SANY CRAWLER CRANE
SCC 800C
CRAWLER CRANE

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SCC800C

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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 and operation efficiency:**
   The rated single-rope tension may reach 9.2t, and max. single-rope tension of the main hoist may reach 16t, with loading capacity, hoist and luffing speed improved further;

6. **Flexible configuration combination:**
   Free-fall function is optional, or the main and auxiliary winches may have free-fall function simultaneously; caterpillar crawler of excavator may be optionally used for crawler traveling;

7. **Large-chassis design:**
   Track frame which can be broadened, ensuring excellent machine and job stability within the range of 360° rotation;

8. **Optimized transportation programs:**
   With the function of crawler extension, the max. transportation width of the whole machine is 3.4m;

9. **Reliable transmission system:**
   The hydraulic technology of world-renowned brand ensures high system stability and reliability;

10. **Many optional configurations:**
    Additional functions include free-fall excavator type crawler, fuel pre-heating, and high pressure alarm, etc.
## Main Performance Data

### Transport Dimensions

### Main performance data of SCC800C crawler crane

<table>
<thead>
<tr>
<th>Performance index</th>
<th>Unit</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. rated lifting capacity</td>
<td>t</td>
<td>80</td>
</tr>
<tr>
<td>Boom length</td>
<td>m</td>
<td>13~58</td>
</tr>
<tr>
<td>Boom luffing angle</td>
<td>°</td>
<td>30~80</td>
</tr>
<tr>
<td>Max. lifting torque</td>
<td>t.m</td>
<td>344</td>
</tr>
<tr>
<td>Fully extended boom + fully extended jib</td>
<td>m</td>
<td>49+18</td>
</tr>
<tr>
<td>Angle between boom and jib</td>
<td>°</td>
<td>15, 30</td>
</tr>
<tr>
<td>Rope speed of main and auxiliary winch</td>
<td>m/min</td>
<td>0~110</td>
</tr>
<tr>
<td>Rope speed of luffing winch (fifth tier)</td>
<td>m/min</td>
<td>0~73</td>
</tr>
<tr>
<td>Swing speed</td>
<td>rpm</td>
<td>0~2.25</td>
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<tr>
<td>Travel Speed</td>
<td>km/h</td>
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<td>Gradeability</td>
<td>%</td>
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<tr>
<td>Output power/rated speed</td>
<td>kW/rpm</td>
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<td>Maximum transport weight of single piece</td>
<td>t</td>
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<tr>
<td>Transportation size (length x width x height)</td>
<td>mm</td>
<td>13320×3400×3340</td>
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<tr>
<td>Average ground pressure (basic boom)</td>
<td>MPa</td>
<td>0.076</td>
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</table>
TRANSPORT DIMENSIONS

Central counterweight block  × 2
- Length: 1.68m
- Width: 0.72m
- Height: 0.67m
- Weight: 2.2t

Boom base  × 1
- Length: 6.728m
- Width: 1.626m
- Height: 2.035m
- Weight: 1.6t

Jib base  × 1
- Length: 4.69m
- Width: 0.89m
- Height: 0.77m
- Weight: 0.3t

4.5m jib insert  × 2
- Length: 4.57m
- Width: 0.87m
- Height: 0.77m
- Weight: 0.21t

Boom extension  × 1
- Length: 1.15m
- Width: 0.97m
- Height: 0.77m
- Weight: 0.15t

80t hook block  × 1
- Length: 2.1m
- Width: 0.75m
- Height: 0.85m
- Weight: 1.35t

50t Hook block  × 1
- Length: 1.99m
- Width: 0.85m
- Height: 0.97m
- Weight: 0.97t

Jib tip  × 1
- Length: 4.875m
- Width: 0.87m
- Height: 0.77m
- Weight: 0.35t

3m boom insert  × 1
- Length: 3.136m
- Width: 1.626m
- Height: 1.626m
- Weight: 0.4t

6m boom insert  × 1
- Length: 6.136m
- Width: 1.626m
- Height: 1.626m
- Weight: 0.75t

9m boom insert  × 4
- Length: 9.136m
- Width: 1.626m
- Height: 1.626m
- Weight: 1.05t

Jib tip  × 1
- Length: 4.875m
- Width: 0.87m
- Height: 0.77m
- Weight: 0.35t
## Transport Dimensions

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<td>Weight</td>
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<td>9t Hook block</td>
<td>×1</td>
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<tr>
<td>Height</td>
<td>0.36m</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>0.35t</td>
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</table>

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 difference due to the manufacturing error.
1) Engine
- Imported Cummins QSC8.3.
- Rated power/speed: 183kW/2000rpm.
- Emission standard: Tier 3.
- Air filtering: Two-stage filtering system consisting of air pre-filter and air filter.
- Optional engine: 6CTAA-250 imported Cummins engine.
- Rated power/speed: 186KW/2200rpm.
- Emission standard: Tier 2.

2) Electrical Control System
- Controller, combination instrument, engine, load moment limiter, 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, primary-to-amplitude 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.
- Adopt the steel wire of global well-known brands, which are more reliable and durable.

### NO.1 Main and Auxiliary Hoisting Mechanisms
| Rope speed of the outermost working layer | 0~110m/min |
| Wire rope diameter | φ24mm |
| Wire rope length of main/auxiliary hoist | 240m/180m |
| Rated tension of single wire | 9.2t |

5) Luffing Mechanism
- Luffing drum is driven directly by luffing motor; the drum handle can rotate towards both directions i.e. hoisting and lowering. Lifting and lowering of boom can be achieved.
- Global brands motor reducer with higher reliability.
- The fold line winding drum design can ensure that multi-layer winding rope without mess.
- Adopt global well-known brands steel wire, which are more reliable and durable.

### NO.2 Luffing Mechanism
| Rope speed of the outermost working layer | 0~73m/min |
| Wire rope diameter | φ20mm |
| Wire rope length of luffing | 180m |
| Rated tension of single wire | 6.9t |

6) Swing Mechanism
- External 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) 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.
- Armrest box: The left and right armrest boxes are equipped with control levers, electric switches, and ignition lock, etc. The arm box can also be adjusted with the seat.
- Suspension, multi-way adjustable seats with unloading switch.
- Air conditioning: heating and cooling air, optimized air duct and air outlet.

8) Counterweight
- Use the mode of overlapped tray and counterweights block for the convenience of mixing, disassembly and transport.
- Standard counterweight: 26.7t; counterweight tray: 8.3t×1, left counterweight block 2.7t×3; right counterweight block 2.7t×3, and central counterweight block 2.2t×1.
- Additional counterweight: 2.2t×1.
- Under a special condition, additional counterweight block may improve the lifting capacity of medium and long arms.
Independent traveling drive is mounted at each crawler frame. The traveling motor achieves straight-line traveling and steering through reducer and driving wheel.

1) Telescopic crawler
The crawler frame is extended and retracted through the extension of cylinder.

2) Track tensioning
Hydraulic jack is used to push the guide pulley, and the adjusting gasket to adjust the tension of crawler.

3) Crawler shoes
- High-strength, alloy cast steel crawler shoe boasts a longer life.
- Caterpillar plane crawler shoe of excavator or crawler shoe with grouser is optional for crawler assembly.
- When there is no restriction on transportation load, the crawler frame may be retracted during transportation, so as to transport the basic machine together with crawler frame and reduce disassembly/assembly time.

1) Boom
- In a truss structure, the main chords use high-strength structure steel pipes. All boom sections are connected with pin shafts.
- Basic boom: 6.5m tip + 6.5m base.
- Insert: 3m×1, 6m×3 and 9m×4.
- Boom length: 13m~58m.

2) Fixed jib
- In a truss structure, the main chords use high-strength structure steel pipes. All boom sections are connected with pin shafts.
- Basic boom: 4.5m tip + 4.5m base.
- Insert: 4.5m×2.
- Jib length: 9m~18m.
- Fully extended boom + jib: 49m boom + 18m jib.

3) Hook block
- 80t hook block
- 50t hook block
- 25t hook block
- 9t hook block

Note: The operation devices above are in all configurations, and the specific configuration should be subject to contract for goods.
**SAFETY DEVICES**

1) **Switch between Installation/operation Mode**
   In installation mode, anti roll device, lifting boom inhibiting device, torque limiter do not work to facilitate crane installation. In operation mode, all the safety limit devices are working.

2) **Emergency Stop Function**
   In emergency, press the emergency stop button to cut off power supply of the machine and stop all the operations.

3) **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.

4) **Load Moment Indicator (LMI)**
   - A completely separate and secure computer-controlled operating system; LMI can automatically detect the load of cranes and the angle of lifting arm and show its rated load and actual load, working radius and boom angle.
   - Components: machine, monitor, angle sensors, force sensors etc.
   - 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 angle transfinite and load transfinite and other dynamic data, and give real-time alarm and limit movement.

5) **Anti-pulley equipments of primary and vice 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 auxiliary hook**
   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) **Lock Locking**
   - If the function lock is not in position, all other functional control levers will not function, so as to prevent misoperation due to knocks of body while getting on and off the crane.
   - When the operator is not at seat, all manipulations will be out of function, so as to avoid some misoperations effectively.

8) **Drum Locking Device**
   Primary reel, vice reel and amplitude 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) **Swing Locking Device**
   Hydralic 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) **A-frame Alarm Device**
    In installation mode, if A-frame does not rise to position, then it will transform into work mode; the system will alarm by buzzer and display, meanwhile all motor functions will fail.

11) **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 torque 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 torque limiter.

12) **Boom Back-stop Device**
    Composed of nested steel pipe, spring, etc., It prevents the boom from back-lifting by relying on the spring force to buffer the inclining force of boom.

13) **Boom Angle Indicator**
    Pendulum-type angle indicator secured onto the boom base on the side near the driver’s cab, Thus facilitating operators to check.

14) **Hook Clamp**
    Every lifting hook is equipped with a clamp plate to prevent wire rope from falling off.

15) **Monitoring System**
    - Cameras: 2 cameras are equipped for monitoring vice winch, amplitude 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.

16) **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.

17) **Gradienter**
    The gradienter may indicate the inclination angle of superworks on the display.
18) Three-color Load Alarm Light
There are 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.

19) Audio-visual Alarm
When the engine runs, the light will flash; when the crane travels or slews, it will give audio alarm.

20) Swing Indicating Device
When walking or turning, Swing indicating light is blinking.

21) Illumination
Night illuminating devices, such as winch illuminator, dipped headlight in front of the driver’s cab, front angle-adjustable high beam, illuminator inside the driver’s cab, are equipped to improve the visibility during construction.

22) Rearview Mirror
Mirrors are respectively set at the right side of the driver’s cab and front handrail of cover for the convenience of monitoring the situation at the rear of the machine.

23) Pharos
It is mounted on the top of the arm support for guiding from high above.

24) Shove-off Seat Protection
When the operator is not seated, all the manipulation will not work, thus some disoperation can be effectively avoided.

25) Anemometer
Installed at the top of boom supporter for real-time monitoring of wind speed; and transmit the data to driver’s cab and display on monitor.
**Operating Condition Combination**

**H Operation Condition**

- **Boom**: 13m~58m
- **Fixed Jib**:
  - 9m~18m

**Length of Boom and Insert**

<table>
<thead>
<tr>
<th>m</th>
<th>3m</th>
<th>6m</th>
<th>9m</th>
</tr>
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<tr>
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<td>58</td>
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</tbody>
</table>
**SCC 800C Crawler Crane**

**H operation condition load chart 1/3**

| Radius (m) | 4.3 | 4.5 | 5   | 5.5 | 6   | 6.5 | 7   | 7.5 | 8   | 8.5 | 9   | 9.5 | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 28  | 30  |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Boom (m) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 16       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 19       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 22       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 25       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 28       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 31       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 34       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

**Unit:** (t)

Note: The 40% orange part in the table indicate the rated loads with additional counterweight, the values in the 20% orange part with frame depend on the boom strength.
### SCC 800C Crawler Crane

#### Operation Condition Load Charts 2/3

<table>
<thead>
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<th>Radius (m)</th>
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<th>40</th>
<th>43</th>
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<td>2.53</td>
<td>2.90</td>
<td>2.30</td>
</tr>
<tr>
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<td>2.69</td>
<td>2.14</td>
<td>2.49</td>
<td>1.94</td>
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</table>

**Counterweight:** 26.7, 26.7+2.2, 26.7, 26.7+2.2, 26.7, 26.7+2.2, 26.7, 26.7+2.2, 26.7, 26.7+2.2

*Note: The 40% orange part in the table indicate the rated loads with additional counterweight, the values in the 20% orange part with frame depend on the boom strength.*

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### SCC 800C Crawler Crane

#### Operation Condition Load Charts 3/3

<table>
<thead>
<tr>
<th>Radius (m)</th>
<th>52</th>
<th>55</th>
<th>58</th>
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<tbody>
<tr>
<td>8.5</td>
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<td>16.13</td>
<td>17.02</td>
<td>15.94</td>
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<td>6.43</td>
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<tr>
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<td>5.50</td>
<td>4.73</td>
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<tr>
<td>28</td>
<td>4.17</td>
<td>4.70</td>
<td>3.97</td>
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<td>3.52</td>
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<td>2.95</td>
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<td>2.75</td>
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<tr>
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<td>2.46</td>
<td>2.98</td>
<td>2.25</td>
</tr>
<tr>
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<td>2.02</td>
<td>2.42</td>
<td>1.81</td>
</tr>
<tr>
<td>38</td>
<td>1.63</td>
<td>2.01</td>
<td>1.42</td>
</tr>
</tbody>
</table>

**Counterweight:** 26.7, 26.7+2.2, 26.7, 26.7+2.2, 26.7, 26.7+2.2, 26.7, 26.7+2.2

*Note: The 40% orange part in the table indicate the rated loads with additional counterweight, the values in the 20% orange part with frame depend on the boom strength.*
H OPERATION CONDITION LOAD CHARTS

Note ——— Rated load of crane
1. 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 not travel.
2. The rated load indicated in the table is the value computed by taking 75% of the tipover load.
3. Rated load includes the weight of lifting hook, etc. The actual lifting capacity is the value obtained by deducting the weight of hoisting tools (e.g. lifting hook) (the weight of 80t lifting hook is 1.35t, that of 50t lifting hook 0.97t, that of 25t lifting hook 0.55t, and that of 9t hook block 0.35t from the rated load in the table.
4. Upon assembly of jib or boom extension the rated load includes the weight of main and auxiliary lifting hooks and values listed in the table below. The actual lifting capacity of crane is the value in the load chart of boom minus the weights listed in the table below and equivalent weights of main hook, auxiliary hook, wire rope, hoisting tools, etc., converted into the boom head.
5. The boom to which a jib can be mounted is 37m~52m long.

6. When the crane is hoisting load, the crawler frame must be in the state of extension.
7. The relationship between the multiplying Factor of wire rope and max. rated load as well as weight of hook is shown as below.

<table>
<thead>
<tr>
<th>Jib length (m)</th>
<th>Insert</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>4.5m</td>
</tr>
<tr>
<td>13.5</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
</tr>
</tbody>
</table>

8. All values in the load chart are suitable for 360° swing.
9. When additional counterweight (26.7t+2.2t) is used, it is an optional operating condition, rather than a standard operating condition. The boom allowing to use additional counterweight is 31m~58m long.
FIXED JIB RANGE DIAGRAM

49m boom + 18m jib (jib angle 15°)
49m boom + 18m jib (jib angle 30°)
52m boom + 13.5m jib (jib angle 15°)
52m boom + 13.5m jib (jib angle 20°)
49m boom + 13.5m jib (jib angle 15°)
52m boom + 9m jib (jib angle 15°)
49m boom + 9m jib (jib angle 30°)
52m boom + 9m jib (jib angle 30°)

60°
61°
62°
63°
64°
65°
66°
67°
68°
69°
70°
71°
72°
73°
74°
75°
76°
77°
78°

Working Radius (m)

Lifting height (m)

30° 40° 50° 60° 70°

Note: The 40% orange part in the table indicate the rated loads with additional counterweight, the values in the 20% orange part with frame depend on the boom strength.
### SCC 800C Crawler Crane

#### Load Chart of Fixed Jib 2/3

<table>
<thead>
<tr>
<th>Boom length (m)</th>
<th>Jib angle</th>
<th>5m</th>
<th>15m</th>
<th>30m</th>
<th>60m</th>
<th>90m</th>
</tr>
</thead>
<tbody>
<tr>
<td>58°</td>
<td>5°</td>
<td>3.59</td>
<td>3.93</td>
<td>3.40</td>
<td>3.73</td>
<td>3.65</td>
</tr>
<tr>
<td></td>
<td>10°</td>
<td>4.00</td>
<td>4.36</td>
<td>3.77</td>
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</tr>
<tr>
<td></td>
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<td>4.86</td>
<td>4.19</td>
<td>4.55</td>
<td>3.82</td>
</tr>
<tr>
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<td>20°</td>
<td>5.01</td>
<td>5.41</td>
<td>4.64</td>
<td>4.99</td>
<td>4.29</td>
</tr>
<tr>
<td></td>
<td>25°</td>
<td>5.31</td>
<td>5.72</td>
<td>4.94</td>
<td>5.28</td>
<td>4.55</td>
</tr>
<tr>
<td></td>
<td>30°</td>
<td>5.65</td>
<td>6.05</td>
<td>5.28</td>
<td>5.61</td>
<td>4.84</td>
</tr>
<tr>
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<td>6.00</td>
<td>6.40</td>
<td>5.63</td>
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<td>5.14</td>
</tr>
<tr>
<td></td>
<td>40°</td>
<td>6.45</td>
<td>6.85</td>
<td>6.08</td>
<td>6.41</td>
<td>5.63</td>
</tr>
</tbody>
</table>

#### FIXED JIB LOAD CHARTS

**SCC 800C Crawler Crane**

**Load Chart of Fixed Jib 2/3**

<table>
<thead>
<tr>
<th>Boom length (m)</th>
<th>Jib angle</th>
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<td>6.85</td>
<td>6.08</td>
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<td>5.63</td>
</tr>
</tbody>
</table>

**Counterweight (t):**

- 26.7: 26.7 to 26.7
- 26.7: 26.7 to 26.7
- 26.7: 26.7 to 26.7
- 26.7: 26.7 to 26.7
- 26.7: 26.7 to 26.7
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**Note:** The 40% orange part in the table indicate the rated loads with additional counterweight, the values in the 20% orange part with frame depend on the boom strength.