

# ZOOMLION ALL TERRAIN CRANE ZAT2000E



**ZOOMLION**

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website:en.zoomlion.com 2022.08.05

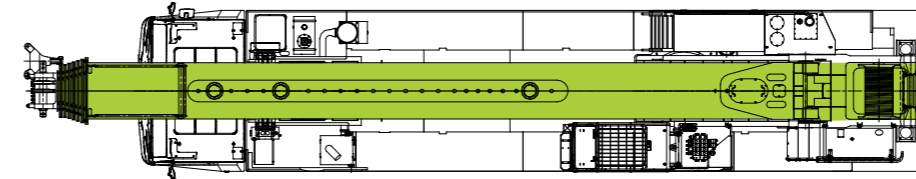
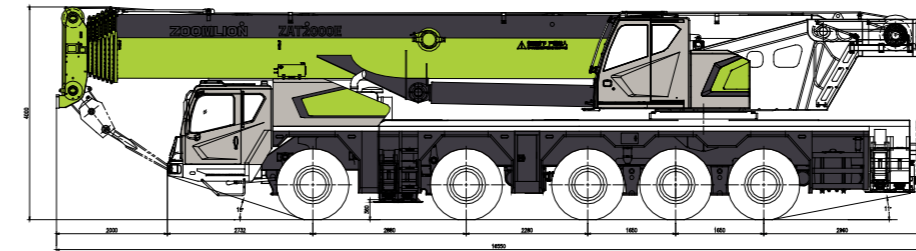
**ZOOMLION**

**4.0**  
PRODUCTS

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## DIMENSIONS



## WEIGHT

Axle	1	2	3	4	5	Total weight
T	12	12	12	12	12	60

Hook Load T	No. of Sheaves	No. of Lines	Weight Kg	Remark
130	8	16	1480	Standard
110	7	14	1200	Optional
70	5	10	900	Standard
70	5	10	928	Optional
25	1	3	580	Optional
9	0	1	310	Standard

### Working Speeds

445/95 R25	km/h MAX.	48	12/R2
	80		

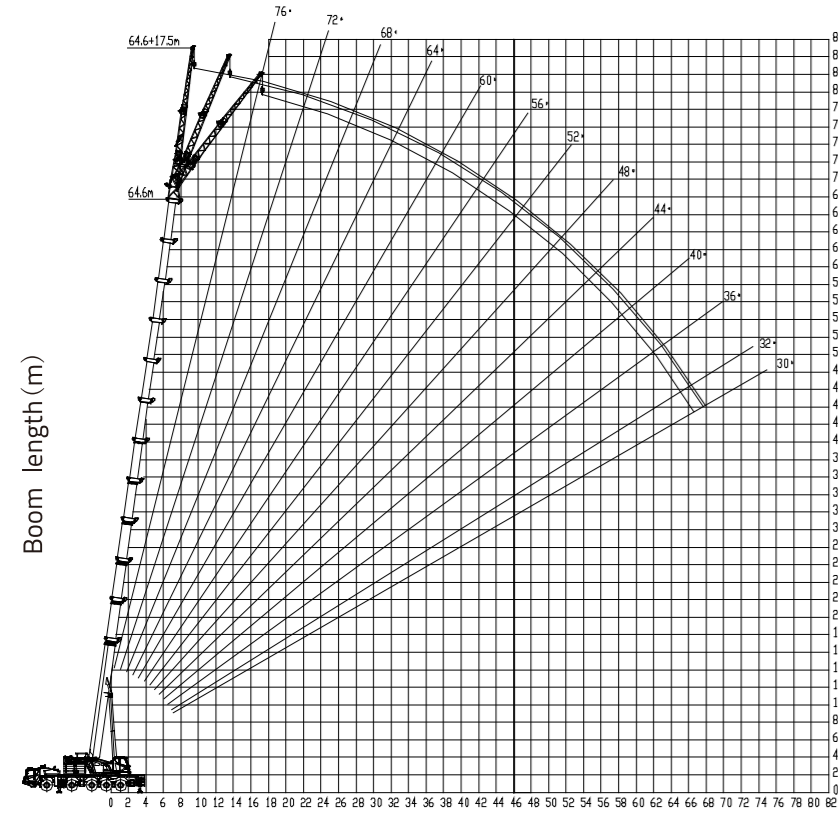
Drive	Operation Speed	Rope diameter/length	Max. single line pull
1	135m/min	Φ 20mm/395m	
2	120m/min	Φ 20mm/220m	
Swing	0 ~ 1.5r/min		
Derricking	70s		
Telescoping	650s		





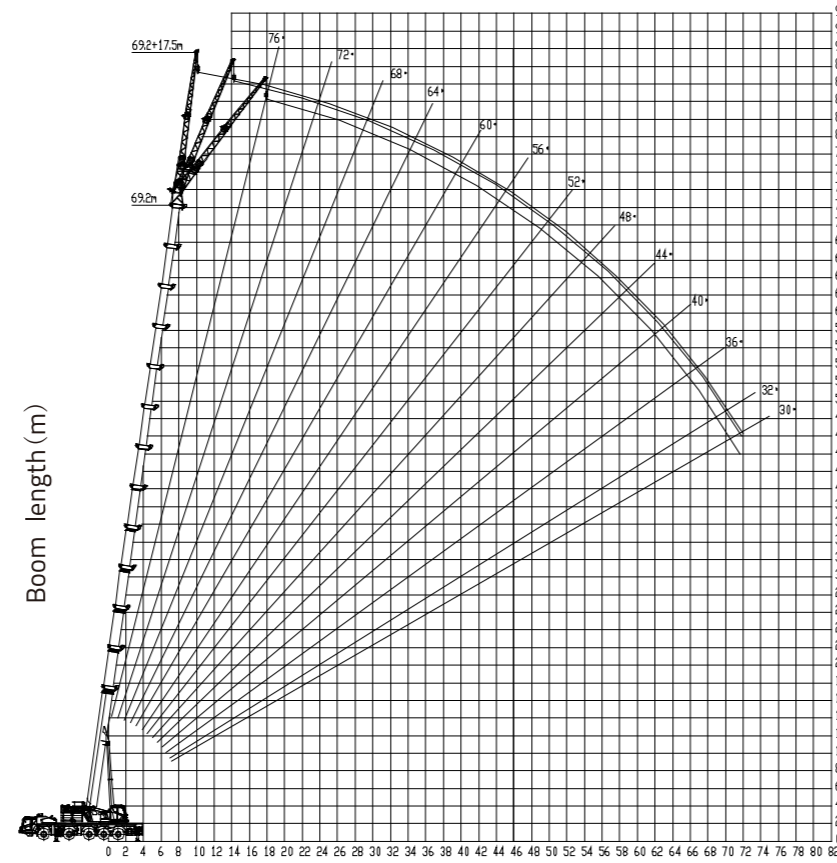
# MAIN BOOM + 17.5 M JIB

64.6 m main boom + 17.5 m jib



Working radius (m)

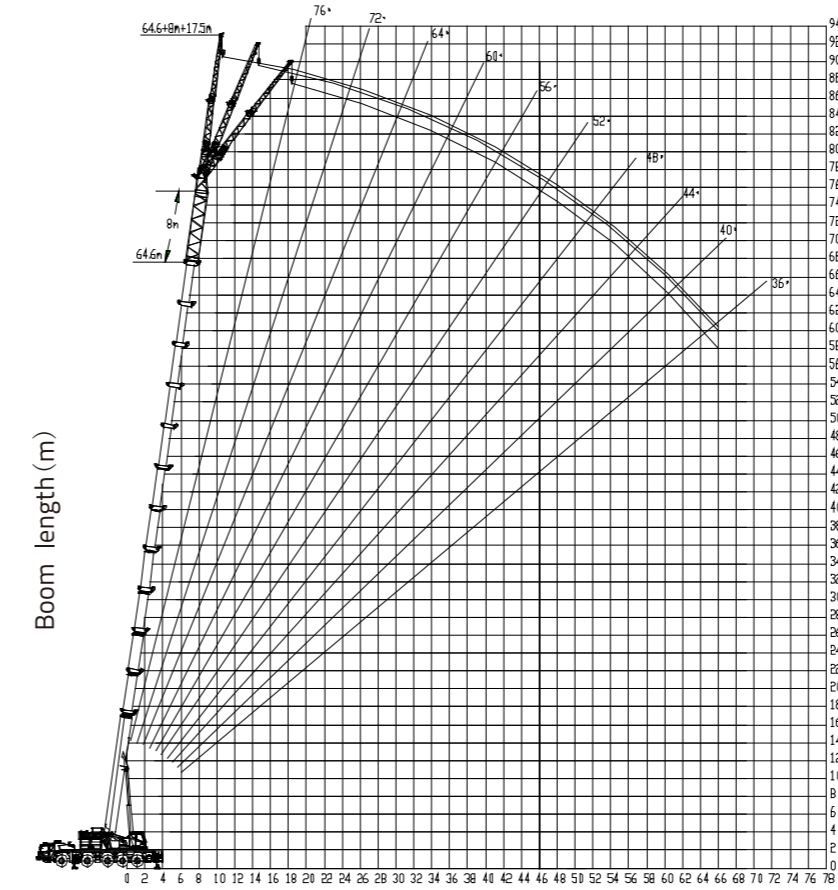
69.2 m main boom + 17.5 m jib



Working radius (m)

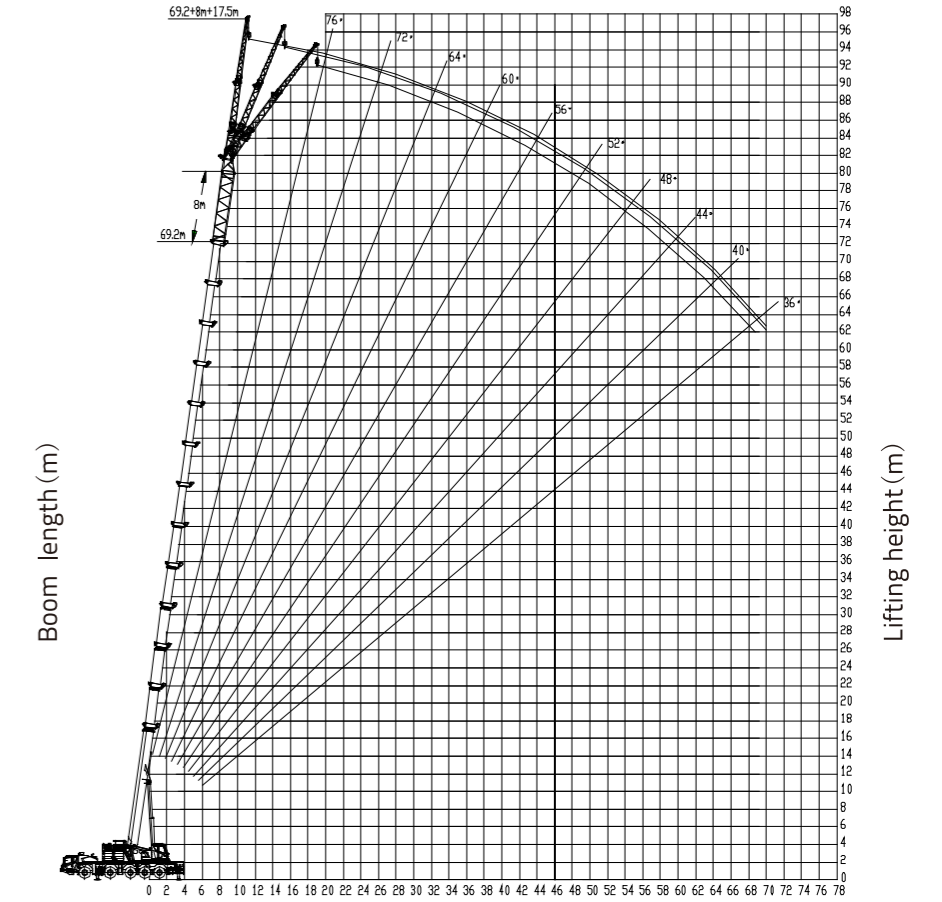
# MAIN BOOM + 25.5 M JIB

64.6 m main boom + 8 m extension + 17.5 m jib



Working radius (m)

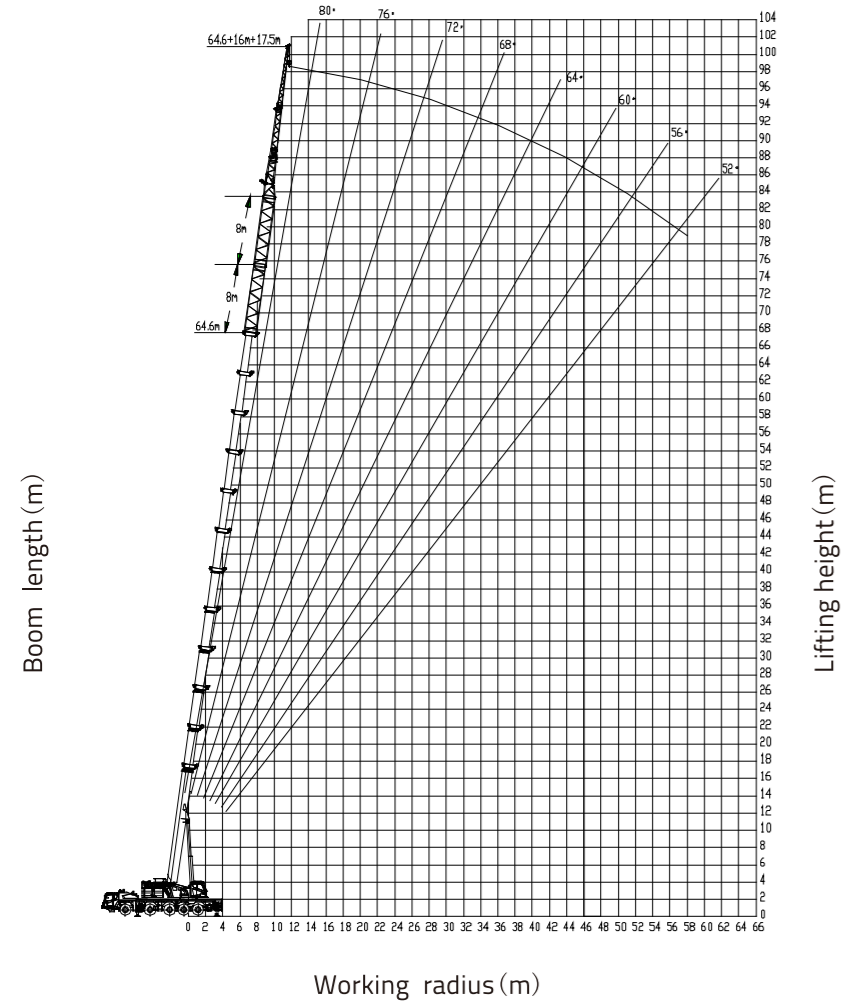
69.2 m main boom + 8 m extension + 17.5 m jib



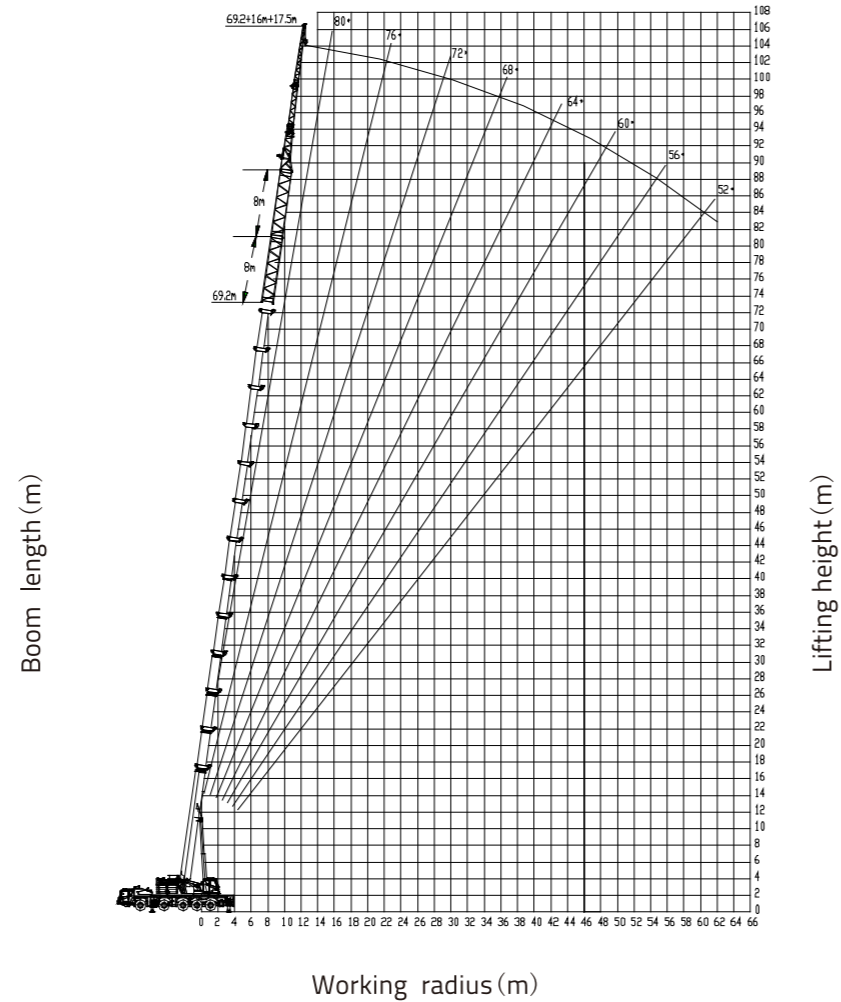
Working radius (m)

# MAIN BOOM + 33.5 M JIB

64.6 m main boom + 8 m extension + 8 m extension + 17.5 m jib



69.2 m main boom + 8 m extension + 8 m extension + 17.5 m jib



# LIFTING HEIGHT CHARTS

Main boom + jib

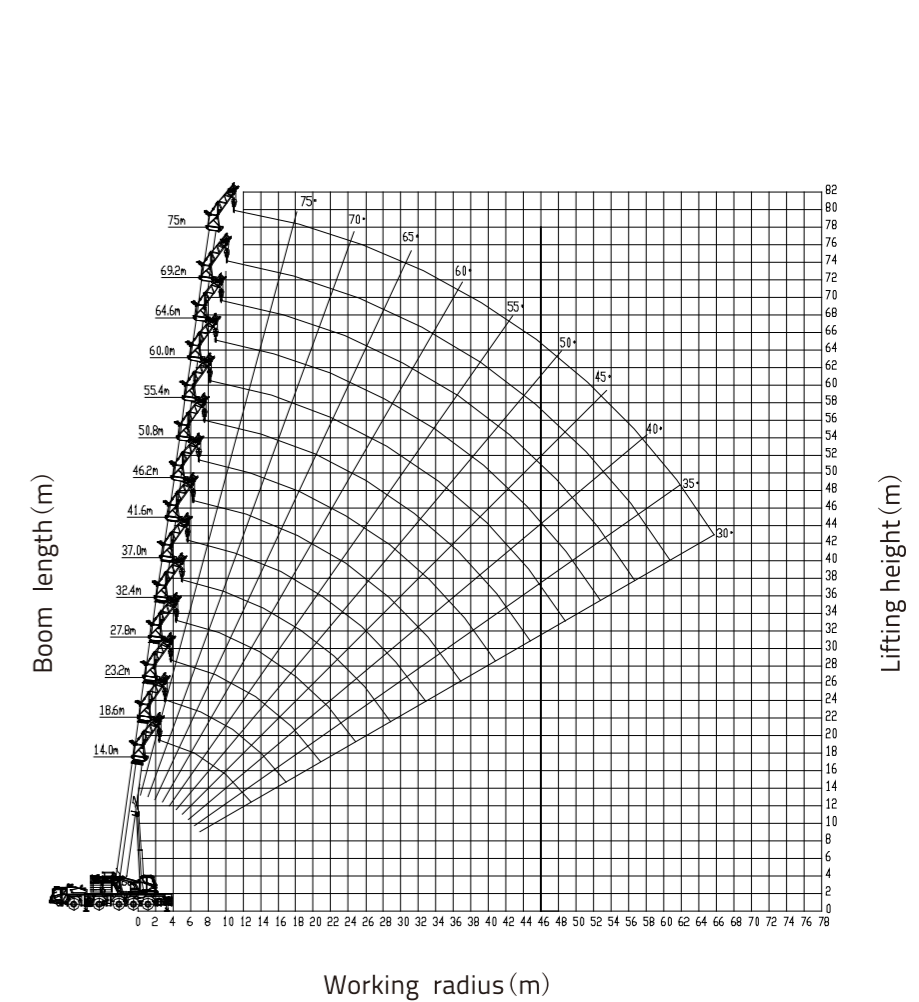
Unit: t

Outriggers completely extended 8.3 m, with 68 t counterweight, over full range

Working Radius (m)	Main boom (m) + jib (m)													
	64.6		69.2		64.6		69.2		64.6		69.2		64.6	69.2
	10.4	17.5	10.4	17.5	10.4	17.5	10.4	17.5	10.4	17.5	10.4	17.5	33.5	33.5
16.0														
18.0	9.0					4.6								
20.0	9.0	8.0		8.5		4.5	3.5		4.5					
22.0	9.0	7.9	7.2	8.3	7.6	4.4	3.4	2.9	4.4	3.4		3.7		
24.0	9.0	7.8	7.1	8.1	7.5	6.7	4.3	3.4	2.8	4.3	3.4	2.8	3.6	2.9
26.0	9.0	7.7	7.0	7.9	7.4	6.6	4.2	3.3	2.8	4.2	3.3	2.8	3.5	2.9
28.0	8.8	7.6	6.9	7.7	7.3	6.5	4.1	3.3	2.8	4.1	3.3	2.8	3.4	2.8
30.0	8.6	7.5	6.8	7.5	7.2	6.4	4.0	3.2	2.7	4.0	3.2	2.7	3.3	2.8
32.0	8.4	7.4	6.7	7.3	7.1	6.3	3.9	3.2	2.7	3.9	3.2	2.7	3.2	2.7
34.0	8.1	7.3	6.6	7.1	6.9	6.2	3.8	3.1	2.7	3.8	3.1	2.7	3.1	2.7
36.0	7.7	7.2	6.5	6.9	6.7	6.1	3.7	3.1	2.6	3.7	3.1	2.6	3.0	2.6
38.0	7.3	7.1	6.4	6.7	6.5	6.0	3.6	3.0	2.6	3.6	3.0	2.6	2.9	2.6
40.0	6.9	6.9	6.3	6.5	6.3	5.9	3.5	3.0	2.6	3.5	3.0	2.6	2.9	2.5
42.0	6.5	6.7	6.2	6.3	6.1	5.8	3.4	2.9	2.5	3.4	2.9	2.5	2.8	2.5
44.0	6.2	6.3	6.1	6.0	5.9	5.7	3.3	2.9	2.5	3.3	2.9	2.5	2.8	2.4
46.0	5.9	6.0	6.0	5.7	5.7	5.6	3.2	2.8	2.5	3.2	2.8	2.5	2.7	2.4
48.0	5.6	5.7	5.7	5.4	5.4	5.4	3.1	2.8	2.4	3.1	2.8	2.4	2.7	2.3
50.0	5.2	5.4	5.4	5.1	5.1	5.1	3.0	2.7	2.4	3.0	2.7	2.4	2.6	2.3
52.0	4.7	4.9	5.0	4.8	4.8	4.8	2.9	2.6	2.3	2.9	2.6	2.3	2.6	2.2
54.0	4.4	4.5	4.5	4.5	4.5	4.5	2.8	2.5	2.3	2.8	2.5	2.3	2.5	2.2
56.0	4.0	4.1	4.1	4.1	4.1	4.2	2.7	2.4	2.2	2.7	2.4	2.2	2.5	2.1
58.0	3.6	3.7	3.8	3.8	3.8	3.8	2.6	2.3	2.2	2.6	2.3	2.2	2.4	2.1
60.0	3.2	3.3	3.4	3.4	3.5	3.5	2.5	2.3	2.2	2.5	2.3	2.2	2.3	2.0
62.0	2.8	2.9	3.0	3.2	3.3	3.3	2.4	2.2	2.1	2.4	2.2	2.1	2.2	2.0
64.0	2.4	2.5	2.6	2.7	2.8	2.8	2.3	2.2	2.1	2.3	2.2	2.1	2.1	1.9
66.0	2.1	2.2	2.2	2.4	2.5	2.5	2.2	2.2	2.1	2.2	2.1	2.1	2.0	1.9
68.0				2.1	2.2	2.2	2.1	2.1	2.0	2.1	2.0	2.0	1.9	1.8
70.0				1.8	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.8	1.7	1.7
72.0							1.7	1.8	1.8	1.7	1.8	1.8	1.6	1.6
74.0								1.4	1.5	1.5	1.3	1.4	1.4	1.5
76.0													1.3	1.4
78.0														1.4
80.0														
82.0														
84.0														
86.0														
Reeving										1				
Hook										9t				

Note:  
 ① Telescoping combination of 64.6 m boom length: 3 3 3 3 3 2  
 ② Telescoping combination of 69.2 m boom length: 3 3 3 3 3 3

Main boom length + tip boom





# LIFTING HEIGHT CHARTS

Main boom + tip boom

Unit: t

Outriggers completely extended 8.3 m, with 68 t counterweight, over full range												
Working Radius (m)	Main boom length (m)											
	55,4	55,4	55,4	55,4*	60,0	60,0	60,0*	64,6	64,6*	69,2*	75,0*	
3.0												
3.5												
4.0												
4.5												
5.0												
5.5												
6.0												
7.0												
8.0												
9.0												
10.0												
11.0												
12.0												
14.0	12.8	15.3	18.2	18.6	12.6	14.9	16.5					
16.0	12.1	14.6	17.4	17.9	12.0	14.3	16.0	11.4	13.2			
18.0	11.4	13.9	16.3	17.3	11.4	13.7	15.7	11.1	13.0	10.0		
20.0	10.7	13.2	15.2	16.8	10.8	13.1	15.1	10.8	12.7	9.9	8.0	
22.0	10.1	12.4	14.1	15.6	10.3	12.5	14.1	10.5	12.4	9.8	7.9	
24.0	9.6	11.5	13.0	14.6	9.8	11.9	13.2	10.2	12.1	9.7	7.8	
26.0	9.1	10.6	12.1	13.7	9.4	11.3	12.4	9.9	11.7	9.6	7.7	
28.0	8.7	9.8	11.2	12.8	9.0	10.6	11.7	9.6	11.1	9.5	7.6	
30.0	8.3	9.1	10.4	12.0	8.6	9.9	11.0	9.3	10.5	9.1	7.5	
32.0	7.9	8.5	9.7	11.3	8.2	9.2	10.3	8.9	9.9	8.8	7.4	
34.0	7.5	7.9	9.1	10.7	7.7	8.6	9.7	8.5	9.3	8.5	7.3	
36.0	7.1	7.3	8.5	9.9	7.2	8.1	9.2	8.0	8.8	8.1	7.2	
38.0	6.7	6.7	7.9	8.9	6.7	7.6	8.7	7.5	8.3	7.7	6.9	
40.0	6.3	6.2	7.3	8.1	6.2	7.1	8.1	7.0	7.8	7.3	6.6	
42.0	5.9	5.7	6.7	7.2	5.8	6.6	7.3	6.5	7.3	6.9	6.3	
44.0	5.5	5.2	6.2	6.5	5.4	6.2	6.7	6.1	6.8	6.5	6.0	
46.0	5.1	4.8	5.7	5.8	5.0	5.8	6.1	5.7	6.2	6.2	5.7	
48.0	4.7	4.4	5.3	5.1	4.6	5.4	5.5	5.3	5.6	5.9	5.4	
50.0	4.3	4.0	4.7	4.6	4.2	5.0	4.9	4.9	5.2	5.5	5.1	
52.0	4.0	3.7	4.2	4.0	3.9	4.6	4.3	4.6	4.6	4.9	4.8	
54.0					3.6	4.2	3.8	4.3	4.1	4.4	4.4	
56.0					3.3	3.7	3.4	4.0	3.7	4.0	4.0	
58.0								3.7	3.3	3.7	3.5	
60.0								3.3	2.9	3.4	3.1	
62.0										3.0	2.6	
64.0										2.6	2.3	
66.0											2.3	
68.0											2.0	
70.0											1.7	
Reeving		3			2			2		2	1	
Hook		25t						25t				
Telescoping mode	I	1	1	2	3	1	2	3	2	3	3	4
	II	2	3	3	3	3	3	3	3	3	3	4
	III	3	3	3	3	3	3	3	3	3	3	4
	IV	3	3	3	2	3	3	3	3	3	3	4
	V	3	3	2	2	3	3	2	3	3	3	4
	VI	3	2	2	2	3	2	2	3	2	3	4

# TECHNICAL SPECIFICATIONS

## Crane Superstructure

<b>Main boom</b>	The box-shaped main boom consists of 7 oval boom sections made of low-alloy and high-strength steel plate, providing the boom with excellent bending-resistance capacity, super load bearing capacity, light deadweight, large lateral stiffness and small end deflection.
<b>Jib</b>	It consists of two jib sections. Jib offset: 0°, 15° or 30°. The jib adaptor can be used as a tip boom individually. The extension can be used with the main boom as well as the jib together.
<b>Jib length</b>	Jib section 1: 10.4 m Jib section 2: 17.5 m. Extension (optional): 8 m per section, two sections for options.
<b>Slewing table</b>	Rigid steel construction welded from high-tensile structural steel (homemade 960 and HG785, etc.), providing superior load bearing capacity. The optimized arrangement of 3 articulated points, making the slewing table in a novel.
<b>Rooster sheave</b>	It is inserted at the boom head of telescopic boom section 5 during short distance transition. This option is set up for rapid hoists over the boom head to improve the work efficiency when the loads are light. The rooster sheave cannot be attached with the vehicle during driving.
<b>Derricking gear</b>	One hydraulic cylinder with balancing valve, providing the boom with smooth derricking movements from -0.5° to 82°.
<b>Slewing gear</b>	Dual slewing gears, consisting of hydraulic motor and planetary reducer.
<b>Hoist gear</b>	Hydraulic motor + planetary reducer. Both main winch and auxiliary winch are driven by variable motors. The main and auxiliary winches can be operated independently or simultaneously. Diameter of hoist rope: 20 mm. Strength grade: 1960 N/mm2. Length of main hoist rope: 395 m. Length of auxiliary hoist rope: 220 m. Auxiliary hoist gear and auxiliary hoist rope are available for options.
<b>Main and auxiliary hooks</b>	There are five kinds of main hook: 9 tons, 25 tons, 70 tons, 110 tons and 130 tons. Standard configuration: 130 tons ramshorn hook, 70 tons straight shank hook with one point and 9 tons straight shank hook with one point. Options: 110 tons ramshorn hook, 70 tons ramshorn hook and 25 tons straight shank hook with one point. The 9 tons rotatable auxiliary hook (1 reeving) is with hook latch.
<b>Operator's cab</b>	Operator's cab in steel construction, with broad vision. Interior of modern design for convenient and comfortable operation. Adjustable dual-rail spring-mounted and hydraulically cushioned operator's seat is suitable for any operator height or size. Ergonomically arranged control console and joysticks can relieve operator's fatigue. The cab can be tilted for 0-20° to improve operator's field of vision. It is equipped with air conditioning and cab heater. It is also equipped with a windshield wiper and washer.
<b>Counterweight</b>	Underslung self-handled multivariable counterweight system in a total weight of 68 t. Counterweight variants of 0 t, 12 t, 24 t, 36 t, 48 t and 68 t, thus for a considerable application spectrum. Movable counterweight plates can be assembled and disassembled by the counterweight handler on the tail of slewing table.

# TECHNICAL SPECIFICATIONS

## Crane Carrier

<b>Chassis frame</b>	Made by ZOOMLION with high-tensile steel plate.
<b>Outrigger</b>	H-type outriggers, hydraulically extendable into horizontal and vertical directions.  Model: WP12.460E62 Optional: Model: WP12.460E50. Type: water-cooled 6-cylinder in-line diesel, 4-stroke turbo-charged, inter-cooled. Cylinder diameter: 126 mm. Piston stroke: 155 mm. Displacement: 11.596 L. Rated power / RPM: 338 kW at 1900 r/min. Max. output torque / RPM: 2200 N.m at 1000 - 1400 r/min.
<b>Engine</b>	
<b>Transmission and its controls</b>	12JZSD220A + QH100 automatic transmission, manufactured by Shaanxi FAST Auto Drive Co., Ltd.
<b>Transfer case</b>	Single stage transfer case with stand-by steering pump, manufactured by Zhuzhou Gear Co., Ltd.
<b>Propeller shaft</b>	7 propeller shaft assy., transferring the torque via the conrate gear flange. The transmission propeller shaft taking the power and the propeller shaft of chassis oil pump don't have the conrate gear.
<b>Axles</b>	With hub brake. All axles steer. Axles 2, 4 and 5 are steer and drive axles. Axles 1 and 3 are steer and driven axles. Axle load: 13 tons, Luzhou Kishiler. Drive type: 10 × 6.
<b>Wheels and tires</b>	Tubeless tire. Tire size: 385/95R25, tire pressure: 1 MPa, rim type: 9.5 – 25.
<b>Steering system</b>	All-wheel variable steering system with 6 steering programs.
<b>Suspension</b>	All axles with hydro-pneumatic suspension and automatic leveling system Load equalization between the axle pairs.
<b>Brake system</b>	It consists of service brake, parking brake (emergency brake) and auxiliary brake. Service brake: dual-circuit air brake system, acting on 10 disc brakes. Parking brake (Emergency brake): spring-loaded brake, acting on 6 disc brakes. Auxiliary brake: engine exhaust brake.
<b>Electrical system</b>	The chassis adopts two N200 batteries which are series connected (the rated voltage of each battery is 12 V). The electrical system is single-wired. The negative pole is earthed via the battery master switch to form a circuit with 24 V output voltage.



## MAIN TECHNICAL PARAMETERS

Item		Value	Remarks
Working performance	Max. rated lifting capacity	kg	200000
	Max. load moment of basic boom	kN.m	5880
	Max. load moment of main boom (fully extended)	kN.m	2470
	Max. lifting height of basic boom	m	14.0
	Max. lifting height of main boom	m	75
	Max. lifting height of jib	m	103
			These parameters do not include deflection of boom and jib.
Working speeds	Max. hoist rope speed (Main winch)	m/min	135
	Max. hoist rope speed (Auxiliary winch)	m/min	120
	Boom derricking up time	s	70
	Boom extending time	s	650
	Max. slewing speed	r/min	1.5
Driving	Max. operation altitude	m	2000
	Max. driving speed	km/h	80
	Max. gradeability	%	45
	Min. turning diameter	m	20.4
	Min. ground clearance	mm	360
	Limits for exhaust pollutants and smoke		Conform to related standard
	Oil consumption per hundred kilometer	L	73
Mass	Deadweight in driving condition	kg	60000
	Complete vehicle kerb mass	kg	59805
	Axle load (axles I and II)	kg	12000/12000
	Axle load (axles III, IV and V)	kg	12000/12000/12000
Dimension	Overall dimensions (L x W x H)	mm	16550 x 3000 x 4000
	Outrigger spread (L)	m	9.23
	Outrigger spread (W)	m	Completely extended: 8.3 m; intermediate extended: 5.5 m
	Main boom length	m	13.0 - 75
	Boom angle	°	-0.5 - 82
	Jib length	m	10.4, 17.5
	Jib length with extension	m	25.5, 33.5
	Offset	°	0, 15, 30