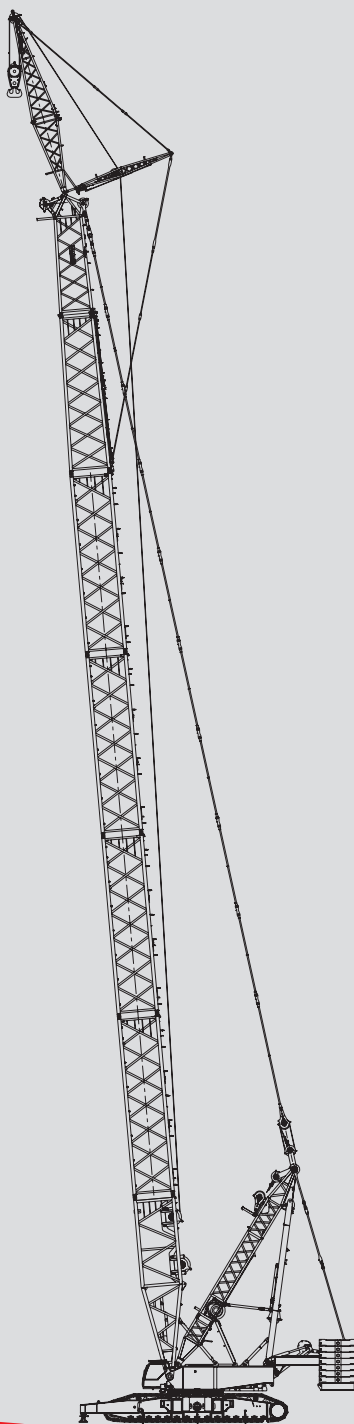


# Crawler Crane Series

## SCC6500WE



**SANY**

# A

## **SCC6500WE (Rexroth) Crawler Crane** **03**

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# B

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SCC6500WE

# A

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04 Dimensions

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05 Main Technical Features

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06 Table of Main Performance Data

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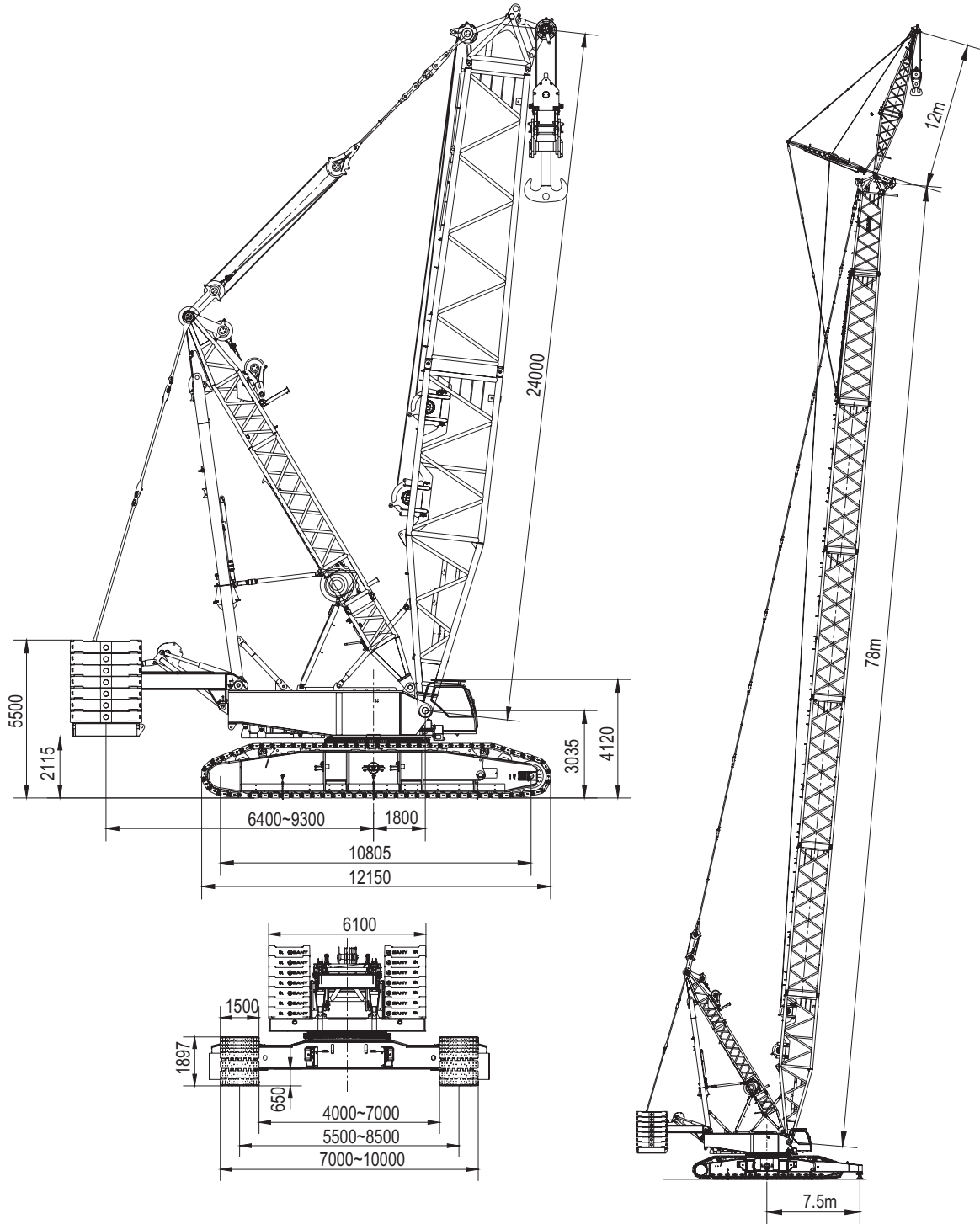
07 Transport Dimensions

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14 Assembly Diagram of left and right crawlers

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# Dimensions



A

## Main Technical Features

### 1. Original mobile rear counterweight and its control technology:

Improve lifting performance and counterweight availability, and reduce maximum ground pressure.

### 2. Advanced control of gravity center of the whole machine:

Monitor the gravity center of the whole machine in real time, and provide safety guarantee for the chassis track transfer, whole arm support traveling under operating condition, and rear counterweight movement.

### 3. Track-transferable crawler chassis:

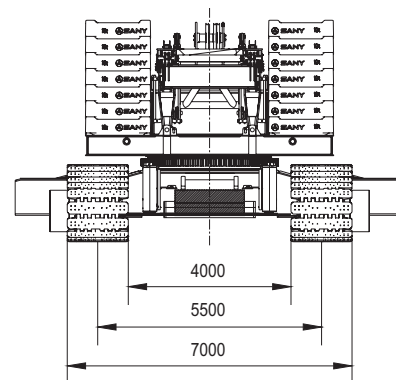
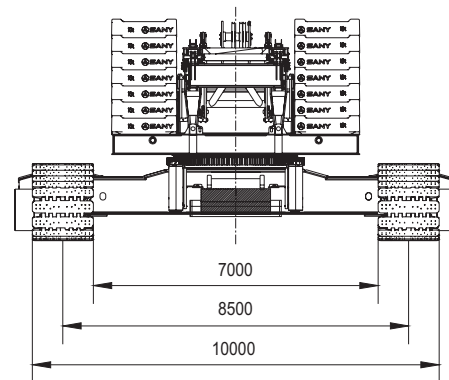
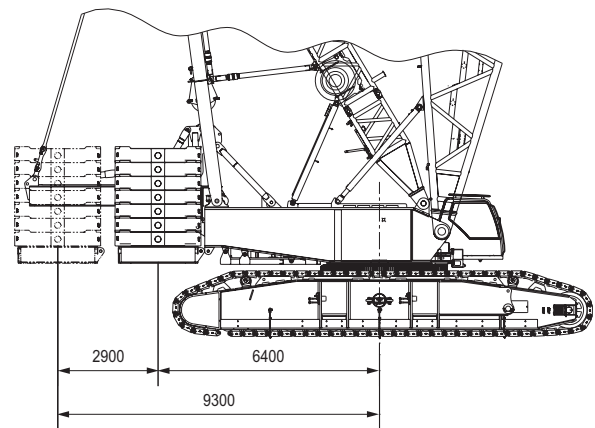
Improve the crane's trafficability, reduce the road construction cost, and improve the construction efficiency.

### 4. Original positive lifting outrigger design:

Solve the problems related to raising of long arm support.

### 5. Operating condition of fixed jib:

Customized operating condition combination for 3.0MW fans provides a high operation height and big loading capacity.





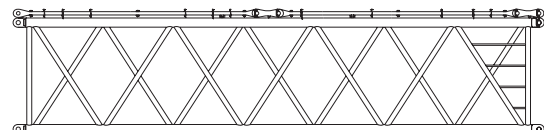
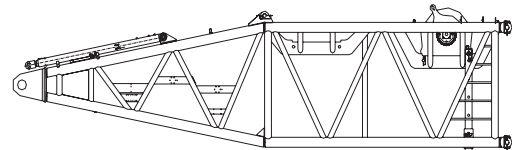
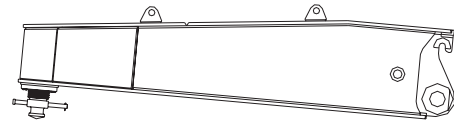
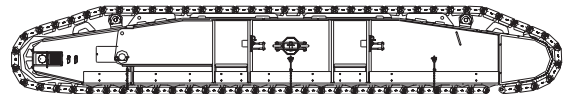
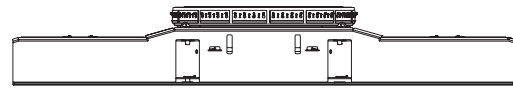
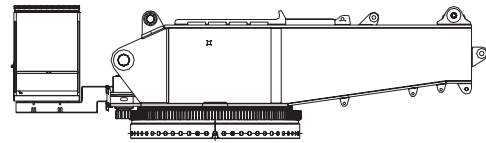
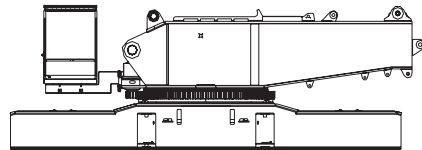
## Table of Main Performance Data

### SCC6500WE Technical Parameters

Technical indexZHUAN	Unit	Value
Max. rated lifting capacity	t	650 (6m working radius)
Max. rated lifting moment	t•m	595×7=4165
Length of heavy-duty boom	m	24~84
Length of light-duty boom	m	78~108
Boom + luffing jib	m	(30~66) + (24~66)
Length of fixed short jib	m	(78~102) +12
Boom angle	°	30~85
luffing angle	°	20~70
Maximum single rope speed of main winch (outermost working layer)	m/min	105
Maximum single rope speed of auxiliary winch (outermost working layer)	m/min	105
Maximum single rope speed of main luffing (outermost working layer)	m/min	48×2
Maximum single rope speed of auxiliary luffing (outermost working layer)	m/min	105
Swing speed (no load)	r/min	0~0.88
Travel Speed	km/h	0~0.4 (low speed) , 0~0.85 (high speed)
Gradeability (with basic boom, and driver's cab facing backward)	%	15
Rated engine output power	kW/r/min	330/2000
Total crane weight (basic boom, 140t mobile rear counterweight, and 40t central counterweight, with 650t hook)	t	480
Average ground pressure (basic boom, 155t basic machine counterweight, and 40t central counterweight, with 650t hook)	MPa	0.17 (basic arm, 650t lifting hook)
Rear counterweight of basic machine	t	180
Central counterweight	t	40
Maximum transport dimension of single piece (length X width X height)	mm	10200×3380×3440 (basic machine not separated)

## Main Technical Features

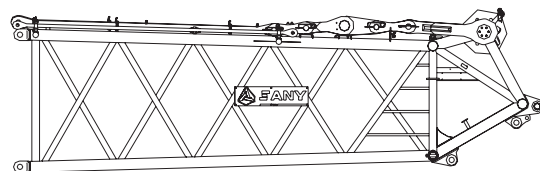
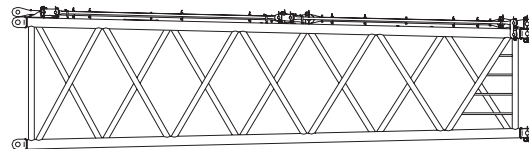
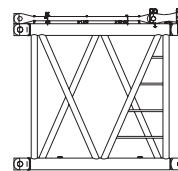
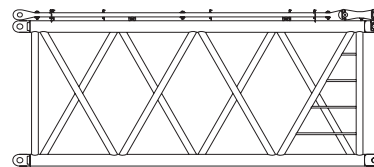
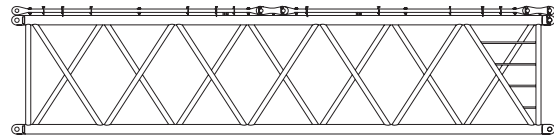
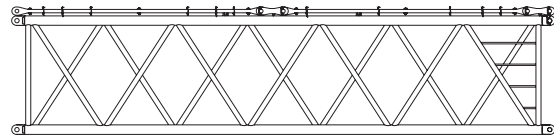
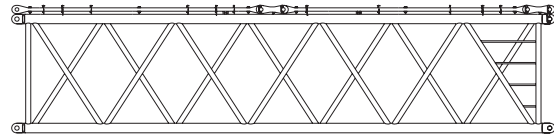
<b>Crane body</b>	<b>×1</b>
Length	10.2m
Width	3.38m
Height	3.44m
Weight	68t
<b>Upperworks</b>	<b>×1</b>
Length	9.50m
Width	3.00m
Height	2.70m
Weight	40t
<b>Lowerworks</b>	<b>×1</b>
Length	9.60m
Width	3.40m
Height	1.50m
Weight	35.6t
<b>Crawler assembly (31t welded body + 24.5t crawler shoe)</b>	<b>×2</b>
Length	12.20m
Width	2.30m
Height	1.9m
Weight	5.5t
<b>Lifting outrigger</b>	<b>×2</b>
Length	4.2m
Width	2.17m
Height	1.1 m
Weight	4.3t
<b>Boom base (including the main hoisting device I)</b>	<b>×1</b>
Length	12.4m
Width	3.09m
Height	3.3m
Weight	20t
<b>12mA boom insert</b>	<b>×2</b>
Length	12.24m
Width	3.09m
Height	2.95m
Weight	8.03t





## Transport Dimensions

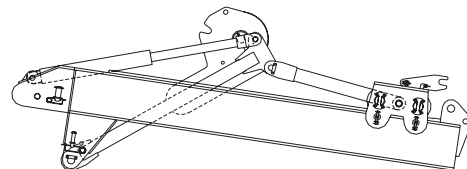
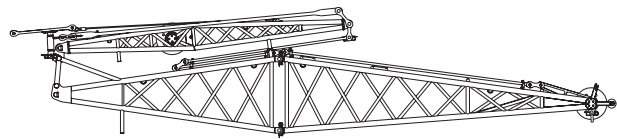
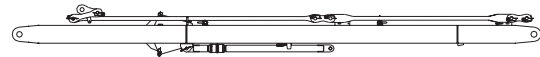
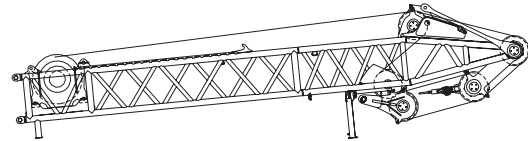
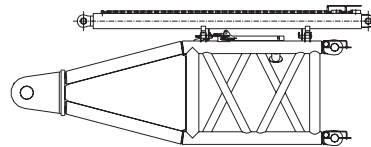
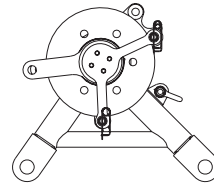
<b>12mB boom insert</b>	<b>x2</b>
Length	12.24m
Width	3.09m
Height	2.95m
Weight	7.45t
<b>12mC boom insert</b>	<b>x1</b>
Length	12.24m
Width	3.09m
Height	2.95m
Weight	6.76t
<b>12mD boom insert</b>	<b>x1</b>
Length	9.60m
Width	3.40m
Height	1.50m
Weight	6.07t
<b>6mA boom insert</b>	<b>x1</b>
Length	6.24m
Width	3.09m
Height	2.95m
Weight	4.46t
<b>3mA boom insert</b>	<b>x1</b>
Length	3.24m
Width	3.09m
Height	2.95m
Weight	2.66t
<b>Boom transitional section (including fixed jib pull rod)</b>	<b>x1</b>
Length	10.72m
Width	2.98m
Height	2.94m
Weight	5.8t
<b>Boom tip</b>	<b>x1</b>
Length	8.34m
Width	2.92m
Height	2.54m
Weight	5.8t





## Transport Dimensions

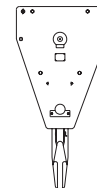
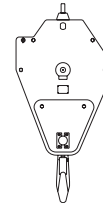
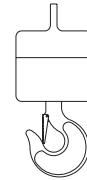
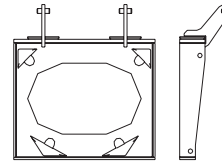
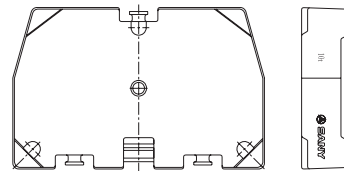
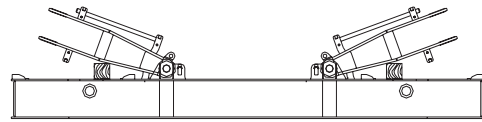
<b>Pulley block</b>	<b>×1</b>
Length	1.36m
Width	1.39m
Height	1.16m
Weight	1.6t
<b>Mast base</b>	<b>×1</b>
Length	4.02m
Width	2.64m
Height	1.55m
Weight	2.8t
<b>Mast tip</b>	<b>×1</b>
Length	12.04m
Width	2.44m
Height	3.12m
Weight	17.6t
<b>Strut (including adjusting lever and some pull rods)</b>	<b>×1</b>
Length	11.1m
Width	3.06m
Height	1.05m
Weight	6.65t
<b>Fixed jib (including fixed jib mast)</b>	<b>×1</b>
Length	3.24m
Width	3.09m
Height	2.95m
Weight	2.66t
<b>Mobile rear counterweight guide rail bracket</b>	<b>×1</b>
Length	5.9m
Width	2.69m
Height	2.1m
Weight	8.8t





# Transport Dimensions

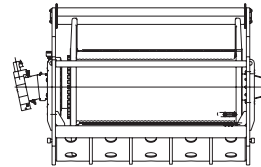
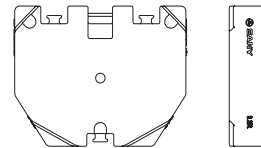
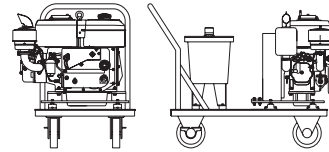
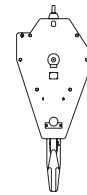
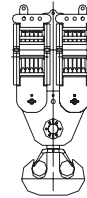
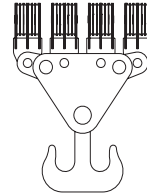
<b>Mobile rear counterweight tray of base machine</b>	<b>X1</b>
Length	6.1m
Width	2.5m
Height	1.42m
Weight	6.38t
<b>10t Counterweight block</b>	<b>X18</b>
Length	2.49m
Width	1.6m
Height	0.455m
Weight	10t
<b>Central counterweight tray</b>	<b>X2</b>
Length	2.41m
Width	2.24m
Height	0.8m
Weight	1.6t
<b>16t hook ball</b>	<b>X1</b>
Length	0.6m
Width	0.6m
Height	1.5m
Weight	1t
<b>50t Lifting hook</b>	<b>X1</b>
Length	0.80m
Width	0.48m
Height	2.1m
Weight	1.55t
<b>110t Lifting hook</b>	<b>X1</b>
Length	0.8m
Width	0.46m
Height	2.1m
Weight	2.3t



A

## Transport Dimensions

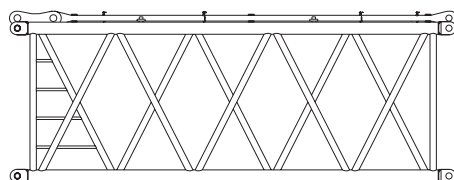
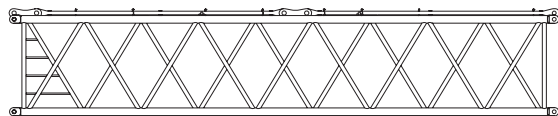
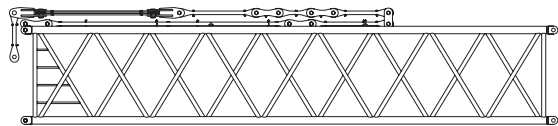
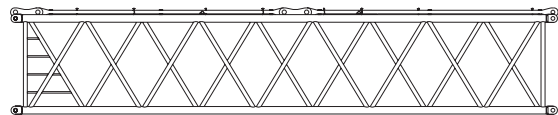
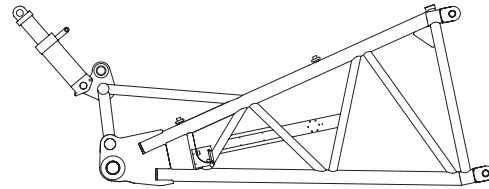
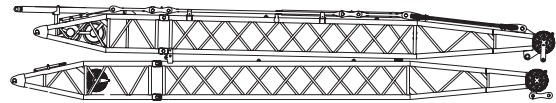
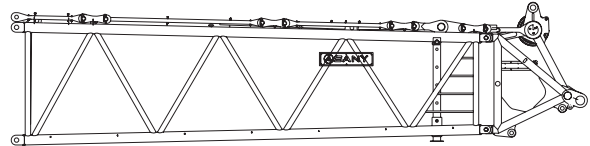
<b>160t Lifting hook</b>	<b>×1</b>
Length	0.65m
Width	0.8m
Height	2.1m
Weight	3.1t
<b>250t Lifting hook</b>	<b>×1</b>
Length	1.53m
Width	1m
Height	3.47m
Weight	8t
<b>650t Lifting hook</b>	<b>×1</b>
Length	3.47m
Width	0.71m
Height	4.0m
Weight	17t
<b>Main hoisting device</b>	<b>×1</b>
Length	2.3m
Width	1.37m
Height	1.4m
Weight	7.75t
<b>Counterweight block</b>	<b>×4</b>
Length	2.12m
Width	1.66m
Height	0.49m
Weight	9.25t
<b>Mobile pumping station</b>	<b>×1</b>
Length	1.36m
Width	0.87m
Height	0.98m
Weight	0.2t





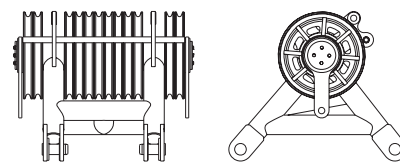
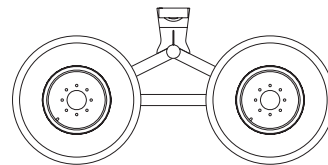
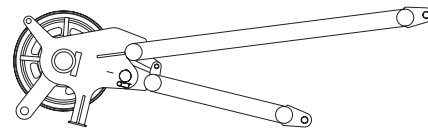
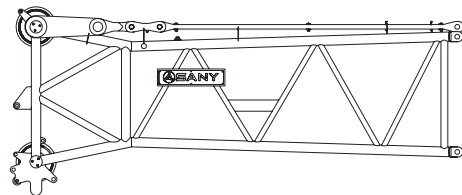
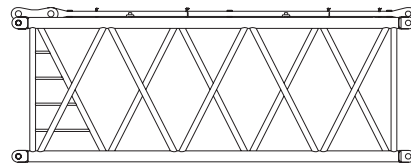
## Transport Dimensions

<b>Boom arm support (10.5m), boom/jib connecting section</b>	<b>X1</b>
Length	12.90m
Width	3.03m
Height	2.97m
Weight	13.5t
<b>Front and rear mast of luffing jib</b>	<b>X18</b>
Length	17.2m
Width	3.04m
Height	2.94m
Weight	15.5t
<b>Jib base</b>	<b>X1</b>
Length	6.0m
Width	2.69m
Height	2.3m
Weight	3.2t
<b>12mA Luffing jib insert</b>	<b>X2</b>
Length	12.2m
Width	2.69m
Height	2.38m
Weight	4.8t
<b>12mA' Luffing jib insert</b>	<b>X1</b>
Length	12.2m
Width	2.69m
Height	2.65m
Weight	6.9t
<b>12mB Luffing jib insert</b>	<b>X1</b>
Length	12.2m
Width	2.35m
Height	2.38m
Weight	4.8t
<b>6mB Luffing jib insert</b>	<b>X1</b>
Length	6.2m
Width	2.69m
Height	2.38m
Weight	2.9t



## Transport Dimensions

<b>6mB Luffing Jib insert</b>	<b>X1</b>
Length	6.2m
Width	2.69m
Height	2.38m
Weight	2.7t
<b>Luffing jib tip</b>	<b>X1</b>
Length	8.06m
Width	2.61m
Height	3.36m
Weight	6.8t
<b>Extension arm</b>	<b>X1</b>
Length	2.98m
Width	1.71m
Height	0.85m
Weight	0.5t
<b>Trolley</b>	<b>X1</b>
Length	3.3m
Width	2.0m
Height	1.61m
Weight	1.9t
<b>Pulley block</b>	<b>X2</b>
Length	1.47m
Width	1.45m
Height	1.22m
Weight	1.8t

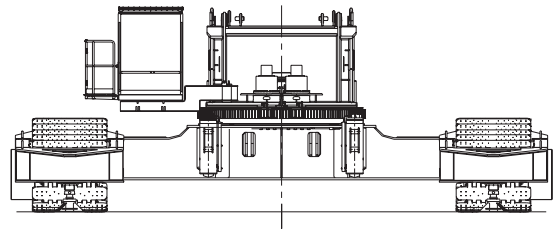
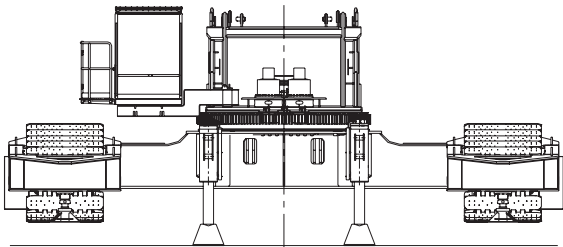
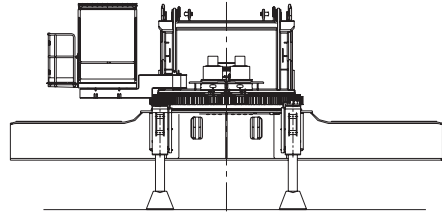
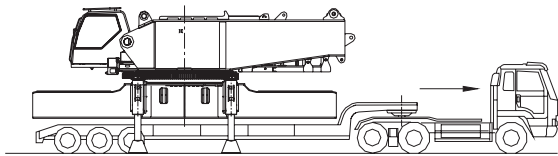
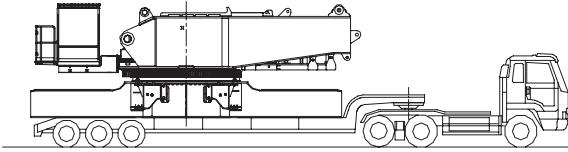


Notes:

(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.

## Assembly Diagram of left and right crawlers



A

# B

---

16 Superworks

---

19 Lowerworks

---

20 Operation Device

---

21 Safety Devices

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23 Table of Main Mechanism Data

---



■ **Engine**

German Duetz TC D2015 diesel engine with rated power 330kw(450HP)/2000rpm and rated torque output 2000N•m/1300rpm, and V06 six-cylinder, water-cooled

One 1000L diesel tank.

■ **Control system**

Advanced SYMC controller, rated capacity limit(RCL) display and CCTV (Closed circuit TV) monitoring system are used. The RCL display( 8.4 " ), CCTV display ( 7 " ), integrated instrument display ( 8 " ), etc. is readily visible to the operator. CAN BUS is used to transfer data among the controllers, displays, operating handles , engine and RCL.

■ **Hydraulic System**

The hydraulic system includes: hoisting system, traveling system, swing system, luffing hydraulic system, servo system, backstop system, cooling system, and auxiliary system, etc. Major hydraulic components are Bosch Rexroth.

Characteristics: The closed circuit is used for hoisting, traveling, swing and luffing; the starting, stopping and reversing are stable with no shock, fast response to operation, little heat generated, and long life.

■ **Main and Auxiliary Hoisting Mechanisms**

The variable displacement hydraulic motor drives the planet gear speed reducer to raise and lower the load.

Powered hoisting/lowering is standard with automatic(spring applied , hydraulic released ) multi-disc brakes , and drum rotation indicators.

The winch speed is infinitely adjustable between

0-105m/min, and the speed value can be decided by the user within the range of 0-105 m/min; It has superior micro-motion control; the fastest gear can realize quick hoisting to improve the operation efficiency; One winch can hoist within 325t load and two winches can hoist over 325t load; one synchronous device to control the two winch. the full lines is 48; Famous brand wire rope is used, control on rope cross-over ensures smooth multi-layer winding of ropes , and the reducer is built-in to save space , thus boasting low noise, high efficiency, long life, and convenient to change the oil.

**5) Swing mechanism**

Swing is driven by double motors with large

**Main load hoist data**

Reel diameter	630mm
Maximum line speed	105m/min
Wire rope diameter	28mm
Wire rope length of main winch	1,180m
Rated single rope pull	16.4t

**Auxiliary load hoist data**

Reel diameter	630mm
Rope speed of the outermost working layer	0~105m/min
Wire rope diameter	28mm
Wire rope length of aux. hoisting	350m
Rated single rope pull	16.4t



placement and planetary gear reducer. Automatic load centering and 360° rotation. The maximum swing speed is 0.88rev/min,.

Handle in neutral position with zero speed engage the brake and lock swing; also available through rockor switch.

A swing brake release pedal allows the crane to swing when centering over the load. The rotating bed is mounted on a triple-row roller bearing turntable.

■ **Swing ring:**

Triple-row roller swing ring

■ **Superworks/lowerworks separation device:**

The crane body can be able to transport just base on the road transportation standard. And it's easy to assemble the superworks and lowerworks in case of the road transportation standard can not be fit.

■ **Luffing mechanism**

Boom hoist and jib luffing with control on Cross-over. Built-in reducer, closed circuit, switch-over valve for power supply for compound actions; infinite adjustable control to ensure Sound micro-motion. and Famous brand wire rope is used. Auxiliary luffing device: second function of main hoisting device II

**Table 3 Main Luffing Mechanism**

Reel diameter	630mm
Rope speed of the outermost working layer	(0~48)×2m/min
Wire rope diameter	28mm
Wire rope length of main hoisting	360x2m
Rated single rope tension	16.4t

■ **Counterweight System**

Central counterweight: 43.2t  
 Counterweight block 4x10t  
 Trays and accessories: 2x1.6t  
 Mobile rear counterweight: 185.1t  
 Counterweight block 18x10t  
 Trays and accessories 5.1t

■ **Ultra Cab**

All-enclosed steel frame structure; reinforced glass is installed at the front and back; GE structural plates are installed on the top, providing good light transmission, high strength and high abrasion resistance, and low indoor noise (below 85dB). Inside the cab are installed the control device, detection instruments, fire extinguisher and alarm device, and CCTV monitoring system, etc. One 24V USB port. Ergonomic design. Broad view with maximum elevation of 25°.

### ■ Control Operation

The display of load moment limiter, CCTV monitor, monitoring display and combined instruments are within the direct field of vision of operators; the load moment limiter display mainly monitors the moments of crane and other parameters; the combined instrument display mainly indicates the operating conditions of crane, and control parameters and alarm of various monitoring points; the left and right armrest boxes have one operating handle each, and the handle action switching displays the operating function via the combined instrument display; independent actions and allowed composite actions are displayed in the form of text and graph.

### ■ Alarm display:

All alarm information, including wind speed, water temperature, oil temperature, oil quantity, oil pressure, operating time, engine speed, etc., will be indicated on the screen within the driver's cab.



## Lowerworks

For the crawler-retractable lowerworks, when the crane work, the crawler frame extends to the outermost side, to ensure the stability of the whole crane; when the crane travels, the crawler frame is retracted to the innermost side, with the outermost side not over 7.0m, thus creating desirable trafficability.

### ■ Traveling Drive

The traveling system has two gearshifts, at each of which speed change can be realized in a stepless way (high speed: 0~0.85km/h, low speed: 0~0.4km/h); and it ensures the operation stability of equipment. It provides a strong traction force, capable of realizing 70% steering traveling under load; each travel reducer is independently driven, and may thus flexibly perform forward, back or in-situ steering.

### ■ Travel brake:

The travel brake is normally engaged in the reducer (namely, it is in the braking state when the travel handle is not operated). It can compensate automatically without requiring adjustment. When the travel handle is operated, the brake will be released automatically to realize traveling

### 3) Crawler Shoe

The crawler units at the left and right have 138 crawler shoes totally, of 1,500mm wide, the crawler can reach an ideal tension by adjusting the hydraulic cylinder and the quantity of shims.

#### ■ Base

The base is H-type guide rail beam frame structure welded with high-strength steel plates. It is jointed with the crawler frame in the form of extension arm, and the hydraulic power cylinder is used to control the extension of crawler. This function is controlled with a remote wired manipulator in a safe, convenient and reliable way.

#### ■ Lubrication System

The track roller and tension pulley of the lowerworks are equipped with autocontrol centralized lubrication system, thus reducing maintenance load and ensuring reliable lubrication of moveable parts. All tubes of the operation device are high-strength steel tubes, and the plates are high-strength steel plates. The luffing bearing is also made of high-strength steel tubes. Pulley materials: the pulleys on arm lever all use the rolling welded pulleys, and all lifting hooks use rolling welded pulleys;



## Operation Device

### ■ Boom

The arm support is the truss structure with uniform section in the middle and variable sections at both ends. It is welded with steel tubes, and the top and root segment of arm support are reinforced with steel plates, which is more favorable to transmit loads.

24m basic boom and 84m maximum length common boom; 108m the maximum length light-duty boom, and that of boom under tower operating condition is 66m.

Composition: boom base 12m, boom insert 12m×6, boom insert 6m×1, boom insert 3m×1, boom reducing section 10.5m, and boom tip 7.5m.

### ■ Fixed short jib

The arm support is the spatial truss structure with variable sections, larger in the middle and smaller at both ends. It is welded with steel tubes, and the end and root of arm support are reinforced with high-strength steel plates, which is more favorable to transmit loads.

Length of fixed jib is 12m.

Composition: fixed jib tip, fixed jib base, and fixed jib mast.

### ■ Luffing Jib condition 24m~84m

The arm support is the spatial truss structure with variable sections, larger in the middle and smaller at both ends. It is welded with steel tubes, and the end and root of arm support are reinforced with high-strength steel plates, which is more favorable to transmit loads.

The length of boom ranges between the basic boom (24m) and the maximum length (66m).

Composition: luffing jib tip, luffing jib tip, luffing jib insert, luffing jib mast, jib basic arm 24m, jib insert 12m×3, and jib insert 6m×2.

### ■ Mast assembly

The mast is the spatial truss structure with uniform section in the middle and variable sections at both ends. It is welded with steel tubes, and the top and root segment of arm support are reinforced with steel plates, which is more favorable to transmit loads.

Composition: mast root knot, and mast top knot.

The strut is an integral door-shaped structure welded with high-strength steel plate, extending 11.3m long, and the middle part has a beam for reinforcement. The structural strength is high with good rigidity.

### ■ Hook

Standard configuration:

16t hook ball

110t hool hook

160t hool hook

250t hool hook

650t hool hook (which can be disassembled into the 325t lifting hooks)

### ■ Operating condition

H: Boom operating

HL. Operating condition of light-duty boom 78m~108m

FJ: Operating conditions of light-duty boom + fixed jib 78m~102m+12m

LJ: Operating conditions of boom + luffing jib 30m~66m+24m~66m



## Safety Devices

### ■ Rated capacity limited(RCL)

Famous brand RCL is used, and it forms a network with other controllers via CAN bus to realize safe and reliable control. The RCL may automatically detect the weight hoisted by the crane and the angle of boom, and displays the rated loading capacity and actual load, working radius and the height of lifting hook.

Composition: large-screen color display, host, angle sensor, load detector, and boom back-stop pressure sensor.

### ■ Crane Center of Gravity Real-time Monitoring

System: Calculate the crane's center of gravity in real time via the hoisting value, mobile rear counterweight sensor, and arm support status, and display it on the screen. This greatly improves the safety of crane operation

### ■ Over Roll-out Limit Device for Main and Auxiliary Hooks

The limit switch is used for preventing the hooks from being over-lifted; when the lifting hook is lifted to a certain height, the limit switch will get actuated, with a buzzer on the console sending an alarm; meanwhile the lifting action of the hook is forced to stop automatically stop and may only drop to avoid the over roll-out of hook.

### ■ Over-hoist Limit Device for Main and Auxiliary Hooks

It is composed of action-triggering device and proximity switch installed in the reel. When the wire rope is rolled out near the last three circles, a signal is given out, and the electric control system will automatically shut off the dropping action of hook

and give an alarm via the buzzer and display.

### ■ Assembling/Working Mode Switch

Under the assembling mode, the over roll-out limit device, boom limit device and load moment limiter system do not function to facilitate installation of crane.

Under the operating mode, all these safety devices are functioning

### ■ Boom limit device:

When the boom angle is over 85°, the corresponding limit switch gets actuated to make the buzzer give an alarm. At the same time, the boom will stop automatically. The raising operation of luffing reel does not function. But the lowering operation can be realized. When the lowering angle of boom is less than 30°, the manipulation will be limited. The protection function is automatically controlled by load moment limiter system.

### ■ Boom Back-stop Device:

The boom and mast have a pair of back-stop cylinders respectively, the high pressure of back-stop cylinder needs to be conquered when the arm support tilts backward, and the hydraulic system automatically compensates the high pressure oil and strains the pull rod of arm support when the arm support sets out forward to prevent the vibration and back-tilting of arm support in operation.

### ■ Winch Brake:

All winch brakes are spring-loaded normally engaged disk brakes, which is robust, reliable, free of maintenance, and durable.

■ **CCTV Monitoring System**

The operator can keep track of the conditions of all winches and surroundings within the cab.

■ **Fault Self-diagnosis System**

It can eliminate the fault conveniently according to the fault codes.

■ **Data Recorder**

It records all the operation and equipment running data in case of future accidents.

■ **Aircraft warning lights**

It is installed on the top of arm support.

■ **Anemometer**

It is installed on the top of arm support to have real-time monitoring over the wind velocity and send data to the driver's cab to display on the monitor there.

■ **Electronic Gradiometer**

The electronic gradiometer displays the inclining angle of crane on the monitor and guarantees the safe operation of crane

■ **Lightning protection devices**

Such devices include the grounding device and surge protection device, which can effectively prevent the damage to devices of electric system and working staff in case of lightning stroke

## Table of Main Mechanism Data

Hoisting Performance Parameters			
Name	Rated single rope tension	Rope speed	
Main hoist I	16.4t	105 m/min	
Main hoist II (auxiliary luffing)	16.4t	105 m/min	
Auxiliary hoist	16.4t	105 m/min	
Boom luffing	16.4t	(0~48)×2m/min	

Note: the speed of wire rope refers to the rope speed at the outermost layer

### Performance Parameters of Wire Rope

Purpose	Model & specification of wire rope	Wire rope diameter (mm)	Length of wire rope (m)
Main hoist I	Non-rotary concurrent twist	28	1180
Main hoist II (auxiliary luffing)	Non-rotary concurrent twist	28	1180
Auxiliary hoist	Non-rotary concurrent twist	28	350
Boom luffing	Rotary alternating twist	28	360×2

Note: the speed of wire rope refers to the rope speed at the outermost layer

### Counterweight Parameters

Name	Q'ty	Length (m)	Width (m)	Height (m)	Weight of single piece (t)
Main hoist I	2	2.41	2.24	0.8	1600
Main hoist II (auxiliary luffing)	4	2.49	1.6	0.455	10000
Auxiliary hoist	1	6.1	2.5	0.76	5120
Boom luffing	18	2.49	1.6	0.455	10000

### Hook Parameters

Hook name	Max. hoisting capacity	Q'ty	Number of pulleys	Multiplying factor	Weight of single piece (kg)
650t lifting hook	650t	1	2×13	2×24	17
250t lifting hook	250t	1	2×5	2×10	8
160t lifting hook	160t	1	5	11	3.1
110t lifting hook	110t	1	3	7	2.3
50t lifting hook	50t	1	1	3	1.55
16t Lifting hook	16t	1	None	1	0.98

Note: the 650t lifting hook can be disassembled into the 325t lifting hooks

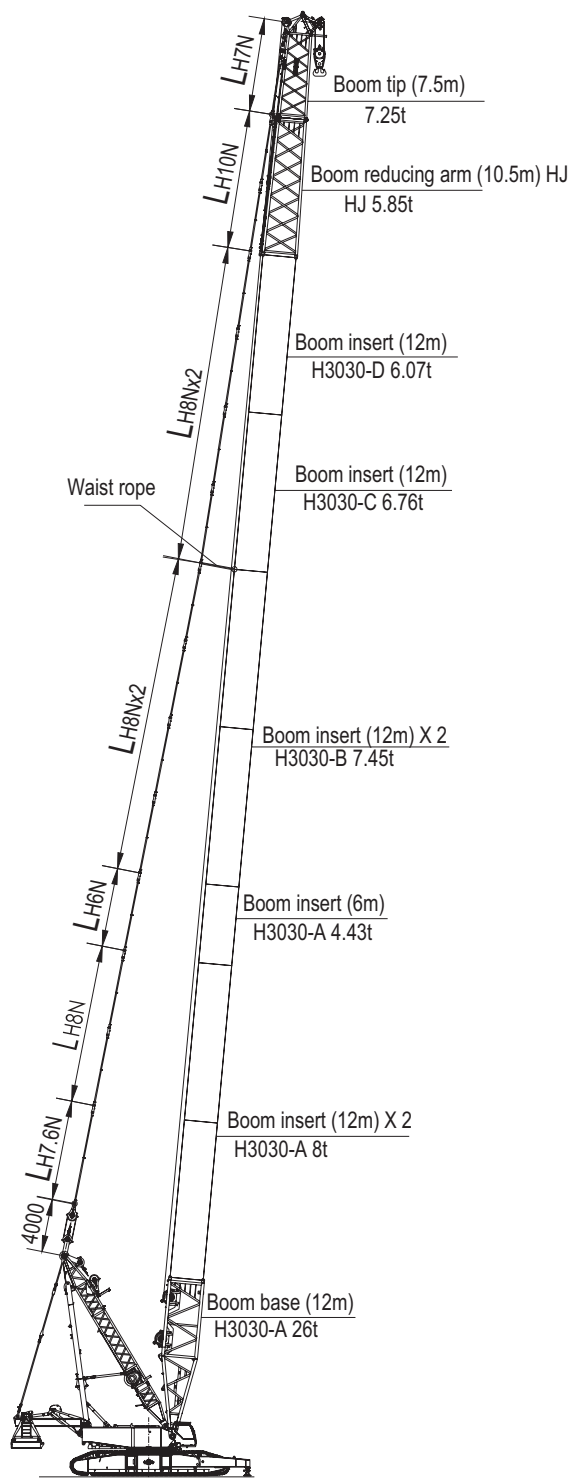
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25	HL Operating Condition Combination
26	Operating Range Diagram of HL Operating Condition
27	Load Charts of HL Operating Condition
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30	Load Charts of FJ Operating Condition of SCC6500WE (Rexroth) Crawler Crane
31	Load Charts of FJ Operating Condition





# HL Operating Condition Combination

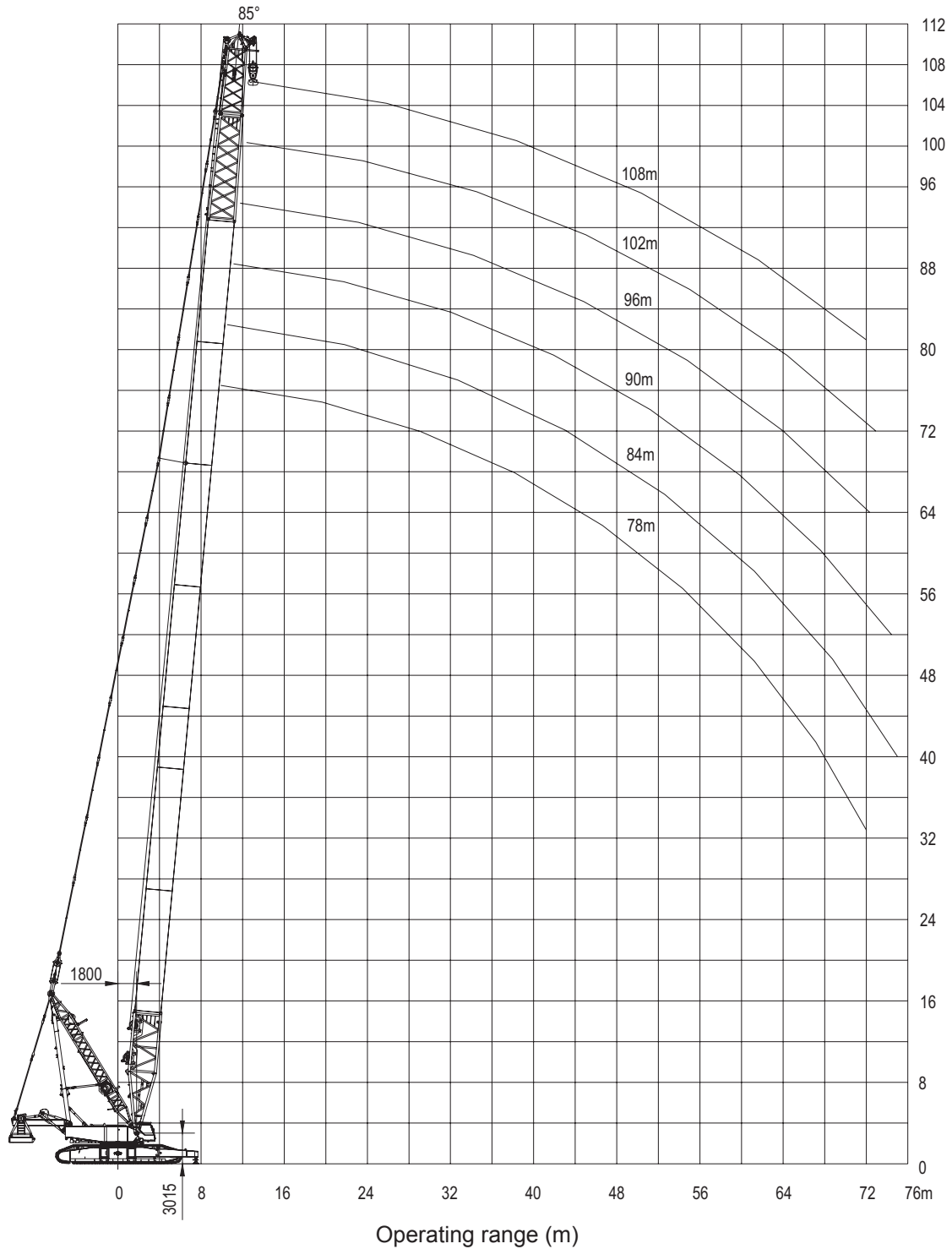


HL operating condition combination (108)





## Operating Range Diagram of HL Operating Condition





## Load Charts of HL Operating Condition

Load Charts of HL Operating Condition of SCC6500WE (Rexroth) Crawler Crane

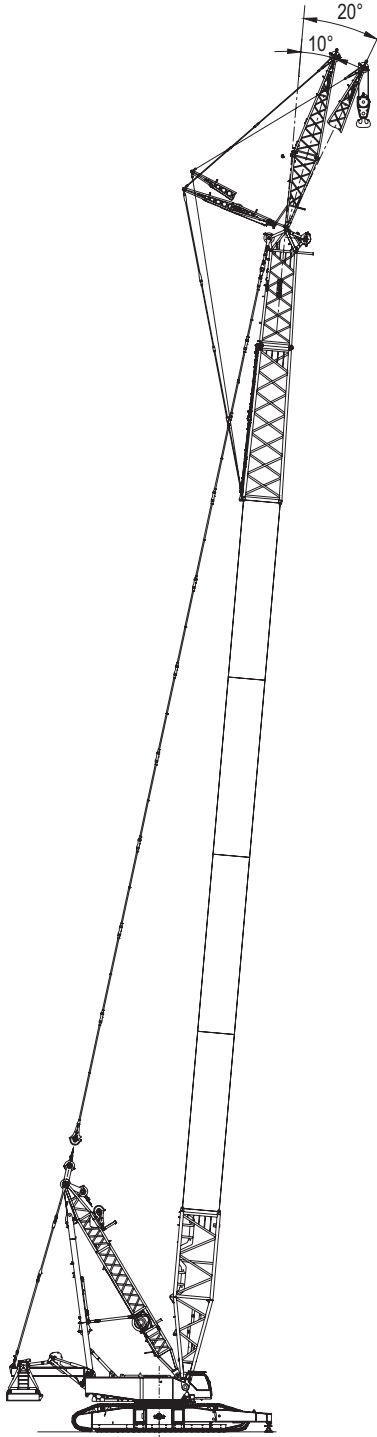
Unit: (t)

Radius (m)	78	84	90	Length of boom (m)	96	102	108
10	230	—	—	—	—	—	—
11	225	220	—	—	—	—	—
12	220	212	204	—	162	—	—
13	205	196	188	—	161	148	132
14	188	180	172	—	160	147	132
15	174	168	159.5	—	151.0	143	131
16	160	156	148.0	—	143.0	138	131
18	140.0	135.0	130.0	—	126.0	121.0	116.0
20	124.0	119.0	115.0	—	111.0	107.0	103.0
22	111.0	107.0	103.0	—	100.0	96.0	92.0
24	98.5	96.5	92.5	—	90.0	86.5	83.0
26	87.0	85.5	84.0	—	81.5	78.0	74.5
28	77.5	76.0	75.0	—	74.0	71.0	67.5
30	69.5	68.0	67.0	—	66.5	64.5	61.5
34	57.0	55.5	54.5	—	53.5	52.5	51.0
38	47.5	46.2	44.9	—	44.3	43.1	41.4
42	40.0	38.7	37.2	—	36.5	35.1	33.3
46	33.9	32.3	30.8	—	30.1	28.7	26.9
50	28.7	27.1	25.6	—	24.8	23.4	21.6
54	24.4	22.8	21.2	—	20.5	19.0	17.2
58	20.8	19.2	17.6	—	16.8	15.3	13.5
62	17.8	16.1	14.5	—	13.6	12.1	10.3
66	15.2	13.5	11.8	—	10.9	9.4	7.5
70	13.0	11.2	9.5	—	8.6	7.0	5.1
72	—	10.2	8.5	—	7.5	6.0	4.1
74	—	9.3	7.5	—	6.5	5.0	—
75	—	8.9	7.0	—	6.0	4.5	—

Notes: 1. The actual lifting capacity must be obtained by deducting the weight of lifting hook, hoisting tools, and wire rope wound around the lifting hook and arm head from the rated lifting capacity in the table

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 not travel.

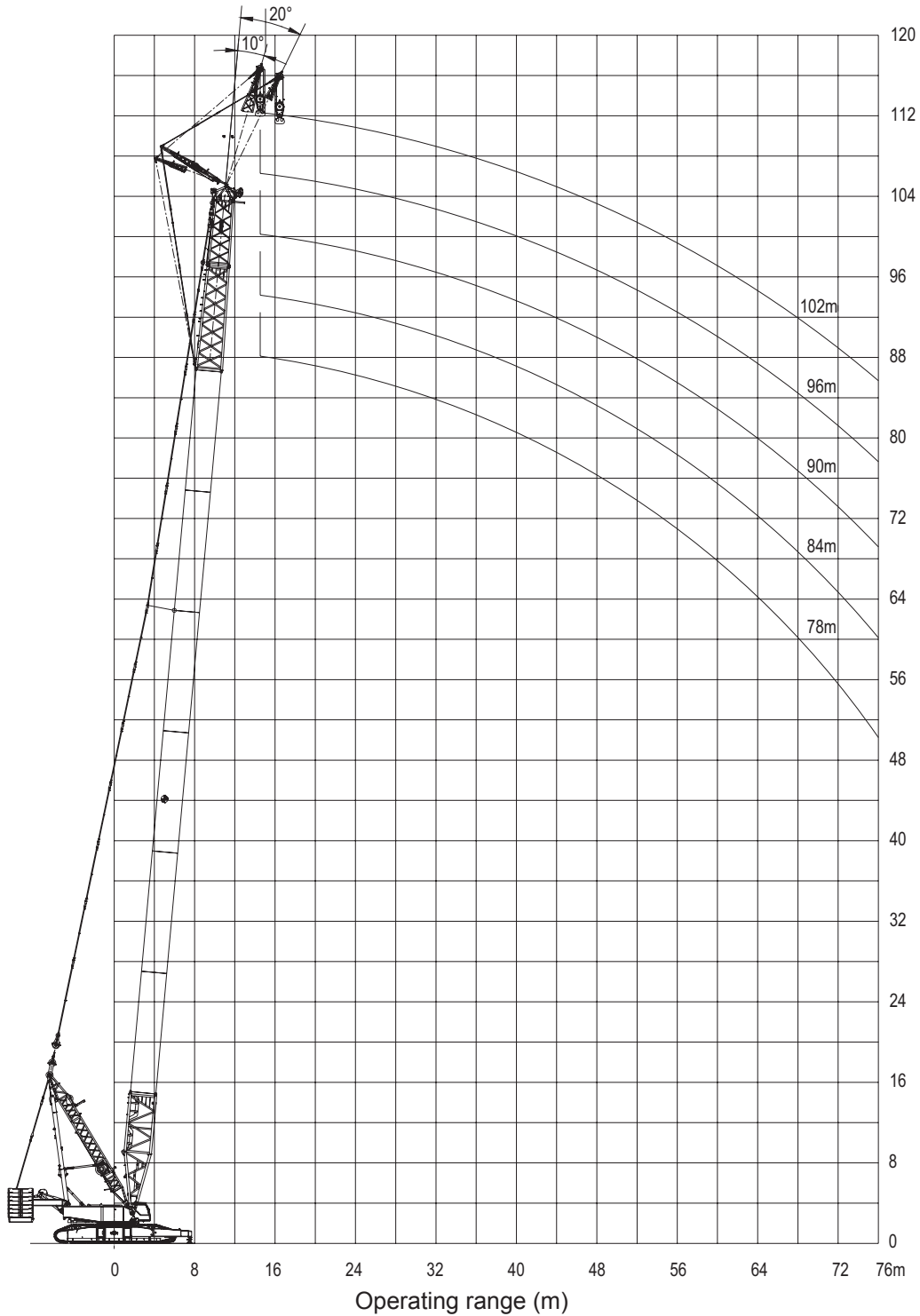
## FJ Operating Condition Combination Condition



FJ Operating Condition Combination (78+12m)



# FJ Operating Condition Combination Condition





## Load Charts of FJ Operating Condition of SCC6500WE (Rexroth) Crawler Crane

12m fixed jib (included angle between boom and jib 10°)

Radius (m)	Length of boom (m)				
	78	84	90	96	102
14	130	130	130	—	—
15	130	130	128	118	111
16	128	127	126	116	111
17	125.0	125	125	114.5	111
18	125.0	125	125	113	110
20	119.0	115	111	108	105
22	107	103	100	97	94
24	97	94	90	88	84
26	88.0	85	82	79.5	76
28	79.5	77.5	74.5	72	69
30	71.5	70.5	68	66	63
34	58.5	57.5	56.5	55.5	53
38	49.1	47.9	46.7	45.8	44.5
42	41.4	40.2	38.9	37.9	36.3
46	35.3	33.9	32.3	31.3	29.7
50	29.9	28.5	26.9	25.8	24.2
54	25.4	24	22.3	21.3	19.7
58	21.7	20.2	18.5	17.5	15.8
62	18.4	16.9	15.2	14.2	12.5
66	15.6	14.1	12.4	11.3	9.7
70	13.2	11.7	10	8.9	7.2
73	11.6	10	8.3	7.2	5.5
74	11.1	9.5	7.8	6.7	5
77	9.6	8	6.3	5.2	3.5
78	—	5.3	3.5	—	—

Notes: 1. The actual lifting capacity must be obtained by deducting the weight of lifting hook, hoisting tools, and wire rope wound around the lifting hook and arm head from the rated lifting capacity in the table

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 not travel.



## Load Charts of FJ Operating Condition

12m fixed jib (included angle between boom and jib 15°)

Radius (m)	Length of boom (m)				
	78	84	90	96	102
15	117	115	113	—	—
16	117	115	113	106	100
17	116	111	108	103	97
18	113	108	104	100	94.5
20	104	96	93	80	84.5
22	92	86	84	80	76
24	83	78	75	72	68
26	74	70.5	68	65.5	62
28	67	84	62	59.5	56
30	61	58.5	56.5	54	50.5
34	52.5	50	48	45	42.5
38	42	40.5	39.5	38	35.5
42	35	33.5	32	31	30
46	30	28	26	25	23.5
50	24.5	23	21.5	20.5	19
54	20.5	19	17.5	16.5	14.5
58	16.5	15.5	14	13	11.5
62	13.5	12.5	11	10	8.5
66	11.5	10	8.5	7.2	5.8
70	8.5	7.8	6.2	5	3
74	7.5	6	4.3	3	—
78	5	4.2	—	—	—

Notes: 1. The actual lifting capacity must be obtained by deducting the weight of lifting hook, hoisting tools, and wire rope wound around the lifting hook and arm head from the rated lifting capacity in the table

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 not travel.



## Load Charts of FJ Operating Condition

### Load Charts of FJ Operating Condition of SCC6500WE (Rexroth) Crawler Crane

12m fixed jib (included angle between boom and jib 20°)

Radius (m)	Length of boom (m)				
	78	84	90	96	102
16	89	88	87	—	—
17	89	87	87	85	85
18	88	86	86	85	85
20	83	83	83	82.5	82.5
22	80	79	79	78.5	77.5
24	78	76	75	73.5	70.5
26	73	71	69	66	64
28	68	65	63	61	58
30	61	59	58	55	53
34	52	50	48.5	46.5	44
38	43	41	40	39	37
42	35.5	34	33	32	30.5
46	30	28.5	27	26	24.5
50	25	23.5	22	21.5	19.8
54	20.5	19.5	18	17	15
58	17.5	16	14.5	13.5	11.5
62	14.5	13	11.5	10.5	8.6
66	12	10.5	9	8	6
70	9.5	8	6.5	5.5	3.8
74	7.5	6.2	4.5	3	—
78	5.5	4.5	—	—	—

Notes: 1. The actual lifting capacity must be obtained by deducting the weight of lifting hook, hoisting tools, and wire rope wound around the lifting hook and arm head from the rated lifting capacity in the.

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 not travel.



Notes

A series of horizontal dashed lines for writing notes.



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