ZOOMLION

ZOOMLION ZLJ5551JQZ200V ALL TERRAIN CRANE

TECHNICAL SPECIFICATIONS

ZAT2000V753.1/27Y

Zoomlion Heavy Industry Science & Technology Co.,Ltd.

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1 Product characteristics

ZAT2000 all terrain crane, which makes good use of our several decades' technological crystallization in designing and manufacturing mobile cranes combined with internationally advanced technologies, is a high-performance and high-reliability product designed and developed to meet the market demands. This high-tech product, combining mechanical, electrical and hydraulic systems as a whole, has so many advantages, such as good control performance, excellent micro-positioning performance, great lifting capacity and super lifting height, that it is active in various fields. This product can be widely used in chemical industry, mining establishments, oil fields, harbors and building sites, etc., except strong electromagnetic wave areas, to do lifting and erection work.

This product is an all terrain crane of full range slewing function, telescopic boom sections and electro-hydraulic proportional controlled systems. The 5-axle (3 axles driven and all axles steered) full-width special purpose chassis is manufactured by Zoomlion, providing wide vision, spacious cab and luxurious decoration.

The latest electro-hydraulic proportional directional control valve with load sensing function, multiple plunger variable pumps and open / closed variable system ensure that each executive mechanism makes full use of its work capability.

Two joysticks can provide the crane with smooth simultaneous movements among "Spool up / reel off main winch / auxiliary winch", "Derrick", "Slew" and "Telescope", which greatly improve the work efficiency. The joysticks have such advantages as easy & flexible operation, smooth & and reliable work and stepless speed regulation, etc.

The safety devices, such as relief valve, balance valve, hydraulic lock and brake valve, etc. in the hydraulic system, are against rupture of pipes and hoses.

The complete lighting systems and the safety devices, such as load moment limiter, can ensure your safety during operation and are convenient for night work.

2 Specifications, complete vehicle

2.1 Product model

Model in auto industry:	ZLJ5551JQZ200V
Model in engineering industry:	ZAT2000V
Code:	ZAT2000V753.1

2.2 Technical data

Table 1 Technical date

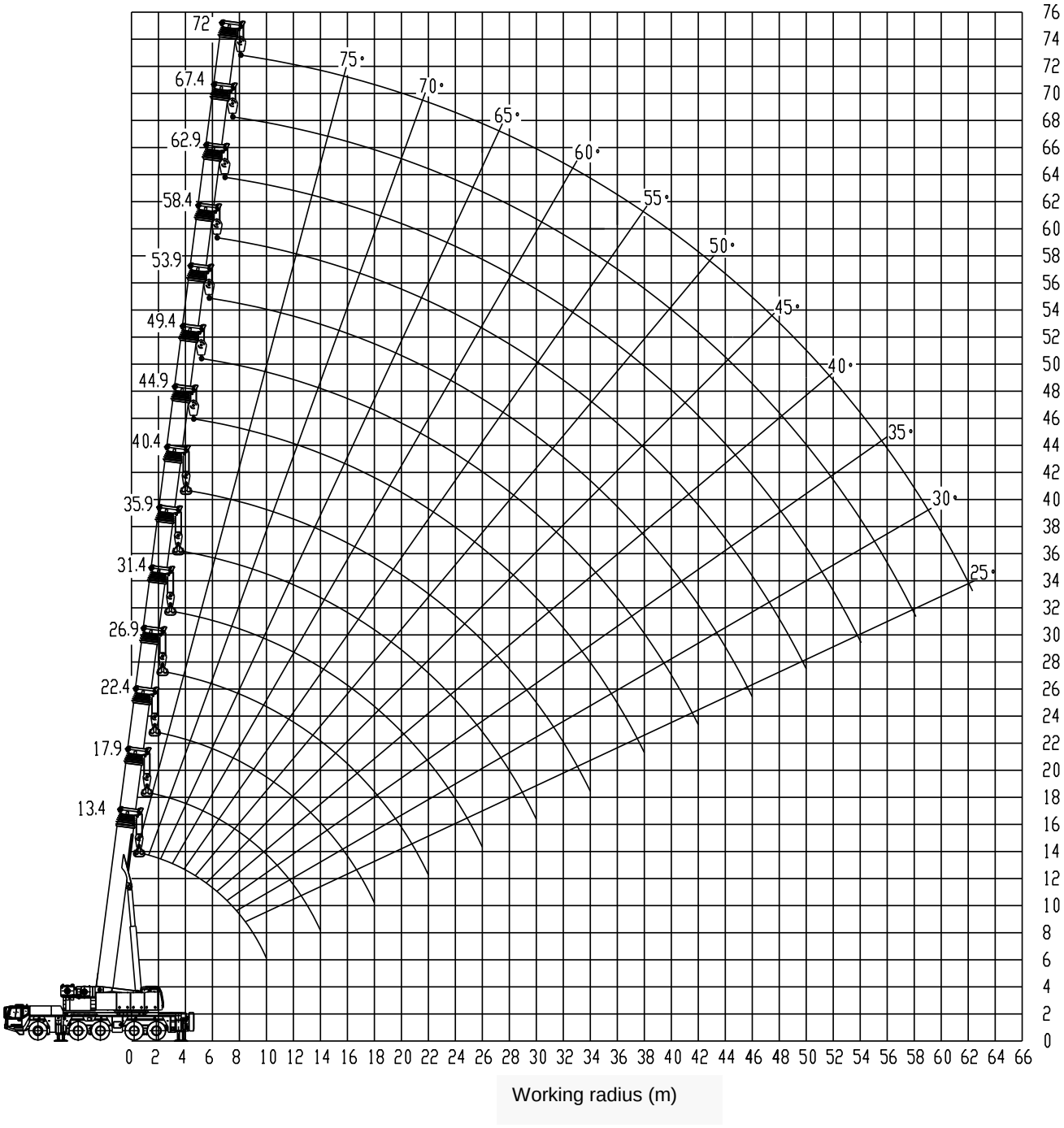
Item			Value	Remarks
Work performance	Max. rated lifting capacity	kg	200000	
	Max. load moment of basic boom	kN.m	6664	At 8 m radius
	Max. lifting height of main boom	m	72	The parameters do not include deflection of main boom and jib. The value in the brackets is the value with extensions installed.
	Max. lifting height of jib	m	95/(103)	
Work speeds	Max. hoist rope speed (Main winch)	m/min	120	At the 4th layer
	Max. hoist rope speed (Auxiliary winch)	m/min	70	At the 4th layer
	Boom extending time	min	12	Affected by the temperature and engine RPM
	Boom derricking up time	s	97	
	Slewing speed	r/min	0 – 1.4	
Driving	Max. height above sea level	m	2000	
	Max. driving speed	km/h	75	
	Max. gradeability	%	40	
	Min. turning diameter	m	20	
	Min. ground clearance	mm	305	
	Limits for exhaust pollutants and smoke		Conform to related standards	GB3847-2005 GB17691-2005 (National Stage V)
	Fuel consumption per hundred kilometers	L	78	
Mass	Deadweight in driving condition	kg	60000	Remove the hook, the movable counterweight, the jib, the rooster sheave, the tip boom, the outrigger pads, sliding beams, main and auxiliary winches, wire ropes reeving on winches and the spare tire, and drain off hydraulic oil of superstructure before vehicle driving.
Dimensions	Overall dimensions (L × W × H)	mm	15660 × 3000 × 4000	
	Outrigger spread (L)	m	8.9	
	Outrigger spread (W)	m	8.3	
	Main boom length	m	13.4 – 72	

Table 1 Technical date *(continued)*

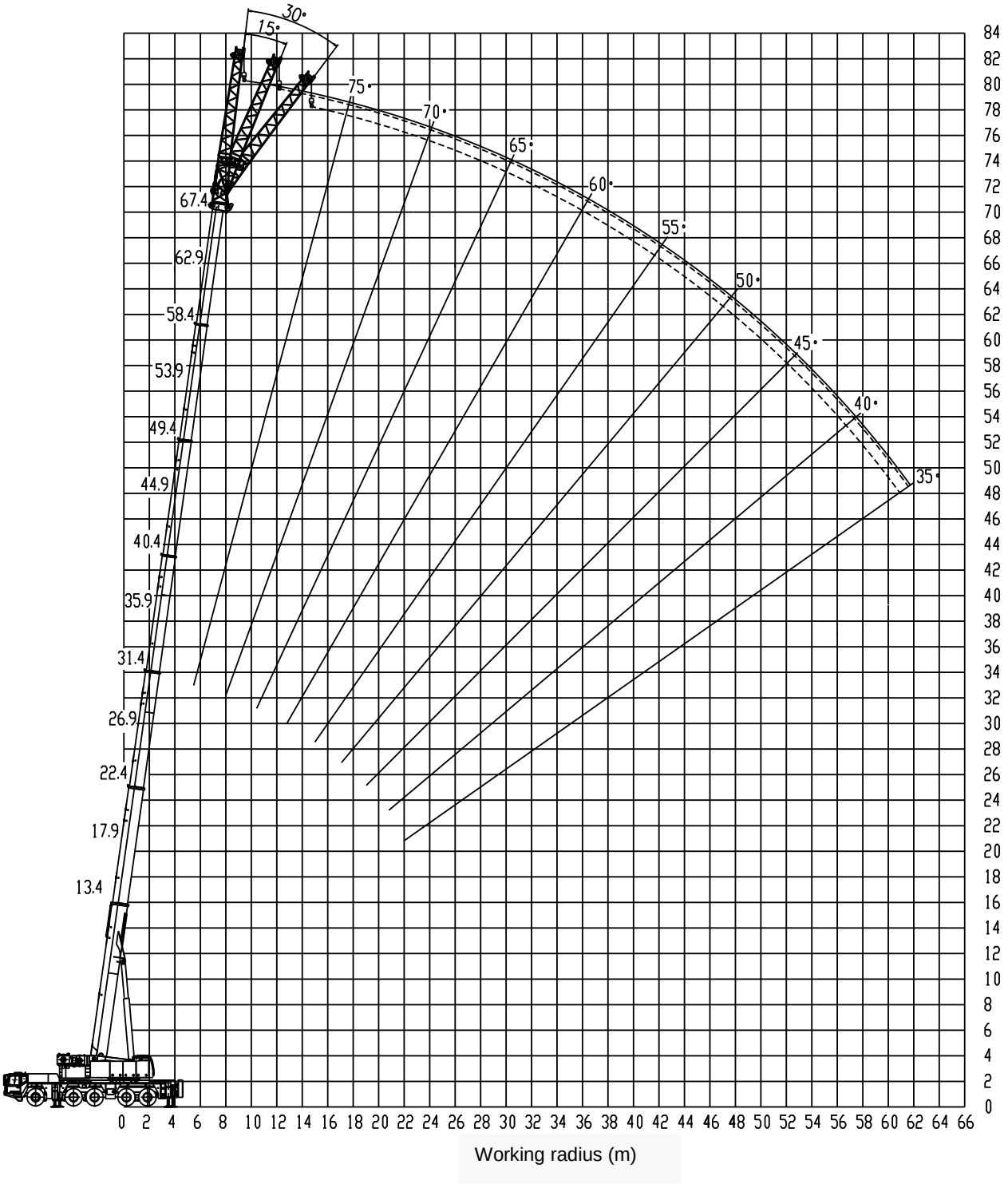
Item				Value	Remarks
Dimensions	Boom angle		°	-0.5 – 83	
	Jib length		m	12, 20, 28	
	Jib + extension length		m	36	Optional
	Offset		°	0, 15, 30	
Chassis	Model			ZLJ5602JQZV5.1	
	Type			II	
	Engine	Model		WP13.530E50	
		Max. rated power	kW/r/min	390	At 2100 r/min
		Max. net power	kW/r/min	385	At 2100 r/min
		Max. output torque	N.m/r/min	2220	At 1200 – 1500 r/min
	Manufacturer			ZOOMLION HEAVY INDUSTRY SCIENCE AND TECHNOLOGY CO., LTD.	

2.3 Lifting height charts

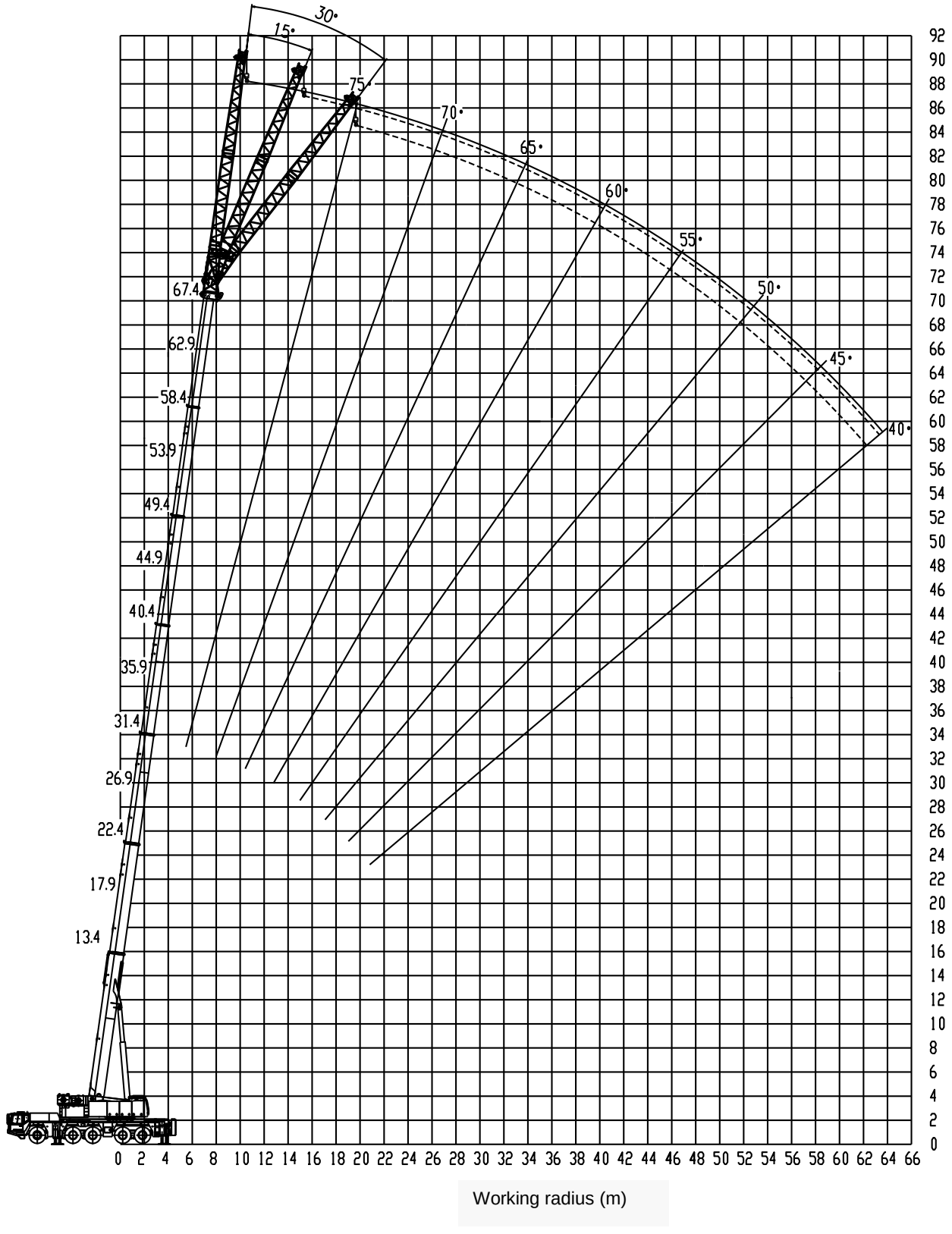
– 72 m main boom



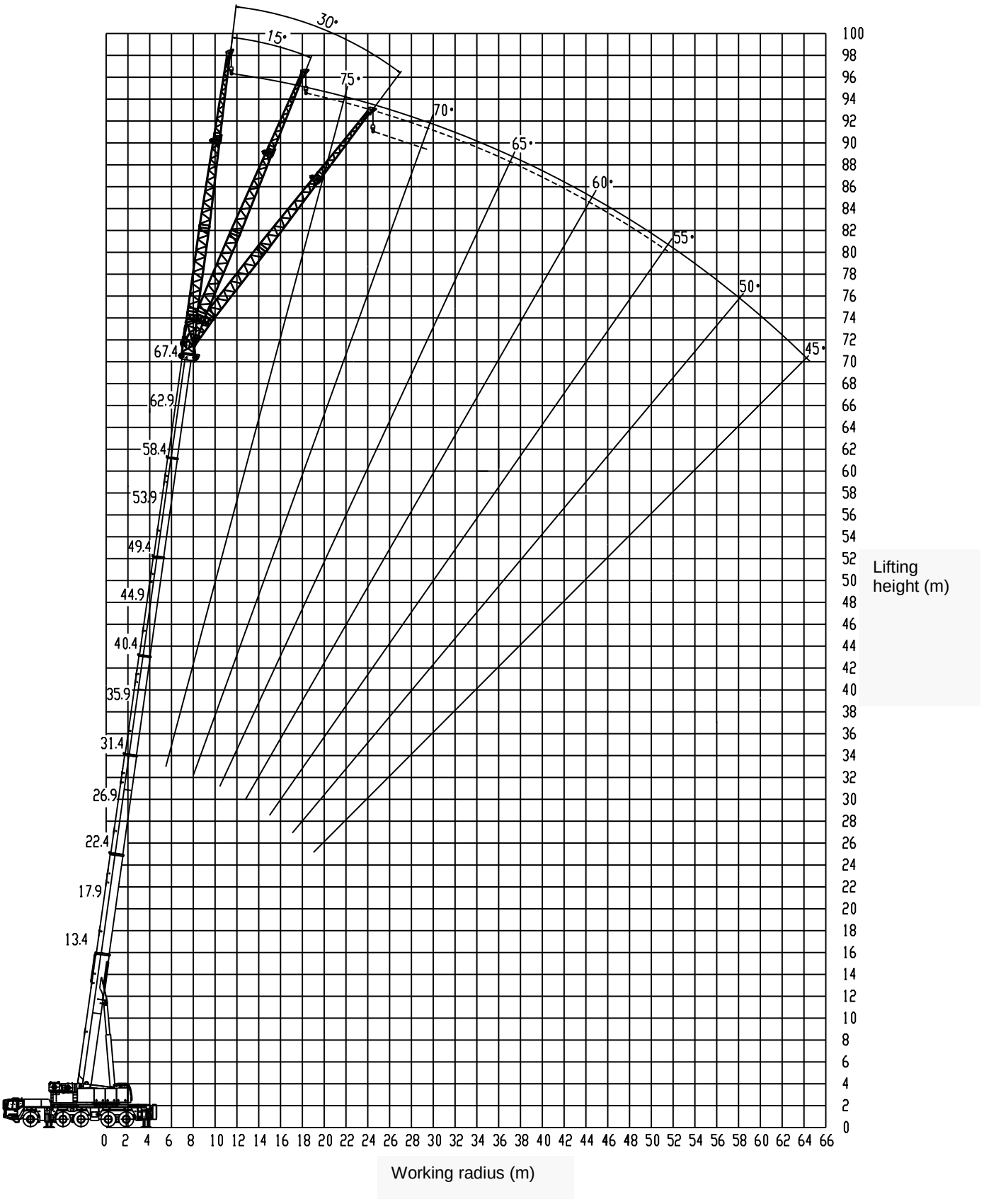
– **67.4 m main boom + 12 m jib (jib section 1)**



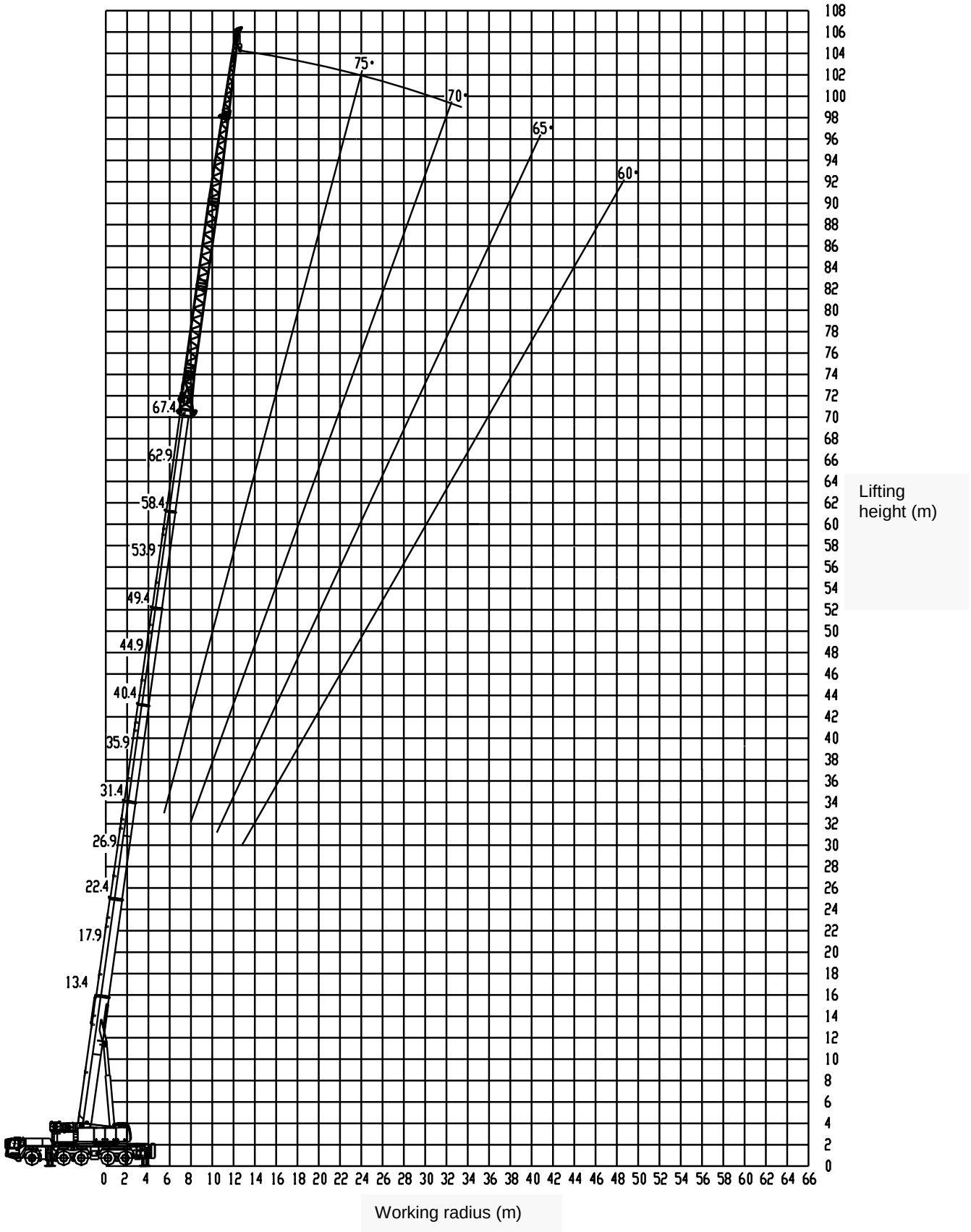
– **67.4 m main boom + 20 m jib (extension 2 + jib section 1)**



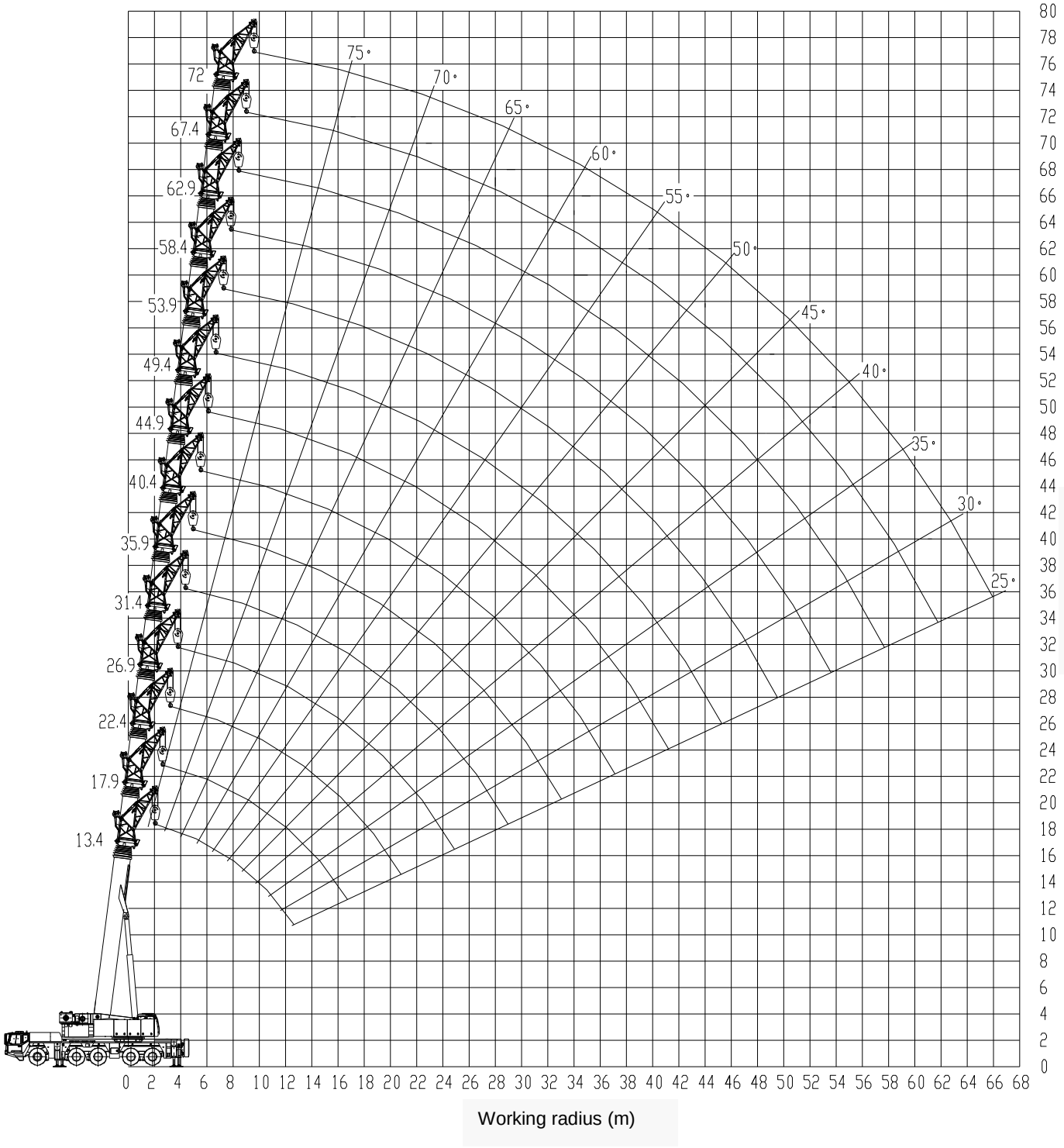
– **67.4 m main boom + 28 m jib (extension 2 + jib section 1 + jib section 2)**



– **67.4 m main boom + 36 m jib (extension 1 + extension 2 + jib section 1 + jib section 2)**



– **13.4 m – 72 m main boom + 4.3 m tip boom**



2.4 Lifting capacity tables

Table 2 Main boom **Unit: ×1000 kg**

Outriggers fully extended, with 72 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		135*	130	125	110										
4.5		128	122	117	108	90									
5.0		120	115	109	105	88									
6.0		108	105	97	95	86	72								
7.0		95	93	87	86	82	70	54							
8.0		85	83	79	78	77	68	52	44						
9.0		75	75	73	72	71	64	50	41	34					
10.0		64	67	67	67	64.5	59	47.5	38	33	26				
11.0			60	60	60	59	56	45	36	32	25	20			
12.0			54	54	54	53.5	53	43.5	34	30	24	19.5	16		
14.0			45	45.5	45	45.5	46	40	30	27	22.5	18.5	15.5	13	11
16.0				39	39	39.5	40	36.5	26.5	24	21	17.5	15	12.5	10.5
18.0				33.5	33	34	35	33	24	22	19	16.5	14.2	12	10
20.0					28	29	30	30	22	20	17.5	15.5	13.5	11.5	9.5
22.0					24	25	25.5	26.5	20	18	16	14.5	12.5	11	9
24.0						21.5	22.5	23.4	18	16.5	15	13.5	12	10.3	8.4
26.0						19	19.5	20.4	16.5	15	13.7	12.5	11	9.7	7.9
28.0							17.5	18.2	15	13.5	12.5	11.5	10.5	9.2	7.4
30.0							15.5	16.2	14	12.5	11.5	10.7	10	8.7	6.7
32.0								14.6	13	11.5	10.5	10	9.5	8.2	6.3
34.0								13.2	12.3	10.7	9.8	9.3	8.9	7.7	5.9
36.0									11	10	9.2	8.6	8.5	7.1	5.5
38.0									10	9.3	8.6	8	8	6.7	5
40.0										8.6	8	7.5	7.4	6.3	4.6
42.0										8	7.3	6.8	6.8	6	4.3
44.0											6.8	6.3	6.3	5.7	4
46.0											6.3	5.8	5.8	5.4	3.8
48.0												5.4	5.4	5.1	3.5
50.0												5	5	4.8	3.2
52.0													4.5	4.6	3
54.0													4.2	4.4	2.8
56.0													4	4.1	2.6
58.0														3.9	2.4
60.0														3.6	2.3
62.0														3.3	2.1
64.0															2
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	Ⅰ	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 3 Main boom **Unit: ×1000 kg**

Outriggers fully extended, with 57 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		135*	130	125	110										
4.5		128	122	117	108	90									
5.0		120	115	109	105	88									
6.0		108	105	97	95	86	72								
7.0		95	93	87	86	82	70	54							
8.0		81	79	78	78	77	68	52	44						
9.0		71	71	70	70	69	64	50	41	34					
10.0		61	62	62	62	62	59	47.5	38	33	26				
11.0			56	56	55	55	55	45	36	32	25	20			
12.0			50	50	50	50	50	43.5	34	30	24	19.5	16		
14.0			41	41	41	42	43	40	30	27	22.5	18.5	15.5	13	11
16.0				34	33	34	35	35.5	26.5	24	21	17.5	15	12.5	10.5
18.0				28	27	28	29	30	24	22	19	16.5	14.2	12	10
20.0					22.5	23.5	24.5	25	22	20	17.5	15.5	13.5	11.5	9.5
22.0					19	20	21	21.5	20	18	16	14.5	12.5	11	9
24.0						17	18	19	18	16.5	15	13.5	12	10.3	8.4
26.0						15	15.5	16.5	16	15	13.7	12.5	11	9.7	7.9
28.0							13.7	14.5	14	13.5	12.5	11.5	10.5	9.2	7.4
30.0							12.2	13	12.3	12.2	11.5	10.7	10	8.7	6.7
32.0								11.5	10.8	10.7	10.5	10	9.5	8.2	6.3
34.0								10.3	9.6	9.5	9.6	9.3	8.9	7.7	5.9
36.0									8.6	8.5	8.6	8.6	8.5	7.1	5.5
38.0									7.6	7.5	7.6	7.8	8	6.7	5
40.0										6.7	6.8	7	7.4	6.3	4.6
42.0										5.9	6	6.4	6.8	6	4.3
44.0											5.3	5.7	6	5.7	4
46.0											4.7	5.1	5.4	5.4	3.8
48.0												4.5	4.8	5.1	3.5
50.0												3.9	4.2	4.7	3.2
52.0													3.8	4.2	2.9
54.0													3.3	3.7	2.7
56.0													2.8	3.3	2.5
58.0														2.8	2.3
60.0														2.5	2.2
62.0														2.2	1.9
64.0															1.8
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	Ⅰ	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 4 Main boom **Unit: ×1000 kg**

Outriggers fully extended, with 41 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		135*	130	125	110										
4.5		128	122	117	108	90									
5.0		110	110	109	105	88									
6.0		98	97	97	95	86	72								
7.0		87	85	85	85	82	70	54							
8.0		75	74	74	74	74	68	52	44						
9.0		65	65	65	65	65	64	50	41	34					
10.0		57	57	57	57	57	57	47.5	38	33	26				
11.0			50	51	50	51	52	45	36	32	25	20			
12.0			44	44	43	44	45	43.5	34	30	24	19.5	16		
14.0			34	34	33	34	35	35.5	30	27	22.5	18.5	15.5	13	11
16.0				27	26.2	27	28	28.5	26.5	24	21	17.5	15	12.5	10.5
18.0				22	21.4	22	23	23.5	23	22	19	16.5	14.2	12	10
20.0					17.6	18.4	19.2	20	19	19	17.5	15.5	13.5	11.5	9.5
22.0					14.8	15.5	16.3	17.1	16.4	16	16	14.5	12.5	11	9
24.0						13.2	14	14.7	14.3	14	14	13.5	12	10.3	8.4
26.0						11.3	12.1	12.8	12.3	12.1	12	12	11	9.7	7.9
28.0							10.5	11.2	10.7	10.6	10.4	10.5	10.5	9.2	7.4
30.0							9.1	9.9	9.3	9.2	9.1	9.3	9.5	8.7	6.7
32.0								8.6	8	7.9	8	8.2	8.5	8.2	6.3
34.0								7.6	7	6.9	6.9	7.3	7.4	7.7	5.9
36.0									6	5.9	6	6.3	6.6	7	5.5
38.0									5.2	5.1	5.2	5.5	5.8	6.1	5
40.0										4.4	4.4	4.8	5.1	5.5	4.6
42.0										3.7	3.8	4.1	4.4	4.8	4.3
44.0											3.2	3.5	3.9	4.2	4
46.0											2.7	3	3.3	3.7	3.7
48.0												2.5	2.8	3.2	3.2
50.0												2.1	2.4	2.8	2.8
52.0													2	2.4	2.4
54.0													1.6	2	2
56.0													1.3	1.7	1.7
58.0														1.4	1.4
60.0															
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	Ⅰ	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 5 Main boom **Unit: ×1000 kg**

Outriggers fully extended, with 32 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		125	125	125	110										
4.5		117	117	117	108	90									
5.0		106	106	106	105	88									
6.0		93	92	92	91	86	72								
7.0		82	81	81	80	79	70	54							
8.0		72	71	71	71	70	66	52	44						
9.0		62	62	62	62	62	62	50	41	34					
10.0		52	52	53	51	52	53	47.5	38	33	26				
11.0			43	44	43	44	45	45	36	32	25	20			
12.0			37	38	37	38	39	40	34	30	24	19.5	16		
14.0			28	29	28	29	29.5	30.5	30	27	22.5	18.5	15.5	13	11
16.0				23	22	22.5	23.5	24	23.5	24	21	17.5	15	12.5	10.5
18.0				18	17	18	19	20	19	19.5	19	16.5	14.2	12	10
20.0					14	15	15.8	16.5	16	16	16	15.5	13.5	11.5	9.5
22.0					11	12	13.2	14	13	13	13	13.5	12.5	11	9
24.0						10	11.2	12	11.2	11	11	11.5	12	10.3	8.4
26.0						8	9.4	10.3	9.5	9.3	9.5	9.8	10.3	9.7	7.9
28.0							8	8.8	8.2	8	8.2	8.5	9	9.2	7.4
30.0							6.8	7.6	7	6.8	7	7.3	7.7	8	6.7
32.0								6.6	6	5.8	6	6.2	6.6	7	6.3
34.0								5.6	5	4.9	5	5.2	5.6	6	5.9
36.0									4.2	4.1	4.2	4.5	4.9	5.2	5.2
38.0									3.5	3.4	3.5	3.8	4.1	4.6	4.6
40.0										2.7	2.8	3.1	3.5	4	4
42.0										2.2	2.3	2.6	2.9	3.3	3.3
44.0											1.8	2.1	2.4	2.7	2.7
46.0											1.2	1.6	1.9	2.3	2.3
48.0												1	1.5	1.9	1.9
50.0													1	1.5	1.5
52.0														1.1	1.1
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	Ⅰ	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 6 Main boom **Unit: ×1000 kg**

Outriggers fully extended, with 21 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		140*	125	120											
3.5		130	125	120	110										
4.0		120	120	120	110										
4.5		112	112	112	108	90									
5.0		101	101	101	101	88									
6.0		90	88	87	86	85	72								
7.0		78	76	75	74	73	70	54							
8.0		64	64	65	64	64	64	52	44						
9.0		51	51	51	50	51	52	50	41	34					
10.0		41	41	42	41	41	42	43	38	33	26				
11.0			34	35	34	34	35	36	36	32	25	20			
12.0			29.5	30	29	30	31	32	31	28	24	19.5	16		
14.0			21.5	22	21	22	23	24	23.5	23	22.5	18.5	15.5	13	11
16.0				17	16	17	18	19	18	18	18	17.5	15	12.5	10.5
18.0				13.5	12.5	13.5	14.5	15	14.6	14.6	14.6	14.5	14.2	12	10
20.0					10	10.8	11.5	12.5	12	12	12	12	12.5	11.5	9.5
22.0					7.8	8.5	9.5	10.3	9.7	9.7	9.7	10	10.5	11	9
24.0						7	7.7	8.5	8	8	8	8.4	8.8	9.3	8.4
26.0						5.5	6.4	7	6.6	6.5	6.5	6.8	7.2	7.7	7.7
28.0							5.1	6	5.4	5.3	5.4	5.6	6	6.5	6.5
30.0							4	5	4.3	4.2	4.4	4.7	5.2	5.5	5.5
32.0								4	3.4	3.3	3.5	3.8	4.3	4.6	4.6
34.0								3.2	2.6	2.5	2.7	3	3.5	3.8	3.8
36.0									2	1.9	2	2.3	2.8	3.2	3.2
38.0									1.3	1.2	1.4	1.7	2.1	2.5	2.5
40.0												1.1	1.6	2	2
42.0													1.1	1.5	1.5
44.0														1.1	1.1
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	Ⅰ	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 140 tons, 15 reevings are recommended.

Table 7 Main boom **Unit: ×1000 kg**

Outriggers fully extended, with 10 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		130	120	115											
3.5		120	120	115	110										
4.0		115	115	115	110										
4.5		107	107	107	107	90									
5.0		98	98	98	98	88									
6.0		86	84	84	84	83	72								
7.0		70	69	70	69	68	67	54							
8.0		51	51	52	51	51	51	52	44						
9.0		40	40	41	40	40	41	42	40	34					
10.0		32	32	33	32	32	33	34	32	32	26				
11.0			26	27	26	26	27	28	27	27	25	20			
12.0			22	22.5	21	22	23	24	23	23	23	19.5	16		
14.0			15.5	16	15	16	17	18	17	17	17	17	15.5	13	11
16.0				12	11	12	13	13.7	13	13	13	13	13	12.5	10.5
18.0				9	8.2	9	10	10.7	10	10	10	10.5	11	11	10
20.0					6	6.8	7.8	8.5	7.8	7.8	8	8.4	8.8	9.3	9.3
22.0					4.2	5	6	6.7	6	6	6.2	6.5	6.9	7.4	7.4
24.0						3.6	4.5	5.4	4.7	4.6	4.8	5.1	5.5	6	6
26.0						2.5	3.4	4.2	3.6	3.5	3.6	3.9	4.3	4.8	4.8
28.0							2.4	3.2	2.6	2.5	2.6	2.9	3.3	3.8	3.8
30.0							1.5	2.4	1.7	1.6	1.8	2.1	2.5	3	3
32.0								1.6				1.4	1.8	2.2	2.2
34.0														1.6	1.6
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	**Ⅰ**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Table 8 Main boom **Unit: ×1000 kg**

Outriggers fully extended, without counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		130	120	110											
3.5		120	120	110	105										
4.0		110	110	110	105										
4.5		105	105	103	103	90									
5.0		93	92	92	92	88									
6.0		75	74	75	74	72	65								
7.0		50	51	51	50	50	49	49							
8.0		37	37	38	37	37	37	37	35						
9.0		28	28	28.5	27.5	28.5	29	29	27	27					
10.0		22	22	22.5	21.5	22.5	23	24	23	22	22				
11.0			17.5	18	17	18	19	20	19	18	18	18			
12.0			14	14.5	13.5	14.5	15.5	16.5	15.5	15	14	14	14		
14.0			9.5	10	9	10	11	12	11	11	10	10	10	10	8
16.0				7	6	7	8	8.5	8	8	8	8	8	8	7
18.0				4.7	4	4.7	5.6	6	5.6	5.5	5.5	6	6	6	6
20.0					2	3	4	4.5	3.8	3.7	3.7	4	4.5	4.5	4.5
22.0						1.6	2.5	3.3	2.6	2.5	2.5	2.8	3	3.5	3.5
24.0								2.3					2	2.5	2.5
26.0														1.5	1.5
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	Ⅰ	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Table 9 Main boom **Unit: ×1000 kg**

Outriggers intermediately extended, with 72 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		135*	130	125	110										
4.5		128	122	117	108	90									
5.0		120	115	109	105	88									
6.0		108	105	97	95	86	72								
7.0		87	87	87	86	82	70	54							
8.0		77	77	77	78	77	68	52	44						
9.0		67	67	67	67	68	64	50	41	34					
10.0		57	57	58	57	57	57	47.5	38	33	26				
11.0			48	49.5	48	49	50	45	36	32	25	20			
12.0			42	43.5	42.5	43	44	43.5	34	30	24	19.5	16		
14.0			33	34	33	34	35	36	30	27	22.5	18.5	15.5	13	11
16.0				28	27	28	28.5	29	28	24	21	17.5	15	12.5	10.5
18.0				22.5	22	23	24	25	24	22	19	16.5	14.2	12	10
20.0					18	19	20	20.5	20	20	17.5	15.5	13.5	11.5	9.5
22.0					15	16	17	17.5	17	17	16	14.5	12.5	11	9
24.0						14	14.5	15	15	15	15	13.5	12	10.3	8.4
26.0						12	12.5	13	13	13	13	12.5	11	9.7	7.9
28.0							11	11.5	11	11	11	11.5	10.5	9.2	7.4
30.0							9.5	10	10	10	10	10.2	10	8.7	6.7
32.0								9	8.7	8.7	8.9	9.2	9.5	8.2	6.3
34.0								8	7.7	7.7	7.8	8.1	8.5	7.7	5.9
36.0									6.8	6.7	6.8	7.2	7.5	7.1	5.5
38.0									6	5.9	6	6.3	6.7	6.7	5
40.0										5.2	5.2	5.5	6	6.3	4.6
42.0										4.5	4.5	4.8	5.2	5.6	4.3
44.0											4	4.3	4.6	5	4
46.0											3.4	3.7	4	4.5	3.8
48.0												3.1	3.5	4	3.5
50.0												2.5	3	3.5	3.2
52.0													2.6	3	3
54.0													2.1	2.6	2.6
56.0													1.8	2.2	2.2
58.0														1.8	1.8
60.0														1.5	1.5
62.0															1.2
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	Ⅰ	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 10 Main boom **Unit: ×1000 kg**

Outriggers intermediately extended, with 57 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		135*	130	125	110										
4.5		128	122	117	108	90									
5.0		120	115	109	105	88									
6.0		108	105	97	95	86	72								
7.0		86	86	85	84	82	70	54							
8.0		68	68	69	67	67	68	52	44						
9.0		56	56	56	55	56	57	50	41	34					
10.0		47	47	47	46	47	48	47.5	38	33	26				
11.0			40	40	40	40	41	42	36	32	25	20			
12.0			35	35	34	35	36	37	34	30	24	19.5	16		
14.0			27	27	26	27	28	29	28	27	22.5	18.5	15.5	13	11
16.0				22	21	22	23	23.5	23	23	21	17.5	15	12.5	10.5
18.0				18	17	18	19	19.5	19	19	19	16.5	14.2	12	10
20.0					14	15	15.5	16	15.5	15.5	15.5	15.5	13.5	11.5	9.5
22.0					11	12	13	14	13	13	13	13.5	12.5	11	9
24.0						10	11	12	11	11	11	11.5	12	10.3	8.4
26.0						8.5	9	10	9.5	9.5	10	10	10.5	9.7	7.9
28.0							8	9	8.2	8.2	8.5	8.8	9	9.2	7.4
30.0							7	7.8	7.2	7.2	7.4	7.7	8	8.5	6.7
32.0								6.8	6.2	6.1	6.3	6.6	7	7.5	6.3
34.0								5.8	5.3	5.2	5.3	5.6	6	6.5	5.9
36.0									4.4	4.4	4.5	4.8	5.2	5.7	5.5
38.0									3.5	3.6	3.8	4.1	4.5	5	5
40.0										3	3.2	3.5	3.8	4.3	4.3
42.0										2.4	2.5	2.8	3.2	3.7	3.7
44.0											2	2.3	2.7	3.1	3.1
46.0											1.5	1.8	2.2	2.6	2.6
48.0												1.5	1.8	2.2	2.2
50.0													1.5	1.8	1.8
52.0														1.5	1.5
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	**Ⅰ**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 11 Main boom **Unit: ×1000 kg**

Outriggers intermediately extended, with 41 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		135*	130	125	110										
4.5		113	112	112	108	90									
5.0		106	105	105	105	88									
6.0		90	90	90	87	86	72								
7.0		68	68	68	67	65	67	54							
8.0		54	54	54	53	54	54	52	44						
9.0		43	43	44	43	44	45	45	41	34					
10.0		36	36	37	36	37	38	39	38	33	26				
11.0			31	31	30	31	32	33	33	32	25	20			
12.0			26	26	25.5	26	27	28	28	28	24	19.5	16		
14.0			20	20	19	20	21	22	21.5	21.5	22	18.5	15.5	13	11
16.0				16	15	16	16.5	17.5	17	17	17	17	15	12.5	10.5
18.0				13	12	13	13.5	14.5	14	14	14	14	14.2	12	10
20.0					9.5	10	11	12	11	11	11	11.5	12	11.5	9.5
22.0					7.5	8.5	9	10	9.5	9.4	9.5	9.8	10.4	11	9
24.0						6.8	7.5	8	7.8	7.8	8	8.3	8.7	9.3	8.4
26.0						5.5	6	7	6.5	6.4	6.6	6.9	7.4	7.8	7.8
28.0							5	6	5.4	5.3	5.4	5.7	6.2	6.6	6.6
30.0							4	5	4.4	4.3	4.4	4.7	5.2	5.6	5.6
32.0								4	3.5	3.4	3.5	3.8	4.3	4.7	4.7
34.0								3.2	2.7	2.7	2.7	3.1	3.5	3.9	3.9
36.0									2	2	2.1	2.4	2.8	3.2	3.2
38.0									1.5	1.4	1.5	1.8	2.2	2.6	2.6
40.0													1.7	2.1	2.1
42.0														1.5	1.5
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	**Ⅰ**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 12 Main boom **Unit: ×1000 kg**

Outriggers intermediately extended, with 32 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		200*	135*	125											
3.5		145*	135*	125	110										
4.0		125	125	125	110										
4.5		102	102	102	102	90									
5.0		96	96	96	95	88									
6.0		77	77	76	73	72	70								
7.0		57	57	58	57	56	56	52							
8.0		44	44.5	45	44	45	45	45	44						
9.0		35	35.5	36.5	35.5	36	37	38	37	34					
10.0		30	30	30.5	29.5	30.5	31.5	32.5	32	32	26				
11.0			25.5	26	25	26	27	27.5	27	27.5	25	20			
12.0			21.5	22	21	22	23	23.5	23	23.5	23	19.5	16		
14.0			16	17	16	17	18	18.5	18	18	18	18.5	15.5	13	11
16.0				13	12	13	14	14.5	14	14	14	14.5	15	12.5	10.5
18.0				10	9	10	11	11.5	11	11	11	11.5	12	12	10
20.0					7.2	8	9	9.5	9	9	9.2	9.5	9.8	10	9.5
22.0					5.5	6.3	7.2	7.8	7.3	7.3	7.4	7.7	8.2	8.5	8.5
24.0						4.8	5.7	6.5	5.8	5.8	6	6.3	6.7	7.2	7.2
26.0						3.6	4.5	5.3	4.6	4.6	4.7	5	5.5	6	6
28.0							3.5	4.3	3.6	3.6	3.7	4	4.4	5	5
30.0							2.5	3.4	2.7	2.7	2.8	3.1	3.5	4	4
32.0								2.7	2	2	2.1	2.3	2.7	3.2	3.2
34.0								2	1.3	1.3	1.4	1.7	2.1	2.5	2.5
36.0													1.5	2	2
38.0														1.4	1.4
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	**Ⅰ**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 200 tons, 18 reevings are recommended. When the lifting capacity is 145 tons, 15 reevings are recommended.

Table 13 Main boom **Unit: ×1000 kg**

Outriggers intermediately extended, with 21 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		140*	125	120											
3.5		130	125	120	110										
4.0		120	120	120	110										
4.5		97	95	94	92	90									
5.0		88	86	85	80	78									
6.0		60	60	60	57	57	55								
7.0		44	44	45	44	44	44	44							
8.0		34	34	35	34	35	35	35	34						
9.0		27	27	28	27	28	29	29	28	27					
10.0		23	23	23.5	22.5	23.5	24.5	25	24.5	24	23				
11.0			19	19.5	18.5	19.5	20.5	21.5	21	21	20	19.5			
12.0			16	16.5	15.5	16.5	17.5	18.5	17.5	17.5	17.5	18	15		
14.0			11.5	12	11	12	13	13.5	13	13	13	13.5	13	12	10
16.0				9	8.3	9.2	10	10.5	10	10	10	10.3	10.8	11	9
18.0				6.5	6	6.8	7.6	8.5	7.8	7.7	7.8	8.2	8.5	9	8.5
20.0					4.2	5	5.8	6.6	6	5.9	6	6.4	6.7	7.2	7
22.0					2.7	3.5	4.3	5.2	4.5	4.4	4.5	4.9	5.3	5.7	5.6
24.0						2.3	3.2	4	3.3	3.2	3.3	3.6	4	4.5	4.4
26.0						1.3	2.2	3	2.3	2.2	2.3	2.6	3	3.5	3.4
28.0								2.1	1.5	1.4	1.5	1.8	2.2	2.5	2.4
30.0								1.3						1.9	1.8
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	**Ⅰ**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Note:

The values with * are suitable for 220 tons hook. When the lifting capacity is 140 tons, 15 reevings are recommended.

Table 14 Main boom **Unit: ×1000 kg**

Outriggers intermediately extended, with 10 tons counterweight, over full range															
Radius (m)		13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72
3.0		130	120	110											
3.5		120	120	110	100										
4.0		115	100	100	93										
4.5		87	82	78	74	71									
5.0		68	65	63	59	58									
6.0		44	45	44	42	42	42								
7.0		32	32	33	32	32	32	33							
8.0		24	24	25	24	25	25.5	26	25						
9.0		19	19	20	19	20	20.5	21	20	20					
10.0		15	15	16	15	16	16.5	17.5	17	16	16				
11.0			12	13	12	13	13.5	14.5	14	14	14	14			
12.0			10	10.5	10	11	11.5	12.5	12	12	12	12	12		
14.0			6.5	7	6.5	7.5	8.3	9.2	8.5	8.5	8.7	9	9.2	8	8
16.0				5	4.2	5	5.8	6.7	6.1	6	6.2	6.5	6.8	7.5	7.5
18.0				3	2.4	3.2	4	4.8	4.2	4.1	4.3	4.6	5	5.5	5.5
20.0						1.7	2.5	3.4	2.7	2.6	2.8	3.1	3.5	4	4
22.0								2.2	1.6	1.5	1.7	2	2.4	2.8	2.8
Reeving		14	14	12	10	8	7	5	4	3	3	2	2	2	2
Hook		130 tons							50 tons			25 tons			
Telescoping mode	**Ⅰ**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅱ	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**4**
	Ⅲ	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**4**
	Ⅳ	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**4**
	Ⅴ	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**4**
	Ⅵ	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**4**

Table 15 Main boom + jib **Unit: ×1000 kg**

Outriggers fully extended, with 72 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.6	6.2	5.4	7	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	7.3	5.9	5.1	6.5	5.5	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	6.9	5.6	4.9	6	5.2	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	6.6	5.4	4.8	5.6	4.9	4.2	3.9	3	2.7	3.5	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	6.2	5.1	4.6	5.1	4.8	4.0	3.7	2.9	2.6	3.2	2.7	2.0	2.3	1.9	1.6	2	1.6		1.2	
64	5.8	4.9	4.5	4.8	4.6	4.0	3.5	2.8	2.5	3.0	2.6	2.0	2.2	1.8	1.5	1.8	1.5		1.1	
62	5.5	4.7	4.4	4.5	4.3	4.0	3.3	2.7	2.4	2.7	2.5	1.8	2.1	1.7	1.5	1.7	1.4		1	
60	5.2	4.5	4.3	4.3	4.0	3.8	3.1	2.6	2.3	2.5	2.3	1.7	2.0	1.6	1.4	1.7	1.4			
58	4.9	4.4	4.2	4.1	3.8	3.6	2.9	2.5	2.2	2.4	2.2	1.6	1.9	1.5	1.4	1.6	1.3			
56	4.6	4.2	4.1	3.8	3.6	3.5	2.8	2.4	2.2	2.2	2.0	1.5	1.8	1.4	1.3	1.5	1.1			
54	4.3	4.0	4.0	3.6	3.4	3.3	2.7	2.3	2.1	2.1	1.9	1.5	1.7	1.4	1.3	1.4				
52	4.1	3.8	3.8	3.4	3.2	3.2	2.6	2.2	2.1	2.0	1.8	1.5	1.6	1.3	1.3	1.4				
50	3.9	3.6	3.6	3.2	3.1	3.0	2.5	2.2	2	2.0	1.8	1.4	1.5	1.3	1.2	1.3				
48	3.7	3.4	3.4	3.1	2.9	2.9	2.4	2.1	2.0	1.8	1.6	1.4	1.4	1.3	1.2	1.2				
46	3.5	3.3	3.3	3.0	2.8	2.8	2.3	2.1	2.0	1.8	1.6	1.4	1.4	1.2	1.2	1.1				
44	3.3	3.1	3.1	2.8	2.7	2.7	2.2	2.0	2.0	1.6	1.5	1.3	1.3	1.2	1.2	1.0				
42	3.1	2.9	2.9	2.6	2.5	2.4	2.1	2.0	1.9	1.6	1.5	1.3	1.3	1.2	1.1					
40	2.9	2.7	2.7	2.4	2.3	2.2	2.0	2.0	1.9	1.5	1.4	1.2	1.2	1.1	1.1					
35	2.3	2.2	2.2	1.7	1.6	1.5	1.6	1.5	1.4				1.1	1.0	1.0					

Table 16 Main boom + jib **Unit: ×1000 kg**

Outriggers fully extended, with 57 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.6	6.2	5.4	7	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	7.3	5.9	5.1	6.5	5.5	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	6.9	5.6	4.9	6	5.2	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	6.6	5.4	4.8	5.6	4.9	4.2	3.9	3	2.7	3.5	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	6.2	5.1	4.6	5.1	4.8	4.0	3.7	2.9	2.6	3.2	2.7	2.0	2.3	1.9	1.6	2	1.6		1.2	
64	5.8	4.9	4.5	4.8	4.6	4.0	3.5	2.8	2.5	3.0	2.6	2.0	2.2	1.8	1.5	1.8	1.5		1.1	
62	5.5	4.7	4.4	4.5	4.3	4.0	3.3	2.7	2.4	2.7	2.5	1.8	2.1	1.7	1.5	1.7	1.4		1	
60	5.2	4.5	4.3	4.3	4.0	3.8	3.1	2.6	2.3	2.5	2.3	1.7	2.0	1.6	1.5	1.7	1.4			
58	4.9	4.4	4.2	4.1	3.8	3.6	2.9	2.5	2.2	2.4	2.2	1.6	1.9	1.5	1.4	1.6	1.3			
56	4.6	4.2	4.1	3.8	3.6	3.5	2.8	2.4	2.2	2.2	2.0	1.5	1.8	1.4	1.3	1.5	1.1			
54	4.3	4.0	4.0	3.6	3.4	3.3	2.7	2.3	2.1	2.1	1.9	1.5	1.7	1.4	1.3	1.4				
52	4.1	3.8	3.8	3.4	3.2	3.2	2.6	2.2	2.1	2.0	1.8	1.5	1.6	1.3	1.3	1.4				
50	3.9	3.6	3.6	3.2	3.1	3.0	2.5	2.2	2.1	2.0	1.8	1.4	1.5	1.3	1.2	1.3				
48	3.7	3.4	3.4	3.1	2.9	2.9	2.4	2.1	2.0	1.8	1.6	1.4	1.4	1.3	1.2	1.2				
46	3.4	3.3	3.3	3.0	2.8	2.8	2.3	2.1	2.0	1.8	1.6	1.4	1.4	1.2	1.2	1.1				
44	3.1	3.0	3.0	2.8	2.7	2.7	2.2	2.0	2.0	1.6	1.5	1.3	1.3	1.2	1.2	1.0				
42	2.9	2.8	2.8	2.5	2.4	2.4	2.1	2.0	1.9	1.6	1.5	1.3	1.3	1.2	1.1					
40	2.6	2.5	2.5	2.2	2.1	2.1	1.9	1.8	1.8	1.5	1.4	1.2	1.2	1.1	1.1					
35	2.1	2.0	2.0	1.6	1.5	1.5	1.5	1.4	1.4				1.1	1.0	1.0					

Table 17 Main boom + jib **Unit: ×1000 kg**

Outriggers fully extended, with 41 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.6	6.2	5.4	7	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	7.3	5.9	5.1	6.5	5.5	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	6.9	5.6	4.9	6	5.2	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	6.6	5.4	4.8	5.6	4.9	4.2	3.9	3	2.7	3.5	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	6.2	5.1	4.6	5.1	4.8	4.0	3.7	2.9	2.6	3.2	2.7	2.0	2.3	1.9	1.6	2	1.6		1.2	
64	5.8	4.9	4.5	4.8	4.6	4.0	3.5	2.8	2.5	3.0	2.6	2.0	2.2	1.8	1.5	1.8	1.5		1.1	
62	5.5	4.7	4.4	4.5	4.3	4.0	3.3	2.7	2.4	2.7	2.5	1.8	2.1	1.7	1.5	1.7	1.4		1	
60	4.7	4.5	4.3	4.1	4.0	3.8	3.1	2.6	2.3	2.5	2.3	1.7	2.0	1.6	1.4	1.7	1.4			
58	4.2	4.0	3.9	3.6	3.5	3.4	2.9	2.5	2.2	2.4	2.2	1.6	1.9	1.5	1.4	1.6	1.3			
56	3.7	3.5	3.4	3.1	3.0	2.9	2.8	2.4	2.2	2.2	2.0	1.5	1.8	1.4	1.3	1.5	1.1			
54	3.2	3.1	3.0	2.8	2.7	2.6	2.5	2.3	2.1	2.0	1.9	1.5	1.7	1.4	1.3	1.4				
52	2.8	2.7	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.7	1.6	1.5	1.5	1.3	1.2	1.2				
50	2.4	2.3	2.2	2.1	2.0	2.0	1.8	1.7	1.6	1.4	1.3	1.2	1.2	1.1	1.0					
48	2.1	2.0	2.0	1.8	1.7	1.7	1.5	1.4	1.3	1.2	1.1	1.0	1.0							
46	1.8	1.7	1.7	1.5	1.4	1.4	1.2	1.1	1.1	1.0										
44	1.6	1.5	1.4	1.2	1.2	1.2	1.0	1.0												
42	1.3	1.2	1.2	1.0	1.0	1.0														
40	1.1	1.0	1.0																	

Table 18 Main boom + jib **Unit: ×1000 kg**

Outriggers fully extended, with 32 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.6	6.2	5.4	7	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	7.3	5.9	5.1	6.5	5.5	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	6.9	5.6	4.9	6	5.2	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	6.5	5.4	4.8	5.6	4.9	4.2	3.9	3	2.7	3.5	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	5.7	5.1	4.6	4.8	4.6	4.0	3.7	2.9	2.6	3.2	2.7	2.0	2.3	1.9	1.6	2	1.6		1.2	
64	4.9	4.6	4.4	4.2	4.0	3.8	3.5	2.8	2.5	3.0	2.6	2.0	2.2	1.8	1.5	1.8	1.5		1.1	
62	4.2	4.0	3.8	3.6	3.4	3.3	3.2	2.7	2.4	2.7	2.4	1.8	2.1	1.7	1.5	1.7	1.4		1	
60	3.6	3.4	3.2	3.1	2.9	2.8	2.7	2.5	2.2	2.3	2.1	1.7	2.0	1.6	1.4	1.5	1.3			
58	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.1	2.0	1.9	1.7	1.6	1.6	1.5	1.3	1.2	1.1			
56	2.6	2.4	2.4	2.2	2.1	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.3	1.1	1.0	1.0				
54	2.2	2.0	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	1.0							
52	1.8	1.7	1.6	1.4	1.4	1.4	1.2	1.1	1.0											
50	1.4	1.3	1.3	1.1	1.1	1.1														
48	1.2	1.1	1.1																	

Table 19 Main boom + jib **Unit: ×1000 kg**

Outriggers fully extended, with 21 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.8	6.2	5.4	7.0	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	6.8	6.0	5.1	5.8	5.4	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	5.8	5.2	4.9	5.0	4.5	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	4.8	4.4	4.1	4.1	3.8	3.6	3.7	3	2.7	3.1	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	4.0	3.6	3.5	3.4	3.2	3.0	3.0	2.7	2.5	2.5	2.2	2.0	2.3	1.8	1.5	1.8	1.6		1.2	
64	3.3	3.0	2.8	2.8	2.6	2.5	2.5	2.2	2.0	2.0	1.8	1.6	1.8	1.5	1.3	1.4	1.2			
62	2.7	2.5	2.3	2.2	2.1	2.0	1.9	1.7	1.6	1.5	1.4	1.2	1.3	1.1	1.0	1.0				
60	2.1	2.0	1.8	1.7	1.6	1.5	1.5	1.3	1.2	1.1	1.0									
58	1.6	1.5	1.4	1.3	1.2	1.1	1.1													
56	1.2	1.1	1.0																	

Table 20 Main boom + jib **Unit: ×1000 kg**

Outriggers intermediately extended, with 72 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.6	6.2	5.4	7	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	7.3	5.9	5.1	6.5	5.5	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	6.9	5.6	4.9	6	5.2	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	6.6	5.4	4.8	5.6	4.9	4.2	3.9	3	2.7	3.5	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	6.2	5.1	4.6	5.1	4.8	4.0	3.7	2.9	2.6	3.2	2.7	2.0	2.3	1.9	1.6	2	1.6		1.2	
64	5.8	4.9	4.5	4.8	4.6	4.0	3.5	2.8	2.5	3.0	2.6	2.0	2.2	1.8	1.5	1.8	1.5		1.1	
62	5.5	4.7	4.4	4.5	4.3	4.0	3.3	2.7	2.4	2.7	2.5	1.8	2.1	1.7	1.5	1.7	1.4		1	
60	5.2	4.5	4.3	4.3	4.0	3.8	3.1	2.6	2.3	2.5	2.3	1.7	2.0	1.6	1.4	1.7	1.4			
58	4.9	4.4	4.2	4.1	3.8	3.6	2.9	2.5	2.2	2.4	2.2	1.6	1.9	1.5	1.4	1.6	1.3			
56	4.4	4.2	4.1	3.8	3.6	3.5	2.8	2.4	2.2	2.2	2.0	1.5	1.8	1.4	1.3	1.5	1.1			
54	4.0	3.8	3.7	3.4	3.4	3.3	2.7	2.3	2.1	2.1	1.9	1.5	1.7	1.4	1.3	1.4				
52	3.5	3.4	3.3	3.0	2.9	2.8	2.6	2.2	2.1	2.0	1.8	1.5	1.6	1.3	1.3	1.4				
50	3.1	3.0	3.0	2.6	2.6	2.5	2.4	2.1	2.0	2.0	1.8	1.4	1.5	1.3	1.2	1.3				
48	2.8	2.7	2.6	2.4	2.4	2.3	2.1	2.0	1.9	1.7	1.6	1.4	1.4	1.3	1.2	1.2				
46	2.5	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.0				
44	2.2	2.1	2.0	1.8	1.8	1.7	1.6	1.5	1.4	1.2	1.2	1.1	1.0	1.0						
42	2.0	1.9	1.8	1.6	1.6	1.5	1.3	1.2	1.2	1.0	1.0									
40	1.7	1.6	1.5	1.4	1.4	1.3	1.1	1.1	1.0											
35	1.2	1.1	1.0	1.0	1.0															

Table 21 Main boom + jib **Unit: ×1000 kg**

Outriggers intermediately extended, with 57 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.6	6.2	5.4	7	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	7.3	5.9	5.1	6.5	5.5	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	6.9	5.6	4.9	6	5.2	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	6.6	5.4	4.8	5.6	4.9	4.2	3.9	3	2.7	3.5	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	6.0	5.1	4.6	5.1	4.8	4.0	3.7	2.9	2.6	3.2	2.7	2.0	2.3	1.9	1.6	2	1.6		1.2	
64	5.3	4.9	4.5	4.6	4.3	4.0	3.5	2.8	2.5	3.0	2.6	2.0	2.2	1.8	1.5	1.8	1.5		1.1	
62	4.6	4.4	4.2	4.0	3.8	3.6	3.3	2.7	2.4	2.7	2.5	1.8	2.1	1.7	1.5	1.7	1.4		1	
60	4.1	3.8	3.6	3.5	3.3	3.2	3.1	2.6	2.3	2.5	2.3	1.7	2.0	1.6	1.4	1.7	1.4			
58	3.5	3.3	3.2	3.0	2.9	2.8	2.7	2.4	2.2	2.2	2.0	1.6	1.9	1.5	1.4	1.5	1.3			
56	3.0	2.8	2.7	2.6	2.5	2.4	2.3	2.1	2.0	1.8	1.7	1.5	1.6	1.4	1.3	1.3	1.1			
54	2.6	2.5	2.4	2.2	2.1	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0				
52	2.2	2.1	2.0	1.8	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1.0	1.0							
50	1.9	1.8	1.7	1.5	1.5	1.4	1.3	1.2	1.1	1.0										
48	1.6	1.5	1.4	1.3	1.2	1.2	1.0													
46	1.3	1.2	1.2	1.0	1.0															
44	1.1	1.0	1.0																	

Table 22 Main boom + jib **Unit: ×1000 kg**

Outriggers intermediately extended, with 41 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	7.9	6.6	5.6	7.3	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	7.6	6.2	5.4	7.0	5.8	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	6.8	5.9	5.1	6.0	5.4	4.5	4.5	3.4	2.9	4.0	3.2	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	5.8	5.3	4.9	5.0	4.6	4.2	4.2	3.2	2.8	3.7	3.0	2.2	2.8	2.1	1.7	2.4	1.8	1.1	1.4	1.1
68	5.0	4.5	4.3	4.2	3.9	3.7	3.8	3	2.7	3.2	2.8	2.0	2.5	2.0	1.6	2.2	1.7	1.1	1.3	1.0
66	4.2	3.8	3.6	3.6	3.3	3.1	3.2	2.8	2.5	2.6	2.4	2.0	2.3	1.9	1.6	1.9	1.6		1.2	
64	3.5	3.2	3.1	3.0	2.7	2.6	2.6	2.3	2.1	2.1	1.9	1.7	1.9	1.6	1.4	1.5	1.2			
62	2.8	2.6	2.5	2.4	2.2	2.1	2.1	1.8	1.7	1.7	1.5	1.3	1.5	1.2	1.0	1.1				
60	2.3	2.2	2.1	1.9	1.7	1.6	1.6	1.4	1.3	1.3	1.1	1.0	1.1							
58	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0											
56	1.4	1.3	1.3	1.1	1.0															
54	1.0	1.0																		

Table 23 Main boom + jib **Unit: ×1000 kg**

Outriggers intermediately extended, with 32 tons counterweight, over sides and rear																				
Jib length	12.0 m						20.0 m						28.0 m						36.0 m	
Boom length	62.9 m			67.4 m			62.9 m			67.4 m			62.9 m			67.4 m			62.9 m	67.4 m
Offset (°) / Boom angle (°)	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	0
82	9	7.5	6.3	7.8	6.2	5.0	6	4.1	3.2	4.8	3.5	2.5	4.2	2.8	2.1	3.3	2.3	1.4	2.2	1.8
80	8.5	7.3	6.1	7.6	6.2	4.8	5.8	4.1	3.2	4.8	3.5	2.5	4.1	2.7	2	3.3	2.3	1.4	2.1	1.7
78	8.2	7	5.9	7.4	6.0	4.6	5.6	4.1	3.1	4.7	3.5	2.4	3.9	2.6	2	3.2	2.1	1.4	2	1.6
76	8.0	6.6	5.6	7.0	6.0	4.5	5.2	3.9	3.1	4.6	3.4	2.4	3.6	2.4	1.9	3	2.1	1.3	1.9	1.6
74	6.7	6.0	5.4	5.8	5.2	4.5	4.8	3.7	3.0	4.3	3.4	2.3	3.3	2.3	1.9	2.8	1.9	1.2	1.8	1.5
72	5.5	5.0	4.6	4.8	4.4	4.0	4.2	3.4	2.9	3.6	3.1	2.3	3	2.2	1.8	2.6	1.9	1.1	1.6	1.4
70	4.5	4.1	3.8	3.9	3.5	3.3	3.5	3.0	2.6	2.9	2.5	2.2	2.6	2.1	1.7	2.1	1.7	1.1	1.5	1.0
68	3.6	3.4	3.1	3.1	2.9	2.7	2.8	2.4	2.1	2.3	2.0	1.8	2.0	1.6	1.4	1.6	1.3	1.1		
66	2.9	2.7	2.5	2.4	2.2	2.1	2.2	1.8	1.6	1.7	1.5	1.3	1.5	1.2	1.0	1.1				
64	2.3	2.1	2.0	1.9	1.7	1.6	1.6	1.4	1.2	1.2	1.0		1.0							
62	1.7	1.6	1.5	1.4	1.2	1.1	1.1													
60	1.2	1.1	1.0																	

Table 24 Main boom + tip boom

Unit: ×1000 kg

Radius (m)	Outriggers fully extended, with 72 tons counterweight, over full range														Radius (m)
	Boom length (m)														
	13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72	
3	36														3
3.5	34														3.5
4	33	33													4
4.5	32.5	32	33												4.5
5	32	32	33												5
5.5	31	31	32	33											5.5
6	30	30	31	32	33										6
7	28	29	30	31	32	32									7
8	27	28	29	30	31	31									8
9	26	27	28	29	30	30	31								9
10	25	26	27	28	29	29	30	28							10
11	24	25	26	27	28	28	29	27	27						11
12	23	24	25	26	27	27	28	25	26	21					12
14	22	23	24	24	25	26	27	22	23.5	19	15				14
16		22	23	23	24	25	25	20	21	18	15	12			16
18		21	22	22	23	24	23.5	18	19	16	14	12	9		18
20			21.5	21.5	22	23	22	16.5	17.5	15	13	11	9	7	20
22			21	21	21.5	22	21	15	16	14	12	10	9	7	22
24				20	20.5	21	19.5	13.6	15	13	11	9.8	9	7	24
26				19	19.5	20	18.5	12.5	14	12	10.5	9.4	8.5	7	26
28					17	17.5	17.5	11.6	13	11.2	10	8.8	8	7	28
30					15	15.5	16	10.8	12	10.5	9.5	8.3	7.5	7	30
32						14	14.5	10	11.2	9.8	9	7.8	7.1	6.8	32
34						12.5	13	9	10.5	9	8.5	7.4	6.8	6.6	34
36							12	8.5	9.8	8.5	8	7	6.5	6.3	36
38							10.5	8	9	8	7.5	6.7	6.2	6	38
40								7.5	8.5	7.5	7	6.3	5.8	5.6	40
42								7	8	7	6.5	6	5.5	5.3	42
44									7.3	6.5	6	5.7	5.2	5	44
46									6.5	6	5.6	5.3	4.8	4.7	46
48										5.8	5.2	5	4.5	4.4	48
50										5.4	4.8	4.6	4.2	4.1	50
52											4.5	4.3	4	3.8	52
54											4.2	4	3.8	3.5	54
56												3.7	3.5	3.2	56
58												3.5	3.3	3	58
60												3.2	3	2.7	60
62													2.8	2.5	62
64													2.5	2.3	64
66														2.1	66
68														1.8	68
Reeving	4	4	4	4	4	4	4	3	3	2	2	2	2	2	
Hook	50 tons									25 tons					
Telescoping mode I	1	1	1	2	2	2	2	3	3	3	3	3	3	4	
Telescoping mode II	1	2	2	2	2	2	2	2	3	3	3	3	3	4	
Telescoping mode III	1	1	2	2	2	2	2	2	2	3	3	3	3	4	
Telescoping mode IV	1	1	1	1	2	2	2	2	2	2	3	3	3	4	
Telescoping mode V	1	1	1	1	1	2	2	2	2	2	2	3	3	4	
Telescoping mode VI	1	1	1	1	1	1	2	2	2	2	2	2	3	4	

Table 25 Main boom + tip boom

Unit: ×1000 kg

Radius (m)	Outriggers fully extended, with 57 tons counterweight, over full range														Radius (m)
	Boom length (m)														
	13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72	
3	36														3
3.5	34														3.5
4	33	33													4
4.5	32.5	32	33												4.5
5	32	32	33												5
5.5	31	31	32	33											6
6	30	30	31	32	33										
7	28	29	30	31	32	32									7
8	27	28	29	30	31	31									8
9	26	27	28	29	30	30	31								9
10	25	26	27	28	29	29	30	28							10
11	24	25	26	27	28	28	29	27	27						11
12	23	24	25	26	27	27	28	25	26	21					12
14	22	23	24	24	25	26	27	22	23.5	19	15				14
16		22	23	23	24	25	25	20	21	18	15	12			16
18		21	22	22	23	24	23.5	18	19	16	14	12	9		18
20			21.5	21	22	23	22	16.5	17.5	15	13	11	9	7	20
22			21	20.5	21	21.5	20.5	15	16	14	12	10	9	7	22
24				17.5	18	18.5	19	13.6	15	13	11	9.8	9	7	24
26				15	15.5	16	17	12.5	14	12	10.5	9.4	8.5	7	26
28					13.5	14	15	11.6	13	11.2	10	8.8	8	7	28
30					11.5	12.5	13	10.8	12	10.5	9.5	8.3	7.5	7	30
32						11	11.5	10	11	9.8	9	7.8	7.1	6.8	32
34						9.5	10	9	10	9	8.5	7.4	6.8	6.6	34
36							9	8.5	9	8.5	8	7	6.5	6.3	36
38							8.5	8	8	8	7.5	6.7	6.2	6	38
40								7	7	7	7	6.3	5.8	5.6	40
42								6.2	6.2	6.3	6.5	6	5.5	5.3	42
44									5.4	5.6	5.8	5.7	5.2	5	44
46									4.7	5	5.2	5.3	4.8	4.7	46
48										4.3	4.6	4.8	4.5	4.4	48
50										3.7	4	4.3	4.2	4.1	50
52											3.5	3.8	4	3.8	52
54											3	3.4	3.7	3.5	54
56												2.9	3.3	3.2	56
58												2.5	2.9	2.9	58
60												2	2.6	2.6	60
62													2.2	2.2	62
64													1.9	1.9	64
Reeving	4	4	4	4	4	4	4	3	3	2	2	2	2	2	
Hook	50 tons									25 tons					
Telescoping mode I	1	1	1	2	2	2	2	3	3	3	3	3	3	4	
Telescoping mode II	1	2	2	2	2	2	2	2	3	3	3	3	3	4	
Telescoping mode III	1	1	2	2	2	2	2	2	2	3	3	3	3	4	
Telescoping mode IV	1	1	1	1	2	2	2	2	2	2	3	3	3	4	
Telescoping mode V	1	1	1	1	1	2	2	2	2	2	2	3	3	4	
Telescoping mode VI	1	1	1	1	1	1	2	2	2	2	2	2	3	4	

Table 26 Main boom + tip boom

Unit: ×1000 kg

Radius (m)	Outriggers fully extended, with 41 tons counterweight, over full range														Radius (m))
	Boom length (m)														
	13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72	
3	36														3
3.5	34														3.5
4	33	33													4
4.5	32.5	32	33												4.5
5	32	32	33												5
5.5	31	31	32	33											5.5
6	30	30	31	32	33										6
7	28	29	30	31	32	32									7
8	27	28	29	30	31	31									8
9	26	27	28	29	30	30	31								9
10	25	26	27	28	29	29	30	28							10
11	24	25	26	27	28	28	29	27	27						11
12	23	24	25	26	27	27	28	25	26	21					12
14	22	23	24	24	25	26	27	22	23.5	19	15				14
16		22	23	23	24	25	25	20	21	18	15	12			16
18		20	21.5	21.5	22.5	23	23	18	19	16	14	12	9		18
20			19	18	19	19.5	20	16.5	17.5	15	13	11	9	7	20
22			16	15	16	16.5	17	15	16	14	12	10	9	7	22
24				12.5	13	14	14.5	13.4	14	13	11	9.8	9	7	24
26				10.5	11	12	12.5	12	12	12	10.5	9.4	8.5	7	26
28					9.5	10	11	10.5	10.5	10.5	10	8.8	8	7	28
30					8	9	9.5	9	9	9	9.3	8.3	7.5	7	30
32						7.8	8.5	7.8	7.8	8	8.2	7.8	7.1	6.8	32
34						6.8	7.5	6.8	6.8	7	7.2	7.3	6.8	6.6	34
36							6.5	6	6	6	6.3	6.5	6.5	6.3	36
38							5.5	5.1	5.1	5.2	5.5	5.8	6	6	38
40								4.4	4.4	4.4	4.7	5	5.5	5.5	40
42								3.6	3.7	3.8	4	4.3	4.8	4.8	42
44									3.1	3.2	3.4	3.7	4.2	4.2	44
46									2.4	2.6	2.8	3.2	3.6	3.6	46
48										2.1	2.4	2.7	3	3	48
50										1.6	1.8	2.2	2.6	2.6	50
52												1.8	2.2	2.2	52
54													1.8	1.8	54
Reeving	4	4	4	4	4	4	4	3	3	2	2	2	2	2	
Hook	50 tons									25 tons					
Telescoping mode I	1	1	1	2	2	2	2	3	3	3	3	3	3	4	
Telescoping mode II	1	2	2	2	2	2	2	2	3	3	3	3	3	4	
Telescoping mode III	1	1	2	2	2	2	2	2	2	3	3	3	3	4	
Telescoping mode IV	1	1	1	1	2	2	2	2	2	2	3	3	3	4	
Telescoping mode V	1	1	1	1	1	2	2	2	2	2	2	3	3	4	
Telescoping mode VI	1	1	1	1	1	1	2	2	2	2	2	2	3	4	

Table 27 Main boom + tip boom

Unit: ×1000 kg

Radius (m)	Outriggers fully extended, with 32 tons counterweight, over full range														Radius (m)
	Boom length (m)														
	13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72	
3	36														3
3.5	34														3.5
4	33	33													4
4.5	32.5	32	33												4.5
5	32	32	33												5
5.5	31	31	32	33											5.5
6	30	30	31	32	33										6
7	28	29	30	31	32	32									7
8	27	28	29	30	31	31									8
9	26	27	28	29	30	30	31								9
10	25	26	27	28	29	29	30	28							10
11	24	25	26	27	28	28	29	27	27						11
12	23	24	25	26	27	27	28	25	26	21					12
14	21.5	23	24	24	25	26	27	22	23.5	19	15				14
16		21.5	22.5	22.5	23.5	24.5	25	20	21	18	15	12			16
18		19	19.5	19	19	20	21	18	19	16	14	12	9		18
20			16	15	15	16	17	16.5	16.5	15	13	11	9	7	20
22			13	12	12.5	13	14.5	13.5	13.5	13.5	12	10	9	7	22
24				10	10.5	11	12	11.5	11.5	12	11	9.8	9	7	24
26				8.5	9	9.5	10.5	10	10	10	10	9.4	8.5	7	26
28					7.5	8	9	8.5	8.5	8.5	8.5	8.8	8	7	28
30					6	7	7.8	7.3	7.3	7.3	7.4	7.5	7.5	7	30
32						6	6.5	6.2	6.2	6.2	6.2	6.5	6.5	6.5	32
34						5	5.6	5.2	5.2	5.2	5.5	5.8	6.2	6.2	34
36							4.8	4.4	4.3	4.3	4.5	5	5.3	5.3	36
38							4	3.6	3.5	3.5	3.8	4	4.5	4.5	38
40								3	2.8	3	3.2	3.5	3.8	3.8	40
42								2.3	2.2	2.4	2.5	3	3.2	3.2	42
44									1.6	1.7	2	2.3	2.5	2.5	44
46											1.5	1.8	2.2	2.2	46
48													1.8	1.8	48
Reeving	4	4	4	4	4	4	4	3	3	2	2	2	2	2	
Hook	50 tons									25 tons					
Telescoping mode I	1	1	1	2	2	2	2	3	3	3	3	3	3	4	
Telescoping mode II	1	2	2	2	2	2	2	2	3	3	3	3	3	4	
Telescoping mode III	1	1	2	2	2	2	2	2	2	3	3	3	3	4	
Telescoping mode IV	1	1	1	1	2	2	2	2	2	2	3	3	3	4	
Telescoping mode V	1	1	1	1	1	2	2	2	2	2	2	3	3	4	
Telescoping mode VI	1	1	1	1	1	1	2	2	2	2	2	2	3	4	

Table 28 Main boom + tip boom

Unit: ×1000 kg

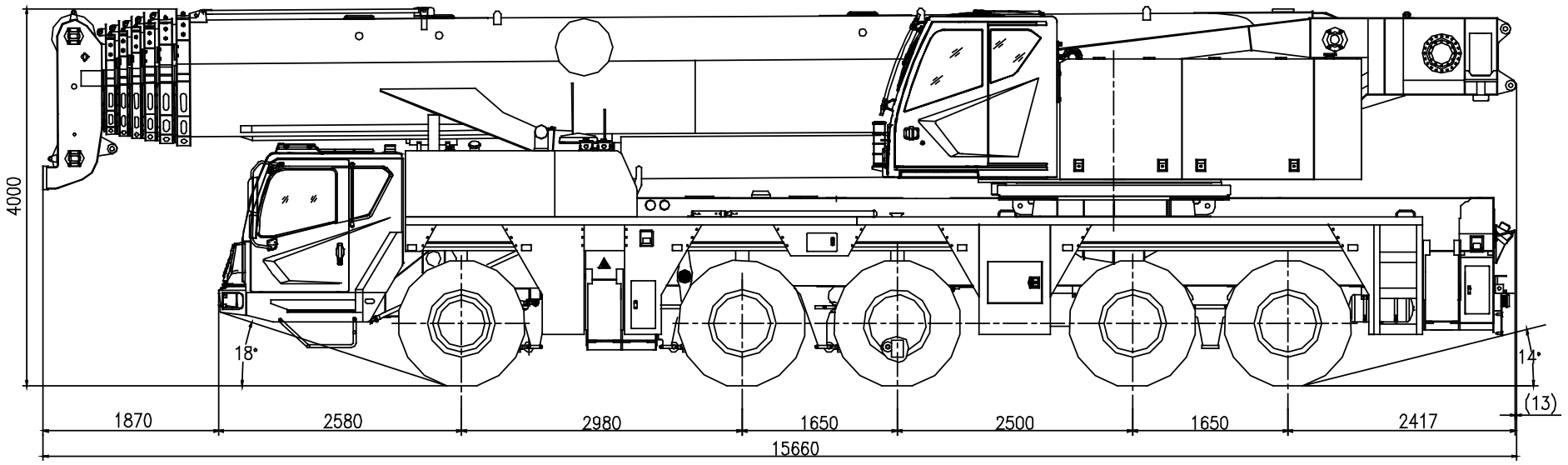
Radius (m)	Outriggers fully extended, with 21 tons counterweight, over full range														Radius (m)
	Boom length (m)														
	13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72	
3	36														3
3.5	34														3.5
4	33	33													4
4.5	32.5	32	33												4.5
5	32	32	33												5
5.5	31	31	32	33											5.5
6	30	30	31	32	33										6
7	28	29	30	31	32	32									7
8	27	28	29	30	31	31									8
9	26	27	28	29	30	30	31								9
10	24.5	26	27	28	29	29	30	28							10
11	23	25	26	27	28	28	29	27	27						11
12	22	24	25	26	26	27	28	25	26	21					12
14	21	22.5	23	22	22	23	22	21	21	19	15				14
16		18.5	19	17	17	18	18	17	17	17	15	12			16
18		14.5	15	13	13	15	15	14	14	14	14	12	9		18
20			12	11	11	12	12	12	12	12	12	11	9	7	20
22			9.5	8.5	9	10	10	10	10	10	10	10	9	7	22
24				6.5	7.6	8	8.5	8	8	8	8	8	8	7	24
26				5	6	6.5	7	6.8	6.8	6.8	7	7	7	7	26
28					4.8	5.5	6	5.4	5.2	5.3	5.5	6	6	6	28
30					3.8	4.5	5	4.4	4.2	4.3	4.5	5	5	5	30
32						3.5	4	3.5	3.4	3.5	3.8	4	4.2	4.2	32
34							3.2	2.6	2.5	2.7	3	3	3.3	3.3	34
36							2.5	2	1.8	2	2.3	2.5	2.8	2.8	36
38											1.6	2	2.2	2.2	38
40													1.8	1.8	40
Reeving	4	4	4	4	4	4	4	3	3	2	2	2	2	2	
Hook	50 tons									25 tons					
Telescoping mode I	1	1	1	2	2	2	2	3	3	3	3	3	3	4	
Telescoping mode II	1	2	2	2	2	2	2	2	3	3	3	3	3	4	
Telescoping mode III	1	1	2	2	2	2	2	2	2	3	3	3	3	4	
Telescoping mode IV	1	1	1	1	2	2	2	2	2	2	3	3	3	4	
Telescoping mode V	1	1	1	1	1	2	2	2	2	2	2	3	3	4	
Telescoping mode VI	1	1	1	1	1	1	2	2	2	2	2	2	3	4	

Table 29 Main boom + tip boom

Unit: ×1000 kg

Radius (m)	Outriggers fully extended, with 10 tons counterweight, over full range														Radius (m)
	Boom length (m)														
	13.4	17.9	22.4	26.9	31.4	35.9	40.4	44.9	49.4	53.9	58.4	62.9	67.4	72	
3	36														3
3.5	34														3.5
4	33	33													4
4.5	32.5	32	33												4.5
5	32	32	33												5
5.5	31	31	32	33											5.5
6	30	30	31	32	33										6
7	28	29	30	31	32	32									7
8	27	28	29	30	31	31									8
9	26	27	28	29	30	30	31								9
10	24.5	26	27	28	29	29	30	28							10
11	23	25	26	26	27	27	28	25	25						11
12	22	24	24	23.5	24	24	26	21	21	20					12
14	18	17.5	17.5	16.5	17	18	19	18	18	18	15				14
16		13	13	12.5	12.5	13	14	13.5	13.5	14	12	11			16
18		9.5	9.5	9	9.5	10	11	10	10	10	10	10	8		18
20			7.5	6.5	7.5	8	8.5	8	8	8	8	8.5	7	6	20
22			5.5	4	5.5	6	7	6	6	6	6	6.5	6	6	22
24				3.5	4	4.8	5.5	5	5	5	5	5	5	5	24
26				2.5	3	3.8	4.2	3.8	3.8	3.8	4	4	4	4	26
28					2	2.8	3.2	2.8	2.8	2.8	3	3	3	3	28
30						1.8	2.2	1.8	1.8	1.8	2	2.2	2.5	2.5	30
32							1.8					1.6	1.8	1.8	32
Reeving	4	4	4	4	4	4	4	3	3	2	2	2	2	2	
Hook	50 tons									25 tons					
Telescoping mode I	1	1	1	2	2	2	2	3	3	3	3	3	3	4	
Telescoping mode II	1	2	2	2	2	2	2	2	3	3	3	3	3	4	
Telescoping mode III	1	1	2	2	2	2	2	2	2	3	3	3	3	4	
Telescoping mode IV	1	1	1	1	2	2	2	2	2	2	3	3	3	4	
Telescoping mode V	1	1	1	1	1	2	2	2	2	2	2	3	3	4	
Telescoping mode VI	1	1	1	1	1	1	2	2	2	2	2	2	3	4	

2.5 Overall view (Unit: Metric mm)



3 Specifications, superstructure

3.1 Main boom and telescoping system

One basic boom and 6 telescopic sections welded from high-tensile steel (δs = 1100 MPa)

Optimal oviform boom profile for the super lifting capacities

Boom length: 13.4 – 72 m

Max. number of reeving: 18

With two optional pulleys (optional for special requirements)

In the automatic rapid-cycle telescoping system, all telescopic sections are driven by a telescopic cylinder and pinned mechanically, extendable independently of each other.

3.2 Jib

The jib consists of two jib sections and two jib extensions (each of 8 m) (one is standard, and the other is optional). The jib sections are reducing and lattice structured and the jib extensions are constant and lattice structured.

The jib can be assembled for an angle of 0°, 15° or 30° to the telescopic boom.

The jib cannot be attached with the vehicle during driving.

Jib variants: 12 m, 20 m, 28 m, 36 m

3.3 Slewing table

Torsionally rigid steel construction welded from high-tensile structural steel (δs = 960 MPa), providing superior load bearing capacity

The optimized arrangement of 3 articulated points, making the slewing table in a novel style and offering reasonable stress distribution

The engine hood of a human-based layout is in beautiful figure.

3.4 Rooster sheave

This option is set up for rapid hoists to improve the work efficiency when the loads are light.

You can insert it at the boom head of telescopic boom section 6 during short distance transit. But you should dismantle it before long distance driving.

3.5 Derricking gear

One hydraulic cylinder with balance valve, providing the boom with smooth derricking movements from -0.5° to 83°

3.6 Slewing gear

Dual slewing gears, consisting of hydraulic motor and planetary reducer

Triple-roller slewing bearing provides big output torque and smooth slewing.

3.7 Hoist gear

- Main and auxiliary winches

  Main and auxiliary winches have the same parts, which include:

  – Hydraulic motor

  – Planetary reducer.

  The models of main and auxiliary winches are the same. The main winch is driven by a variable motor and auxiliary winch is driven by a constant motor.

  The auxiliary winch cannot be attached with the vehicle during driving.

- Wire ropes

  Diameter of main / auxiliary hoist rope: φ23 mm

3.8 Main and auxiliary hooks

Ser. No.	Lifting capacity (tons)	Pulley	Remarks
1	220	9	Ramshorn hook, optional
2	130	7	Ramshorn hook
3	80	4	Ramshorn hook, optional
4	50	2	Straight shank hooks with one point
5	25	1	Straight shank hooks with one point, optional
6	12	0	Straight shank hooks with one point

3.9 Operator's cab

All-steel thin-wall steel construction, tiltable backwards for 20° to broaden the operator's field of vision

The cab is wide in front section and narrow in rear section, providing spacious operating space.

It is equipped with air conditioning (cool & warm).

3.10 Outriggers

H-type outriggers, hydraulically extendable into horizontal and vertical directions

Two-stage sliding beams extendable (fully or intermediately) simultaneously via two telescoping cylinders.

Sliding beam extension states:

- Fully extend: both cylinders I and II fully extended
- Intermediate extend: cylinder I fully extended, cylinder II fully retracted.

Sliding beams in box-shaped sections are welded from high-tensile steel (δs = 960 MPa).

A support control unit is attached to both sides of the vehicle for controlling the 4 outriggers to extend and retract simultaneously or independently.

With sliding beam illumination, support control unit illumination and electronic inclinometer (on the support control units)

Outrigger spread (L × W): 8900 × 8300 mm

3.11 Hydraulic system

Open / closed variable system offers little hydraulic pressure loss, high work efficiency, accurate movements, stable & reliable work and stepless speed regulation.

The superstructure is electro-hydraulic proportional controlled with computer system, providing comfortable operation, accurate micro-positioning performance and simultaneous movements.

In addition, this crane is also of such functions as counterweight self-handling, operator's cab tilting angle regulation, overload protection and engine idle speed regulation, providing stable brake performance and high system reliability.

3.12 Electrical system

The data bus technology effectively decreases the number of cables and connections for improving the system reliability and the convenience of maintenance.

This system is of such functions as engine load limit control and RPM limit control.

The computer system is used to monitor the crane movements and display the relevant parameters in real time for analysis and treatment. It is also of self-diagnosis function.

Electron accelerator, easy for operation

3.13 Safety devices

This crane is equipped with an automatic load moment limiter whose display and warning devices are all fitted in the operator's cab.

If the actual load reaches 90% of the rated one, the warning light lights up and the buzzer sends out slow acoustic warning.

If the actual load approaches 100% of the rated one, the warning light lights up, the buzzer sends out fast acoustic warning and all dangerous crane movements are switched off.

The basic parameters, such as moment ratio, boom angle, boom length, working radius, actual lifting capacity, rated lifting capacity and maximum lifting height, will be displayed on the digital LCD.

This crane is also equipped with the following safety devices to ensure the crane safety:

- Boom angle indicator
- Hoisting limit switch
- Hook latch
- Lowering limit switch
- Two-way hydraulic lock
- Balance valve
- Relief valve

3.14Engine

Weichai WP7G270E301 series, 6-cylinder in-line diesel, turbo-charged, intercooled (air to air)

The engine obeys Off-road Emission Standards.(National stage III) (GB 20891-2014)

Max. rated power: 199 kW at 2000 r/min.

Max. output torque: 1200 N.m at 1200 r/min. – 1500 r/min.

3.15 Air conditioning and cab heater

Both the driver's cab and operator's cab are equipped with special air conditioning for vehicle.

3.16 Counterweight

Underslung self-handled multivariable counterweight system in a total weight of 72 tons

Counterweight variants of 0 tons, 10 tons, 21 tons, 32 tons, 41 tons, 57 tons and 72 tons, thus for a considerable application spectrum

Movable counterweight plates can be assembled and disassembled by the counterweight handler on the tail of slewing table.

3.17 Central lubricating system

All the lubricating points are automatically supplied with the correct grease quantity.

3.18 Tip boom

4.3 m long, consisting of one adapter and one-section reducing lattice component

The lattice component is attachable for 0° or 25° in relation to the adapter.

When the operation does not use the tip boom, assemble the lattice component at an angle of 0° to the adapter and install it on the side of the boom. It connects to boom by pins.

Before you begin a lift operation, assemble the lattice component at an angle of 25° to the adapter and pin the adapter to the head of telescopic section 6. You can operate the pull bracket to set the offset.

The use of tip boom can enlarge the effective work space of the main boom.

The tip boom uses wire rope on the main winch.

Max. reeving: 4, max. lifting capacity: 36 tons

Remove the tip boom before vehicle driving.

4 Specifications, chassis

4.1 Engine

Model: WP13.530E50

Type: water-cooled 6-cylinder in-line diesel, turbo-charged, inter-cooled, with four stroke cycles

Cylinder diameter: 127 mm

Piston stroke: 165 mm

Displacement: 12.54 L

Rated power / RPM: 390 kW at 2100 r/min.

Max. net power/ RPM： 385 kW/2100r/min

Max. output torque / RPM: 2220 N.m at 1200~1500 r/min.

Rotation direction of crankshaft: (Viewed from the front): clockwise

Fuel type: diesel oil

Limits for exhaust pollutants and smoke: conforming to GB3847-2005 and GB17691-2005 (National stage Ⅴ)

4.2 Transmission and its controls

Fast 12 JZSD240A transmission system with automatic switching system (mechanically controlled)

12 forward and 2 reverse speeds

4.3 Transfer case

2-stage transfer case (manufactured by Zhuzhou gear Co., Ltd.), with stand-by steering pump

4.4 Propeller shaft

5 propeller shaft assy., transferring power via the contrate gear flange

Propeller shaft section 1 and 2 are installed between the transmission and transfer case. Propeller shaft section 3 is installed between the transfer case and axle 2, and propeller shaft section 4 is installed between transfer case and axle 4. Propeller shaft section 5 is installed between axles 4 and 5.

4.5 Axles

With disc brake

Axle load: 12 tons

Drive type: 10 × 6

All axles steer. Axles 2, 4 and 5 are steer and drive axles. Axles 1 and 3 are steer and driven axles.

The drive axles are equipped with the transversal differentials and differential locks. The through drive axle (axle 4) is equipped with longitudinal differential and differential lock.

4.6 Wheels and tires

Tubeless tire

Tire size: 385/95R25

Tire pressure: 0.9 MPa (imported tires) / 1 MPa (domestic tires)

Rim type: 9.5 – 25

Tightening torque of tire bolt: 650 – 700 N.m

4.7 Steering system

All-wheel variable steering system with 6 steering programs

The steering system, which is mechanically and electro-hydraulically controlled, consists of a single-channel steering gear and the emergency steering system. Each axle is powered by two oil cylinders.

Axles 1 and 2 are mechanically steered by the steering wheel. Axles 3, 4 and 5 are steered by the electro-hydraulic proportional control system.

Steering of the booster cylinder is controlled by the PLC and proportional valve. Each axle is equipped with an angle sensor.

During steering, the angle sensors will detect corresponding signals and will send the signals to PLC. PLC will calculate the steering angles required by each axle according to the selected steering mode and the steering angle of axle 1. Signals for the calculated target steering angles for each steering axle will be transmitted to the control plate for the proportional valve via the output port of PLC. The control plate will open proportional valve element to drive steering booster cylinders. In this way, axles are steered. At the same time, the angle sensor will detect the actual steering angles of steering axles and adjust the control signal of proportional valve until the feedback signals are equal to the command signals. Consequently, rear axles can be rapidly, correctly and reliably steered depending on the speed and steering angle of axle 1.

4.8 Suspension

All axles with hydro-pneumatic suspension and automatic leveling system

Load equalization between the axle pairs

The axles are hydro-pneumatically sprung via hydraulic cylinders and are hydraulically lockable. Entire vehicle can be raised or lowered and its left / right side can also be raised or lowered independently. All tires can be raised or lowered after the crane is supported on outriggers.

The synchronized extension and retraction movements of suspension cylinders can be realized by the speed control valve fitted in the oil line of suspension control valve.

4.9 Brake system

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 8 disc brakes

Auxiliary brake: consisting of retarder (engine compression brake & engine exhaust brake) and eddy current brake

Dual-circuit brake system, disc brakes on all axles

Each disc brake on axle 1 is equipped with two single-diaphragm brake chambers. Each disc brake on axle 2 is equipped with a single-diaphragm brake chamber and a dual-compartment diaphragm spring brake chamber. Each disc brake on the other axles is equipped with a dual-compartment diaphragm spring brake chamber.

Taking the powerful spring in the brake chambers on axles 2, 3, 4 and 5 as the power source, the parking brake acts on the disc brakes.

The auxiliary brake is used for long descending gradients to minimize wear of disc brake and can be used when the service brake is defected.

The brake system is with ABS.

4.10 Electrical system

Data bus technology

The driver’s cab is equipped with a large multifunctional electronic display screen (touch screen) in multiple interfaces with convenient interactive functions.

Generator: 28 V, 100 A

With rearview camera, reversing radar and acoustic warning system

Intelligent diagnostic interface provides a quick and convenient diagnostic analysis.

4.11Driver's cab

The low-mounted, full-width and all-metal welded spacious cab with flexible lining is of convincing design and outstanding functionality

The control elements and displays are arranged according to ergonometric factors, thus for safe and convenient handling at permanent operation

The cab is with the following features:

- Height and inclination adjustable steering wheel, sliding windows, windshield wiper & washing device and large reflectors
- Luxurious instrument console equipped with all kinds of instruments (multifunctional electronic instrument), control lights, control switches, cigarette lighter and DVD player and so on

  Note:

  The multifunctional integral electronic instrument in multiple interfaces with convenient interactive functions is independently developed by Zoomlion. It not only can display the common information about the crane during normal driving, but also can display the vehicle steering status. You can set and modify the steering mode and hydro-pneumatic suspension via switching over the screens.
- Adjustable cab heater / defroster and air conditioning
- Rearview camera
- 3 comfortable seats with armrests and seat belts. (The pneumatically suspended driver's seat can be adjusted automatically to suit any driver height and size.)

Appendix

Table of main purchased parts

No.	Description	Manufacturer	Remarks
1	Engine, superstructure	WEICHAI Power Co., Ltd.	
2	Engine, chassis	WEICHAI Power Co., Ltd.	
3	Transmission	Shaanxi FAST Auto Drive Co., Ltd.	
4	Transfer case	Zhuzhou Gear Co., Ltd.	
5	Axles	Zoomlion Heavy Industry Science and Technology Co., Ltd.	
6	Tires	Qingdao Techking Tire Co., Ltd.	
7	Hydraulic pump, superstructure	High-tech Fluid Power Co., Ltd.	
8	Hydraulic pump, chassis	Linde Hydraulic (China)	
9	Horizontal cylinder	Hunan Teli Hydraulic Co., Ltd.	
10	Vertical cylinder	Hunan Teli Hydraulic Co., Ltd.	
11	Slewing bearing	Rothe Erde (Xuzhou), Luoyang BEARING-SCI&TECH, Luoyang LYC Bearing Co., Ltd.	
12	Slewing gear	Xuzhou Keyuan Hydraulic Co., Ltd.	
13	Slewing motor	Shanghai Electric Hydraulic and Pneumatic Co., Ltd. High-tech Fluid Power Co., Ltd.	
14	Main winch	Xuzhou Keyuan Hydraulic Co., Ltd., Tai'an Taishan Fushen Gearbox Co., Ltd.	
15	Auxiliary winch	Xuzhou Keyuan Hydraulic Co., Ltd., Tai'an Taishan Fushen Gearbox Co., Ltd.	
16	Main winch motor	L Bosch Rexroth (Shanghai)	
17	Auxiliary winch motor	L Bosch Rexroth (Shanghai)	
18	Telescoping cylinder	Chengdu Chenggang Hydraulic Equipment Manufacturing Limited Company Hunan Teli Hydraulic Co., Ltd.	
19	Derricking cylinder	Hunan Teli Hydraulic Co., Ltd.	
20	Hoist balance valve	Bucher Hydraulics Remscheid GMBH (Germany)	
21	Derricking balance valve	Bucher Hydraulics Remscheid GMBH (Germany)	

22	Telescoping balance valve	Bucher Hydraulics Remscheid GMBH (Germany)	
23	Multiple unit valve, superstructure	Zoomlion Hydraulic Co., Ltd.	
24	Load moment limiter	Hirschmann (Shanghai)	
25	Pilot-operated proportional joysticks	UK P+G (Shanghai PalFin as its agency)	
26	Bite-type fitting connector	Faster (Italy) Zhejiang Xiongpeng Machinery Co., Ltd.	
27	Hoist rope	Hunan Baoxian Mechanical Equipment Trade Co., Ltd.	

Note:

The equipment fitted in the crane is subject to changes due to design improvements or other reasons. Therefore, the above table is for reference only.