



**Zoomlion Heavy Industry Science & Technology Co.,Ltd.**  
Add: No.677, Lugu Road, Zoomlion Industrial Park, Changsha, Hunan, China, 410205  
Copyright©2023 Zoomlion. All rights reserved. Reproduction and copying of any part of contents is not allowed for any purposes without Zoomlion's approval.



Product specifications are subject to change without notice and obligation. The photographs and/or drawing in this document are for illustrative purposes only. Please consult your local ZOOMLION dealer for more information.  
website:en.zoomlion.com 2023.06.09

# 60 ton capacity ZCT600V552



**4.0**  
PRODUCTS

VISION CREATES FUTURE

ZOOMLION

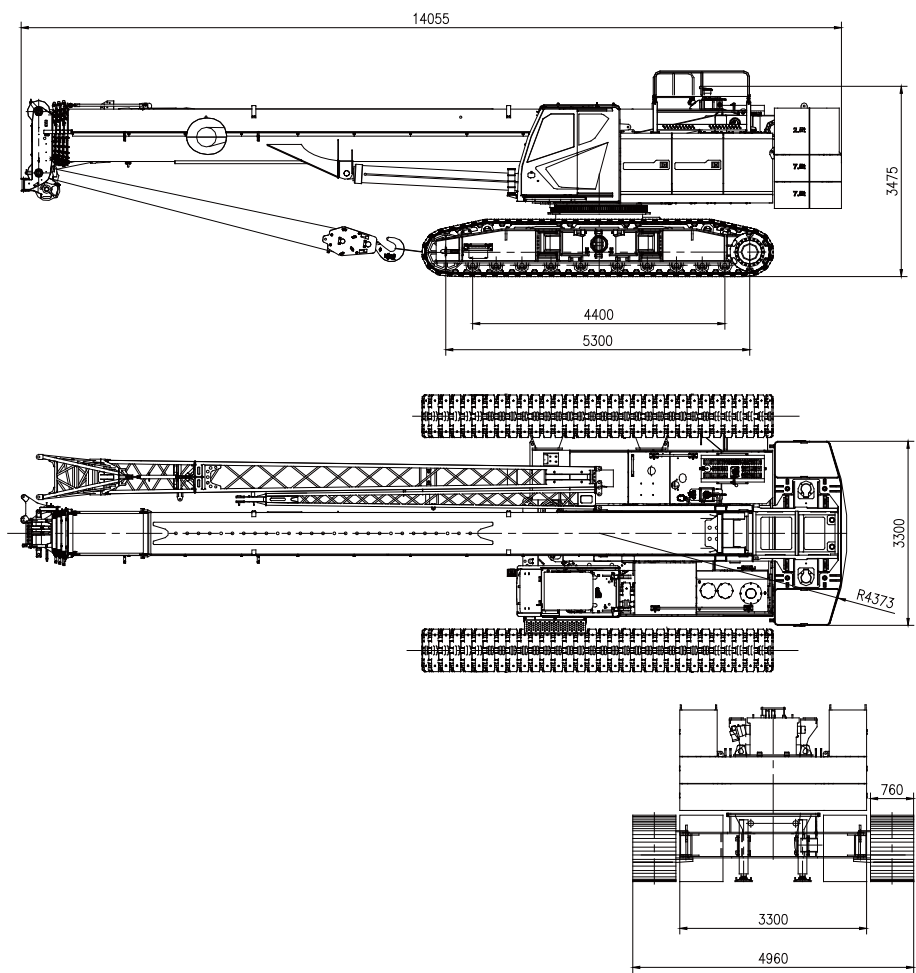
CONTENTS

ZCT600	DEMENSIONS	01
ZCT600	PRODUCT CHARACTERISTICS	01
ZCT600	LIFTING PERFORMANCE	02
ZCT600	TRANSPORTATION MODES	02
ZCT600	LIFTING CAPACITY TABLES	03
ZCT600	TECHNICAL DESCRIPTION	04
ZCT600	TECHNICAL PARAMETERS	05





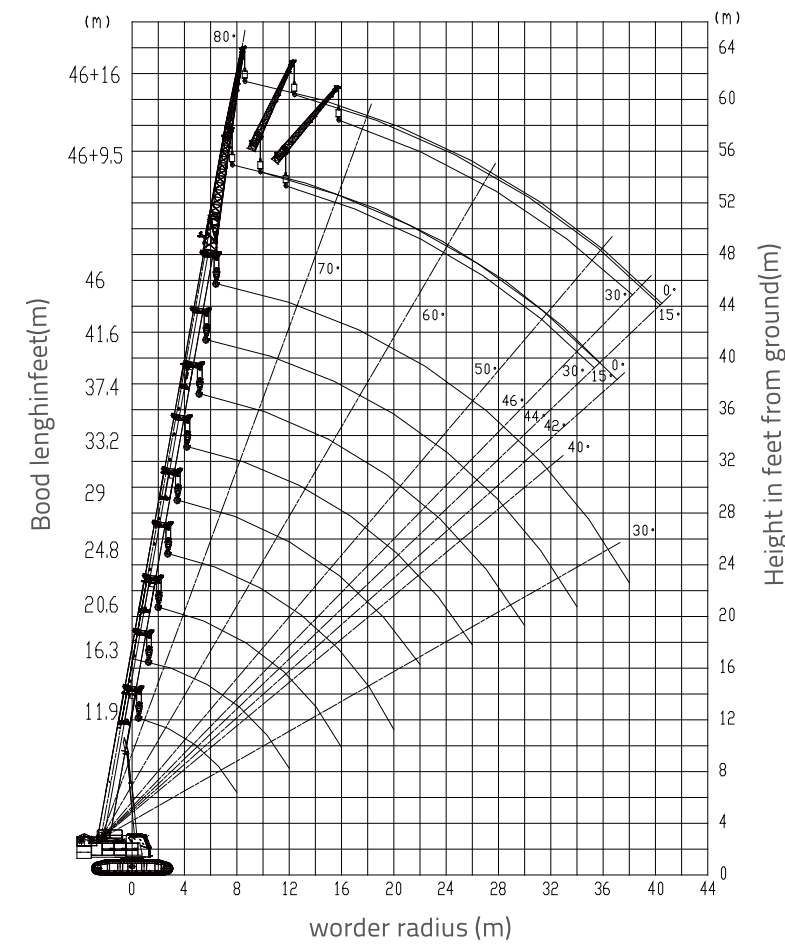
DIMENSIONS



PRODUCT CHARACTERISTICS

- High work efficiency**
- The crane is capable of multiple compound movements.
  - Single rope speed on the outmost layer of the hoisting winch 1 is 135 m/min.
- Optimization of transportation, assembly and dismantling**
- The four counterweight plates, whose weight is 7.5 t, 7.5 t, 2.5 t and 2.5 t respectively, can be installed conveniently by a counterweight handler.
  - The crawler carriers can be extended and retracted, and the maximum transport width of the crane is 3.3 m.

LIFTING PERFORMANCE



Note:

- 1、Boom deflections not shown;
- 2、This curve is made under the condition, and the gap between ground and wheels are standard;
- 3、The distance between the center of hook and the center of boom head is; The distance between the center of Auxiliary hook and the center of boom head is 7.2.

TRANSPORTATION MODES

Total weight of the crane is 41.85 t. The crane body is transported by a trailer, while other components such as the counterweight and hook, etc. (approx. 21 t) are transported in another trailer.; The transportation mode as show below. Transportation mode (Trailer #1: main crane body, 41.85 t; Trailer #2: other components, approx. 21 t).



LIFTING CAPACITY TABLES

RATED LOADS WITH THE BOOM ONLY

Unit: kg

Working Radius (m)	Boom length (m)								
	Telescopic cylinder I fully extended, crawler carriers fully extended, 360° working range, 20t counterweight, 0°								
	11.9	16.3	20.6	24.8	29	33.2	37.4	41.6	46
3.0	60000	46000							
3.5	54000	46000	38000						
4.0	52000	46000	35000	29000					
4.5	50000	46000	33000	28000	27000				
5.0	44000	43000	31000	27500	27000				
5.5	38000	37000	28000	25500	27000				
6.0	36000	35000	27000	24500	27000	22000			
7.0	27000	26500	24500	22000	24500	20000	19000		
8.0	21000	21000	22000	19500	21500	18000	16800	15000	
9.0		17000	18000	17500	19200	16500	14500	14000	11000
10.0		14500	14500	15500	15600	15000	13600	12800	10800
11.0		11200	11500	11800	12500	13000	12400	11200	10000
12.0		9800	10000	11500	11500	12500	11500	10400	9600
14.0			7800	8400	9000	9600	9800	9000	8600
16.0			5500	6500	7000	7500	7800	8000	7600
18.0				5000	5200	6000	6200	6500	6800
20.0				3800	4100	4800	5000	5000	5600
22.0					3100	3700	4000	4200	4500
24.0						3000	3200	3200	3700
26.0						2400	2600	2600	3000
28.0							2100	2200	2500
30.0							1600	1800	2100
32.0								1400	1800
34.0								1100	1400
36.0									1100
38.0									900
40.0									
I	0	4.4	8.7	8.7	8.7	8.7	8.7	8.7	8.7
II	0	0	0	4.2	8.4	12.6	16.8	21	25.4
Reeving	12	10	8	8	6	6	6	4	4
Hook	60t								

RATED LOADS WITH THE JIB

Unit: kg

20t counterweight, lift a load at standstill						
Boom combination	46m boom + 9.5m jib			46m boom +16m jib		
Jib angle	0°	15°	30°	0°	15°	30°
80	5000	3300	2500	3000	2000	1500
78	5000	3300	2500	3000	2000	1450
76	4800	3200	2500	2900	1900	1400
74	4500	3100	2500	2700	1800	1350
72	4200	3000	2500	2500	1700	1300
70	3900	2800	2400	2300	1650	1250
68	3600	2700	2300	2100	1600	1250
66	3300	2600	2200	2000	1550	1200
64	3000	2500	2100	1900	1500	1200
62	2700	2400	2000	1800	1450	1150
60	2400	2200	1900	1700	1400	1150
58	2100	1950	1800	1600	1350	1100
56	1850	1750	1600	1500	1300	1100
54	1600	1500	1400	1300	1200	1050
52	1400	1300	1250	1200	1100	1000
50	1200	1100	1050	1000	950	900
48	1000	950	900	850	800	750
46	850	800	750	700	650	600
44	700	650	600	600	550	
42	550					
Reeving	1	1	1	1	1	1
Hook	5t					

TECHNICAL DESCRIPTION



Engine

Engine model: US Cummins LCL-ZL-QSB-S5-C260-D diesel engine compliant to Euro V emission standard for non-road vehicles.  
Type: six-cylinder in-line, intercooling turbo-charged diesel engine.  
Displacement: 6.7L.  
Rated power: 194 kW/2200rpm.  
Max. torque: 1152 N·m/1500rpm.  
Fuel tank capacity: 400L.



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 movements of the mechanisms.  
The system has such advantages as high efficiency, energy-saving, smooth and safe simultaneous movements.  
The oil cooler for hydraulic system: a radiator driven by high-power hydraulic motor, 40 kW.  
Hydraulic oil tank capacity: 770 L.



Hoisting winch

It consists of a main hoist mechanism and an auxiliary hoist mechanism. The two hoist mechanisms are driven by an axial plunger hydraulic motor with a built-in planetary gear reducer to lift or lower the hook.  
The sealed-in planetary reducer is of a compact structure, light deadweight and high reliability.  
Specifications for high-tensile torsion resistant hoist rope:  
Diameter: 17.0 mm.  
Strength grade: 1870 N/mm2.  
Length of main hoist rope: 230 m.  
Length of auxiliary hoist rope: 140 m.



Swing

Via the planetary gear reducer, the axial plunger hydraulic motor of constant displacement drives the pinion gear on the output shaft to rotate the toothed ring of the slewing bearing fixed on chassis frame, providing a 360° unlimited slewing range.  
The free swing function decreases lateral pulling force from a load to the boom.  
Slewing bearing  
Single-row ball, four-point contact, externally geared.  
Slewing braking  
The crane is installed with a hydraulically controlled normally-closed brake, and is capable of conducting controllable free swing operation.  
Slewing speed  
The highest slewing speed is 2 rpm.

# TECHNICAL PARAMETERS

## MAIN TECHNICAL PARAMETERS

Item		Unit	Value	Remarks
Max. lifting capacity		t	60	
Max. lifting moment		t×m	225	
Max. lifting moment at max. boom length		t×m	122	
Main boom length		m	11.9-46	
Jib length		m	9.5-16	
Max. length of main boom with the jib		m	62	
Main boom angle		°	-2-80	
Jib angle		°	0, 15, 30	
Max. single rope speed of the main hoisting winch		m/min	135	Unloaded, the 4th drum layer
Max. single rope speed of the auxiliary hoisting winch.		m/min	135	Unloaded, the 4th drum layer
Boom derricking up time		s	50	
Boom telescoping out time		s	120	
Slewing speed		rpm	0~2	
Traveling speed		km/h	2.6 (unloaded)/1.5 (fully loaded)	
Max. gradeability			45	
Ground pressure		MPa	0.065	
Deadweight		t	62.5	With the main hook installed on the basic boom
Counterweight		t	20	
Overall dimensions (L × W × H)		mm	14055×3300 (4960) ×3475	
Engine	Model		LCL-ZL-QSB-55-C260-D	US Cummins
	Rated power / rotational speed	kW/rpm	194/2200	
	Max. output torque / rotational speed	Nm/rpm	1152/1500	
	Exhaust emission	/	Euro V for non-road vehicles	
Distance between track center × crawler contact length × crawler width		mm	2540×5300×760	Crawler carrier retracted
		mm	4200×5300×760	Crawler carrier extended

Note:  
1.The single rope speed of the winch, slewing speed and traveling speed vary with the load.  
2.The ground pressure is an average value, and the actual maximum ground pressure should be determined according to actual lifting conditions.