



# SANY

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## **SANY CRAWLER CRANE SCC 500E**

# CRAWLER CRANE

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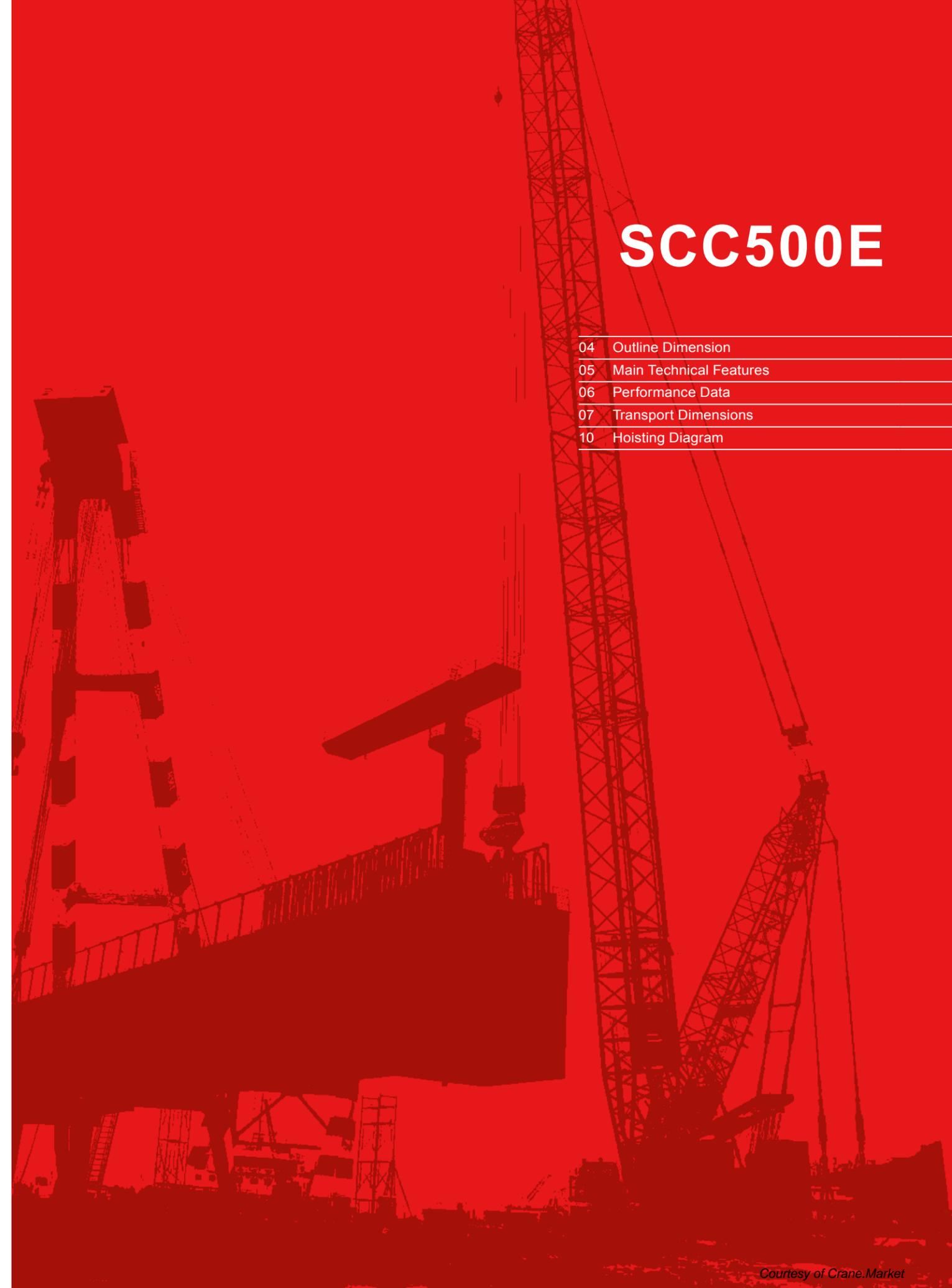
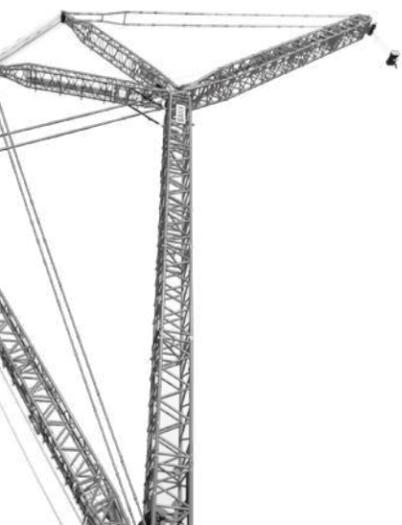
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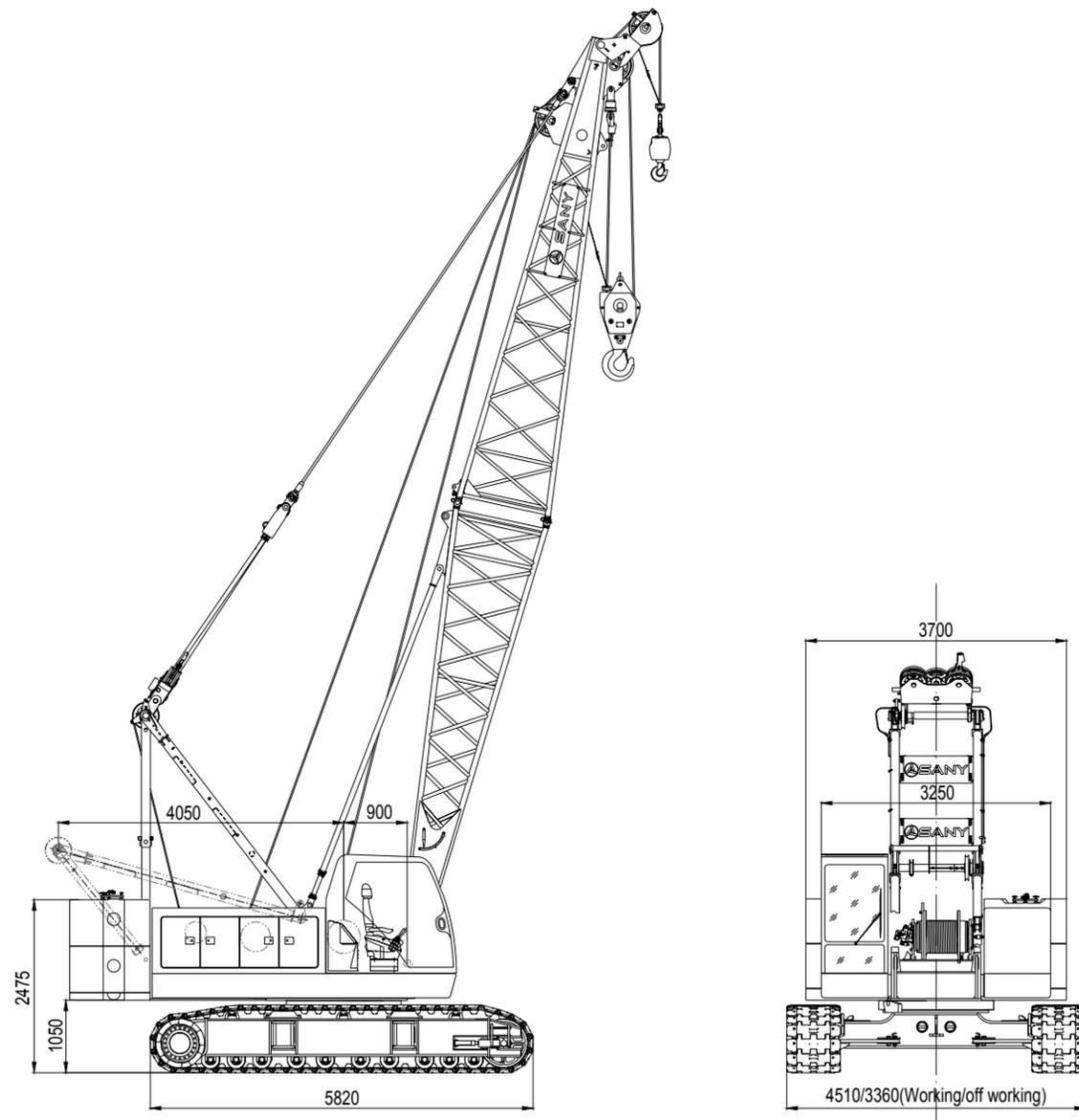
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# SCC500E

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## OUTLINE DIMENSIONS



## MAIN TECHNICAL FEATURES

### 1. Safety control system:

Two convenient and reliable modes of operation; working and installation, with real-time level display, stop operation braking away from machine, electrical emergency control, anti-lightning protection, automatically walk switches, CCTV monitoring function, complete safety and supervision system;

### 2. Excellent operating performance:

Advanced load-sensing, limit load regulation and electro-hydraulic proportional micro-speed control make each micro-movement extremely good and operation more stable;

### 3. Reliable function assurance:

Key components adopt famous international brands; sufficient safety margin for structural and mechanical design; control system can operate stably in harsh environments such as cold, high temperature, altitude and sandy conditions;

### 4. 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;

### 5.Powerful lifting capacity:

The maximum lifting capacity of boom is  $50t \times 3.7m = 185t \cdot m$ , and the max. length of main boom is 52m;

### 6.Flexible configuration combination:

Free hook is optional;

### 7.Large-chassis design:

Track frame which can be broadened, ensuring excellent machine and job stability within the range of  $360^\circ$  rotation;

### 8.Optimized transportation programs:

With the function of crawler frame telescopic function, the max. transportation width of the whole machine is 3.36m;

### 9.Two counterweight configurations:

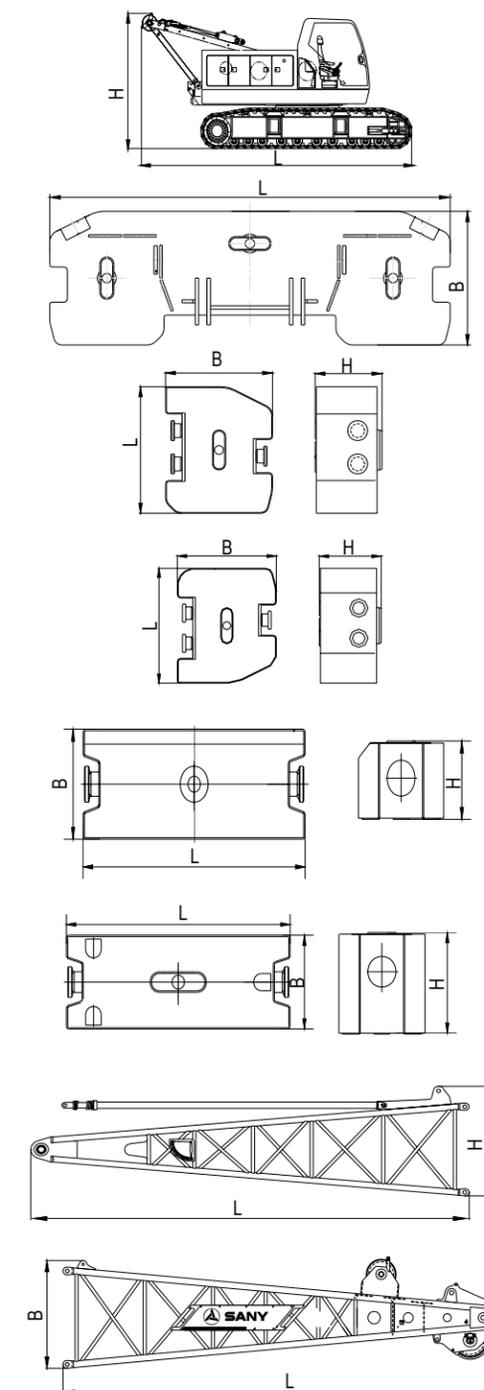
Improve the lifting capacity of medium and long boom.

## PERFORMANCE DATA

Main performance data of SCC500E crawler crane			
Performance index		Unit	Data
Boom operating condition	Max. rated lifting capacity	t	50
	Boom length	m	13~52
	Boom luffing angle	°	30~78
Operating Condition of Fixed Jib	Max. rated lifting moment	t·m	50×3.7
	Max. length boom + Max. length jib	m	43+15.25
Working speed	Angle between boom and fixed jib	°	10、30
	Rope speed of main and auxiliary winches	m/min	0~63/0~102
Engine	Rope speed of luffing winch	m/min	0~73
	Swing speed	rpm	0~3.2/0~1.6
	Travel Speed	km/h	0~1.39
Transportation parameter	Output power/rated speed	kW/rpm	127/2000 or (125/2100)
	Maximum transport weight of single piece	t	30
Other parameters	Transportation size (length x width x height)	mm	7110×3300×3260
	Average ground pressure	MPa	0.061

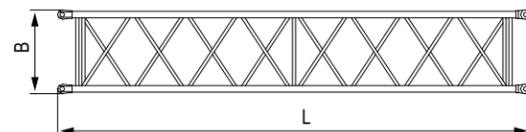
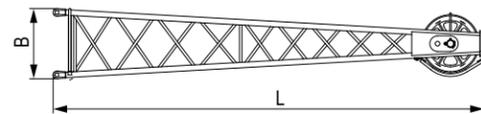
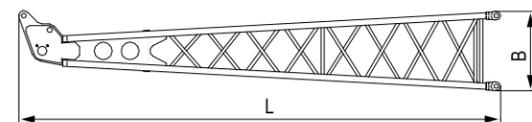
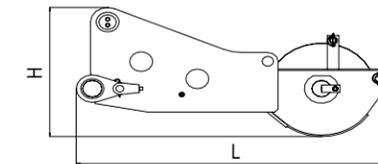
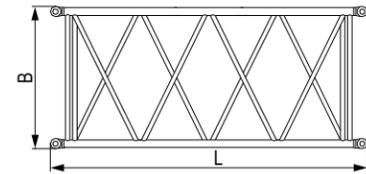
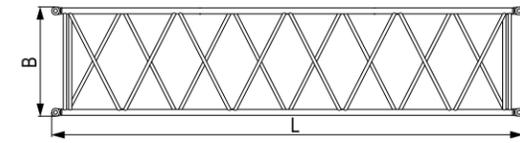
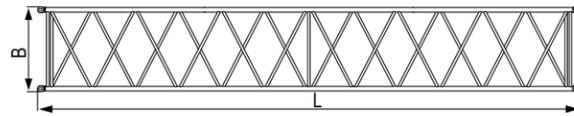
## TRANSPORT DIMENSIONS

<b>Basic machine</b>	×1
Length	7.11m
Width	3.36m
Height	3.26m
Weight	30t
<b>Counterweight tray</b>	×1
Length	3.7m
Width	1.34m
Height	0.63m
Weight	4.3t
<b>Left counterweight block</b>	×2
Length	1.34m
Width	1.12m
Height	0.7m
Weight	2.7t
<b>Right counterweight block</b>	×2
Length (L)	1.34m
Width (W)	1.12m
Height (H)	0.7m
Weight	2.7t
<b>Additional counterweight block</b>	×1
Length (L)	1.43m
Width (W)	0.75m
Height (H)	0.39m
Weight	1.5t
<b>Central counterweight block</b>	×1
Length (L)	1.43m
Width (W)	0.75m
Height (H)	0.59m
Weight	1.9t
<b>Boom base</b>	×1
Length (L)	6.65m
Width (W)	1.54m
Height (H)	1.40m
Weight	1.2t
<b>Boom tip</b>	×1
Length (L)	6.88m
Width (W)	1.47m
Height (H)	1.40m
Weight	1.1t



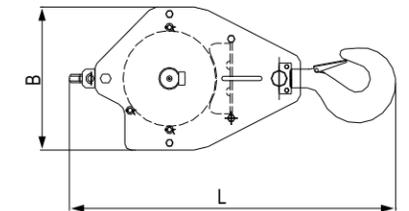
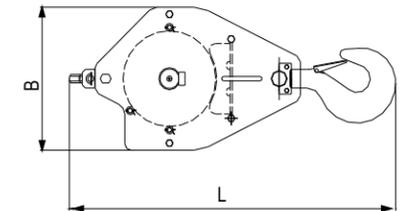
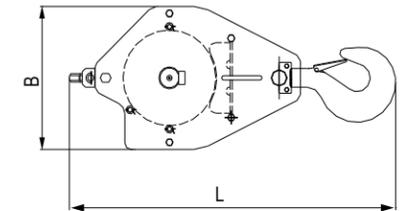
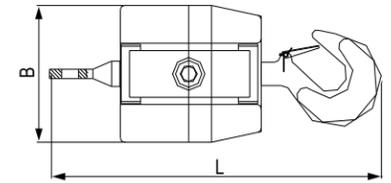
## TRANSPORT DIMENSIONS

<b>9m Boom insert</b>	×2
Length (L)	9.1m
Width (W)	1.4m
Height (H)	1.4m
Weight	0.9t
<b>6m Boom insert</b>	×3
Length (L)	6.1m
Width (W)	1.4m
Height (H)	1.4m
Weight	0.6t
<b>3m Boom insert</b>	×1
Length (L)	3.1m
Width (W)	1.4m
Height (H)	1.4m
Weight	0.4t
<b>Boom extension</b>	×1
Length (L)	1.35m
Width (W)	0.72m
Height (H)	0.65m
Weight	0.2t
<b>Jib base</b>	×1
Length (L)	3.35m
Width (W)	0.6m
Height (H)	0.55m
Weight	0.2t
<b>Jib tip</b>	×1
Length (L)	3.35m
Width (W)	0.6m
Height (H)	0.55m
Weight	0.2t
<b>Jib insert</b>	×3
Length (L)	3.11m
Width (W)	0.6m
Height (H)	0.55m
Weight	0.1t



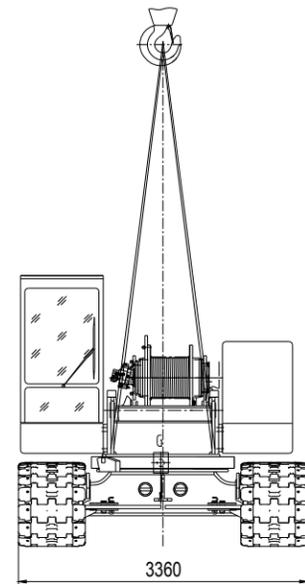
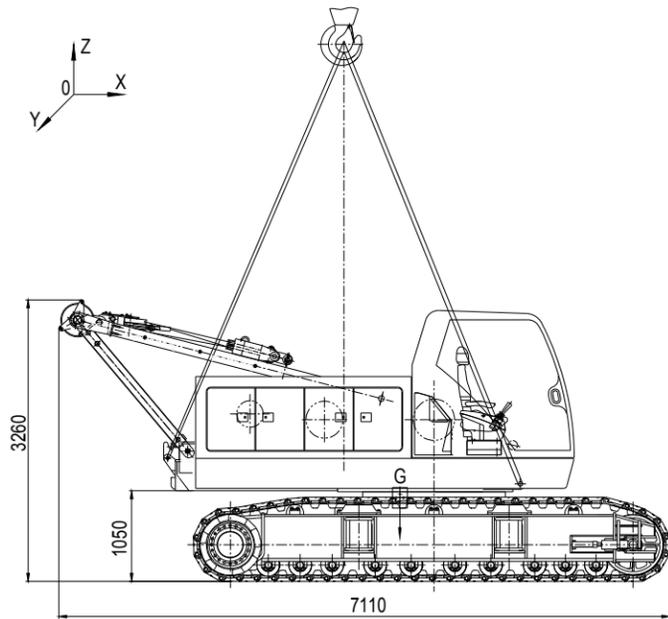
## TRANSPORT DIMENSIONS

<b>6t lifting hook</b>	×1
Length (L)	0.8m
Width (W)	0.32m
Height (H)	0.32m
Weight	0.2t
<b>15t lifting hook</b>	×1
Length (L)	1.52m
Width (W)	0.65m
Height (H)	0.31m
Weight	0.4t
<b>30t lifting hook</b>	×1
Length (L)	1.58m
Width (W)	0.65m
Height (H)	0.34m
Weight	0.5t
<b>50t lifting hook</b>	×1
Length (L)	1.64m
Width (W)	0.65m
Height (H)	0.39m
Weight	0.6t



- 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.
3. The basic dimensions and weight of all the parts above should comply with the latest new upgraded product.

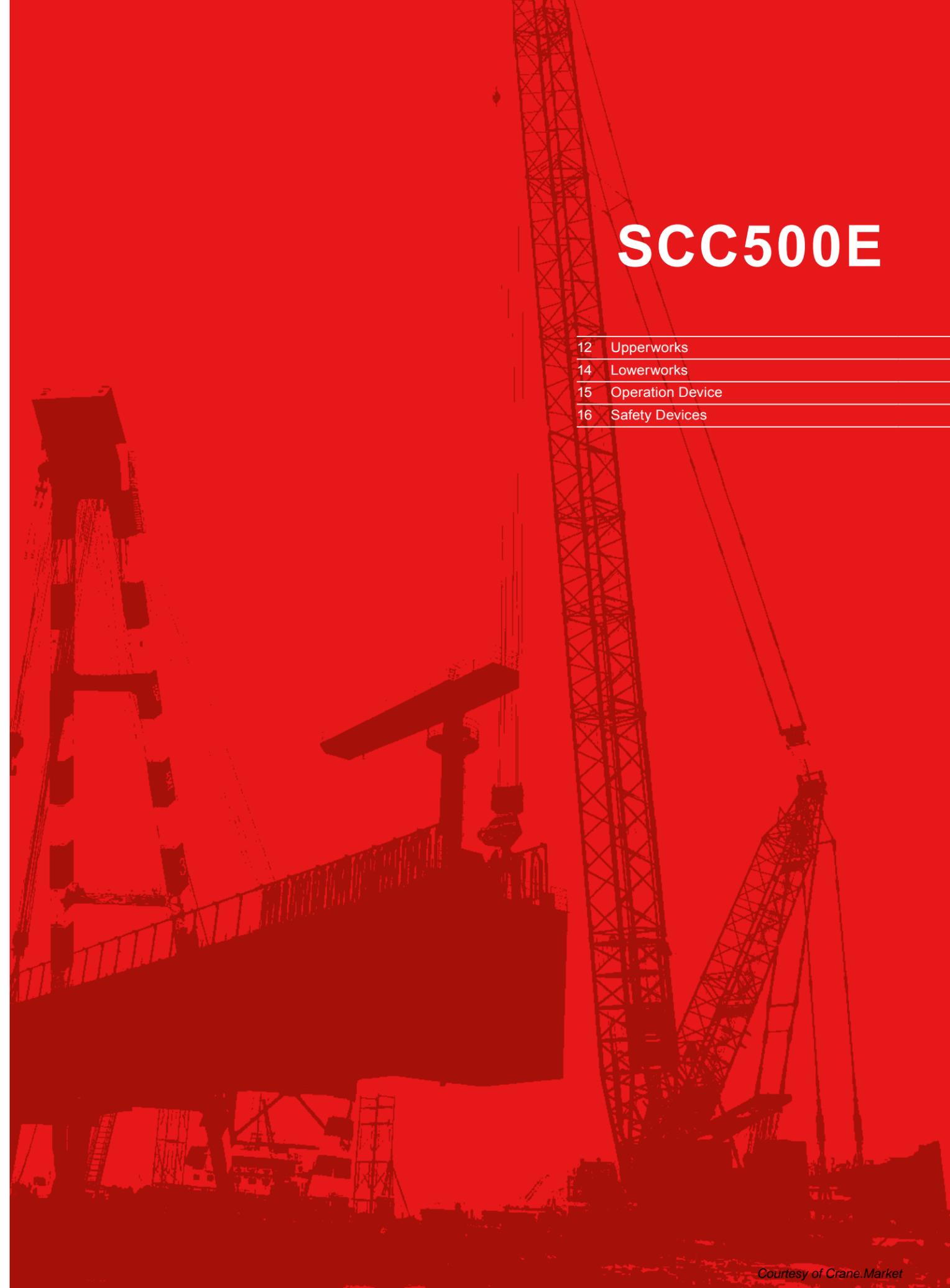
# HOISTING DIAGRAM



X=-390mm Y=25mm Z=950mm

# SCC500E

- 12 Upperworks
- 14 Lowerworks
- 15 Operation Device
- 16 Safety Devices



## UPPERWORKS

### 1) Engine

- Imported Cummins QSB6.7 electronic-controlled line six-cylinder, water-cooled, turbo charging.
- Rated power: 127kW/2000r/min.
- Max. Torque: 658N·m/1500r/min.
- Emission standard: Tier III .
- Air filtering: Two-stage filtering system consisting of air pre-filter and air filter.  
Optional engine Imported Isuzu 6BG1TRP inline.
- 6-cylinder, water-cooled, turbocharger.
- Rated Power: 125kW/2100r/min.
- Max. Torque: 637N·m/1800r/min.
- Emission Standard: Tier II .

### 2) Electrical Control System

- Controller, combination instrument, engine, load moment indicator, remote control terminal apply CAN bus techniques for data communication.
- Combined instrument can display parameters such as engine rotating speed, fuel quantity, machine oil pressure, servo pressure, wind speed, the engine operating working hours and primary winch lock, main-to-luffing winch lock, turn lock and other working conditions.

### 3) Hydraulic System

- Configuration of hydraulic system: adopt the world-renowned brands of hydraulic systems, including the main pump, main valve, control handle and motor reducer. It is efficient, energy saving, stable and reliable.
- It has excellent micro-rotation and performance improvement, load sensing; limit load regulation makes the operation more stable.
- Adopt controlled hydraulic oil cooling system independently.

### 4) Main and Auxiliary Hoisting Mechanisms

- Main and auxiliary lifting mechanism are independently driven; winding drum is driven directly by winding motor; the drum handle can rotate towards both directions i.e. hoisting and lowering.
- Global brands motor reducer with higher reliability;
- The fold line winding drum design can ensure that multi-layer winding rope without mess.
- Adopt the steel wire of global well-known brands, which are more reliable and durable.

NO.1 Main and Auxiliary Hoisting Mechanisms

Wire speed of the outermost working layer (Rexroth)	0~102m/min (high speed) 0~63m/min (low speed)
Wire speed of the outermost working layer (Kawasaki)	0~120m/min
Wire rope diameter	φ20mm
Wire rope length of main winch	180m
Wire rope length of auxiliary winch	130m
Rated tension of single wire	6.1t

### 5) Luffing Mechanism

- The drum is directly driven by the luffing motor through the reducer. The drum may rotate in two directions through the winch handle, that is, boom raising and lowering.
- The motor reducer of a world-renowned brand boasts higher reliability .
- The design of polyline drum ensures smooth multi-layer winding of ropes.
- The wire ropes of a world-renowned brand are used, featuring higher reliability and durability.

NO.2 Luffing Mechanism

Wire speed of the outermost working layer (Rexroth)	0~73m/min
Wire speed of the outermost working layer (Kawasaki)	0~90m/min
Wire rope diameter	φ16mm
Wire rope length of luffing winch	142m
Rated tension of single wire	3.7t

### 6) Swing mechanism

- Inner gear compound swing can rotate 360° .
- Revolution lock: hydraulic control lock adjust pin; upper works can be locked when work is finished or in transport.
- Free wheels pin: In hoisting, boom center and load center are not on the same level due to wrong judgment; free wheels pin can automatically arrange upper works to avoid movement of load after being hoisted.
- Revolution support: single row ball revolution support.

### 7) Counterweight

- Use the mode of overlapped tray and counterweights block for the convenience of mixing, disassembly and transport.
- Counterweight: 17t in total, including: counterweight tray 4.3t×1, left counterweight block 2.7t×2, right counterweight block 2.7t×2, and central counterweight block 1.9 t×1. Additional counterweight: 1.5t×1.
- While the boom length is more than 34m, additional counterweight block may improve the lifting capacity of medium and long boom.

### 8) Cab

- Newly designed sliding-door cab, large area windows; with near and far beam headlamp, rear-view mirrors and more open vision; Installed with heating and cool air conditioning, MP3 player; seats, control handle; control button layout designed according to ergonomic; thus operation is more comfortable.
- Installed with the manipulation handle, all electrical switches and ignition lock on left, right arm and auxiliary control box. Armrest can be adjusted with the seat.
- Suspension, multi-way adjustable seats with unloading switch.
- Heating and cooling air, optimized air duct and air outlet.

## LOWERWORKS

### 1) Traveling Drive

The track frame on both sides adopts separate walk-driven devices. Walking motor can achieve lineal walk and turn of the whole machine through motor reducer and driving wheel.

### 2) Traveling Brake

Built-in, wet, spring-loaded normal-engaged disk brake applies braking through spring force and release braking through oil pressure.

### 3) Telescopic Crawler

Expansion and contraction of crawler frame can be realized through cylinder expansion.

### 4) Track Tensioning

Use pushing guide wheels of hydraulic jacks; adjust the tension of track by adjusting shims.

### 5) Track Shoes

High-strength alloy steel track link with longer life.

### 6) Traveling Speed

0~1.39km/h (without load, on level and hard soil ground).

## OPERATION DEVICE

### 1) Boom

- Truss structures; the main chord adopts high strength structure steel; each section is connected with pins.
- Basic boom: composed of 6.5m base and 6.5m tip.
- Insert: 3m×1, 6m×3 and 9m×2.
- Boom length: 13m~52m.

### 2) Fixed jib

- Truss structures; the main chord adopts high strength structure steel; each section is connected with pins.
- Basic boom: composed of 3.05m base and 3.05m tip.
- Insert: 3.05m×3.
- Jib length: 6.1m~15.25m.
- Fully extended boom + jib: 43m boom + 15.25m jib.

### 3) Boom extension

In a welded structure, it is jointed with boom through pin roll for auxiliary hook operation.

### 4) Hook block

- 50t lifting hook
- 30t lifting hook
- 15t lifting hook
- 6t lifting hook

Notes: The operation devices above are safe configuration; order contract shall prevail for specific configuration.

# SAFETY DEVICES

## 1) Load Moment Indicator

- Standard configuration, optional manufacturer.
- A completely separate and secure computer-controlled operating system; LMI can automatically detect the load of cranes and the angle of lifting boom and show its rated load and actual load, working radius and boom angle. Functions: can real-time display rated load, actual load, working radius and boom angle, height and other data at current status of the crane. Automatically detect luffing angle transfinite and load transfinite and other dynamic data, and give real-time alarm and limit movement.
- Components: display, machine, monitor, angle sensors, force sensors etc.

## 2) Emergency Function

When the system crashes, use electrical emergency plug and manipulate the machine to a safe status. Then all the security protection functions are not working.

## 3) Switch between installation/operation mode

- In installation mode, anti roll device, lifting boom inhibiting device, load moment indicator do not work to facilitate crane installation. In operation mode, all the safety limit devices are working.

## 4) Emergency stop function

In emergency, press the emergency stop button fixed inside the driver's cab to cut off power supply of the machine and stop all the operations.

## 5) Anti-pulley equipments of main and auxillary winch

Composed of limit switch, hammer etc. on jib to prevent excessive promotion of hook block. When the lifting hook raises to a certain height, limit switch will work, the buzzer on the control panel will alarm, meanwhile the failure indicator blinks and automatically stop the lifting operation of hook block.

## 6) Anti-roll out equipments of main and auxillary hoists

It is composed of movement trigger device and proximity switches installed in roll to prevent wire rope from being over-decentralized. When the wire rope is over-decentralized near the last three hoops, limit switch will work, the system will alarm through buzzer, alarm information will be displayed in instrument cluster and automatically stop the decentralization movement of hoist.

## 7) Function Lock

- If the function lock handle is not in place, all the other functions for operating handle will fail to avoid mis-operation caused by collisions in upper and lower works.
- When operator is not seated, all the manipulation will not work; some mis-operations can effectively be avoided.

## 8) Winch locking device

Main reel, auxillary reel and luffing winch are equipped with electric locking device. Before winch operation, users need to switch towards dissolution for operation consciously, avoid handle mis-operation; ensure the security of winch under non-working states.

## 9) Rotary locking device

Hydraulic power pin lock can lock the crane in front, rear, left and right positions. Rotary pin and rotary motion adopt electronically controlled linkage to prevent malfunction.

## 10) Boom inhibiting device

- When the elevation angle of lifting arm is greater than 78° , the buzzer will alarm, and boom elevation control will be closed. This protection is controlled by load moment limiter and position switch.
- When the elevation angle of lifting arm is less than 30° , the buzzer will alarm through buzzer and display alarm information in instrument cluster and automatically stop arm sinking operation. This protection is controlled by load moment indicator.

## 11) Boom Back-stop Device

Composed of nesting tube and spring etc. Buffer the energy of boom backwards tilting by spring force to prevent boom backwards tilting.

## 12) Signs for boom angle

Pendulum angle indicating device is fixed in base next to the cab for the convenience of operator.

## 13) Hook Clamp Plate

Lifting hooks are provided with baffle to prevent the rope from dropping.

## 14) Monitoring System

- Cameras: 2 cameras are equipped for monitoring auxillary winch, luffing winch and the back of whole machine.
- Optional monitoring: variable zoom monitoring system monitors the working conditions of hooks.
- Optional remote control: GPS satellite positioning and GPRS data transfer, device status information, statistics, monitoring and analysis of operational data and remote fault diagnosis can be realized.

## 15) Lightning protection device

Including lightning protection grounding devices and surge protection devices; it can effectively prevent damage to electrical components and operators under lightning strikes.

## 16) Level gauge

Electronic leveling gauge can display tilt angle of upper works on monitor.

## 17) Three-color load warning light

There is green, yellow and red load warning lights, simultaneous displaying real-time load.

When the actual load is less than 92% of rated load, the "green" light is on; when the actual load is between 92% and 100% of the rated load, the "yellow" light is on, the pre-

warning lights will flash and intermittent alarm will be issued; When the actual load reaches 100% of rated load, the "red" light is on, the pre-warning lights will flash and intermittent alarm will be issued; When the actual load reaches 102% of rated load, the system will automatically cut off the trend of crane operation towards danger.

## 18) Sound and light alarming device

When engine is working, lights will flash; in walking or turning, sound alarm will be issued.

## 19) Swing indicating device

When walking or turning, swing indicating light is blinking.

## 20) Lighting

Equipped with winch lights, lower beam in front of driver, front adjustable high beam, the lighting lamps in driver's cab, lighting equipment for night; these can improve the visibility in construction.

## 21) Rearview mirror

Set respectively on the right of the driver's cab and armrest in front of hood for the convenience of monitoring the rear status of the machine.

## 22) Navigation light

Installed on the top of boom; provide instructions for boom at height.

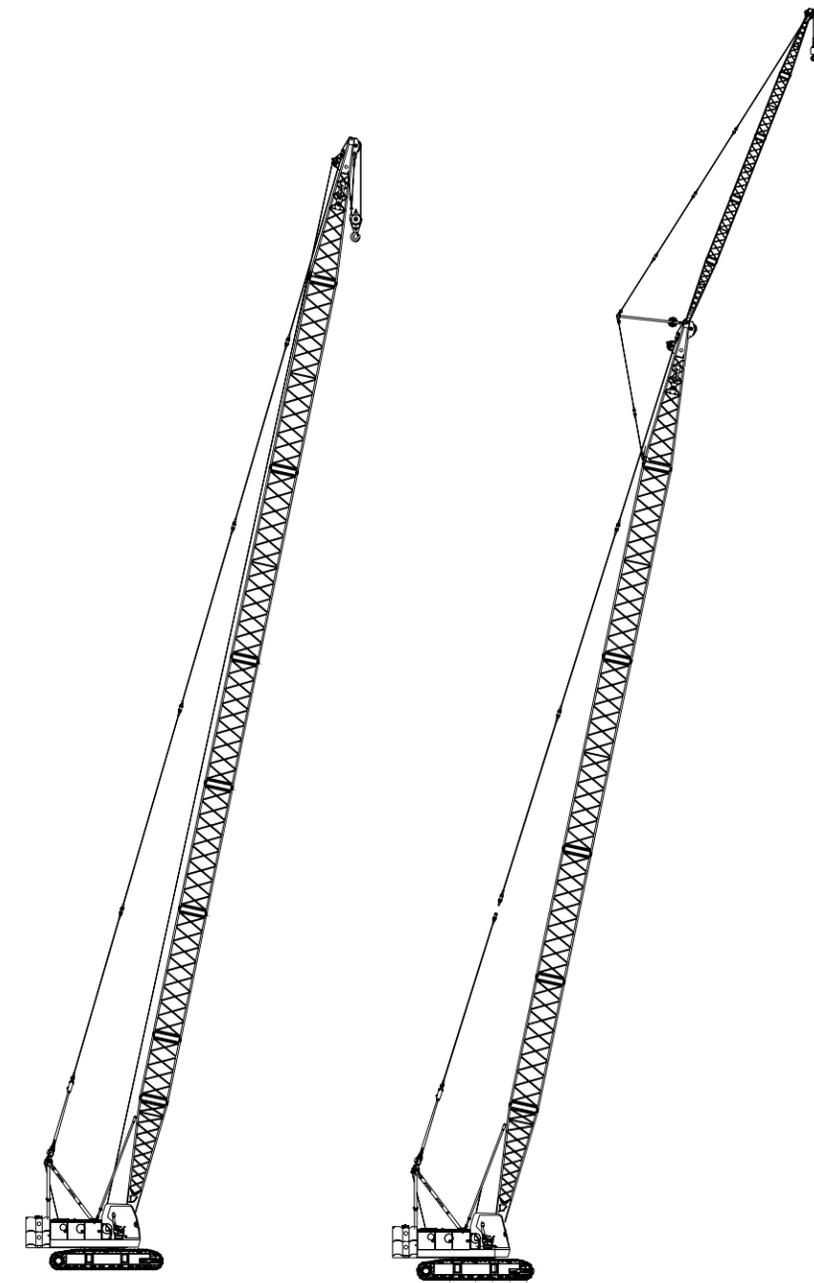
## 23) Anemometer

Installed at the top of boom supporter for real-time monitoring of wind velocity; and transmit the data to the cab and display on monitor.

# SCC500E

Operating Condition Combination	19
H Operating Condition	20
FJ Operating Condition of Fixed Jib	25

## OPERATION CONDITION COMBINATION



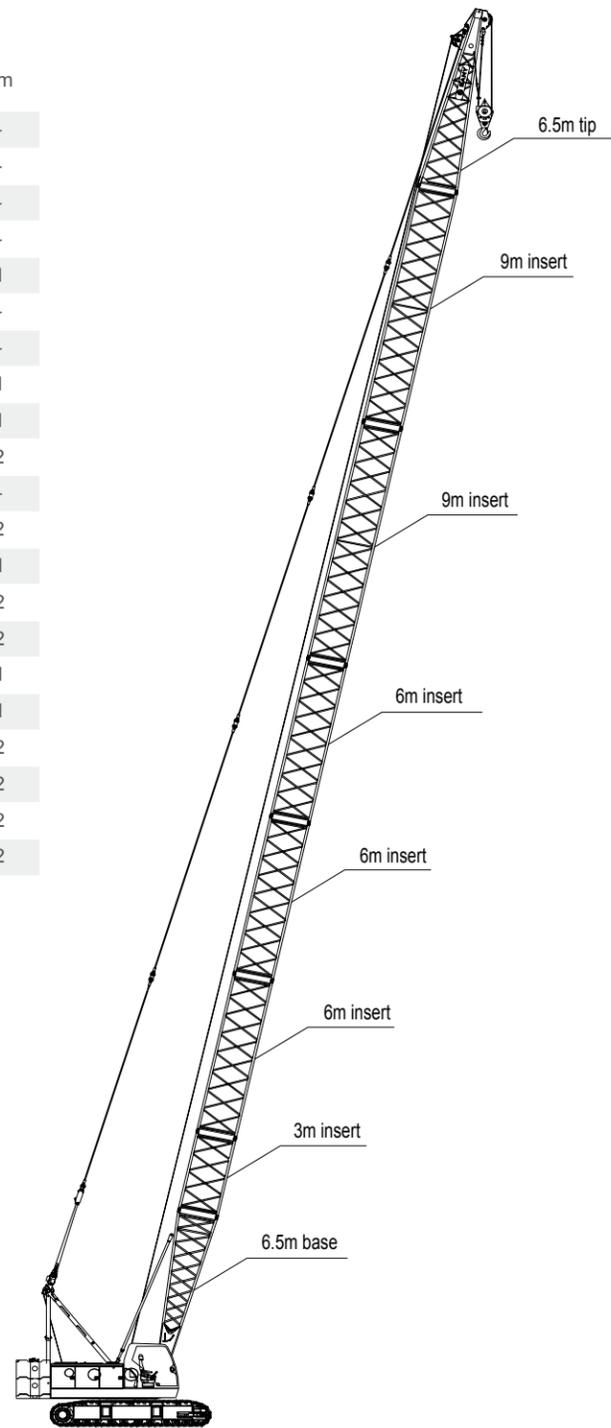
H operation condition  
Boom: 13m~52m

FJ operating condition  
Boom: 22m~43m  
Fixed jib: 6.1m~15.25m

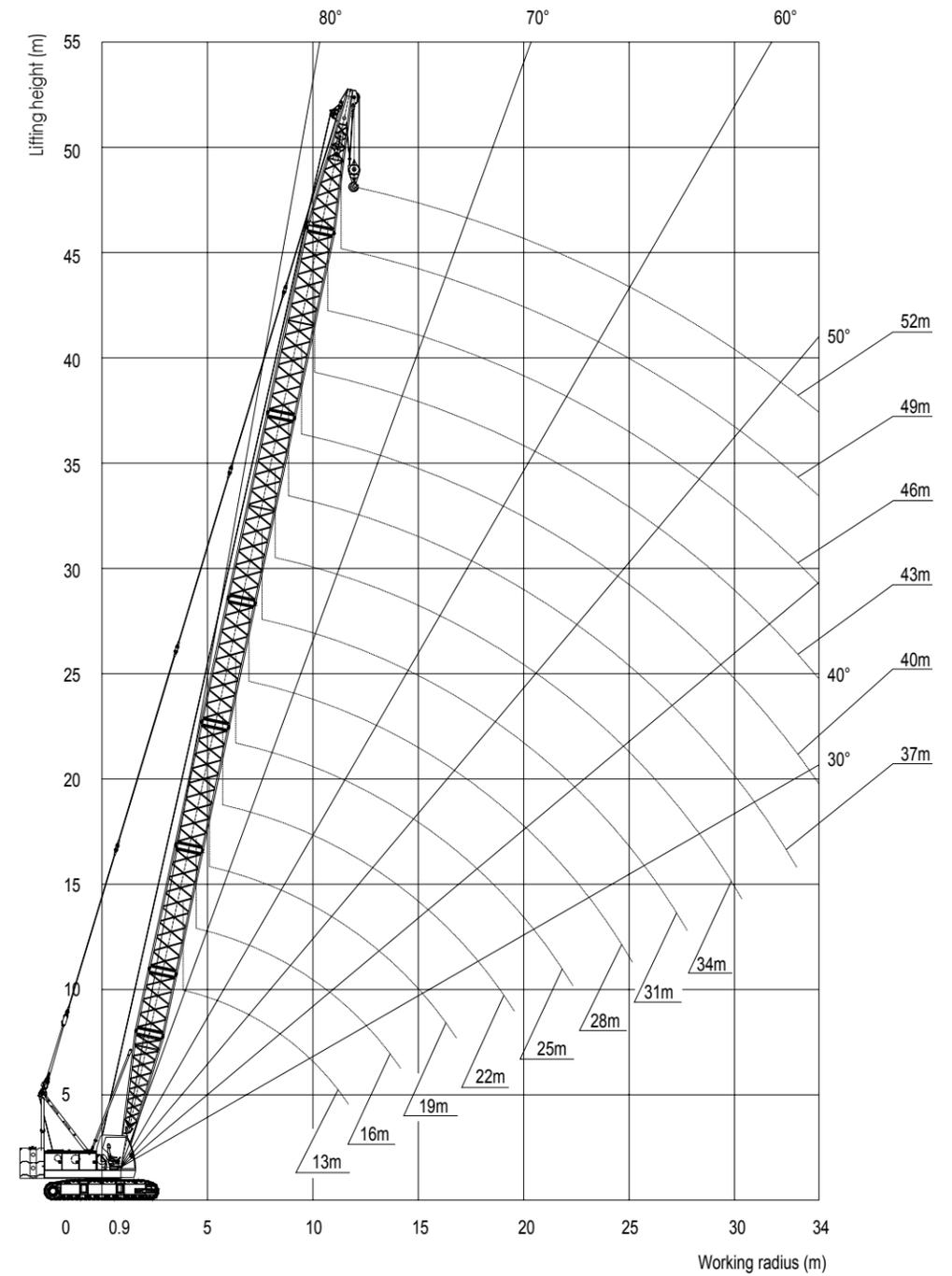
# H OPERATION CONDITION

Boom length m	Basic boom		Insert		
	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	-
25	★	1	1	-	1
28	1	1	-	2	-
31	★	1	1	1	1
34	1	1	1	1	1
37	★	1	1	-	2
40	1	1	1	1	2
43	★	1	1	-	3
46	1	1	1	2	2
49	1	1	-	3	2
52	1	1	1	3	2

※Note: Boom combination with ★ are optimized combination



# H OPERATION CONDITION RANGE DIAGRAM



# H OPERATION CONDITION LOAD CHARTS

## SCC500E Crawler Crane

### H operation condition load charts

unit: (t)

Radius (m)	Boom Length (m)												
	13	16	19	22	25	28	31	34	37				
3.7	50.00												
4	46.00												
4.5	39.06	39.02											
5	32.77	32.72	32.60/5.1										
5.5	28.19	28.13	28.03	26.40/5.7									
6	24.70	24.64	24.54	24.44	22.30/6.3								
7	19.74	19.69	19.57	19.47	19.40	19.30	17.40/7.6						
8	16.39	16.33	16.21	16.11	16.03	15.93	15.83	15.4/8.2	16.26/8.2	13.90/8.8	14.61/8.8		
9	13.97	13.91	13.79	13.68	13.60	13.50	13.40	13.30	14.08	13.21	13.99		
10	12.14	12.08	11.96	11.85	11.77	11.67	11.56	11.50	12.20	11.37	12.07		
12	9.56	9.50	9.37	9.27	9.18	9.08	8.97	8.86	9.44	8.78	9.36		
14		7.77	7.64	7.53	7.44	7.34	7.22	7.12	7.62	7.03	7.53		
16			6.39	6.28	6.20	6.09	5.97	5.86	6.30	5.78	6.22		
18				5.34	5.26	5.15	5.03	4.92	5.31	4.84	5.23		
20					4.52	4.41	4.30	4.19	4.54	4.10	4.45		
22						3.94	3.82	3.71	3.60	3.92	3.51	3.83	
24							3.34	3.23	3.12	3.41	3.03	3.32	
26								2.82	2.71	2.98	2.62	2.89	
28									2.35	2.60	2.24	2.49	
30										2.03	2.26	1.91	2.14
32											1.63	1.85	
34													
counterweight	17	17	17	17	17	17	17	17	17	17	17+1.5	17	17+1.5

Notes: 1.The rated load includes the weights of hook, wire rope, and other hoisting tools, and the lifting capacity must be obtained by deducting the total weight of all above items from the rated lifting capacity;  
 2.The additional counterweight (1.5t) can only be used when the boom is no less than 34m long;  
 3.The 25% orange thick frame indicates that the load depends on boom strength t, and 40% orange and italic values indicate the operating condition with standard counterweight and additional counterweight.

# H OPERATION CONDITION LOAD CHARTS

## SCC500E Crawler Crane

### H operation condition load charts

unit: (t)

Radius (m)	Boom Length (m)											
	40	43	46	49	52							
3.7												
4												
4.5												
5												
5.5												
6												
7												
8												
9	12.40/9.5	13.14/9.5										
10	11.27	11.97	11.2/10.1	11.89/10.1	10.30/10.7	10.95/10.7	9.50/11.3	10.10/11.3				
12	8.67	9.25	8.58	9.16	8.48	9.06	8.39	8.97	8.29	8.87		
14	6.92	7.42	6.84	7.34	6.73	7.23	6.64	7.14	6.53	7.03		
16	5.67	6.11	5.58	6.02	5.47	5.91	5.39	5.83	5.27	5.71		
18	4.72	5.11	4.64	5.03	4.52	4.91	4.44	4.83	4.33	4.72		
20	3.99	4.34	3.90	4.25	3.79	4.14	3.70	4.05	3.59	3.94		
22	3.40	3.72	3.31	3.63	3.20	3.52	3.09	3.41	2.94	3.26		
24	2.91	3.20	2.81	3.10	2.66	2.95	2.55	2.84	2.40	2.69		
26	2.47	2.74	2.36	2.63	2.21	2.48	2.10	2.37	1.95	2.22		
28	2.09	2.34	1.98	2.23	1.83	2.08	1.72	1.97	1.57	1.82		
30	1.76	1.99	1.65	1.88	1.50	1.73	1.39	1.62	1.24	1.47		
32	1.48	1.70	1.36	1.58	1.22	1.44	1.10	1.32	0.95	1.17		
34	1.23	1.44	1.12	1.33	0.97	1.18	0.85	1.06	0.70	0.91		
counterweight	17	17+1.5	17	17+1.5	17	17+1.5	17	17+1.5	17	17+1.5	17	17+1.5

Notes: 1.The rated load includes the weights of hook, wire rope, and other hoisting tools, and the lifting capacity must be obtained by deducting the total weight of all above items from the rated lifting capacity;  
 2.The additional counterweight (1.5t) can only be used when the boom is no less than 34m long;  
 3.The 25% orange thick frame indicates that the load depends on boom strength , and 40% orange and italic values indicate the operating condition with standard counterweight and additional counterweight.

## LOAD CHARTS OF H OPERATION CONDITION

### Notes —— Rated load of crane

1. When the crane is hoisting, the crawler frame must be in the state of extension;
2. The rated load indicated in the table is the weight hoisted slowly and stably on a level and hard soil ground when the crane does travel;
3. The rated load indicated in the table is the value computed by taking 75% of the tipover load when the wind speed is below 9.8m/s;
4. All values in the load chart are suitable for 360° rotation;
5. Rated load includes the weight of hook, hoisting tools and wire rope, etc. The actual lifting capacity must be obtained by deducting the weight of lifting hook, hoisting tools, and wire rope (the weight of 50t lifting hook is 0.6t, that of 30t lifting hook 0.5t, that of 15t lifting hook 0.4t, and that of 6t hook block 0.2t; the weight of wire rope is calculated as 2kg/m) from the rated lifting capacity in the table;
6. The boom which a jib can be mounted is 22m~43m, and the max. length boom with an extension arm mounted is 49m;
7. The relationship between the multiplying Factor of wire rope and max. rated load as well as weight of hook is shown as below:

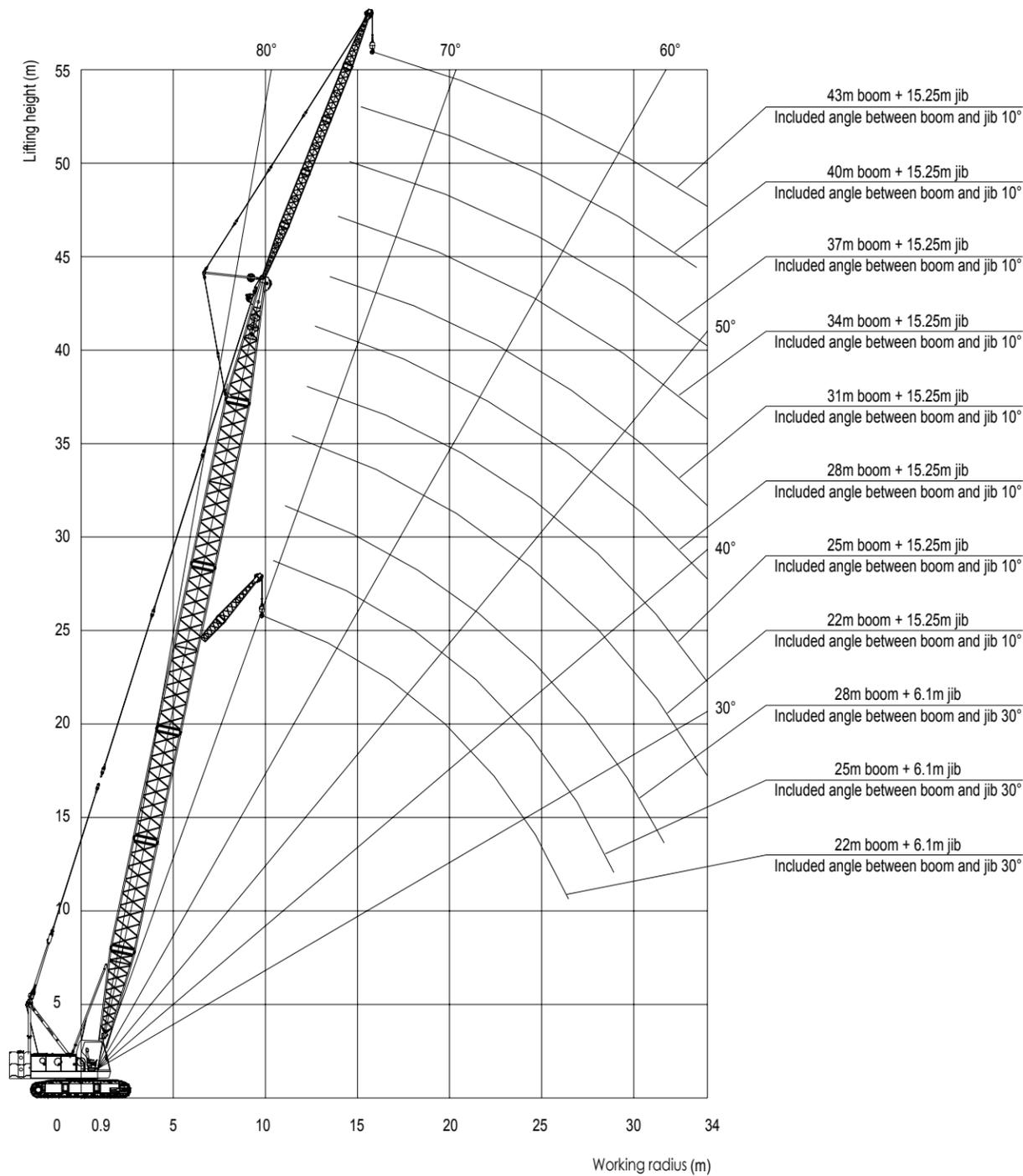
Hook tonnage (t)	Hook Weight (t)	Max. Rated Total Load (t)								
		9Multiplying Factor	8Multiplying Factor	7Multiplying Factor	6Multiplying Factor	5Multiplying Factor	4Multiplying Factor	3Multiplying Factor	2Multiplying Factor	1Multiplying Factor
50	0.58	50.0	44.8	39.9	34.2	28.5	22.8	17.1	11.4	5.7
30	0.47				30.0	28.5	22.8	17.1	11.4	5.7
15	0.36							15.0	11.4	5.7
6	0.19									5.0

8. When additional counterweight (17t+1.5t) is used, it is an optional operating condition, rather than a standard operating condition. The boom allowing to use additional counterweight is 34~52m.

## FIXED JIB OPERATION CONDITION (FJ) FIXED JIB

Fixed jib combination					
Jib length (m)	Basic boom		Insert	Boom length (m)	Angle between boom and jib
	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°

# FIXED JIB RANGE DIAGRAM



# FIXED JIB LOAD CHARTS

## SCC500E Crawler Crane Fixed jib load charts

unit: (t)

		Boom Length 22m							
		6.1		9.15		12.2		15.25	
Jib Length(m)	Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8		5.00	9.8m×5.00	9.2m×5.00					
10		5.00	5.00	5.00		10.3m×4.00		11.4m×3.20	
12		5.00	5.00	5.00	4.65	4.00		3.20	
14		5.00	15.4m×5.00	5.00	4.30	4.00	3.65	3.20	
16		5.00	4.90	5.00	4.05	4.00	3.45	16.8m×3.20	3.05
18		19.5m×5.00	4.65	19.7m×5.00	3.85	19.8m×3.85	3.25	3.15	2.90
20		4.80	21.7m×4.30	4.85	3.65	3.75	3.10	3.05	2.75
22		4.20	4.20	4.25	3.50	3.65	2.95	2.95	2.60
24		3.70	3.75	3.75	3.35	3.50	2.80	2.90	2.45
26		3.30	3.35	3.35	27.2m×3.20	3.40	2.70	2.80	2.35
28		26.1m×3.30	26.5m×3.25	3.05	3.05	3.05	2.60	2.70	2.25
30				29.0m×2.90	29.0m×2.85	2.75	2.55	2.60	2.15
32						31.8m×2.50	2.50	2.50	2.10
34							32.6m×2.50	2.30	2.05
counterweight		17	17	17	17	17	17	17	17

		Boom Length 25m							
		6.10		9.15		12.20		15.25	
Jib Length(m)	Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8		8.6m×5.00		9.8m×5.00		10.9m×4.00			
10		5.00	10.4m×5.00	5.00		4.00			
12		5.00	5.00	5.00	12.5m×4.65	4.00		12.1m×3.65	
14		5.00	5.00	5.00	4.40	4.00	14.5m×3.65	3.20	
16		5.00	16.5m×5.00	5.00	4.15	3.85	3.50	16.5m×3.20	16.6m×3.05
18		19.3m×5.00	4.80	19.5m×5.00	3.90	3.75	3.35	3.15	2.95
20		4.70	20.6m×4.55	4.80	3.70	3.65	3.20	3.05	2.80
22		4.10	4.15	4.20	3.55	3.50	3.05	2.95	2.65
24		3.65	3.65	3.70	3.40	3.30	2.90	2.90	2.55
26		3.25	3.25	3.30	3.30	2.95	2.80	2.80	2.40
28		2.90	2.90	2.95	3.00	2.65	2.70	2.70	2.30
30		28.7m×2.80	29.1m×2.75	2.65	2.70	2.40	31.4m×2.60	2.65	2.20
32				31.6m×2.45	2.40	2.20	2.40	2.45	2.20
34							2.25	2.20	2.10
counterweight		17	17	17	17	17	17	17	17

Notes: 1.The rated load includes the weights of hook, wire rope, and other hoisting tools, and the lifting capacity must be obtained by deducting the total weight of all above items from the rated lifting capacity;  
2.The 25% orange thick frame indicates that the load depends on the boom strength.

# FIXED JIB LOAD CHARTS

## SCC500E Crawler Crane Fixed jib load charts

unit: (t)

Boom Length 28m								
Jib Length(m)	6.1		9.15		12.2		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8	9.3m×5.00							
10	5.00	11.1m×5.00	10.4m×5.00		11.6m×4.00			
12	5.00	5.00	5.00	13.1m×4.65	4.00		12.7m×3.20	
14	5.00	5.00	5.00	4.50	4.00	15.1m×3.65	3.20	
16	5.00	17.7m×5.00	5.00	4.25	4.00	3.60	16.8m×3.20	17.2m×3.05
18	19.0m×5.00	19.8m×4.75	19.2m×5.00	4.05	3.85	3.45	3.15	3.00
20	4.60	4.70	4.70	3.85	3.75	3.30	3.05	2.85
22	4.00	4.10	4.10	3.70	3.65	3.15	2.95	2.75
24	3.50	3.60	3.60	24.8m×3.50	3.50	3.00	2.90	2.60
26	3.10	3.15	3.20	3.25	3.20	2.85	2.80	2.50
28	2.75	2.80	2.85	2.90	2.85	2.75	2.70	2.40
30	2.45	2.50	2.55	2.60	2.55	2.65	2.60	2.30
32	31.3m×2.30	31.7m×2.30	2.30	2.30	2.30	2.40	2.35	2.20
34			2.05	2.10	2.10	2.15	2.10	2.15
counterweight	17	17	17	17	17	17	17	17

Boom Length 31m								
Jib Length(m)	6.10		9.15		12.20		15.25	
Jib Angle Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°
8	9.9m×5.00							
10	5.00	11.7m×5.00	11.0m×5.00					
12	5.00	5.00	5.00	13.7m×4.65	12.2m×4.00		13.3m×3.20	
14	5.00	5.00	5.00	4.60	4.00		3.20	
16	5.00	5.00	5.00	4.35	4.00	3.65	16.8m×3.20	
18	18.8m×5.00	19.0m×5.00	19.0m×5.00	4.15	3.85	3.50	3.15	3.05
20	4.50	4.65	4.65	3.95	3.75	3.35	3.05	2.95
22	3.95	4.00	4.00	23.6m×3.70t	3.65	3.20	2.95	2.80
24	3.45	3.50	3.50	3.60	3.50	3.10	2.90	2.65
26	3.05	3.10	3.10	3.20	3.15	2.95	2.80	2.55
28	2.70	2.75	2.75	2.85	2.85	2.85	2.75	2.45
30	2.40	2.45	2.45	2.55	2.50	2.60	2.50	2.35
32	2.15	2.20	2.20	2.25	2.25	2.30	2.25	2.25
34	33.9m×1.90	1.95	1.95	2.00	2.00	2.10	2.05	2.15
counterweight	17	17	17	17	17	17	17	17

Notes: 1.The rated load includes the weights of hook, wire rope, and other hoisting tools, and the lifting capacity must be obtained by deducting the total weight of all above items from the rated lifting capacity;  
2.The 25% orange thick frame indicates that the load depends on the boom strength.

# FIXED JIB LOAD CHARTS

## SCC500E Crawler Crane Fixed jib load charts

unit: (t)

Boom Length 34m								
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×5.00		11.7m×5.00					
12	5.00	12.3m×5.00	5.00		12.8m×4.00		13.9m×3.20	
14	5.00	5.00	5.00	14.4m×4.60	4.00		3.20	
16	5.00	5.00	5.00	4.45	4.00	16.4m×3.65	16.8m×3.20	
18	18.6m×5.00	18.8m×5.00	18.8m×5.00	4.25	3.85	3.55	3.15	18.4m×3.05
20	4.45	4.60	4.55	4.05	3.75	3.40	3.05	2.90
22	3.75	3.95	3.95	23.0m×3.80	3.65	3.30	2.95	2.80
24	3.40	3.45	3.45	3.55	3.50	3.10	2.90	2.70
26	2.95	3.05	3.05	3.15	3.05	27.7m×2.90	2.80	2.60
28	2.60	2.65	2.70	2.80	2.70	2.85	2.75	2.50
30	2.30	2.35	2.40	2.45	2.40	2.55	2.45	2.45
32	2.05	2.05	2.10	2.20	2.15	2.25	2.20	2.30
34	1.80	1.85	1.85	1.95	1.90	2.00	1.95	2.05
counterweight	17	17	17	17	17	17	17	17

Boom Length 37m								
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×5.00							
12	5.00	12.9m×5.00	12.3m×5.00		13.4m×4.00			
14	5.00	5.00	5.00	15.0m×4.60	4.00		14.6m×3.20	
16	5.00	5.00	5.00	4.50	4.00	17.0m×3.65	16.8m×3.20	
18	18.4m×5.00	18.6m×5.00	18.6m×5.00	4.30	3.85	3.60	3.15	19.1m×3.05
20	4.40	4.50	4.45	4.15	3.75	3.45	3.05	2.95
22	3.80	3.90	3.85	4.00	3.65	3.30	2.95	2.85
24	3.30	3.40	3.35	3.50	3.40	3.20	2.90	2.75
26	2.85	2.95	2.95	3.10	3.00	26.6m×3.05	2.80	2.65
28	2.50	2.60	2.60	2.70	2.60	2.80	2.65	2.60
30	2.20	2.30	2.30	2.40	2.30	2.45	2.35	2.50
32	1.90	2.00	2.00	2.10	2.05	2.20	2.10	2.20
34	1.65	1.75	1.75	1.85	1.80	1.90	1.85	2.00
counterweight	17	17	17	17	17	17	17	17

Notes: 1.The rated load includes the weights of hook, wire rope, and other hoisting tools, and the lifting capacity must be obtained by deducting the total weight of all above items from the rated lifting capacity;  
2.The 25% orange thick frame indicates that the load depends on the boom strength.





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