



# SANY

Quality Changes the World



## **HYDRAULIC CRAWLER CRANE**

### **SCC 600E**

# HYDRAULIC CRAWLER CRANE

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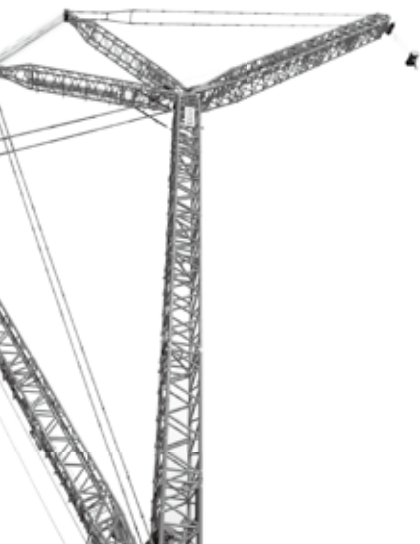
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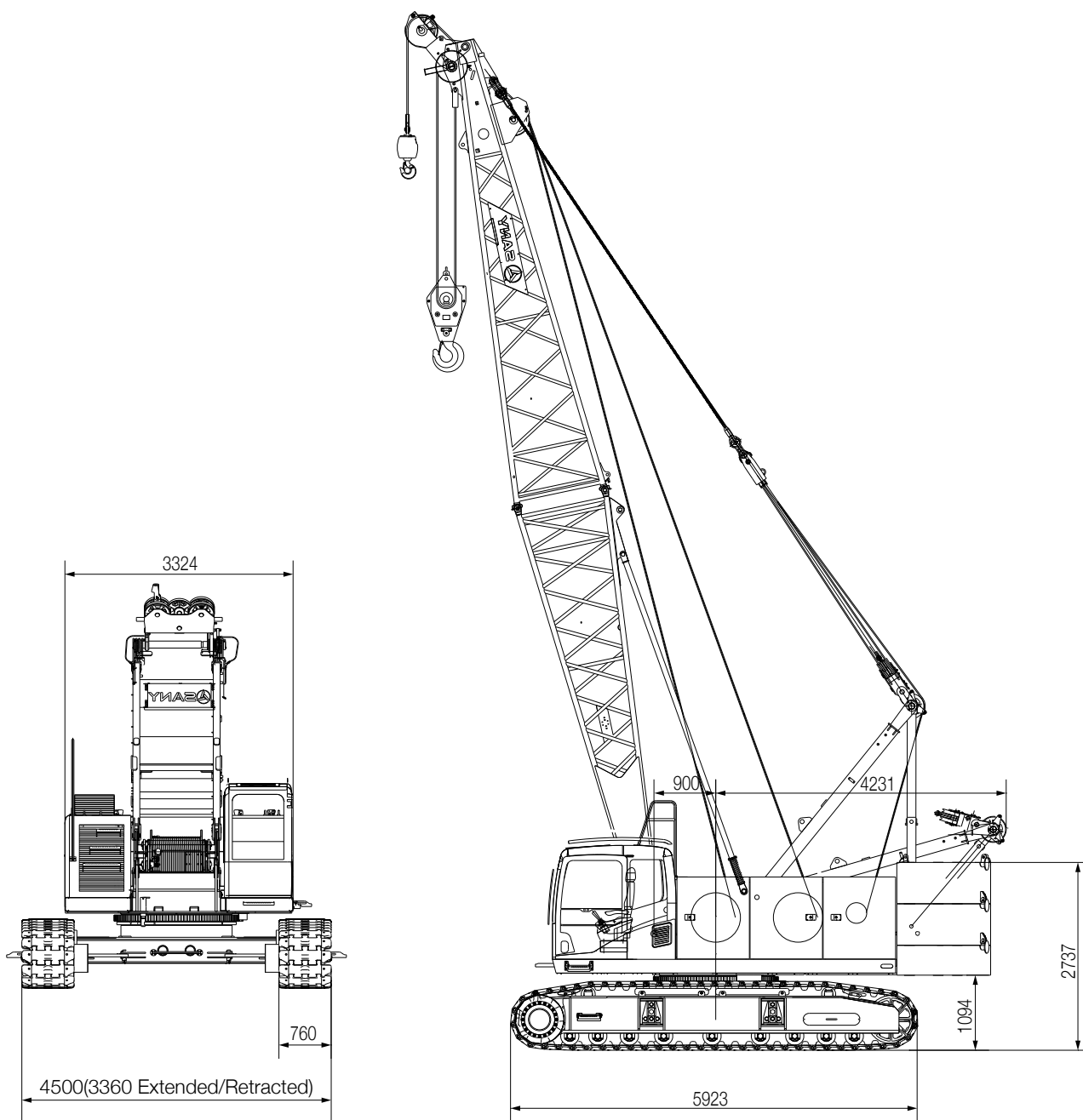




# SCC600E

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## OUTLINE DIMENSIONS



# TECHNICAL FEATURES

## **1. Highly Secured Control System:**

There are two operation modes, working and assembly for your convenience. It features with electronic level gauge, machine-leaving stop action, and emergency electrical control, with complete set of safety and monitoring device. Load moment limiter is free of calibration, providing higher safety of the equipment, and less auxiliary operating time; slewing area limit device is optional, to improve the safety of the equipment;

## **2. Excellent Operating Performance:**

Maximum load regulation and electronic-over-hydraulic controls ensure smooth micro-movement and stable operation. A real-time queried electronic load chart is provided, more conveniently and quickly;

## **3. Reliable Function Assurance:**

The safety margin in structural design is sufficient; the advanced flow distribution system which is load independent is adopted to the hydraulic system. the key components like pumps, valves, motors, and reducers, etc. are reliable and stable. are also adopted to ensure system stability and reliability. The control system is fully capable to function stably in extreme weather, such as high-and-cold, high-temperature, and high plateau weather; sensor has a protection against lightning strike; the entire machine adopts the closed wiring way, with waterproof / dust-proof protective grade up to IP65; the machine passed the verification test of the strength that is higher above two times of that in industry, having high reliability;

## **4. 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.

## **5. Powerful Lifting Capacity:**

Wide-track chassis is design to ensure excellent overall and operating stability within 360° slewing range, with max. single line pull of main and auxiliary winch up to 6.5t, with max. lifting capacity of main boom of 60t×3.7m=222t·m. and with 52m main boom.

## **6. High-efficient operating speed:**

Outmost layer line speed of main and auxiliary lifting winches is 120m/min, and of luffing winch is 72m/min;

## **7. Flexible Configuration Combination:**

Free fall winch is optional for main and auxiliary lifting winches.

## **8. Optimized Transportation Programs:**

With telescopic crawler, the maximum transportation width of whole machine is 3.36m, ensuring it to be transported around freely.

# PERFORMANCE PARAMETERS

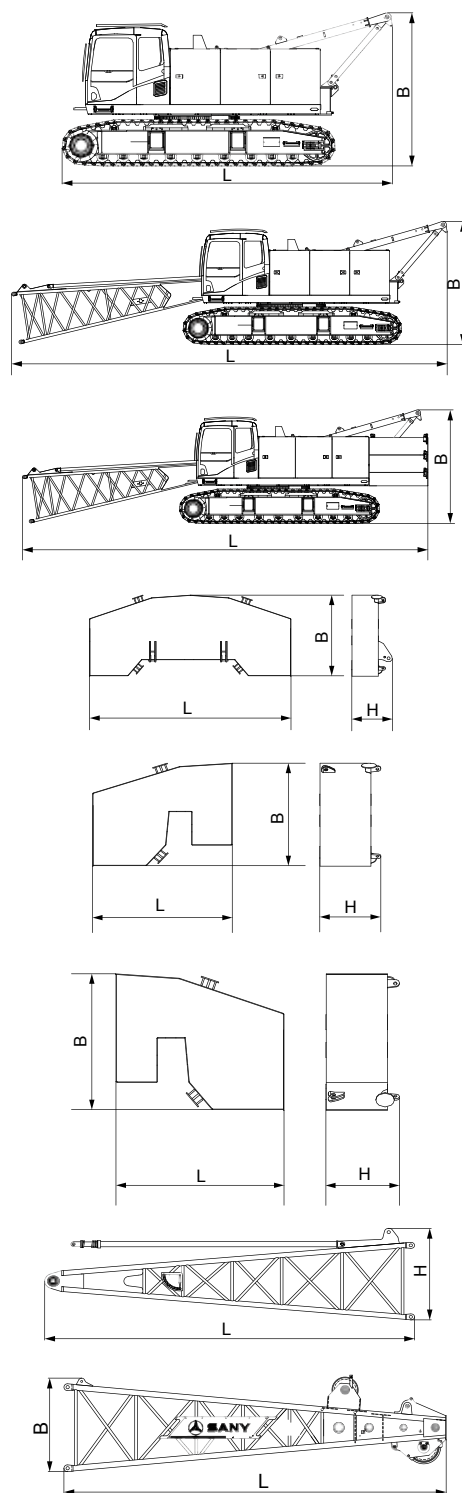
Performance Parameters of SCC600E Crawler Crane			
Performance Index		Unit	Parameter
Boom Operating Condition	Max. Rated Lifting Capacity	t	60
	Boom Length	m	13~52
	Boom Luffing Angle	°	30° ~80°
	Max. Rated Lifting Torque	t•m	222
Fixed Jib Operating Condition	Max. Length Boom + Max. Length Jib	m	43+15.25
	Jib offset Angle	°	10° 、 30°
Luffing Jib Operating Condition	Max. lifting Capacity	t	12.5
	Max. lifting moment	t•m	10.1t×14m
	Max. Length Boom + Max. Length luffing jib	m	40.3+28
	Boom luffing angle	°	60° ~90°
	Jib luffing angle	°	15° ~75°
Operating Speed	Rope Speed of Main and Auxiliary Winches*	m/min	0~120 (third layer)
	Rope Speed of Luffing Winches*	m/min	0-50 (fourth layer) or 72 (magnetic valve connected)
	Slewing Speed*	rpm	0~2
	Traveling Speed*	km/h	0~1.2
Engine	Output Power/Rated Speed	kW/ rpm	127/2000 EURO III (optional) 129/2200 GB III
Transportation Parameter	Max. Transportation Weight of Single Piece (with chassis, boom base, without counterweight)	t	28.5 (including boom base, and undercarriage, but not including counterweight)
	Transportation Dimension(Length×Width×Height)	mm	7030×3360×3304
Other Parameter	Average Ground Pressure	MPa	0.059

Notes:

1. The item with \* means that rope speed of main / auxiliary winch, rope speed of luffing winch, slewing and traveling speeds will change with the load
2. The average ground pressure is only for reference and the actual ground pressure should be calculated based on the real working conditions.

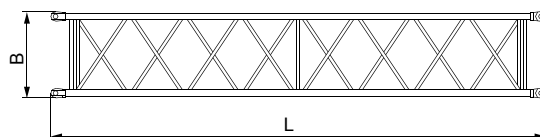
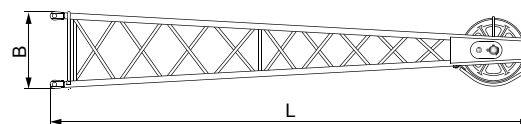
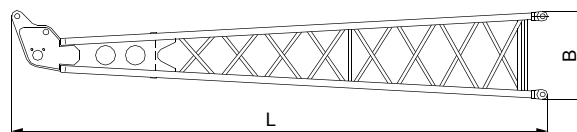
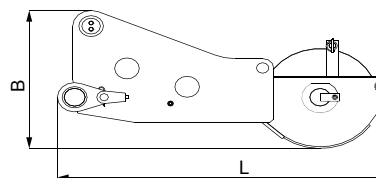
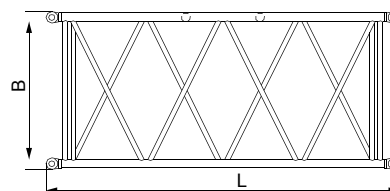
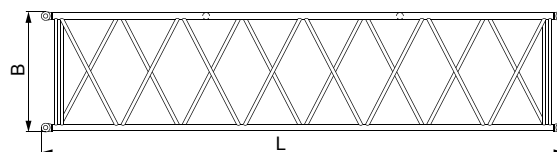
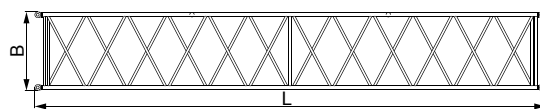
# TRANSPORTATION DIMENSIONS

<b>Basic Machine (without track frame)</b>	×1
Length(L)	5.92m
Width (B)	3.36m
Height (H)	3.43m
Weight	27.5t
<b>Basic Machine (with track frame)</b>	×1
Length(L)	10.4m
Width (B)	3.36m
Height (H)	3.43m
Weight	28.5t
<b>Body (including boom base and main machine counterweight)</b>	×1
Length(L)	11.8m
Width (B)	3.36m
Height (H)	3.43m
Weight	46.5t
<b>Counterweight Tray</b>	×1
Length(L)	3.324m
Width (B)	1.36m
Height (H)	0.67m
Weight	6t
<b>Right Counterweight Blocks</b>	×2
Length(L)	1.647m
Width (B)	1.36m
Height (H)	0.72m
Weight	3t
<b>Left Counterweight</b>	×2
Length(L)	1.647m
Width (B)	1.36m
Height (H)	0.72m
Weight	3t
<b>Boom Base</b>	×1
Length(L)	6.65m
Width (B)	1.66m
Height (H)	1.40m
Weight	1.2t
<b>Boom Tip</b>	×1
Length (L)	6.88m
Width (B)	1.48m
Height (H)	1.40m
Weight	1.1t



# TRANSPORTATION DIMENSIONS

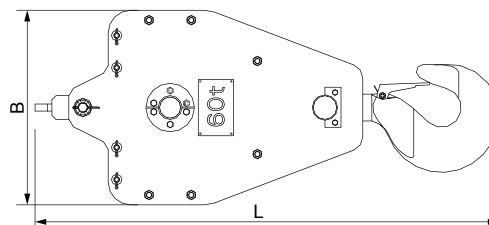
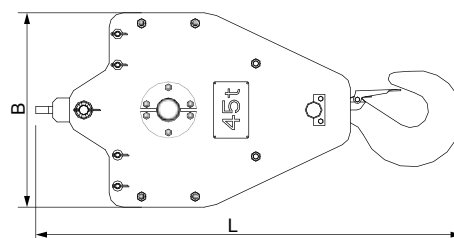
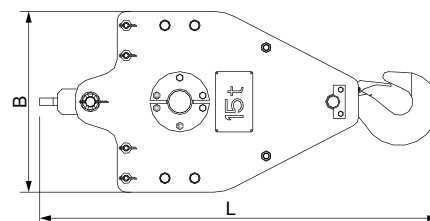
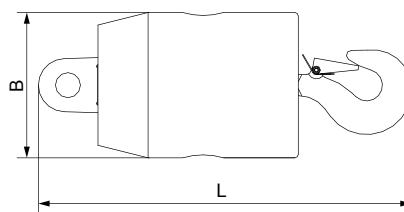
<b>9m Boom Inserts</b>	<b>×2</b>
Length (L)	9.1m
Width (B)	1.46m
Height (H)	1.58m
Weight	0.7t
<b>6m Boom Insert</b>	<b>×3</b>
Length (L)	6.1m
Width (B)	1.46m
Height (H)	1.58m
Weight	0.5t
<b>3m Boom Insert</b>	<b>×1</b>
Length (L)	3.1m
Width (B)	1.46m
Height (H)	1.58m
Weight	0.3t
<b>Boom Extension</b>	<b>×1</b>
Length (L)	1.35m
Width (B)	0.7m
Height (H)	0.66m
Weight	0.2t
<b>Jib Base</b>	<b>×1</b>
Length (L)	3.24m
Width (B)	0.6m
Height (H)	0.55m
Weight	0.2t
<b>Jib Tip</b>	<b>×1</b>
Length (L)	3.35m
Width (B)	0.6m
Height (H)	0.55m
Weight	0.2t
<b>Jib Insert</b>	<b>×3</b>
Length (L)	3.11m
Width (B)	0.62m
Height (H)	0.7m
Weight	0.1t





# TRANSPORTATION DIMENSIONS

<b>6t hook</b>	<b>×1</b>
Length(L)	0.75m
Width(B)	0.3m
Height(H)	0.3m
Weight	0.16t
<b>15t hook</b>	<b>×1</b>
Length(L)	1.34m
Width(B)	0.6m
Height(H)	0.34m
Weight	0.29t
<b>45 t hook</b>	<b>×1</b>
Length(L)	1.52m
Width(B)	0.69m
Height(H)	0.37m
Weight	0.49t
<b>60 t hook</b>	<b>×1</b>
Length(L)	1.65m
Width(B)	0.69m
Height(H)	0.39m
Weight	0.66t

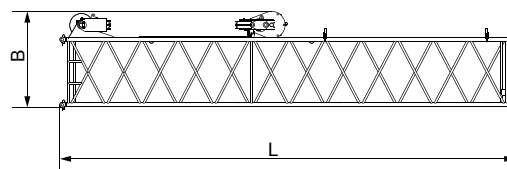
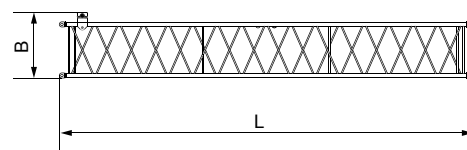
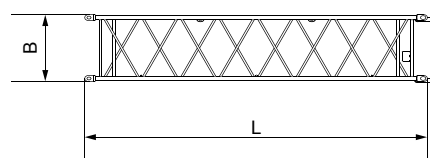
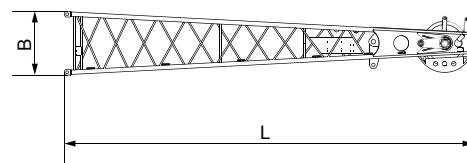
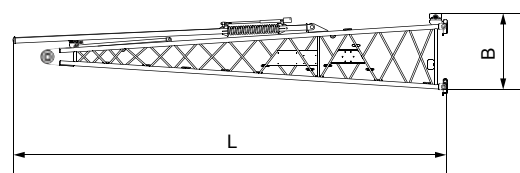
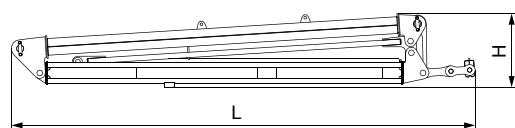
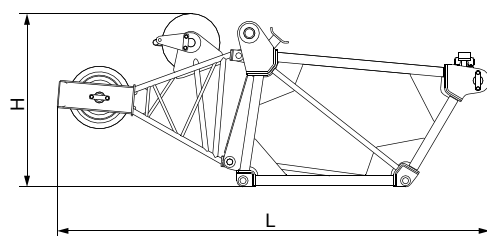


## Notes:

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
3. After product upgrading, the actual weight is subjected to the latest products.

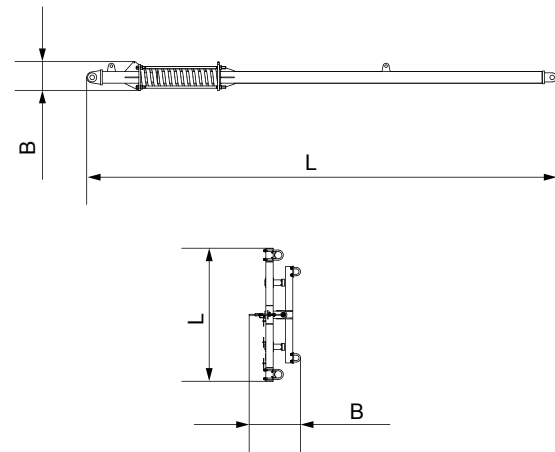
# TRANSPORTATION DIMENSIONS OF LUFFING JIB

<b>Special Boom Head Combination under Tower Condition</b>	×1
Length (L)	3.46m
Width (B)	1.42m
Height (H)	1.39m
Weight	0.6t
<b>Special Mast Combination under Tower Condition</b>	×1
Length (L)	4.958m
Width (B)	1.446m
Height (H)	0.795m
Weight	0.68t
<b>Luffing Jib Base</b>	×1
Length (L)	5.48m
Width (B)	0.97m
Height (H)	1.35m
Weight	0.35t
<b>Luffing Jib Tip</b>	×1
Length (L)	5.42m
Width (B)	0.84m
Height (H)	1.01m
Weight	0.40t
<b>Luffing Jib 3m Insert</b>	×2
Length (L)	3.08m
Width (B)	0.84m
Height (H)	1.02m
Weight	0.13t
<b>Luffing Jib 6m Insert</b>	×2
Length (L)	6.08m
Width (B)	0.99m
Height (H)	1.02m
Weight	0.24t
<b>9m Boom Insert under Tower Condition</b>	×1
Length (L)	9.10m
Width (B)	1.91m
Height (H)	1.43m
Weight	1.02t



# TRANSPORTATION DIMENSIONS OF LUFFING JIB

<b>Special Boom Back-stop under Tower Condition</b>	<b>×2</b>
Length (L)	5.13m
Width (B)	0.32m
Height (H)	0.29m
Weight	0.32t
<b>Special Jib Fixed Frame under Tower Condition</b>	<b>×1</b>
Length (L)	1.45m
Width (B)	0.56m
Height (H)	0.46m
Weight	0.07t



# SCC600E

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# SPECIFICATIONS / SUPERSTRUCTURE

## 1) Engine

Two options of the engine

EU III standard

- QSB6.7-C170, 6-cylinder, turbocharging & air-air intercooler
- Displacement:6.7L
- Rated Power:127KW/2000RPM
- Max. Torque: 659N·m 1500RPM
- Emission Standard: EURO III TPE
- Fuel Tank Volume:400L

GB III standard

- QSB6.7-C170, 6-cylinder, turbocharging & air-air intercooler
- Displacement:6.7L
- Rated Power:129KW/2200RPM
- Max. Torque:800N·m 1500RPM
- Emission Standard: CN 3 TPEM
- Fuel Tank Volume:400L

## 2) Electrical Control System

- The CAN bus technology is applied for data communication between integrated moment intelligent control system and data recorder, and for saving the relevant data.
- Display can show engine speed, fuel level, oil pressure, servo pressure, wind speed, engine working time, weight of load lifted by crane, working radius, and lifting boom angle; electronic load chart has a real-time inquiry function, providing the convenient and quick inquiry; the complete fault self-diagnosis and inquiry system is provided, thus reducing the equipment fault handling time.
- Slewing area limit device is optional, to improve the safety of the equipment; sensor has a protection against the lightning strike, thus further improving the safety of the equipment.
- The entire machine adopts the closed wiring way, with waterproof / dust-proof protective grade up to IP6 and with longer life applied.
- Sensor has a protection against the lightning strike, providing higher reliability.

## 3) Hydraulic System

- Electrical proportion control system are adopted, including main pump, main valve, joystick and motor reducer, which are efficient, reliable, stable and energy-saving.
- Advanced rotation and micro-movement performance and limit load regulation ensure smooth and stable operation.

## 4) Main and Auxiliary Hoisting Mechanisms

- The winch drum is directly driven by winch motor through reducer, and can rotate into two directions through the manipulation of luffing handle to carry out lifting and lowering actions of the hook.
- Motor reducer of well-known brand is adopted for higher reliability and durability.
- The drum design ensures the multi-layer winding is always in order.
- Steel wire of well-known brand is adopted for higher reliability and durability.
- Free fall is optional for main and auxiliary winches, ensuing the convenient operation, and reliable and stable performance.

NO.1 Main and auxiliary winches

Rope speed of outmost working layer	0~120m/min
Diameter of the rope	Φ20mm
Length of the main winch	180m
length of the auxiliary winch	130m
Rated single line pull	6.5t

## 5) Luffing Mechanism

- The winch drum is directly driven by luffing motor through reducer, and can rotate into two directions through the manipulation of luffing handle to carry out lifting and lowering actions of the hook.
- Motor reducer of well-known brand is adopted for higher reliability and durability.
- The drum design ensures the multi-layer winding is always in order.
- Steel wire of well-known brand is adopted for higher reliability and durability.

### NO.2 Luffing Mechanism

Rope speed of the outermost working layer (R)	0-72m/min (magnetic valve connected)
Wire rope diameter	Φ16mm
Wire rope length of luffing winch	142m
Rated single line pull	3.7t

## 6) Swing Mechanism

- The outer toothing swing drive can rotate 360°
- Motor reducer of well-known brands is adopted for higher reliability and durability.
- Slewing lock: Pulling up the locking pin after the completion of operation or during transportation can ensure the superstructure to be locked, which is convenient and reliable.
- Slewing ring: single-row ball type slewing ring.

## 7) Counterweight

- The superposable tray and counterweight blocks, and new guide devices are easy to assembly, disassembly and transport. 3.3m overall width ensures more convenient transport and lower cost.
- Standard Configuration: weight 18t, Composition: tray 6t×1, Counterweight block 3t×4

## 8) Cab

- SANY's newly designed cable features with artistic styling and interior decoration, with large glass windows. There are short and long distance beam headlight, and rear-view mirror for more open vision. It is equipped with well ventilated air conditioning and radio. The seat, joystick and all control buttons are all ergonomically designed, which provides the operator with a more comfortable working environment.
- Armrest box: Joystick, electric switch, emergency stop button and ignition lock are installed on left and right armrest box and auxiliary controlling box. The armrest box is adjustable with the seat.
- Seat: Suspension, multimode, and multistage adjustable seat is adopted, with unloading switch applied.
- Air conditioning provides heating and cooling air with optimized air duct and air outlet.

# UNDERCARRIAGE

## 1) Travelling Drive

Each track frames has an independent traveling drive. The traveling motor drives the machine to achieve independent traveling and turning through drive wheel and reducer.

## 2) Travelling Brake

The concealed, wet and spring loaded normally closed brake is adopted, with spring force for braking and oil pressure for release.

## 3) Telescopic Crawler

Crawler frame can be expanded and retracted through cylinder.

## 4) Crawler Tensioning

Crawler tension can be adjusted by using hydraulic jack to push guide wheel to adjust clearance between shims.

## 5) Track Shoes

High strength alloy steel with higher durability.

## 6) Travelling Speed

0~1.2km/h Empty loaded on hard and level ground) .

# OPERATION DEVICES

## 1) Boom

- Lattice structure; main chord made of high strength structure steel; each section is connected with pins.
- Basic boom: 6.5m boom tip and 6.5m boom base.
- Insert: 3m×1, 6m×32, 9m×2.
- Boom Length: 13m ~ 52m.

## 2) Fixed Jib

- Lattice structure; main chord made of high strength structure steel; each section is connected with pins.
- Basic boom: 3.05m boom tip and 3.05m boom base;
- Insert: 3.05m×3.
- Jib Length: 6.1m~15.25m.
- Longest boom + longest jib: 43m boom + 15.25m jib.

## 3) Luffing Jib

- Lattice structure; main chord made of high strength structure steel; each section is connected with pins.
- Basic Boom: 6.5m boom tip and 6.5m boom base;
- Insert: 3. m×2; 6m×2.
- Jib Length: 16m~28m.
- Longest boom + longest jib: 40.3m boom + 28m jib.

## 4) Boom Extension

- Welded structure; It is jointed with boom through pin for auxiliary hook operation.

## 5) Hook

- 60t hook
- 45t hook
- 15t hook
- 6t ball hook

### Notes:

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



# SAFETY DEVICES

## 1) Integrated moment intelligent control system

- Standard configured SANY load moment limiter is free of calibration, ensuring the high safety and efficiency of the equipment construction.
- Integrated moment intelligent control system can automatically detect the load weight, working radius, and lifting boom angle, and compare with the rated load capacity, actual load, working radius, and lifting boom angle. Under normal operation, it can it can automatically cut the crane action to dangerous direction, and has a black-box function to record the over-load information.
- Composition: display, controller, angle sensing, and load sensor.

## 2) Assemble/Operation Mode Change Switch

In assembly mode, over hoisting limiter, and load moment indicator will be bypassed for the assembly of the crane. In operation mode, all safety limit devices will function.

## 3) Emergency Stop

In case of emergency, the operator can immediately shut down the entire machine by pressing the emergency stop button.

## 4) Main and Auxiliary Hoisting Limiter

Composed of limit switch and hammer etc. on boom tip to prevent over hoisting of hook block. When the lifting hook is raised to a certain height, the limit switch will be activated. The buzzer on the control panel will alarm and the failure indicator will flash. The lifting operation of hook block will be automatically cut off.

## 5) Lowering Limiter of Main and Auxiliary Winch

Composed of movement trigger device and proximity switches to prevent wire rope from being over-released. When the wire rope is released near the last three loops, limit switch will work. The system will alarm through buzzer, sending alarm information to the display and automatically stop the lowering of winches.

## 6) Function Lock

If the function locking handle is not at proper position, all control handles will not function. It can prevent misuse and operational accident due to body impact when getting on or off the cab.

## 7) Drum Locking Device

There are electrically controlled locking devices for main winch, auxiliary winch and luffing winch. The action can be done only after the button is turned to the release position to prevent misuse of handle, thus ensuring the parking safety of winch during idle.

## 8) Swing Locking Device

It can lock the machine at the front, back, left and right direction.

## 9) Boom Angle Limiter

- When the boom angle is greater than  $79^{\circ}$ , . buzzer will give an alarm and the boom operation will be cut off. This protection is controlled by load moment limiter and travel switch.
- When boom angle is less than  $30^{\circ}$ , the system will alarm through buzzer and display alarm information in combined instrument to automatically stop boom lowering movement. This protection is controlled by load moment indicator automatically.

**10) Boom Back-stop Device**

Composed of nesting tubing and spring. It buffers the energy of boom backwards tilting by spring force to prevent the boom from tilting backwards.

**11) Boom Angle Indicator**

The angle indicator device is fixed on the boom base near the cab for convenient view of operator.

**12) Hook Latch**

There are baffle on the hook to prevent the wire rope fall off.

**13) Monitoring System**

Remote monitoring system is equipped for GPS positioning, GPRS data transfer, machine use inquiries, running data monitoring and analysis and remote fault diagnosis.

**14) Three-color Load Alarm Light**

Red, Yellow and Green lights indicate loading situations in Real-Time. If the actual load is less than 90% of the rated load, the Green light will turn on. If the actual load is more than 90%, but less than 100% of the rated load, the Yellow light will turn on with intermittent sound alarm. If the actual load is 100% of the rated load, the Red light will turn on with continuous sound alarm. If the actual load is 100% of the rated load, then the system will immediately cease the operation of the crane.

**15) Audio and Visual Alarm**

When the integrated moment intelligent control system is powered, audio and visual alarm will flash.

**16) Slewing Alarm**

When the machine is traveling or slewing, the slewing lamp will flash.

**17) Illumination Light**

The short-beam lamp at the front of cab, front angle adjustable far-beam lamp, cab lamp and other lighting device at night are equipped to improve the visibility of construction.

**18) Rearview Mirror**

It will be mounted at front of cab and at right platform handrail.

**19) Pharos**

It is on the top of boom for altitude lightning.

**20) Anemometer**

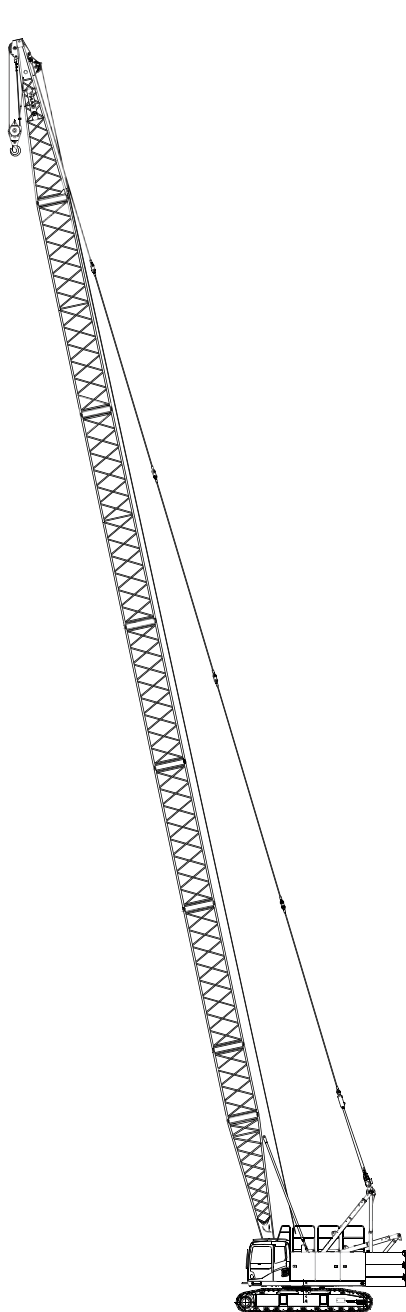
It is on the top of boom to monitor the wind speed in real time and to transfer data to the display in cab.



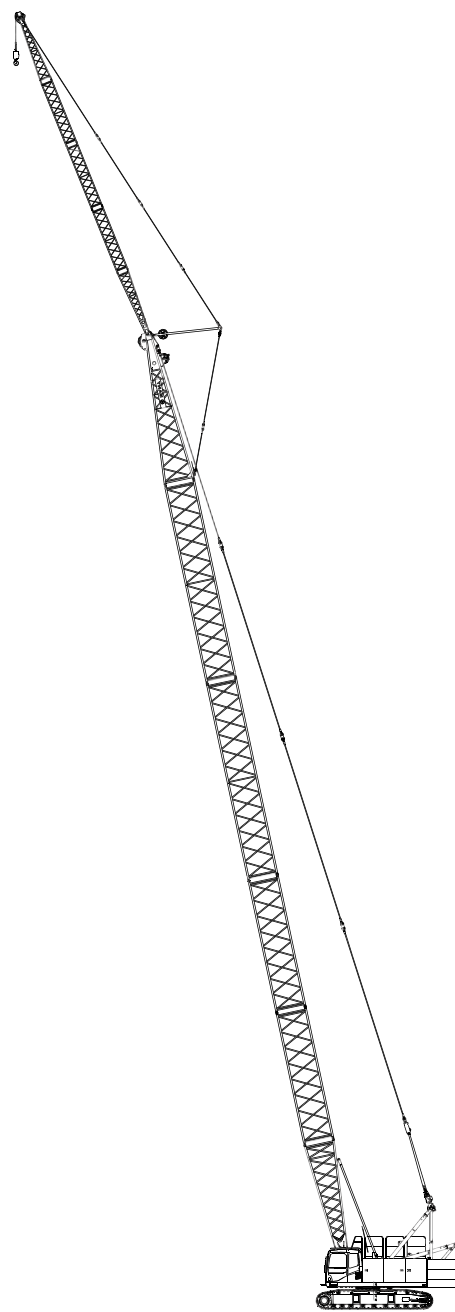
# SCC600E

19	Operating Condition Combination
21	H Operating Condition
24	FJ Operating Condition
30	Luffing Jib LJ Operating Condition

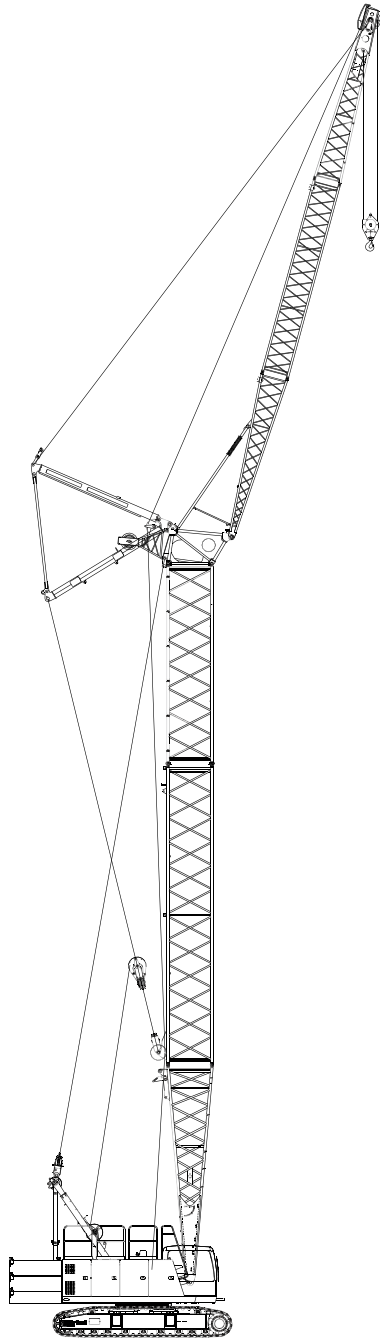
## OPERATING CONDITION COMBINATION



H Operating Condition  
Boom 13m-52m



FJ Operating Condition  
Boom 22m-43m  
Fixed Jib 6.1m-15.25m



LJ Operating Condition

Boom 22.3m~40.3m

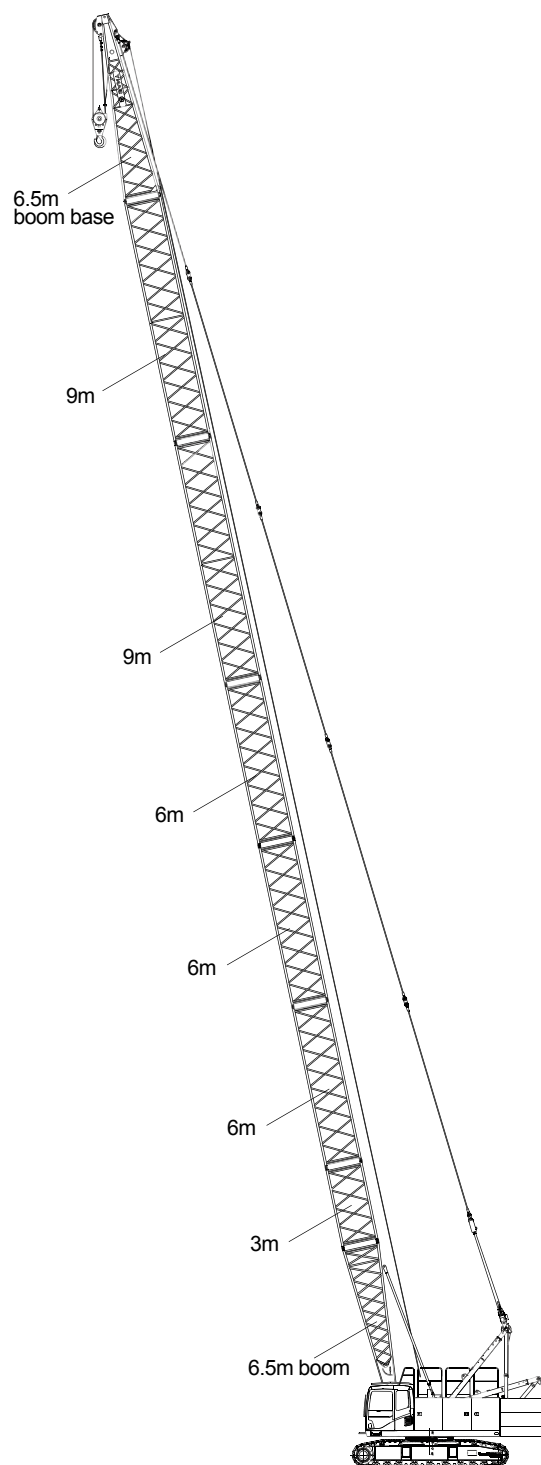
Luffing jib 16m~28m

# H OPERATING CONDITION

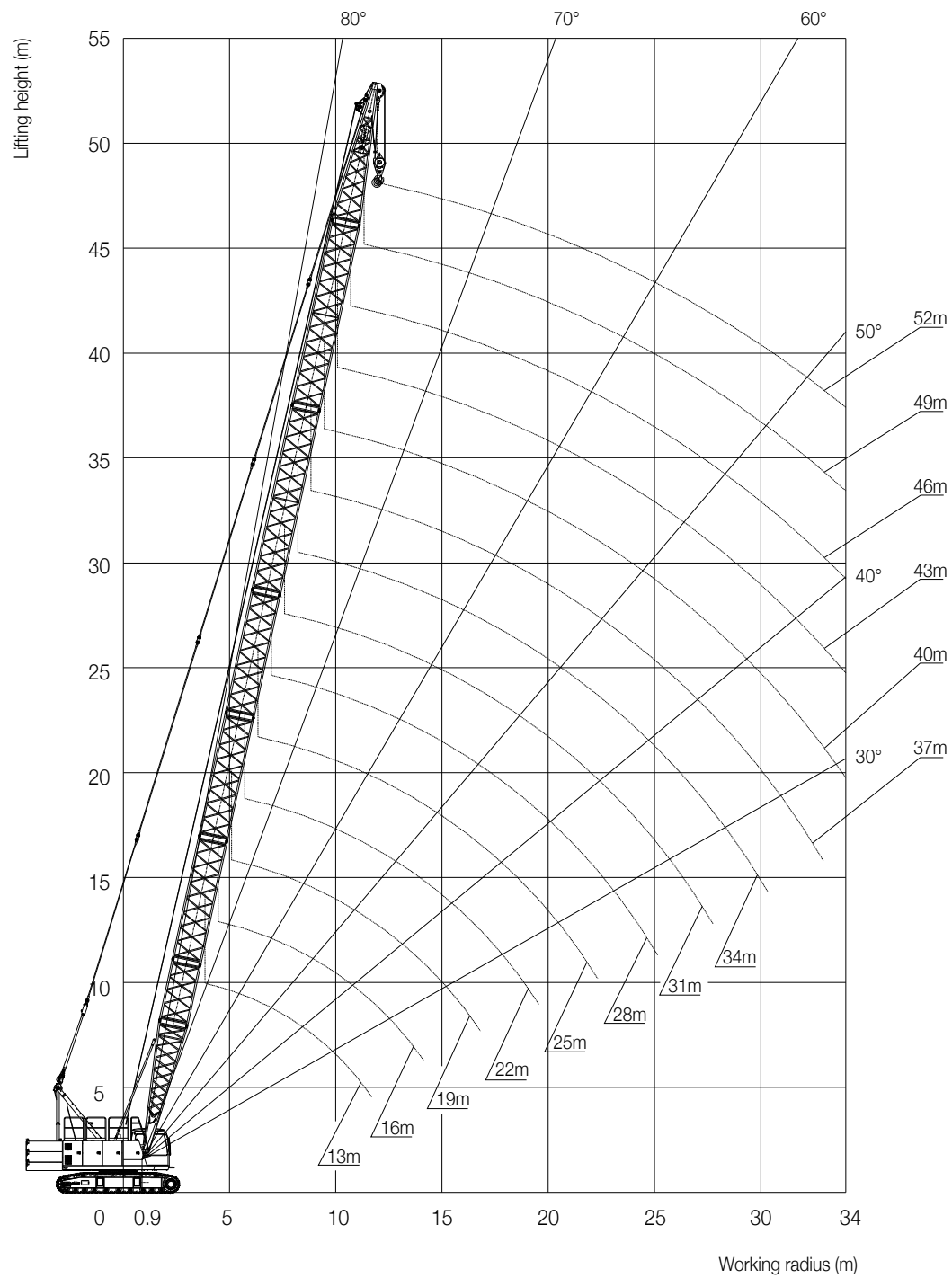
## H OPERATING CONDITION COMBINATION

Boom length		Basic Boom		Insert		
m		6.5m base	6.5m tip	3m	6m	9m
13		1	1	-	-	-
16		1	1	1	-	-
19		1	1	-	1	-
22		1	1	1	1	-
22	★	1	1	-	-	1
25		1	1	-	2	-
28		1	1	1	2	-
28	★	1	1	-	1	1
31		1	1	1	1	1
31	★	1	1	-	-	2
34		1	1	1	3	-
34	★	1	1	-	2	1
37		1	1	1	2	1
37	★	1	1	-	1	2
40		1	1	1	1	2
40	★	1	1	-	3	1
43		1	1	1	3	1
43	★	1	1	-	2	2
46		1	1	1	2	2
49		1	1	-	3	2
52		1	1	1	3	2

Notes: The boom combination remarked with ★ is optimized ;



# OPERATING RANGE DIAGRAM OF H OPERATING CONDITION



# BOOM LOAD CHART(H OPERATING CONDITION)

unit: (t)

SCC600E Boom Rated Load Chart														
Radius (m)	13	16	19	22	25	28	31	34	37	40	43	46	49	52
3.7	60													
4	50.2	48.2												
4.5	42.5	41.8	40.2											
5	37.5	36	35	33.2										
5.5	32.5	31.9	31	30.2	28.2									
6	28.5	28.3	27.5	27.2	26.2	25.2								
7	22.9	22.7	22.5	22.2	21.7	21.2	20.5							
8	19.2	19	18.7	18.5	18.5	18	17.5	17.1	16.7					
9	16.1	15.7	15.7	15.6	15.5	15.4	14.8	14.2	14	13.2	12.8			
10	14.2	14	13.9	13.9	13.7	13.7	13.5	13.2	12.8	12.5	12.1	11.7	11.3	
12	11.3	11.2	11.1	11	10.9	10.8	10.8	10.5	10.3	10	9.6	9.3	9.2	9.2
14		9.3	9.2	9.1	9	8.8	8.8	8.6	8.5	8.2	8	7.7	7.4	7.4
16			7.8	7.7	7.6	7.5	7.4	7.2	7.1	6.9	6.9	6.4	6.2	6.2
18			6.6	6.6	6.6	6.5	6.4	6.2	6.1	5.9	5.8	5.5	5.3	5.1
20				5.6	5.6	5.5	5.5	5.3	5.2	4.9	4.9	4.7	4.4	4.3
22					5	4.8	4.6	4.5	4.3	4.2	4.1	3.9	3.7	3.6
24						4.2	4	3.9	3.7	3.6	3.5	3.3	3.2	3
26						3.6	3.6	3.4	3.3	3.2	3	2.9	2.7	2.5
28							3	3	2.9	2.7	2.5	2.4	2.3	2.1
30								2.6	2.5	2.3	2.1	2	1.9	1.7
32									2.1	2	1.8	1.7	1.6	1.4
34									1.8	1.7	1.5	1.4	1.3	1.2
36										1.3	1.1	1	0.9	

## Notes-Rated Load of Crane

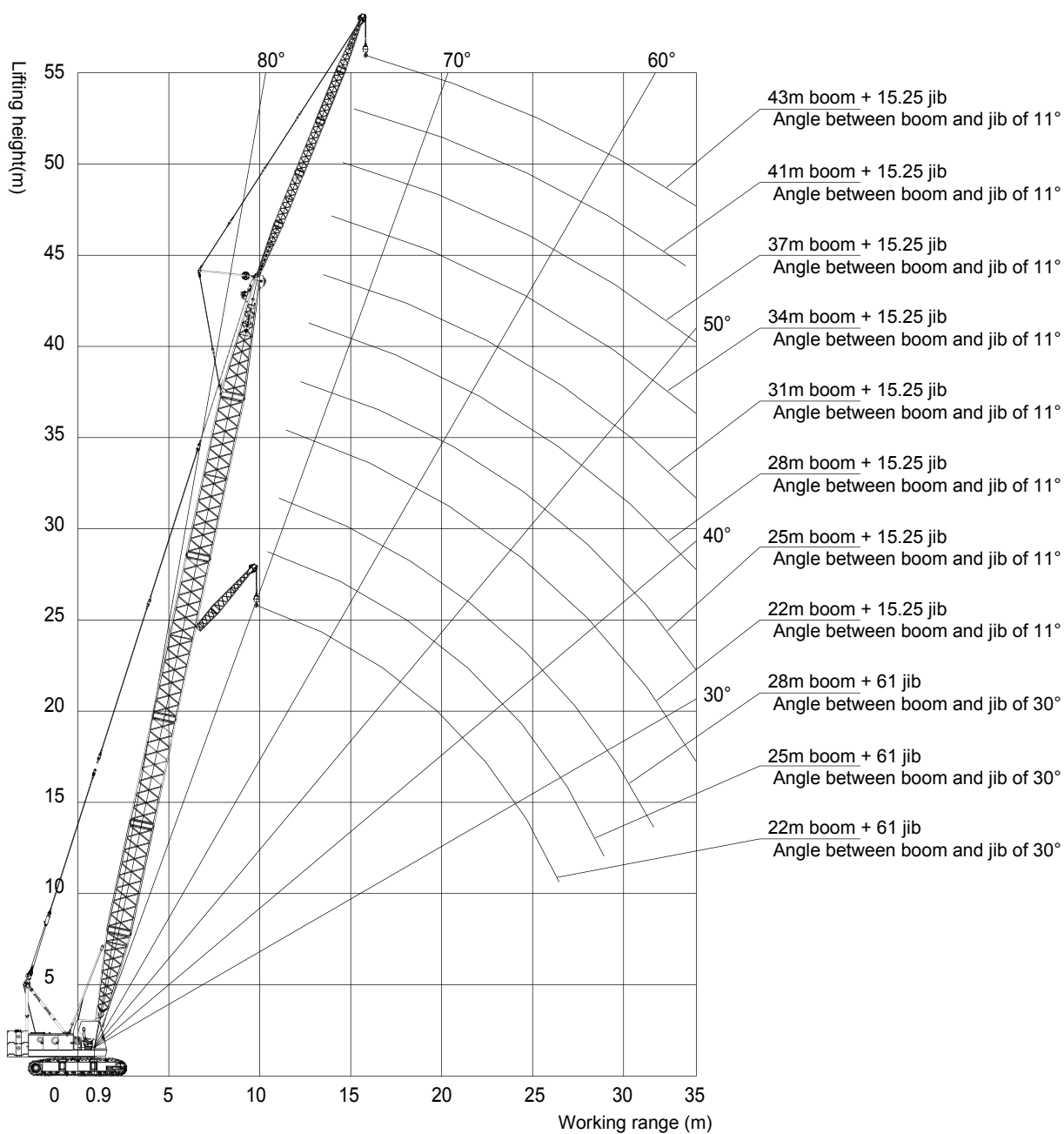
1. The track frame shall be expanded during lifting.
2. The rated load in the table is the value under the condition that the non-traveling heavy load is lifted slowly and steadily from the solid and flat ground.
3. The rated load in the table is calculated based on 75% of the tipping load under wind speed of less than 9.8m/s.
4. All values in load chart are applicable for 360° rotation.
5. The rated load value in the table includes the weight of hook, wire rope and other lifting tools. The actual hoisting capacity is value that the rated value minus the weight of all lifting tools (including hooks, slings, and wire ropes).
6. The length of boom on which a jib can be mounted is 22m~43m. The max. length boom with an extension arm is 49m.



## FJ OPERATING CONDITION

Fixed Jib Combination					
Jib Length(m)	Basic Boom		Insert	Boom Length(m)	Jib Offset Angle
	3.05m Base	3.05m Tip	3.05m		
6.1	1	1	-	22~43	10° 、 30°
9.15	1	1	1	22~43	10° 、 30°
12.2	1	1	2	22~43	10° 、 30°
15.25	1	1	3	22~43	10° 、 30°

# OPERATING RANGE DIAGRAM OF FJ OPERATING CONDITION



# FJ OPERATING CONDITION LOAD CHART

## SCC600E FJ Jib Load Chart

Unit: t

	Boom22m		Fixed Jib 6.1m~15.25m		Rear Counterweight 18t			
Jib Length(m)	6.1		9.15		12.2		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8	5.50	9.8m×5.5	9.2m×5.5					
10	5.50	5.50	5.50		10.3m×4.5		11.4m×4.5	
12	5.50	5.50	5.50	4.80	4.50		4.40	
14	5.50	5.50	5.50	4.65	4.50	4.00	4.40	
16	5.50	5.00	5.50	4.45	4.50	3.50	4.00	3.50
18	5.50	5.00	5.50	4.25	4.15	3.50	4.00	3.25
20	4.90	5.00	5.00	4.05	3.95	3.50	3.85	3.05
22	4.30	4.35	4.35	3.85	3.85	3.50	3.60	2.90
24	3.90	4.00	4.00	3.50	3.65	3.25	3.35	2.85
26	3.80	3.85	3.85	3.45	3.55	3.20	3.25	2.75
28	26.1m×3.3	3.05	3.05	3.05	3.05	3.05	3.05	2.70
30			29m×2.9	29m×2.85	2.75	2.75	2.75	2.65
32					31.8m×2.5	2.50	2.50	2.20
34						32.6m×2.5	2.30	2.15
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

	Boom25m		Fixed Jib 6.10~15.25m		Rear Counterweight 18t			
Jib Length(m)	6.10		9.15		12.20		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8	8.6m×5.5		9.8m×5.5		10.9m×4.5			
10	5.50	10.4m×5.5	5.50		4.50			
12	5.50	5.50	5.50	12.5m×4.8	4.50		12.1m×4.5	
14	5.50	5.50	5.50	4.65	4.50	14.5m×4.0	4.40	
16	5.50	5.50	5.50	4.45	4.35	3.50	4.25	16.6m×3.5
18	5.50	5.00	5.50	4.25	4.15	3.50	4.00	3.25
20	4.90	5.00	5.00	4.05	3.95	3.50	3.85	3.05
22	4.30	4.35	4.35	3.85	3.85	3.50	3.60	2.90
24	3.90	4.00	4.00	3.50	3.65	3.25	3.35	2.85
26	3.80	3.85	3.85	3.45	3.55	3.20	3.25	2.75
28	3.00	3.05	3.05	3.05	3.05	3.05	3.05	2.70
30	28.7m×2.8	29.1m×2.75	2.65	2.75	2.75	2.75	2.75	2.65
32			31.6m×2.45	2.40	2.40	2.40	2.40	2.20
34						2.25	2.20	2.15
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

# FJ OPERATING CONDITION LOAD CHART

## SCC600E FJ Jib Load Chart

Unit: t

Jib Length(m)	Boom28m		Fixed Jib 6.1m~15.25m		Rear Counterweight 18t			
	6.1		9.15		12.2		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8	9.3m×5.5							
10	5.50	11.1m×5.5	10.4m×5.5		11.6m×4.5			
12	5.50	5.50	5.50	13.1m×5.0	4.50		12.7m×4.0	
14	5.50	5.50	5.50	4.80	4.50	15.1m×3.8	3.50	
16	5.50	5.50	5.50	4.55	4.30	3.80	3.50	17.2m×3.2
18	5.50	5.00	5.50	4.05	4.05	3.70	3.50	3.20
20	5.00	5.00	5.00	3.85	3.95	3.55	3.45	3.05
22	4.50	4.50	4.50	3.70	3.85	3.45	3.25	2.95
24	4.00	4.00	4.00	3.50	3.65	3.25	3.35	2.85
26	3.80	3.85	3.85	3.45	3.55	3.20	3.25	2.75
28	3.00	3.05	3.05	3.05	3.05	3.05	3.05	2.70
30	2.60	2.65	2.65	2.75	2.75	2.75	2.75	2.65
32	31.3m×2.3	31.7m×2.3	2.30	2.30	2.35	2.40	2.35	2.20
34			2.05	2.10	2.10	2.15	2.10	2.15
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

Jib Length(m)	Boom31m		Fixed Jib 6.1m~15.25m		Rear Counterweight 18t			
	6.10		9.15		12.20		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8	9.9m×5.5							
10	5.50	11.7m×5.5	11.0m×5.5					
12	5.50	5.50	5.50	13.7m×4.8	12.2m×4.5		13.3m×4.0	
14	5.50	5.50	5.50	4.75	4.50		4.00	
16	5.50	5.50	5.50	4.50	4.50	4.00	4.00	
18	5.50	5.50	5.50	4.35	4.35	3.85	4.00	3.20
20	4.80	4.85	4.85	4.25	4.15	3.70	3.85	3.15
22	4.40	4.45	4.45	4.05	3.95	3.50	3.65	3.00
24	4.00	4.05	4.05	3.85	3.80	3.35	3.45	2.85
26	3.80	3.85	3.85	3.45	3.55	3.20	3.25	2.75
28	3.00	3.05	3.05	3.05	3.05	3.05	3.05	2.70
30	2.60	2.65	2.65	2.75	2.75	2.75	2.75	2.65
32	2.20	2.25	2.25	2.25	2.35	2.35	2.30	2.30
34	33.9m×1.9	1.95	1.95	2.00	2.00	2.10	2.05	2.15
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

# FJ OPERATING CONDITION LOAD CHART

## SCC600E FJ Jib Load Chart

Unit: t

	Boom34m		Fixed Jib 6.1m~15.25m		Rear Counterweight 18t			
Jib Length(m)	6.1		9.15		12.2		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8								
10	10.5m×5.5		11.7m×5.5					
12	5.50	12.3m×5.5	5.50		12.8m×4.5		13.9m×3.5	
14	5.50	5.50	5.50	14.4m×4.8	4.50		3.50	
16	5.50	5.50	5.50	4.75	4.50	16.4m×3.85	3.50	
18	5.50	5.50	5.50	4.65	4.35	3.75	3.50	18.4m×3.2
20	4.80	4.85	4.85	4.45	4.15	3.55	3.50	3.15
22	4.30	4.35	4.35	4.20	3.95	3.45	3.35	3.05
24	3.80	3.85	3.85	3.90	3.75	3.35	3.30	2.95
26	3.40	3.45	3.45	3.45	3.45	3.15	3.20	2.85
28	3.00	3.05	3.05	3.05	3.05	3.05	3.05	2.80
30	2.60	2.65	2.65	2.75	2.75	2.75	2.75	2.65
32	2.20	2.25	2.25	2.25	2.35	2.35	2.30	2.35
34	1.80	1.85	1.85	1.95	1.90	2.00	1.95	2.05
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

	Boom37m		Fixed Jib 6.1m~15.25m		Rear Counterweight 18t			
Jib Length(m)	6.10		9.15		12.20		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8								
10	11.1m×5.5							
12	5.50	12.9m×5.5	12.3m×5.5		13.4m×4.5			
14	5.50	5.50	5.50	15.0m×4.8	4.50		14.6m×4.0	
16	5.50	5.50	5.50	4.80	4.50	17.0m×3.8	4.00	
18	5.50	5.50	5.50	4.60	4.50	3.75	3.80	19.1m×3.2
20	4.60	4.65	4.65	4.45	4.20	3.65	3.60	3.15
22	4.10	4.15	4.15	4.25	4.05	3.45	3.50	3.05
24	3.60	3.65	3.65	3.75	3.75	3.35	3.35	2.95
26	3.20	3.25	3.25	3.35	3.35	3.25	3.20	2.85
28	2.90	2.95	2.95	2.95	2.95	2.95	3.00	2.80
30	2.50	2.55	2.55	2.60	2.65	2.65	2.60	2.70
32	2.20	2.25	2.25	2.25	2.35	2.35	2.30	2.30
34	1.65	1.75	1.75	1.85	1.80	1.90	1.95	2.05
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

# FJ OPERATING CONDITION LOAD CHART

## SCC600E FJ Jib Load Chart

Unit: t

	Boom40m		Fixed Jib 6.1m~15.25m		Rear Counterweight 18t			
Jib Length(m)	6.1		9.15		12.2		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8								
10	11.8m×5.5							
12	5.50	13.6m×5.5	12.9m×5.5					
14	5.50	5.50	5.50	15.6m×4.8	14.8m×4.5		15.2m×3.5	
16	5.50	5.50	5.50	4.50	4.50		3.50	
18	5.50	5.50	5.50	4.50	4.35	4.00	3.45	19.7m×3.2
20	4.50	4.55	4.55	4.35	4.20	3.85	3.35	3.20
22	4.00	4.05	4.05	4.15	4.05	3.70	3.25	3.10
24	3.60	3.65	3.65	3.70	3.55	3.50	3.15	3.00
26	3.15	3.20	3.20	3.25	3.15	3.35	3.00	2.90
28	2.80	2.85	2.85	2.85	2.85	2.85	2.75	2.80
30	2.45	2.50	2.50	2.55	2.45	2.55	2.45	2.55
32	2.10	2.15	2.15	2.25	2.15	2.25	2.15	2.30
34	1.85	1.90	1.90	1.95	1.85	1.95	1.95	2.05
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

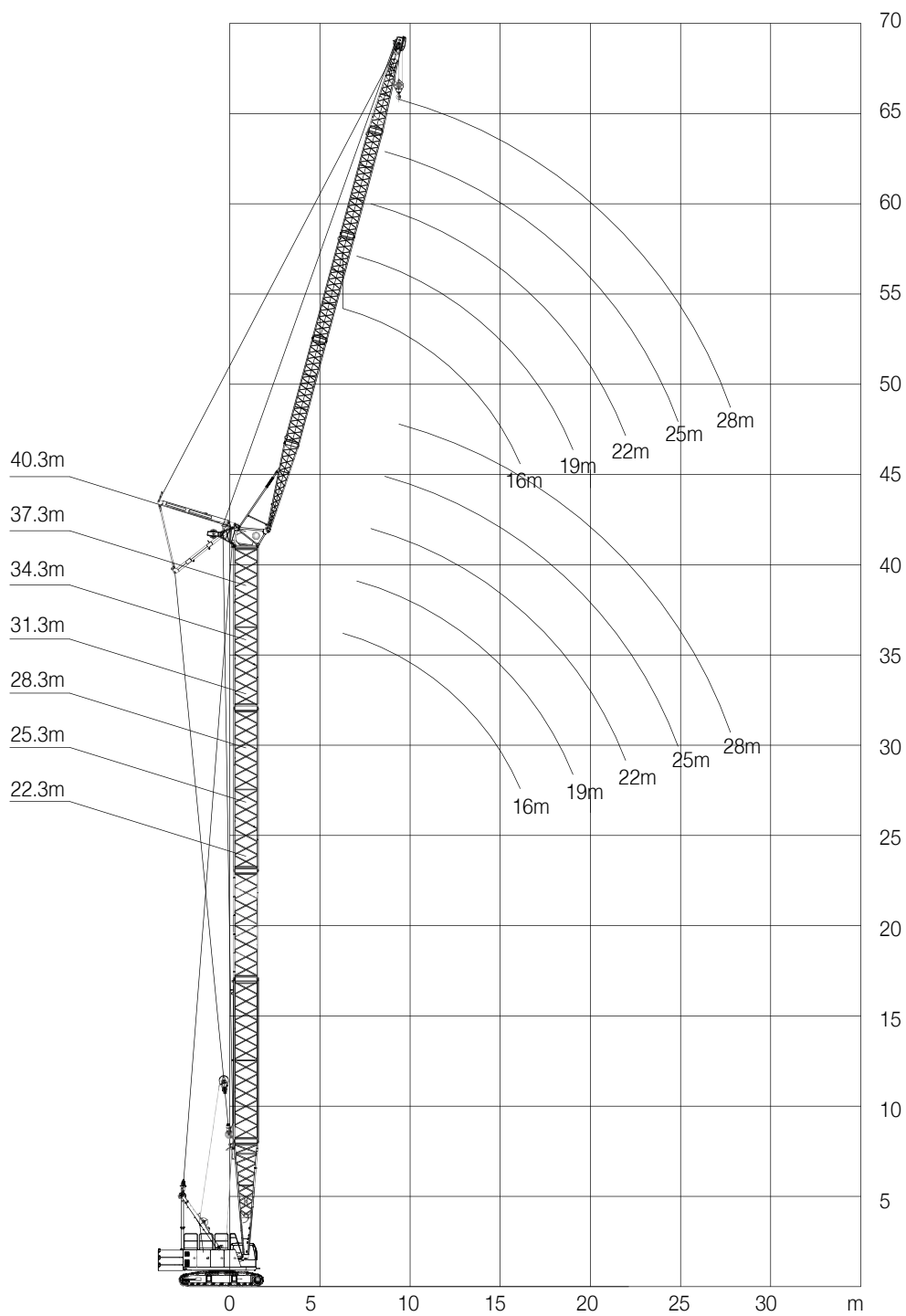
	Boom43m		Fixed Jib 6.1m~15.25m		Rear Counterweight 18t			
Jib Length(m)	6.10		9.15		12.20		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8								
10								
12	12.4m×5.5		13.5m×5.5					
14	5.50	14.2m×5.5	5.50		14.7m×4.5		15.8m×3.5	
16	5.50	5.50	5.50	16.2m×4.8	4.50		16.8m×3.5	
18	5.50	5.50	5.50	4.80	4.35	19.3m×3.8	3.35	
20	4.45	4.50	4.50	4.50	4.20	3.80	3.25	20.3m×3.2
22	3.95	4.00	4.00	4.20	4.05	3.70	3.15	3.15
24	3.50	3.55	3.55	3.65	3.55	3.50	3.05	3.05
26	3.10	3.15	3.15	3.15	3.10	3.20	2.85	2.95
28	2.70	2.75	2.75	2.75	2.75	2.85	2.75	2.85
30	2.40	2.45	2.45	2.35	2.35	2.50	2.40	2.55
32	2.00	2.05	2.05	2.10	2.05	2.15	2.05	2.25
34	1.70	1.75	1.75	1.85	1.75	1.90	1.75	2.05
Counterweight (t)	18	18	18	18	18	18	18	18

Note: Value marked with grey color is determined by boom strength

## LUFFING JIB LJ OPERATING CONDITION

Luffing jib combination				
Jib length (m)	Basic boom		Insert	
	5m Base	5m Tip	3m	6m
16	1	1	-	1
19	1	1	1	1
22	1	1	-	2
25	1	1	1	2
28	1	1	2	2

# OPERATING RANGE DIAGRAM OF LJ OPERATING CONDITION





# LOAD CHART (LJ OPERATING CONDITION)

## LJ Operating Condition

Boom Length	6.1						15.25									Boom Length
Jib Length	16m			19m			16m			19m			22m			Jib Length
Boom Angle Radius	90°	75°	60°	90°	75°	60°	90°	75°	60°	90°	75°	60°	90°	75°	60°	Boom Angle Radius
6.5	12.5						12.5									6.5
7	12.5			7.0m/12.5			12.5			12.5			7.8m/12			7
8	12.5			12.5			12.5			12.5			12.0			8
9	12.5			12.5			12.5			12.5			11.8			9
10	12.5			12.4			12.5			12.4			11.6			10
12	11.2			11.0			11.2			11.0			10.8			12
14	10.1	15.9m/7.2		9.9			10.1			9.9			9.7			14
16	8.2	7.2		8.5	17.4m/6.4		8.6	16.6m/6.6		8.5			8.5			16
18	17.6m/6	6.3		7.5	6.2		17.6m/6.5	6.1		7.5	18.1m/5.8		7.6	19.6m/5.2		18
20		5.5		6.2	5.5			5.4		6.2	5.3		6.6	5.1		20
22		4.9		20.5m/4.8	4.8			4.7		20.5m/4.8	4.6		5.6	4.6		22
24		23.3m/4.4	24.4m/3.6		4.3			4.2	25.9m/3.1		4.2		23.4m/4.3	4.1		24
26			3.4		3.9	26.6m/3.2		24.1m/4.1	3.2		3.8			3.7		26
28			3.0		26.2m/3.8	2.9			2.8		27.0m/3.5	28.1m/2.73		3.4		28
30			28.6m/2.9			2.7			2.6			2.5		29.9m/3.0	30.2m/2.4	30
32						31.5m/2.5			30.1m/2.5			2.3			2.2	32
34												33.0m/2.2			2.1	34
36															35.9m/1.9	36
38																38

# LOAD CHART (LJ OPERATING CONDITION)

## LJ Operating Condition

Boom Length	28.3m												Boom Length
Jib Length	16m			19m			22m			25m			Jib Length
Boom Angle Radius	90°	75°	60°	90°	75°	60°	90°	75°	60°	90°	75°	60°	Boom Angle Radius
6.5	12.5												6.5
7	12.5			12.5			7.8m/12.0						7
8	12.5			12.5			12.0			8.6m/9.0			8
9	12.5			12.5			11.8			9.0			9
10	12.5			12.4			11.6			8.8			10
12	11.2			10.9			10.8			8.6			12
14	10.0			9.8			9.7			8.1			14
16	8.2	17.4m/6.1		8.5			8.5			7.5			16
18	17.6m/6	5.9		7.6	18.9m/5.3		7.6			6.8			18
20		5.1		6.2	5.0		6.6	20.4m/4.8		6.2	21.9m/4.3		20
22		4.6		20.5m/4.8	4.5		5.6	4.4		5.6	4.3		22
24		4.1			4.0		23.4m/4.3	4.0		4.9	3.9		24
26		24.9m/3.8	27.4m/2.6		3.7			3.6		4.2	3.5		26
28			2.6		27.8m/3.2	29.6m/2.2		3.3		26.3m/3.5	3.2		28
30			2.3			2.2		2.9	31.7m/1.9		2.8		30
32			31.6m/2.1			2.1		30.7m/2.8	1.9		2.6	33.8m/1.6	32
34						1.9			1.8		33.6m/2.4	1.6	34
36						34.5m/1.8			1.7			1.5	36
38									37.4m/1.5			1.4	38
40												1.3	40
42												40.3m/1.3	42

# LOAD CHART (LJ OPERATING CONDITION)

## LJ Operating Condition

Boom Length	31.3m															Boom Length
Jib Length	16m			19m			22m			25m			28m			Jib Length
Boom Angle Radius	90°	75°	60°	90°	75°	60°	90v	75°	60°	90°	80°	70°	90°	80°	70°	Boom Angle Radius
6.5	12.5															6.5
7	12.5			12.5			7.8m/12.0									7
8	12.5			12.5			12.0			8.6m/9.0						8
9	12.5			12.5			11.8			9.0			9.4m/6.5			9
10	12.5			12.4			11.6			8.8			6.5			10
12	11.1			10.9			10.8			8.6			6.5			12
14	10.0			9.8			9.7			8.1			6.3			14
16	8.2			8.5			8.5			7.5			5.9			16
18	17.6m/6	18.2m/5.5		7.6	19.7m/4.9		7.6			6.7	18.1m/5.8		5.4	19.4m/5.2		18
20		4.9		6.2	4.8		6.6	21.2m/4.4		6.2	5.1		4.8	5.1		20
22		4.4		20.5m/4.8	4.3		5.6	4.2		5.6	4.6		4.4	4.5		22
24		4.0			3.9		23.4m/4.3	3.8		4.9	4.1		4.0	4.1		24
26		25.6m/3.6			3.5			3.5		4.2	3.7	27.3m/2.7	3.7	3.7		26
28			28.9m/2.1		3.2			3.2		26.3m/3.5	3.4	2.6	3.4	3.3	28.8m/2.4	28
30			1.8		28.5m/3.0	31.1m/1.8		2.8			3.0	2.4	29.2m/2.9	3.0	2.3	30
32			1.7			1.8		31.4m/2.6	33.2m/1.5		31.7m/2.8	2.2		2.7	2.1	32
34			33.1m/1.6			1.6				1.5		2.0		2.5	2.0	34
36						1.5				1.4		1.9		34.6m/2.3	1.8	36
38										1.3					1.7	38
40										38.9m/1.2					39.8m/1.6	40

# LOAD CHART (LJ OPERATING CONDITION)

## LJ Operating Condition

Boom Length	34.3m															Boom Length
Jib Length	16m			19m			22m			25m			28m			Jib Length
Boom Angle Radius	90°	75°	60°	90°	80°	70°	90°	80°	70°	90°	80°	70°	90°	80°	70°	Boom Angle Radius
6.5	12.5															6.5
7	12.5			12.5			7.8m/12.0									7
8	12.5			12.5			12.0			8.6m/9.0						8
9	12.5			12.5			11.8			9.0			9.4m/6.5			9
10	12.5			12.4			11.6			8.7			6.5			10
12	11.1			10.9			10.8			8.4			6.5			12
14	10.0			9.8			9.7			8.1			6.3			14
16	8.2			8.5	16.1m/6.7		8.5	17.4m/6.0		7.5			5.9			16
18	17.6m/6	19.0m/5.0		7.6	5.9		7.6	5.9		6.7	18.6m/5.4		5.4	19.9m/4.9		18
20		4.7		6.2	5.1		6.6	5.1		6.1	5.0		4.8	4.9		20
22		4.2		20.5m/4.8	4.6		5.6	4.5		5.6	4.4		4.4	4.4		22
24		3.8			4.1	24.7m/3.0	23.4m/4.3	4.1		4.9	4.0		4.0	3.9		24
26		3.4			3.8	2.9		3.7	26.4m/2.7	4.2	3.6		3.7	3.6		26
28		26.4m/3.3			26.4m/3.6	2.6		3.4	2.5	26.3m/3.5	3.3	28.1m/2.3	3.3	3.2	29.8m/2.1	28
30			30.4m/1.6			2.4		29.3m/3.0	2.3		2.9	2.2	29.2m/2.9	2.9	2.1	30
32			1.6			2.2			2.1		2.7	2.0		2.6	2.0	32
34			1.4			32.1m/2.1			2.0		32.2m/2.6	1.9		2.4	1.8	34
36			34.6m/1.3						35.0m/1.8			1.7		35.1m/2.3	1.6	36
38												37.9m/1.6			1.5	38
40															1.4	40
42															40.8m/1.4	42

# LOAD CHART (LJ OPERATING CONDITION)

## LJ Operating Condition

Boom Length	37.3m															Boom Length
Jib Length	16m			19m			22m			25m			28m			Jib Length
Boom Angle Radius	90°	80°	70°	90°	80°	70°	90°	80°	70°	90°	80°	70°	90°	80°	70°	Boom Angle Radius
6.5	12.5															6.5
7	12.5			12.5			7.8m/10.6									7
8	12.5			12.5			10.6			8.6m/9.0						8
9	12.5			12.5			10.6			8.9			9.4m/6.5			9
10	12.5			12.5			10.6			8.7			6.5			10
12	11.1			10.9			10.6			8.4			6.5			12
14	10.0	15.4m/7.0		9.8			9.7			8.1			6.3			14
16	8.2	6.8		8.5	16.6m/6.3		8.5	17.9m/5.6		7.5			5.9			16
18	17.6m/6	5.9		7.6	5.8		7.6	5.6		6.7	19.2m/5.0		5.4			18
20		5.1		6.2	5.0		6.6	4.9		6.1	4.8		4.8	20.4m/4.6		20
22		4.6		20.5m/4.7	4.5		5.6	4.4		5.6	4.3		4.4	4.3		22
24		4.1	3.0		4.0	25.7m/2.6	23.4m/4.3	4.0		4.9	3.9		4.0	3.8		24
26			2.8		3.7	2.6		3.6	27.4m/2.3	4.1	3.5		3.7	3.5		26
28			2.5		26.9m/3.4	2.4		3.3	2.3	26.3m/3.5	3.2	29.2m/2.0	3.3	3.0		28
30			2.3			2.2		29.8m/2.9	2.1		2.8	2.0	29.2m/2.9	2.8	30.9m/1.7	30
32			30.7m/2.2			2.0			2.0		2.6	1.8		2.6	1.7	32
34						33.2m/1.8			1.8		32.7m/2.4	1.7		2.3	1.6	34
36									1.6			1.5		35.6m/2.2	1.4	36
38									36.1m/1.5			1.4			1.3	38
40												39.0m/1.2			1.2	40
42															41.9m/1.1	42

# LOAD CHART (LJ OPERATING CONDITION)

## LJ Operating Condition

Boom Length	40.3m													Boom Length
Jib Length	16m			19m			22m			25m		28m		Jib Length
Boom Angle Radius	90°	80°	70°	90°	80°	70°	90°	80°	70°	90°	80°	90°	80°	Boom Angle Radius
6.5	12.5													6.5
7	12.5			10.0			7.8m/10.6							7
8	12.5			10.0			10.6			8.6m/7.0				8
9	12.5			10.0			10.6			7.0		9.4m/6.5		9
10	11.6			10.0			10.6			7.0		6.5		10
12	10.9			10.0			10.6			7.0		6.5		12
14	10.0	15.9m/6.5		9.7			9.7			7.0		6.3		14
16	8.2	6.5		8.5	17.1m/5.8		8.5			7.0		5.9		16
18	17.6m/6	5.7		7.6	5.6		7.6	18.4m/5.2		6.7	19.7m/4.7	5.3		18
20		5.0		6.2	4.9		6.6	4.8		6.1	4.7	4.8	20.9m/4.3	20
22		4.4		20.5m/4.8	4.3		5.6	4.3		5.6	4.2	4.4	4.1	22
24		4.0	25.0m/2.5		3.9		23.4m/4.3	3.8		4.9	3.7	4.0	3.7	24
26		24.6m/3.7	2.5		3.5	26.7m/2.2		3.5		4.1	3.4	3.6	3.3	26
28			2.3		27.5m/3.2	2.2		3.2	28.5m/1.9	26.3m/3.5	3.0	3.3	2.9	28
30			2.1			2.0		2.8	1.9		2.7	29.2m/2.9	2.7	30
32			31.3m/1.8			1.8		30.4m/2.7	1.7		2.5		2.4	32
34						1.6			1.5		33.3m/2.3		2.3	34
36						34.2m/1.4			1.4				2.1	36
38									37.1m/1.2				36.2m/2.0	38





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