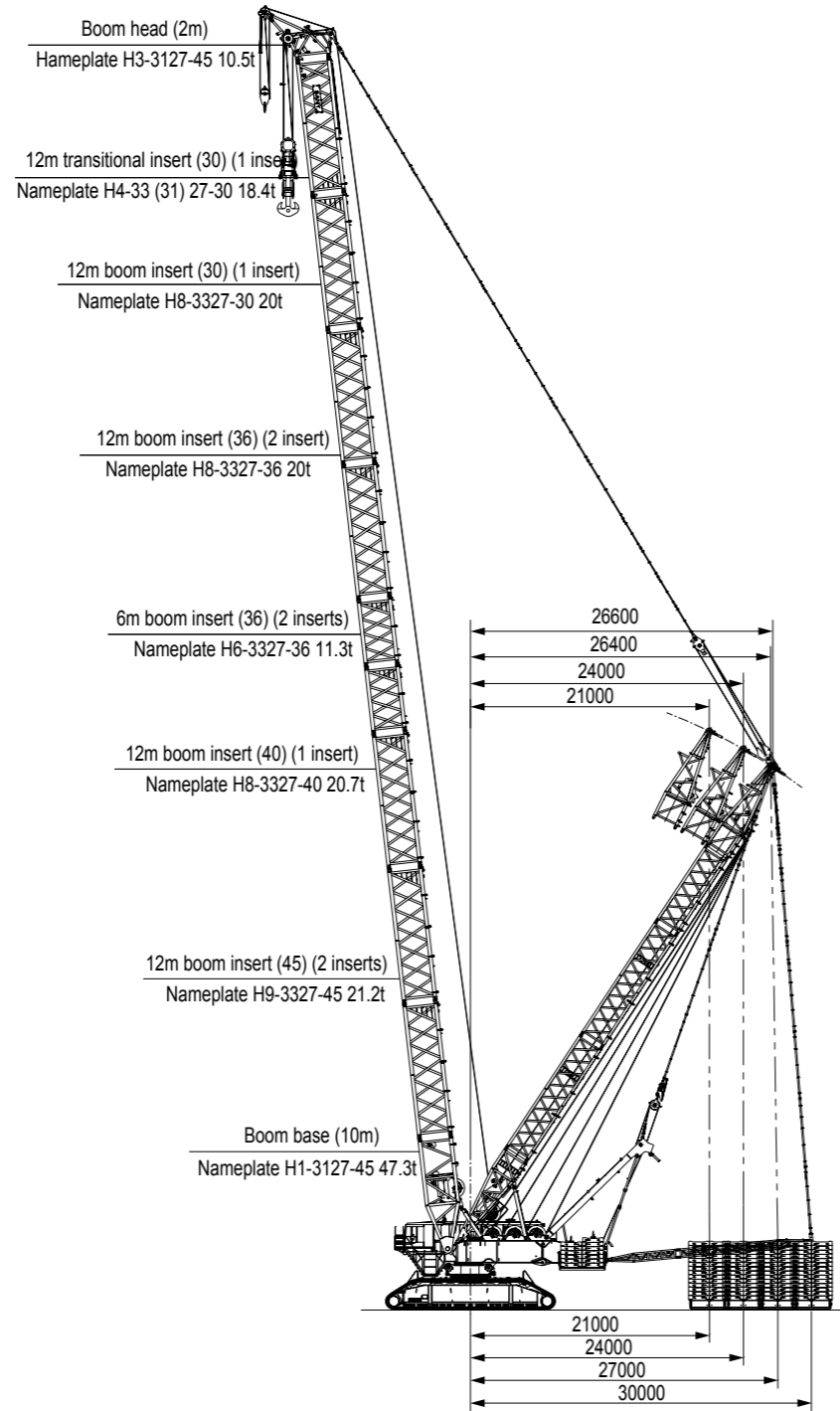


Boom+ fixed jib +superlift mast + superlift counterweight operating condition (FJDB)
 Boom 54m-108m
 Fixed jib 12m
 Superlift radius30m

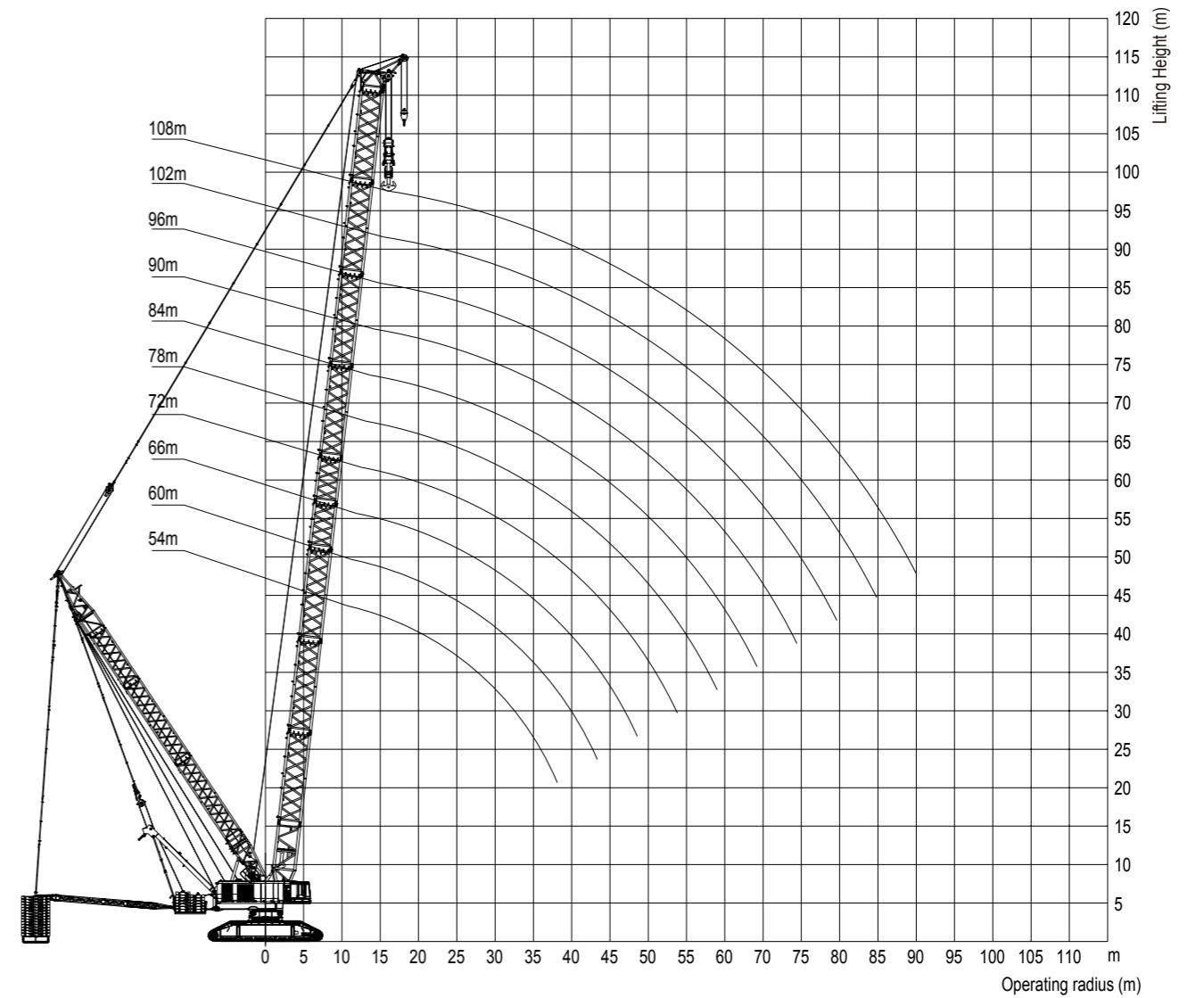
Boom+ fixed jib +superlift mast + superlift counterweight operating condition (LJDB)
 Boom 54m-108m
 Luffing jib 36m-108m
 Superlift radius30m

HDB OPERATING CONDITION

Boom length m	Boom insert				
	6 m	12mA	12mB	12mC	12mD
54	1	1	1	-	-
60	2	1	1	-	-
66	1	2	1	-	-
72	2	2	1	-	-
78	1	2	1	1	-
84	2	2	1	1	-
90	1	2	1	1	1
96	2	2	1	1	1
102	1	2	1	2	1
108	2	2	1	2	1



OPERATING RANGE DIAGRAM UNDER HDB OPERATING CONDITION



Curve of operating range of lifting height

HDB OPERATING CONDITION LOAD CHARTS

SCC 16000 Crawler Crane – HDB30m_660+260+80

Boom length 54~108m, superlift mast 50m, superlift radius 30m, superlift counterweight 660t, rear counterweight 260t and carbody counterweight 80t Unit: (t)

Boom length(m) Radius(m)	54		60		66		72		78		Boom length(m) Radius(m)
	0t	660t	0t	660t	0t	660t	0t	660t	0t	660t	
10	814	1600	803	1553	0	0	0	0	0	0	10
11	733	1581	723	1553	704	1383	669	1217	0	0	11
12	653	1562	644	1553	639	1383	611	1217	585	1100	12
14	542	1531	534	1478	530	1383	519	1217	498	1100	14
16	460	1483	454	1410	450	1383	444	1217	431	1100	16
18	398	1355	392	1315	389	1275	383	1217	379	1100	18
20	349	1236	344	1182	340	1179	335	1175	331	1091	20
22	310	1137	305	1073	301	1070	296	1066	293	1063	22
24	277	1026	272	981	269	978	264	974	261	971	24
26	250	931	245	903	242	899	237	896	234	893	26
28	227	850	222	835	219	832	214	828	211	826	28
30	204	781	199	777	196	773	194	769	191	767	30
34	167	683	162	679	159	676	157	672	156	670	34
38	140	588	135	602	131	599	129	595	127	593	38
42	119	497	114	539	110	536	107	532	105	530	42
45	107	439	101	482	97	497	93.5	493	91.1	490	45
46	103	420	97.3	463	92.7	484	89	480	86.5	477	46
50	90.6	350	83.4	396	78.2	431	74.1	435	71.5	433	50
54	0	0	72.1	336	66.4	373	61.8	396	59.2	394	54
55	0	0	70	322	64	360	59.3	384	56.7	385	55
58	0	0	0	0	57.1	322	52	351	49.3	361	58
60	0	0	0	0	53	297	48.1	328	45	345	60
62	0	0	0	0	0	0	44.2	305	40.8	329	62
65	0	0	0	0	0	0	39.2	273	35.4	299	65
66	0	0	0	0	0	0	0	0	33.7	290	66
70	0	0	0	0	0	0	0	0	28	253	70
Wind speed	13.8m/s					9.8m/s					Wind speed

Notes: 1.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
2.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

HDB OPERATING CONDITION LOAD CHARTS

SCC 16000 Crawler Crane – HDB30m_660+260+80

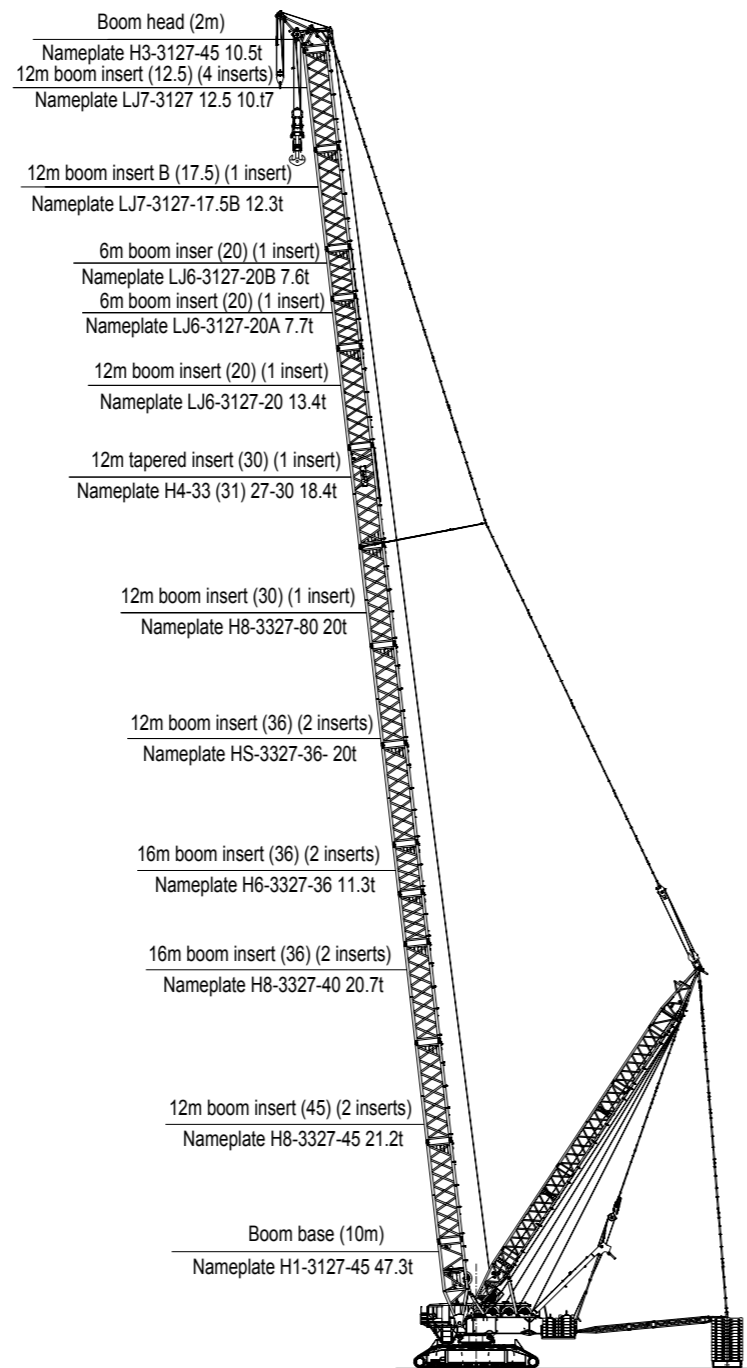
Boom length 54~108m, superlift mast 50m, superlift radius 30m, superlift counterweight 660t, rear counterweight 260t and carbody counterweight 80t Unit: (t)

Boom length(m) Radius(m)	84		90		96		102		108		Boom length(m) Radius(m)
	0t	660t	0t	660t	0t	660t	0t	660t	0t	660t	
12	559	987	0	0	0	0	0	0	0	0	12
13	517	987	493	878	472	784	0	0	0	0	13
14	476	987	458	878	438	784	421	703	403	632	14
16	414	987	398	878	382	784	367	703	352	632	16
18	363	987	350	878	336	784	323	703	311	632	18
20	322	982	311	878	298	784	287	703	276	632	20
22	288	968	278	871	267	783	257	703	247	632	22
24	256	954	251	863	241	778	231	701	221	632	24
26	229	890	226	853	218	774	209	699	199	630	26
28	207	822	205	819	197	769	189	696	181	628	28
30	187	763	185	761	180	757	173	694	164	626	30
34	153	666	153	663	149	660	144	657	136	618	34
38	124	589	124	586	121	582	118	579	114	576	38
42	101	526	101	523	97.8	520	94.7	517	92.7	513	42
46	82.9	474	82.9	471	79.3	467	75.7	464	73.6	461	46
50	67.9	429	67.4	427	63.8	423	60.2	420	58.1	416	50
54	55.6	391	55.1	388	51.1	384	47.8	382	45.6	378	54
58	45.2	357	44.4	355	40.5	351	37.1	348	34.8	345	58
62	36.4	328	35.6	326	31.5	322	28	319	25.5	316	62
66	29	303	28	300	23.7	297	20.1	294	17.5	290	66
70	22.8	272	21.5	278	17	274	13.3	271	10.6	268	70
72	20.2	255	18.7	268	14.2	264	10.4	261	0	258	72
74	17.7	239	15.9	258	11.4	254	0	251	0	248	74
76	15.4	223	13.6	244	0	245	0	242	0	238	76
78	0	0	11.3	230	0	236	0	233	0	229	78
79	0	0	10.3	223	0	230	0	229	0	225	79
81	0	0	0	209	0	220	0	221	0	217	81
82	0	0	0	0	0	215	0	217	0	213	82
86	0	0	0	0	0	190	0	201	0	198	86
90	0	0	0	0	0	0	0	180	0	185	90
91	0	0	0	0	0	0	0	174	0	180	91
94	0	0	0	0	0	0	0	0	0	168	94
96	0	0	0	0	0	0	0	0	0	158	96
Wind speed	9.8m/s										Wind speed

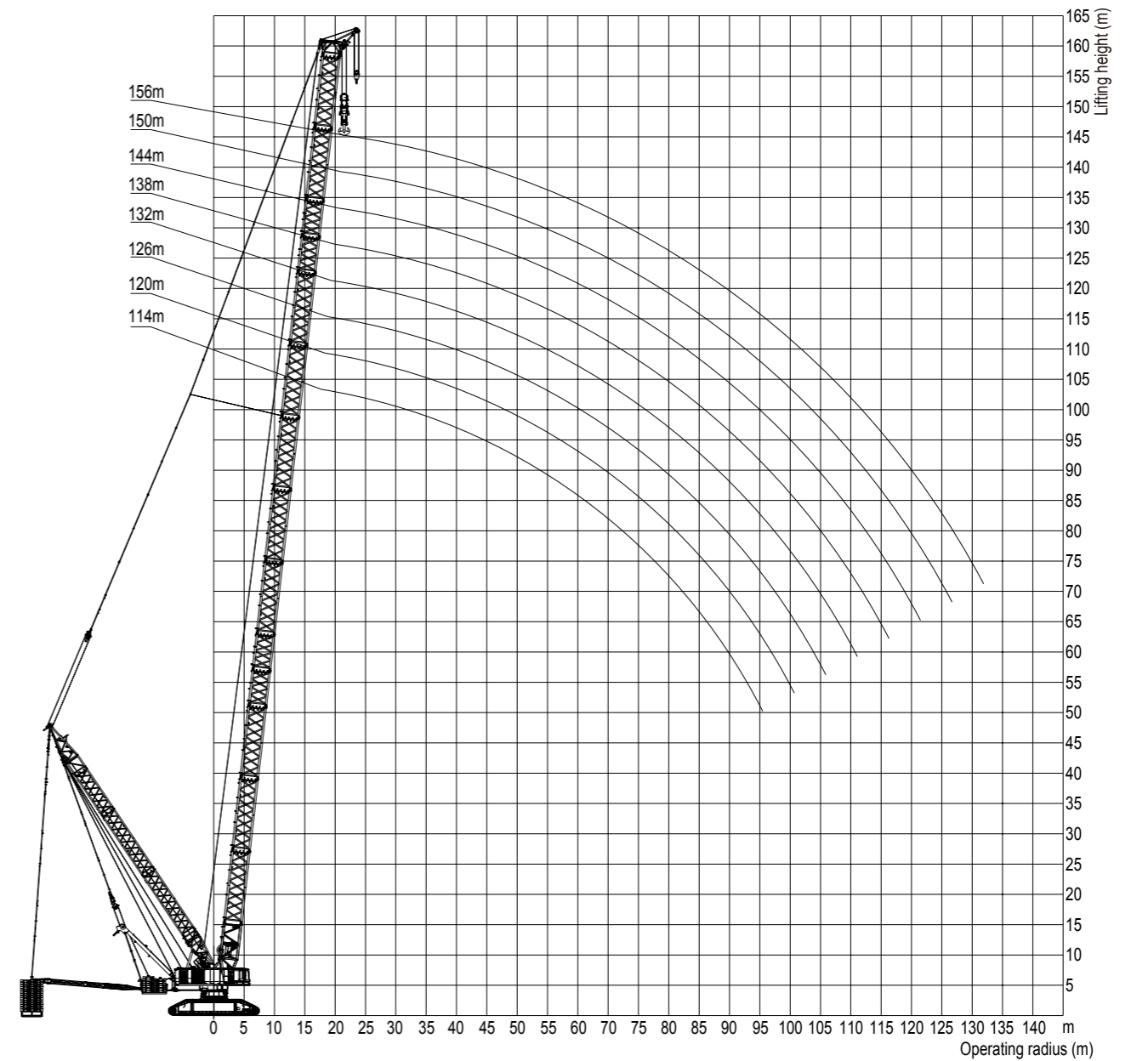
Notes: 1.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
2.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

HJDB OPERATING CONDITION

Length (m)	114	120	126	132	138	144	150	156
6m	2	2	2	2	2	2	2	2
12mA	2	2	2	2	2	2	2	2
12mB	1	1	1	1	1	1	1	1
12mC	2	2	2	2	2	2	2	2
12mD	1	1	1	1	1	1	1	1
6mA	-	1	-	1	-	1	-	1
6mB	1	1	1	1	1	1	1	1
12mA	-	-	-	-	1	1	1	1
12mB	-	-	1	1	1	1	1	1
12mC	-	-	-	-	-	-	-	-
12mD	-	-	-	-	-	-	1	1



OPERATING RANGE DIAGRAM UNDER HJDB OPERATING CONDITION



Curve of operating range of lifting height

HJDB OPERATING CONDITION LOAD CHARTS

SCC 16000 Crawler Crane – HJDB30m_660+260+80

Boom length 114~156m, superlift mast 50m, superlift radius 30m, superlift counterweight 660t, rear counterweight 260t and carbody counterweight 80t Unit: (t)

Boom length(m) Radius(m)	114		120		126		132		138		Boom length(m) Radius(m)
	0t	660t	0t	660t	0t	660t	0t	660t			
16	340	567	328	510	319	460	307	412	0	0	16
18	300	567	290	510	282	460	272	412	263	372	18
20	268	567	259	510	251	460	242	412	234	372	20
22	240	567	231	510	226	459	217	412	211	372	22
24	216	567	209	510	204	459	195	412	189	372	24
26	195	567	188	510	183	459	176	412	171	372	26
28	177	563	171	506	167	455	160	411	155	372	28
30	161	555	155	502	151	449	144	409	140	372	30
34	134	542	129	493	126	436	120	405	116	368	34
38	112	528	108	485	105	424	99.9	402	96.3	363	38
42	93.3	515	90.2	476	87.7	411	82.6	398	79.5	358	42
46	74.4	463	72.9	461	73.4	398	68.3	395	65.2	353	46
50	59.1	419	57.6	417	58.1	382	56.1	385	53	348	50
54	46.4	381	44.8	379	45.5	364	43.6	370	41.9	343	54
58	35.5	347	33.9	345	34.6	344	32.6	342	30.9	335	58
62	26.4	319	24.6	316	25.2	317	23.2	313	21.5	312	62
66	18.4	293	16.7	291	17.2	291	15.1	287	13.3	286	66
70	11.6	270	0	268	10.2	269	0	265	0	264	70
74	0	250	0	248	0	249	0	245	0	244	74
78	0	232	0	230	0	231	0	227	0	226	78
82	0	216	0	214	0	214	0	211	0	210	82
86	0	201	0	199	0	200	0	196	0	195	86
90	0	188	0	186	0	186	0	182	0	181	90
94	0	176	0	174	0	174	0	170	0	169	94
98	0	161	0	162	0	163	0	158	0	157	98
102	0	143	0	150	0	152	0	147	0	147	102
106	0	0	0	135	0	142	0	138	0	137	106
110	0	0	0	0	0	129	0	128	0	128	110
114	0	0	0	0	0	0	0	120	0	119	114
118	0	0	0	0	0	0	0	0	0	111	118
122	0	0	0	0	0	0	0	0	0	101	122
Wind speed	9.8m/s										Wind speed

Notes: 1.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
2.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

HJDB OPERATING CONDITION LOAD CHARTS

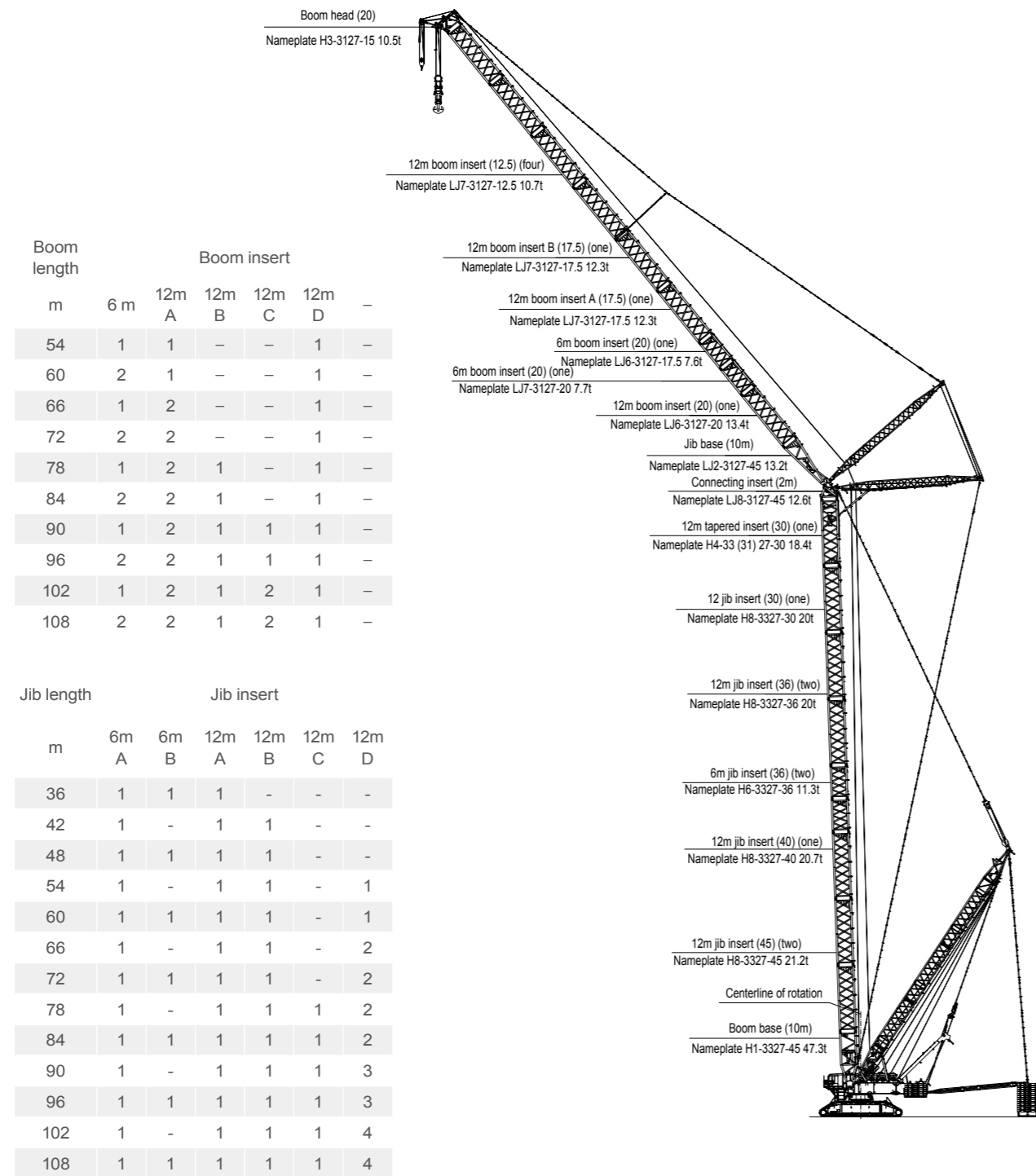
SCC 16000 Crawler Crane – HJDB30m_660+260+80

Boom length 54~108m, superlift mast 50m, superlift radius 30m, superlift counterweight 660t, rear counterweight 260t and carbody counterweight 80t Unit: (t)

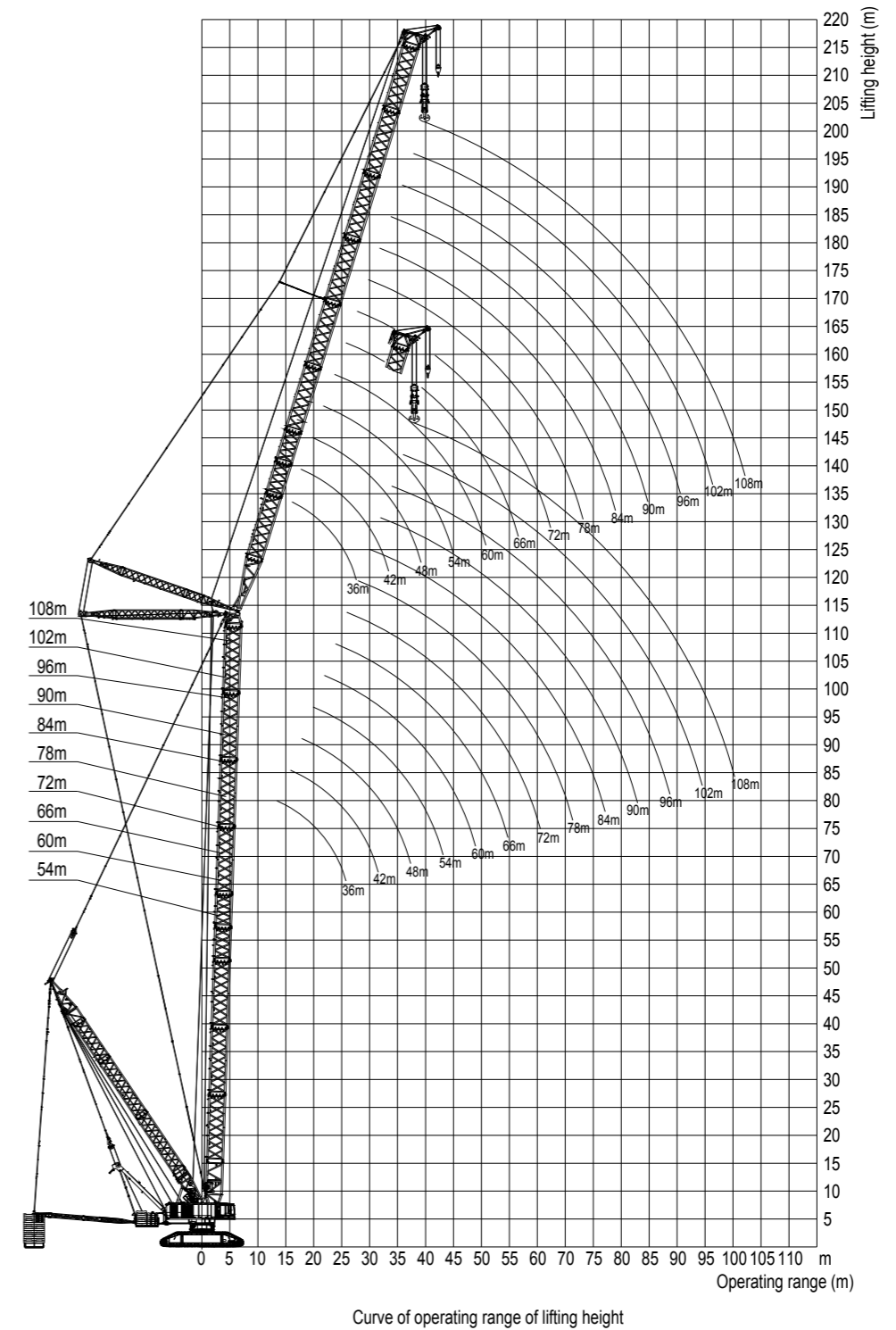
Boom length(m) Radius(m)	144		150		156		Boom length(m) Radius(m)
	0t	660t	0t	660t	0t	660t	
18	253	333	247	301	238	270	18
20	226	333	221	301	213	270	20
22	202	333	198	301	191	270	22
24	182	333	178	301	172	269	24
26	164	333	161	301	155	269	26
28	148	333	145	301	140	268	28
30	134	333	132	300	127	268	30
34	111	330	109	298	104	265	34
38	91.2	327	89.7	295	85.6	262	38
42	74.9	323	73.9	292	69.8	259	42
46	60.6	319	60.1	290	56.6	256	46
50	49.1	315	48.6	287	45	251	50
54	38.8	312	38.4	284	35	248	54
58	29.7	304	29.4	278	26.2	244	58
62	20.4	293	20.7	270	18.3	239	62
66	12.2	283	12.4	263	11.4	233	66
70	0	261	0	255	0	228	70
74	0	241	0	242	0	223	74
78	0	223	0	224	0	217	78
82	0	207	0	208	0	205	82
86	0	192	0	193	0	191	86
90	0	179	0	180	0	177	90
94	0	167	0	168	0	165	94
98	0	155	0	156	0	153	98
102	0	144	0	145	0	143	102
106	0	135	0	136	0	133	106
110	0	126	0	127	0	124	110
114	0	117	0	118	0	115	114
118	0	109	0	110	0	108	118
122	0	102	0	103	0	100	122
126	0	94.8	0	96.3	0	93.7	126
130	0	0	0	89.8	0	87.2	130
134	0	0	0	0	0	81.1	134
138	0	0	0	0	0	72.1	138
Wind speed	9.8m/s						Wind speed

Notes: 1.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
2.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

LJDB OPERATING CONDITION



OPERATING RANGE DIAGRAM UNDER LJDB OPERATING CONDITION



Curve of operating range of lifting height

LJDB OPERATING CONDITION LOAD CHARTS

SCC 16000 Crawler Crane – LJDB Operating Condition Load Table
 Crane rear counterweight 260t, carbody counterweight 80t, superlift counterweight 0-660t and superlift radius 30m
 Unit: (t)

Boom 54m+Jib 36m								Boom 54m+Jib 108m							
Radius	Superlift counterweight	0t		660t				Radius	Superlift counterweight	0t		660t			
(m)	Boom angle	85°	85°	75°	65°	55°	45°	(m)	Boom angle	85°	85°	75°	65°	55°	45°
24		289	657	-	-	-	-	48		87.2	158	-	-	-	-
26		264	637	-	-	-	-	50		82.1	157	-	-	-	-
28		242	614	-	-	-	-	52		77.5	156	-	-	-	-
30		223	556	-	-	-	-	54		72.9	155	-	-	-	-
32		206	506	-	-	-	-	56		68.3	154	-	-	-	-
34		191	463	-	-	-	-	58		64.7	153	-	-	-	-
36		178	426	-	-	-	-	60		60.6	151	-	-	-	-
38		166	394	593	-	-	-	62		57.1	150	-	-	-	-
40		156	366	539	-	-	-	64		54	149	-	-	-	-
42		146	341	492	-	-	-	66		50.5	148	-	-	-	-
43		-	-	470	-	-	-	68		47.3	147	-	-	-	-
44		-	-	451	-	-	-	70		44.2	146	-	-	-	-
45		-	-	432	-	-	-	72		41.3	145	-	-	-	-
46		-	-	415	-	-	-	74		38.6	144	145	-	-	-
47		-	-	399	-	-	-	76		36	139	145	-	-	-
48		-	-	385	-	-	-	78		33.5	133	145	-	-	-
49		-	-	370	-	-	-	80		31.2	127	145	-	-	-
50		-	-	358	-	-	-	84		26.8	117	144	-	-	-
51		-	-	346	422	-	-	88		22.8	107	131	-	-	-
52		-	-	334	413	-	-	92		19.2	98.9	120	-	-	-
53		-	-	-	405	-	-	96		15.8	90.7	110	-	-	-
54		-	-	-	396	-	-	100		12.7	83.6	102	123	-	-
55		-	-	-	388	-	-	104		-	77	93.8	113	-	-
56		-	-	-	380	-	-	108		-	71.4	86.1	104	-	-
57		-	-	-	373	-	-	110		-	-	82.6	99.4	-	-
58		-	-	-	365	-	-	112		-	-	79.5	95.3	-	-
59		-	-	-	357	-	-	114		-	-	76.5	91.8	-	-
60		-	-	-	345	-	-	116		-	-	73.4	88.2	-	-
61		-	-	-	333	-	-	118		-	-	70.3	84.6	-	-
64		-	-	-	-	296	-	120		-	-	67.8	81	96.3	-
65		-	-	-	-	290	-	122		-	-	-	78	92.3	-
66		-	-	-	-	285	-	124		-	-	-	74.9	88.7	-
67		-	-	-	-	280	-	126		-	-	-	71.9	85.1	-
68		-	-	-	-	275	-	128		-	-	-	69.3	81.6	-
69		-	-	-	-	270	-	130		-	-	-	-	78.5	-
74		-	-	-	-	-	216	132		-	-	-	-	75.4	-
76		-	-	-	-	-	209	134		-	-	-	-	72.4	-
		-	-	-	-	-	-	136		-	-	-	-	69.8	-
		-	-	-	-	-	-	138		-	-	-	-	-	57.1
		-	-	-	-	-	-	140		-	-	-	-	-	55
		-	-	-	-	-	-	142		-	-	-	-	-	53.5
		-	-	-	-	-	-	144		-	-	-	-	-	52

Notes : 1.The wind speed of 9.8m/s is allowed for above operating condition;
 2.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
 3.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

LJDB OPERATING CONDITION LOAD CHARTS

SCC 16000 Crawler Crane – LJDB Operating Condition Load Table
 Crane rear counterweight 260t, carbody counterweight 80t, superlift counterweight 0-660t and superlift radius 30m
 Unit: (t)

Boom 66m+Jib 60m								Boom 66m+Jib 66m							
Radius	Superlift counterweight	0t		660t				Radius	Superlift counterweight	0t		660t			
(m)	Boom angle	85°	85°	75°	65°	55°	45°	(m)	Boom angle	85°	85°	75°	65°	55°	45°
32		182	363	-	-	-	-	34		166	326	-	-	-	-
34		170	360	-	-	-	-	36		156	323	-	-	-	-
36		160	354	-	-	-	-	38		147	319	-	-	-	-
38		150	348	-	-	-	-	40		139	313	-	-	-	-
40		140	340	-	-	-	-	42		130	306	-	-	-	-
42		132	334	-	-	-	-	44		122	300	-	-	-	-
44		124	329	-	-	-	-	46		115	293	-	-	-	-
46		116	323	-	-	-	-	48		108	287	-	-	-	-
48		110	317	-	-	-	-	50		102	280	-	-	-	-
50		103	307	-	-	-	-	52		97	273	-	-	-	-
52		98.2	290	-	-	-	-	54		91.8	266	-	-	-	-
54		92.9	275	378	-	-	-	56		86.9	259	312	-	-	-
56		87.9	260	362	-	-	-	58		82.3	248	312	-	-	-
58		83.3	247	340	-	-	-	60		78	235	306	-	-	-
60		79	235	321	-	-	-	62		74	224	301	-	-	-
62		74.9	224	302	-	-	-	64		70.3	214	286	-	-	-
64		71	209	285	-	-	-	66		66.7	204	270	-	-	-
66		67.3	191	270	-	-	-	68		63.3	194	257	-	-	-
67		-	-	263	-	-	-	70		60.1	181	244	-	-	-
68		-	-	256	-	-	-	72		57	166	232	-	-	-
69		-	-	250	-	-	-	73		-	-	226	-	-	-
70		-	-	244	-	-	-	74		-	-	221	-	-	-
71		-	-	237	-	-	-	75		-	-	216	-	-	-
72		-	-	232	265	-	-	76		-	-	212	247	-	-
73		-	-	226	260	-	-	77		-	-	207	243	-	-
74		-	-	221	256	-	-	78		-	-	202	239	-	-
75		-	-	216	252	-	-	79		-	-	197	236	-	-
76		-	-	212	248	-	-	80		-	-	193	232	-	-
77		-	-	207	244	-	-	82		-	-	186	225	-	-
78		-	-	200	240	-	-	84		-	-	-	219	-	-
80		-	-	-	233	-	-	86		-	-	-	212	-	-
82		-	-	-	226	-	-	88		-	-	-	206	-	-
84		-	-	-	219	-	-	90		-	-	-	197	-	-
86		-	-	-	213	-	-	92		-	-	-	189	-	-
88		-	-	-	207	-	-	94		-	-	-	182	177	-
90		-	-	-	-	188	-	96		-	-	-	-	172	-
92		-	-	-	-	183	-	98		-	-	-	-	168	-
94		-	-	-	-	178	-	100		-	-	-	-	163	-
96		-	-	-	-	173	-	102		-	-	-	-	159	-
98		-	-	-	-	168	-	104		-	-	-	-	155	-
104		-	-	-	-	-	131	112		-	-	-	-	-	115
106		-	-	-	-	-	127	113		-	-	-	-	-	114
107		-	-	-	-	-	126								

Notes : 1.The wind speed of 9.8m/s is allowed for above operating condition;
 2.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
 3.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

LJDB OPERATING CONDITION LOAD TABLE

SCC 16000 Crawler Crane – LJDB Operating Condition Load Table

Crane rear counterweight 260t, carbody counterweight 80t,
superlift counterweight 0-660t and superlift radius 30m

Unit: (t)

Room66m+Jib72m								Room66m+Jib78m							
Radius	Superlift counterweight	0t		660t				Radius	Superlift counterweight	0t		660t			
(m)	Boom angle	85°	85°	75°	65°	55°	45°	(m)	Boom angle	85°	85°	75°	65°	55°	45°
36		150	294	-	-	-	-	40		126	262	-	-	-	-
38		141	292	-	-	-	-	44		113	257	-	-	-	-
40		132	288	-	-	-	-	48		101	250	-	-	-	-
42		125	285	-	-	-	-	52		90.1	244	-	-	-	-
44		118	281	-	-	-	-	56		80.2	237	-	-	-	-
46		110	277	-	-	-	-	60		71.5	230	-	-	-	-
48		104	272	-	-	-	-	64		63.9	211	266	-	-	-
50		98.2	268	-	-	-	-	68		57.2	193	253	-	-	-
52		92.6	264	-	-	-	-	72		51.2	177	229	-	-	-
54		87.4	260	-	-	-	-	76		45.7	161	209	-	-	-
56		82.5	257	-	-	-	-	80		40.8	142	191	-	-	-
58		78	245	-	-	-	-	84		-	-	175	212	-	-
60		73.8	234	301	-	-	-	88		-	-	160	199	-	-
62		69.8	223	299	-	-	-	92		-	-	148	186	-	-
64		66.1	212	283	-	-	-	96		-	-	-	170	-	-
66		62.6	203	268	-	-	-	97		-	-	-	166	-	-
68		59.3	194	255	-	-	-	100		-	-	-	157	-	-
70		56.2	186	242	-	-	-	104		-	-	-	145	147	-
72		53.2	176	231	-	-	-	108		-	-	-	-	139	-
74		50.3	164	220	-	-	-	109		-	-	-	-	137	-
76		47.6	152	210	-	-	-	112		-	-	-	-	132	-
78		45	140	201	-	-	-	113		-	-	-	-	130	-
79		-	-	196	-	-	-	116		-	-	-	-	125	-
80		-	-	192	227	-	-	120		-	-	-	-	-	95.8
82		-	-	184	220	-	-	121		-	-	-	-	-	94.3
84		-	-	176	214	-	-	124		-	-	-	-	-	90.7
86		-	-	168	208	-	-								
88		-	-	161	202	-	-								
90		-	-	-	196	-	-								
92		-	-	-	187	-	-								
94		-	-	-	179	-	-								
96		-	-	-	172	-	-								
98		-	-	-	165	163	-								
100		-	-	-	158	158	-								
102		-	-	-	-	154	-								
104		-	-	-	-	150	-								
106		-	-	-	-	146	-								
108		-	-	-	-	142	-								
110		-	-	-	-	139	-								
116		-	-	-	-	-	105								
118		-	-	-	-	-	102								
119		-	-	-	-	-	100								

- Notes : 1.The wind speed of 9.8m/s is allowed for above operating condition;
2.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
3.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

LJDB OPERATING CONDITION LOAD TABLE

SCC 16000 Crawler Crane – LJDB Operating Condition Load Table

Crane rear counterweight 260t, carbody counterweight 80t,
superlift counterweight 0-660t and superlift radius 30m

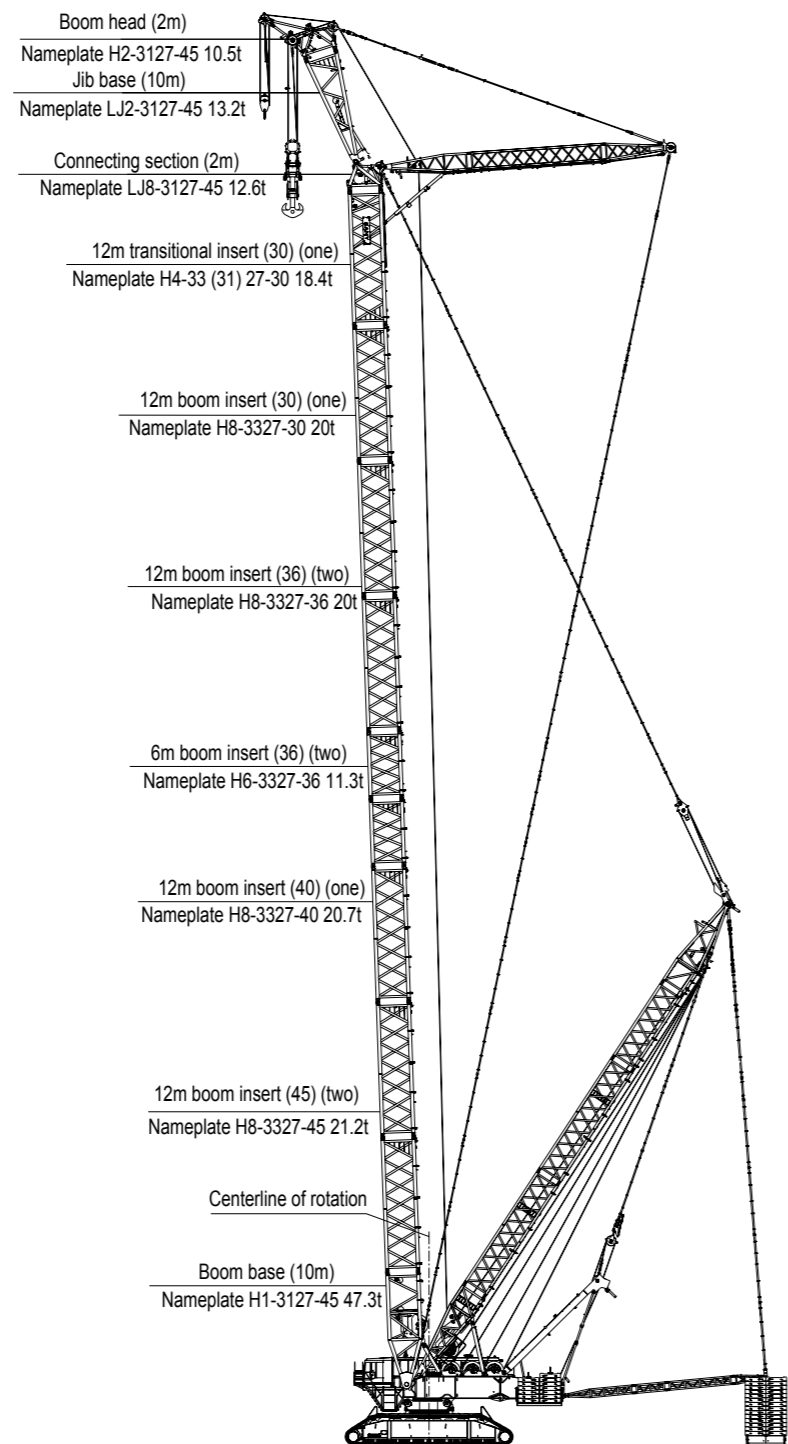
Unit: (t)

Room108m+Jib36m								Room108m+Jib108m							
Radius	Superlift counterweight	0t		660t				Radius	Superlift counterweight	0t		660t			
(m)	Boom angle	85°	85°	75°	65°	55°	45°	(m)	Boom angle	85°	85°	75°	65°	55°	45°
28		176	294	-	-	-	-	52		39.8	83.1	-	-	-	-
30		163	288	-	-	-	-	56		33.8	82.1	-	-	-	-
32		154	282	-	-	-	-	60		28.3	80.5	-	-	-	-
34		144	275	-	-	-	-	64		23.5	79	-	-	-	-
36		135	267	-	-	-	-	68		19.1	77	-	-	-	-
38		128	261	-	-	-	-	72		15.1	74.9	-	-	-	-
40		121	255	-	-	-	-	76		11.6	72.4	-	-	-	-
42		115	249	-	-	-	-	80		-	70.3	-	-	-	-
44		109	244	-	-	-	-	84		-	68.3	-	-	-	-
46		104	238	-	-	-	-	88		-	66.3	77	-	-	-
52		-	-	291	-	-	-	92		-	64.2	77	-	-	-
53		-	-	290	-	-	-	96		-	61.7	76.5	-	-	-
54		-	-	289	-	-	-	100		-	59.6	75.9	-	-	-
55		-	-	287	-	-	-	104		-	57.6	75.4	-	-	-
56		-	-	285	-	-	-	108		-	55.5	74.4	-	-	-
57		-	-	282	-	-	-	112		-	53.5	73.9	-	-	-
58		-	-	280	-	-	-	116		-	51.5	72.9	-	-	-
59		-	-	278	-	-	-	120		-	-	71.9	64.7	-	-
60		-	-	276	-	-	-	124		-	-	70.3	64.7	-	-
61		-	-	273	-	-	-	128		-	-	69.3	64.7	-	-
62		-	-	271	-	-	-	132		-	-	68.3	64.7	-	-
63		-	-	269	-	-	-	136		-	-	-	64.7	-	-
64		-	-	268	-	-	-	140		-	-	-	64.7	-	-
65		-	-	266	-	-	-	144		-	-	-	61.7	-	-
66		-	-	264	-	-	-	148		-	-	-	58.1	-	-
74		-	-	-	221	-	-	152		-	-	-	-	37.4	-
75		-	-	-	217	-	-	156		-	-	-	-	34.7	-
76		-	-	-	214	-	-	160		-	-	-	-	32.2	-
77		-	-	-	211	-	-	164		-	-	-	-	29.7	-
78		-	-	-	207	-	-	168		-	-	-	-	27.2	-
79		-	-	-	203	-	-								
80		-	-	-	200	-	-								
81		-	-	-	197	-	-								
82		-	-	-	195	-	-								
95		-	-	-	-	136	-								
96		-	-	-	-	134	-								
97		-	-	-	-	133	-								
98		-	-	-	-	131	-								
99		-	-	-	-	130	-								
100		-	-	-	-	128	-								
112		-	-	-	-	-	92.3								
113		-	-	-	-	-	91.2								
114		-	-	-	-	-	89.7								

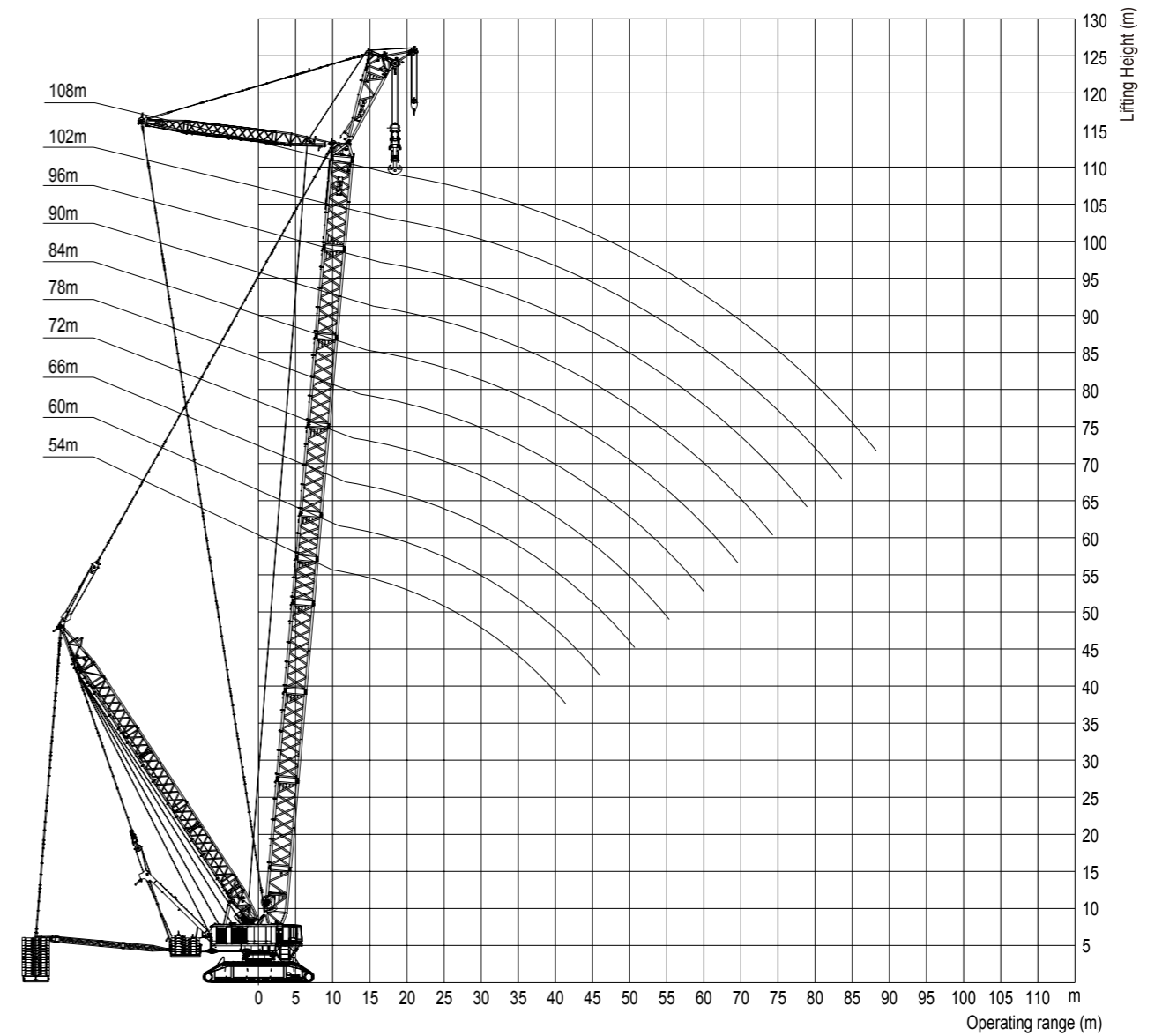
- Notes : 1.The wind speed of 9.8m/s is allowed for above operating condition;
2.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
3.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

F_hDB OPERATING CONDITION

Boom length m	Boom insert				
	6 m	12mA	12mB	12mC	12mD
54	1	1	-	-	1
60	2	1	-	-	1
66	1	2	-	-	1
72	2	2	-	-	1
78	1	2	1	-	1
84	2	2	1	-	1
90	1	2	1	1	1
96	2	2	1	1	1
102	1	2	1	2	1
108	2	2	1	2	1



OPERATING RANGE DIAGRAM UNDER F_hDB OPERATING CONDITION



Curve of operating range of lifting height

FJhDB OPERATING CONDITION LOAD CHARTS

SCC 16000 Crawler Crane – FJhDB30m_660+260+80

Boom length 54~108m, superlift mast 50m, superlift radius 30m, superlift counterweight 660t, rear counterweight 260t

Unit: (t)

Boom length(m) Radius(m)	54		60		66		72		78		Boom length(m) Radius(m)
	0t	660t	0t	660t	0t	660t	0t	660t	0t	660t	
14	553	1021	0	0	0	0	0	0	0	0	14
16	473	964	454	946	436	988	418	890	401	803	16
18	410	914	395	901	380	957	364	890	350	803	18
20	361	869	348	861	334	915	321	890	309	803	20
22	320	828	309	825	296	877	285	875	273	803	22
24	286	792	276	792	264	841	254	842	244	802	24
26	249	758	246	761	237	809	227	812	218	794	26
28	219	728	215	733	211	780	204	785	195	786	28
30	194	701	190	708	186	752	181	759	177	759	30
34	155	652	150	663	146	666	141	663	135	658	34
38	125	594	119	591	114	587	109	582	103	576	38
42	100	525	95.2	526	89.6	523	83.9	517	78.2	510	42
46	81.3	451	75.7	473	69.5	468	63.8	462	58.1	456	46
50	65.4	388	59.7	418	53.5	421	47.7	415	42	408	50
54	52.5	332	46.6	362	40.3	382	34.4	375	28.4	368	54
58	42.2	282	35.8	314	29.3	335	23.1	340	17.2	334	58
62	33.6	234	26.9	269	20.1	292	13.9	309	0	305	62
66	0	0	19.6	227	12.5	253	0	270	0	280	66
70	0	0	0	0	0	216	0	235	0	249	70
74	0	0	0	0	0	0	0	203	0	218	74
78	0	0	0	0	0	0	0	0	0	189	78
82	0	0	0	0	0	0	0	0	0	161	82

- Notes : 1.The wind speed of 9.8m/s is allowed for above operating condition;
 2.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
 3.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.

FJhDB OPERATING CONDITION LOAD CHARTS

SCC 16000 Crawler Crane – FJhDB30m_660+260+80

Boom length 54~108m, superlift mast 50m, superlift radius 30m, superlift counterweight 660t, rear counterweight 260t and carbody counterweight 80t

Unit: (t)

Boom length(m) Radius(m)	84		90		96		102		108		Boom length(m) Radius(m)
	0t	660t	0t	660t	0t	660t	0t	660t	0t	660t	
18	336	719	323	645	310	579	0	0	0	0	18
20	296	719	284	645	272	579	261	522	250	469	20
22	262	719	252	645	242	579	231	522	221	469	22
24	233	719	224	645	214	579	204	522	195	469	24
26	209	716	199	645	191	579	182	522	174	469	26
28	187	713	179	644	170	579	162	522	154	469	28
30	167	709	160	643	152	579	145	522	136	469	30
34	130	651	125	641	120	579	115	522	108	466	34
38	98.3	570	93.2	565	88	559	82.9	522	77.2	464	38
42	72.6	504	67.4	498	62.3	492	57.1	487	51.5	451	42
46	52.5	450	47.4	443	41.9	437	36.5	431	30.7	425	46
50	36.1	402	30.9	397	25.2	391	19.7	385	13.9	379	50
54	22.4	362	17.2	357	11.4	351	0	345	0	338	54
58	11.1	328	0	322	0	316	0	311	0	303	58
62	0	298	0	293	0	286	0	281	0	273	62
66	0	272	0	266	0	260	0	254	0	248	66
70	0	250	0	244	0	237	0	231	0	225	70
74	0	226	0	224	0	218	0	212	0	204	74
78	0	199	0	206	0	199	0	193	0	187	78
82	0	174	0	182	0	184	0	178	0	170	82
86	0	149	0	159	0	163	0	163	0	156	86
90	0	0	0	138	0	143	0	146	0	143	90
94	0	0	0	0	0	123	0	127	0	128	94
98	0	0	0	0	0	105	0	111	0	112	98
102	0	0	0	0	0	0	0	94.2	0	96.8	102
106	0	0	0	0	0	0	0	0	0	81.8	106

- Notes : 1.The wind speed of 9.8m/s is allowed for above operating condition;
 2.Actual hoisting capacity is a value by deducting the mass of hook, rigging and wire ropes winding on the hook and boom/jib head from the rated hoisting capacity in this table;
 3.The rated load in the table is for the condition of load slowly and smoothly lifting from the level and solid ground without traveling.



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