

# 55 ton capacity ZCC550H



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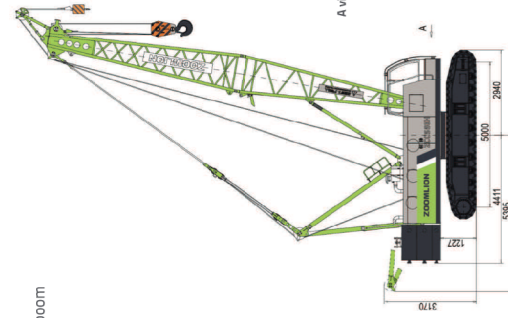
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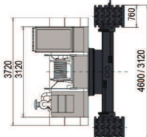


## DIMENSIONS

Overall dimensions of 5 boom



A view (crane with boom removed)



## Operating weight

The operating weight includes the basic machine with crawlers, 2 main winches including wire ropes (165m and 130m) and 13m main boom, consisting of 7-A-frame, boom foot (6.5m) boom head (6.5m), 17.5 t rear counterweight and 55 t hook block.

Total weight-----approx.48.7t

## Equipment

Main boom Max. Length-----52m  
 Fixed Jib -----7.13m  
 Max. combination-----main boom 4.3m  
 fixed jib 1.9m  
 Max. lifting moment-----209t.m  
 Max. lifting capacity on fixed jib-----12t

## TECHNICAL FEATURE

### Excellent interchangeability of the components

- As to the products produced in the same platform, in addition to most of the electrical and hydraulic components, majority of structural parts are also interchangeable, such as a set of fixed jib (including fixed jib pivot section, fixed jib intermediate sections, FA-frame, front tilting-back support of fixed jib, rear tilting-back support of fixed jib, fixed jib front anchoring rods and fixed jib rear anchoring rods), load hook, derricking mechanism, tip boom, rear counterweight base plate and so on, so as to reduce the operating costs of the users.

### High work efficiency

- Series-connected multiple valve-controlled hydraulic system is applied, so that all simultaneous movements can be achieved and no deceleration will occur during the switching of crane movements.
- Single rope speed on the outmost layer of hoisting winch 1 is 132m/min.
- To improve lifting efficiency, hoisting winch 1 with free-fall function is available for an option.

### Optimization of transportation, assembly and dismantling

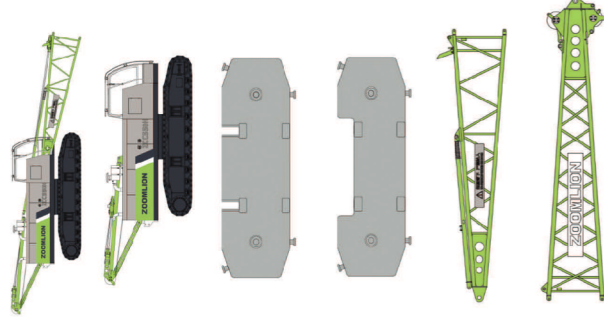
- A-frame can be erected by itself without the help of oil cylinder, thus achieving rapid assembly of the crane.
- The weight of single counterweight plate is less than 6.25t, so that the counterweight can be assembled by use of a small-sized auxiliary crane.
- The crawler carriers can be extended and retracted, and the maximum transport width of the crane is 3.12m.

## BOOM COMBINATION

Code	Type	Operation mode parameters	Description of Boom Assembly Codes	Mode description
S-1	Main boom	13-52m	Main boom, lifting with main boom	Main boom, lifting with main boom
S-3	Main boom	13-52m	Main boom, lifting with tip boom	Main boom, lifting with tip boom
S-2	Main boom	13-52m	Main boom+fixed jib, jiffing with main boom	Main boom+fixed jib, jiffing with main boom
SF-1	Fixed jib	7-15m	Main boom+fixed jib, jiffing with fixed jib	Main boom+fixed jib, jiffing with fixed jib
SF-2	Fixed jib	7-15m	Main boom+fixed jib, jiffing with fixed jib	Main boom+fixed jib, jiffing with fixed jib



## TRANSPORT DIMENSIONS AND WEIGHTS



**Basic machine (with main boom pivot section)**

Length	13000mm
Width	3120mm
Height	3180mm
Weight	29740kg

**Basic machine (without main boom pivot section)**

Length	8330mm
Width	3120mm
Height	3180mm
Weight	28800kg

**Counterweight base plate**

Length	3720mm
Width	1320mm
Height	550mm
Weight	5000kg

**Counterweight plate**

Length	3720mm
Width	1320mm
Height	570mm
Weight	6250kg

**Main boom pivot section**

Length	6650mm
Width	1470mm
Height	1690mm
Weight	9300kg

**Main boom head**

Length	7020mm
Width	1450mm
Height	1440mm
Weight	8200kg

## TRANSPORT DIMENSIONS AND WEIGHTS



<b>3m main boom intermediate section</b>	
Length	3600mm
Width	1430mm
Height	1310mm
Weight	2254kg



<b>6m main boom intermediate section</b>	
Length	6000mm
Width	1430mm
Height	1310mm
Weight	3514kg



<b>9m main boom intermediate section</b>	
Length	9000mm
Width	1430mm
Height	1310mm
Weight	5514kg



<b>Tip boom</b>	
Length	1370mm
Width	590mm
Height	470mm
Weight	120kg



<b>Fixed jib pivot section</b>	
Length	3640mm
Width	570mm
Height	570mm
Weight	160kg



<b>Fixed jib head</b>	
Length	3820mm
Width	570mm
Height	570mm
Weight	210kg

## TRANSPORT DIMENSIONS AND WEIGHTS



<b>6m fixed jib intermediate section</b>	
Length	4600mm
Width	570mm
Height	570mm
Weight	120kg



<b>FA-frame</b>	
Length	3230mm
Width	730mm
Height	410mm
Weight	270kg

### 55t load hook

Length	1440mm
Width	660mm
Height	530mm
Weight	640kg

### 30t load hook

Length	1330mm
Width	490mm
Height	530mm
Weight	380kg

### 16t load hook

Length	1230mm
Width	420mm
Height	530mm
Weight	310kg

### 6t load hook

Length	695mm
Width	300mm
Height	300mm
Weight	185kg

## TECHNICAL DESCRIPTION



### Engine

Engine type-----WEICHA/MP6C150E301  
 Displacement-----6.75L  
 Rated power-----140KW/2000rpm  
 Maximum output torque-----860N.m/1300rpm  
 Fuel tank-----300L  
 Exhaust emission complies with China national 3 Emission Standards.



### Hydraulic system

The crane adopts a series-connected hydraulic system with hydraulic pilot proportional control. The high-speed hydraulic motor drives the planet reducer to realize the movements of the mechanisms.  
 The system has the advantages of high efficiency, energy-saving, smooth and safe still speed, and low noise.  
 Oil cooler for hydraulic system-----400W  
 Hydraulic oil tank capacity-----460 L



### Hoisting winch

The axial piston variable displacement motor drives hoisting winches 1 and 2 via a built-in planet reducer. Brake the winch via the spring on the winch motor, which is controlled by balance valve. The winding drum is a kind of cast drum with LEBUS groove, which can ensure that the multi-layer wire rope will not be wound disorderly.

#### Main winch

Line pull-----Max.65KN  
 Rope diameter-----20mm  
 Rope speed-----0-132m/min  
 Rope length-----185m

#### Aux.winch

Line pull-----Max.65KN  
 Rope diameter-----20mm  
 Rope speed-----0-124m/min  
 Rope length-----130m

Hoisting winch 1 with free-fall function is available for an option, and the single rope force on the 3<sup>rd</sup> rope layer can reach 7.5t.



### Boom winches

The axial piston motor drives the boom winch via a built-in planet reducer.  
 Brake the winch via the spring on the winch motor. The winding drum can be locked by the ratchet wheel and ratchet pawl.

#### Boom winch

Line pull-----Max.65KN  
 Rope diameter-----20mm  
 Rope speed-----0-100m/min  
 Rope length-----150m



### Swing

The axial piston constant displacement motor drives the slewing mechanism via a planet reducer. Free-swing function can effectively reduce the lateral force of the boom.

- Slewing ring
- Single-row ball, four-point contact, internal geared.
- Slewing brake

The slewing mechanism is braked via the spring on the slewing motor, which is controlled by balance valve.

- Slewing speed-----0-2.45 rpm.



### Crawler

Both left and right crawler carriers are fitted with an independent hydraulic driving system. Each hydraulic driving system has a hydraulic motor, which can drive the drive sprocket via planet reducer.

Track pad-----760mm  
 Drive speed-----0-1.65 km/h

## TECHNICAL DESCRIPTION



### Main boom

Main boom length: 13m - 52m;  
 Consisting of 6.5m main boom pivot section, 6.5m main boom head, and main boom intermediate sections of 3m, 6m and 9m as well as tip boom.

Main boom length (m)	Main boom pivot section	Main boom head	3m main boom intermediate section	6m main boom intermediate section	9m main boom intermediate section	5m main boom intermediate section
13	1	1	0	0	0	0
16	1	1	1	0	0	0
19	1	1	0	1	0	0
22	1	1	1	1	1	0
25	1	1	2	1	0	0
28	1	1	1	1	2	0
31	1	1	1	1	1	1
34	1	1	2	1	1	1
37	1	1	1	2	2	1
40	1	1	1	1	1	2
43	1	1	2	1	2	2
46	1	1	1	1	2	2
49	1	1	1	1	1	3
52	1	1	2	1	2	3



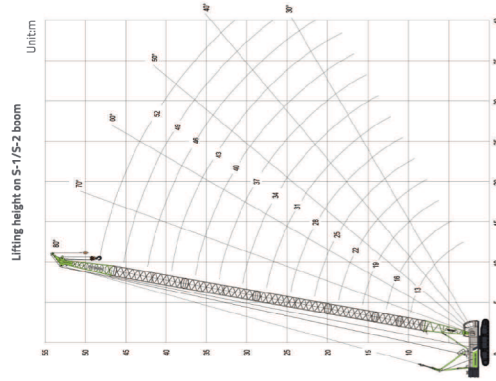
### Fixed jib

Fixed jib length: 7m - 15m;  
 Consisting of 3.5m fixed jib pivot section, 3.5m fixed jib head and 4m fixed jib intermediate sections.

Fixed jib length (m)	Fixed jib pivot section	Fixed jib head	4m fixed jib intermediate section
7	1	1	0
11	1	1	1
15	1	1	2

## LIFTING PERFORMANCE

Main boom configuration



Lifting capacity on S-1 boom															
Rear dwt.:7500kg		75%												360°	
Radius (m)		MAIN BOOM LENGTH (M)													
13	15	19	22	25	28	31	34	37	40	43	46	49	52	UNIT:KG	
3.8	55														
4	50.5	46.5													
4.5	44.5	40.5	40.8												
5	39	39	37	33.3											
5.5	35.3	34.5	33.5	32.2	30.5										
6	31.6	30.5	29.5	30	28.5	27.3									
7	28.1	28.1	28	24	23.8	23.5	23.5	19.6	19.3						
8	20.8	20.8	20.7	20.6	20.3	19.5	19.3	18.6	18.3						
9	17.7	17.7	17.6	17.5	17.5	16.8	16.6	16.1	15.7	15.1	14.6				
10	15.4	15.4	15.3	15.2	15.1	15.1	14.8	14.5	14	13.6	13.3	12.8	12.3		
12	12.2	12.1	12	12	11.9	11.8	11.7	11.6	11.3	11.1	10.7	10.4	10.1	10	
14	9.9	9.9	9.8	9.7	9.6	9.6	9.3	9.2	9.1	8.9	8.6	8.2	8.1		
16	8.3	8.2	8.1	8	7.9	7.7	7.6	7.5	7.1	6.9	6.9				
18	7.1	7	6.9	6.8	6.7	6.6	6.4	6.3	6.1	5.8	5.8				
20	6	6	6	5.9	5.7	5.6	5.5	5.3	5.2	5	5				
22	5.4	5.2	5	4.9	4.8	4.7	4.6	4.5	4.4	4.2	4.2				
24	4.6	4.4	4.2	4.1	4	3.9	3.8	3.7	3.5	3.5	3.5				
26	3.9	3.7	3.6	3.5	3.4	3.3	3.3	3.1	3.1	3.1	3.1				
28	3.3	3.3	3.2	3.1	3	2.9	2.8	2.5	2.5	2.5	2.5				
30	3	2.8	2.7	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3				
32	2.5	2.4	2.3	2.2	2	2	2	2	2	2	2	2	1.9		
34	2.1	2.1	2.1	1.9	1.7	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	
36	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
38	1.5	1.4	1.3	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
40	1.2	1.1	1.1	1	1	1	1	1	1	1	1	1	1	1	

Note: Main boom configuration, rear boom can be fitted with tip booms, whose rated load is the same as that of main boom. But the maximum lifting capacity on tip boom cannot exceed 600.

## LIFTING PERFORMANCE

Main boom with fixed jib configuration

