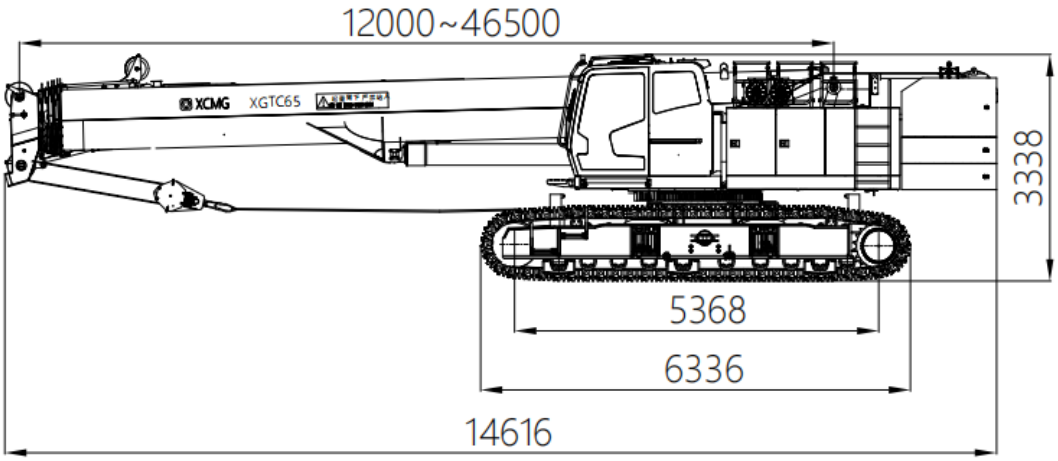
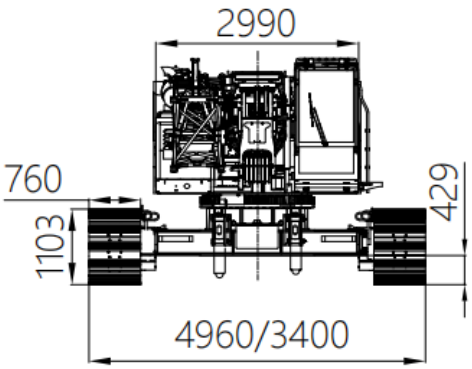
XGTC65 CRAWLER CRANE

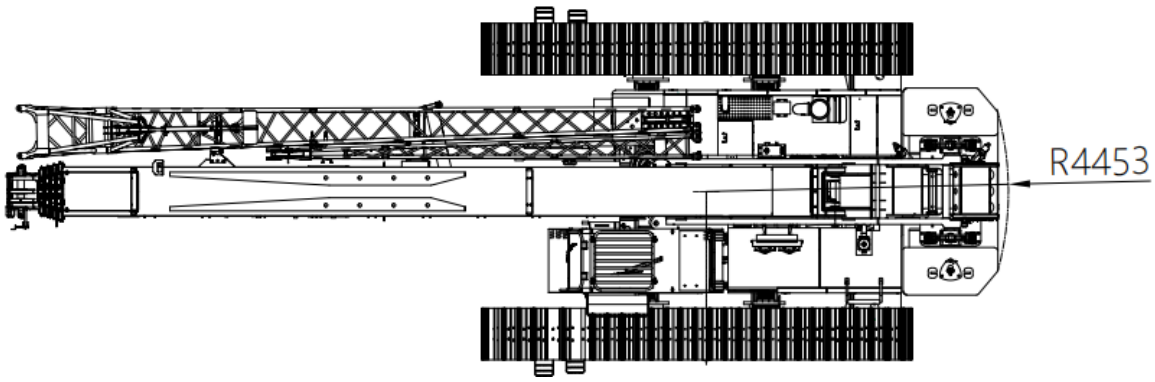
Technical specification

Contents

Dimensions (mm)







Technical specifications

➢ Operator’s cab

- The cab is steel frame structure, all glass are armored glass, with adjustable seat, spacious and comfortable.
- It is equipped with ergonomic designed instruments and controls, air conditioner (heating and cooling), audio and closed-circuit monitoring system.
- When the crane is in operation, the cab can be tilted upwards to widen field of vision for easier operation.

➢ Engine

- Cummins engine B6.7, meeting EU Stage Ⅴ emission standard
- Rated power/speed: 209kW/2200rpm
- It has features of compact structure, small volume, light weight, high output power, low oil consumption, less pollution, reliable work and long service life, the engine can satisfy the demanding working condition for telescopic crawler cranes.

➢ Hydraulic system

- The system is precisely controlled by hydraulic control proportional valve, with features of good fine motion performance and wide range of speed adjustment.
- Hydraulic systems of hoisting and travel share one load sensitive pump. The oil supply of slewing, cooling and pilot systems is provided by independent gear pump.
- Hydraulic parts adopted are mature and reliable, with advanced and efficient hydraulic driving control techniques, easy to operate and convenient to maintain. It cooperates with electrical system to ensure the safety and stability of the crane.

➢ Electrical system

- Intelligent computer integrated programming control system.
- It uses PLC programmable controller as the core of control system. The system is made up of engine control, safety control, pilot control, load moment limiter control and auxiliary functions control, these parts work together to realize the automatic control of crane, greatly increase the safety, reliability and efficiency for crane operation.
- The operation of this crane is shown by a big computer screen, easy for man-machine interaction.

Battery model	Qty.	Total rated voltage	Total rated capacity
6-QAW-180D	2	24 V	180Ah

➢ Hoisting system

- Main and auxiliary hoisting systems adopt built-in reducers and driven independently. They are installed on turntable tail by flanges.
- The reducer is installed with normally-closed disc brake; the reducer is lubricated by splashing oil, free of maintenance.
- Hoisting system has features of easy oil replacement, low noise, high efficiency and long service life, and also with a good fine motion performance.
- Hoisting system uses wire rope with high breaking force, the parameters are as follows:

Main hoisting system	Diameter of wire rope	18mm	Auxiliary hoisting system	Diameter of wire rope	18mm
	Rated single line pull	5.6t		Rated single line pull	5.6t
	Wire rope length	230m		Wire rope length	150m

Technical specifications

➢ Luffing cylinder

- Luffing cylinder is a driving device for boom/jib radius change which is realized by luffing cylinder telescoping. It is also the device to keep boom/jib angle when lifting a load.

➢ Slewing system

- Slewing system is arranged at the front part of turntable, driven by hydraulic motor, with hydraulic buffering and free sliding functions to ensure the safety during operation.
- The reducer is installed with normally-closed disc brake, reliable in work and easy for maintenance.
- Slewing bearing: single-row four-points contact ball slewing bearing; its bearing capacity is very strong which can ensure a safe and stable 360° slewing.

➢ Traveling device

- It includes track beam, track roller, drive sprocket, idler, carrier roller and track shoe.
- Track frame is box type structure, connected with car-body.
- The two track frames are symmetrically distributed. The rollers and track shoes are all made of high strength alloy cast steel.
- Crawler travel unit has built-in planetary reducer, driven by axial piston variable displacement motor. The reducer is set with hydraulic release travel brake, safe and reliable.
- The two travel systems can be operated synchronously or separately to realize straight travel and turning.
- Adopt crawler shoes especially used for excavators, more suitable for traveling on "soft" ground.
- Track rollers and carrier rollers have self-lubricating function, free of maintenance.

➢ Hook block

- Hook block configuration is as follows:

Name	Max. lifting weight (t)	Number of pulleys (pc)	Weight (t)
60t hook	60	6	0.52
25t hook (optional)	25	3	0.32
5t hook	5	0	0.09

➢ Counterweight

- Turntable counterweight has three combinations: 6t, 11.5t and 19.5t, and independent load charts corresponding to different counterweight combinations are provided to meet different purchase and lifting requirements.
- Self-assembly device is configured for turntable counterweight to achieve turntable counterweight self-assembly and disassembly.
- Turntable counterweight combinations are as follows:

No.	Weight of turntable counterweight (t)	Combination type of turntable counterweight (t)
1	0	0
2	6	6
3	11.5	6+5.5
4	19.5	6+5.5+4+4

Technical specifications

➢ Turntable

- Turntable is formed by main structure and two side panels, welded by high-strength steel plate. This structure has strong bending and torsion resistance, with good stability. At the same time, the space of turntable is very large, convenient for crane repair and maintenance. Turntable is connected to undercarriage through slewing bearing.
- Many important parts are installed on turntable, such as operator’ s cab, main and aux. hoisting winches, engine, turntable counterweight and boom system.

➢ Car-body

- Car-body is made of high-strength steel plate and welded in box type structure, cross panel is set in the middle to strengthen its torsion stiffness, high load bearing capacity and good rigidity, with outriggers.

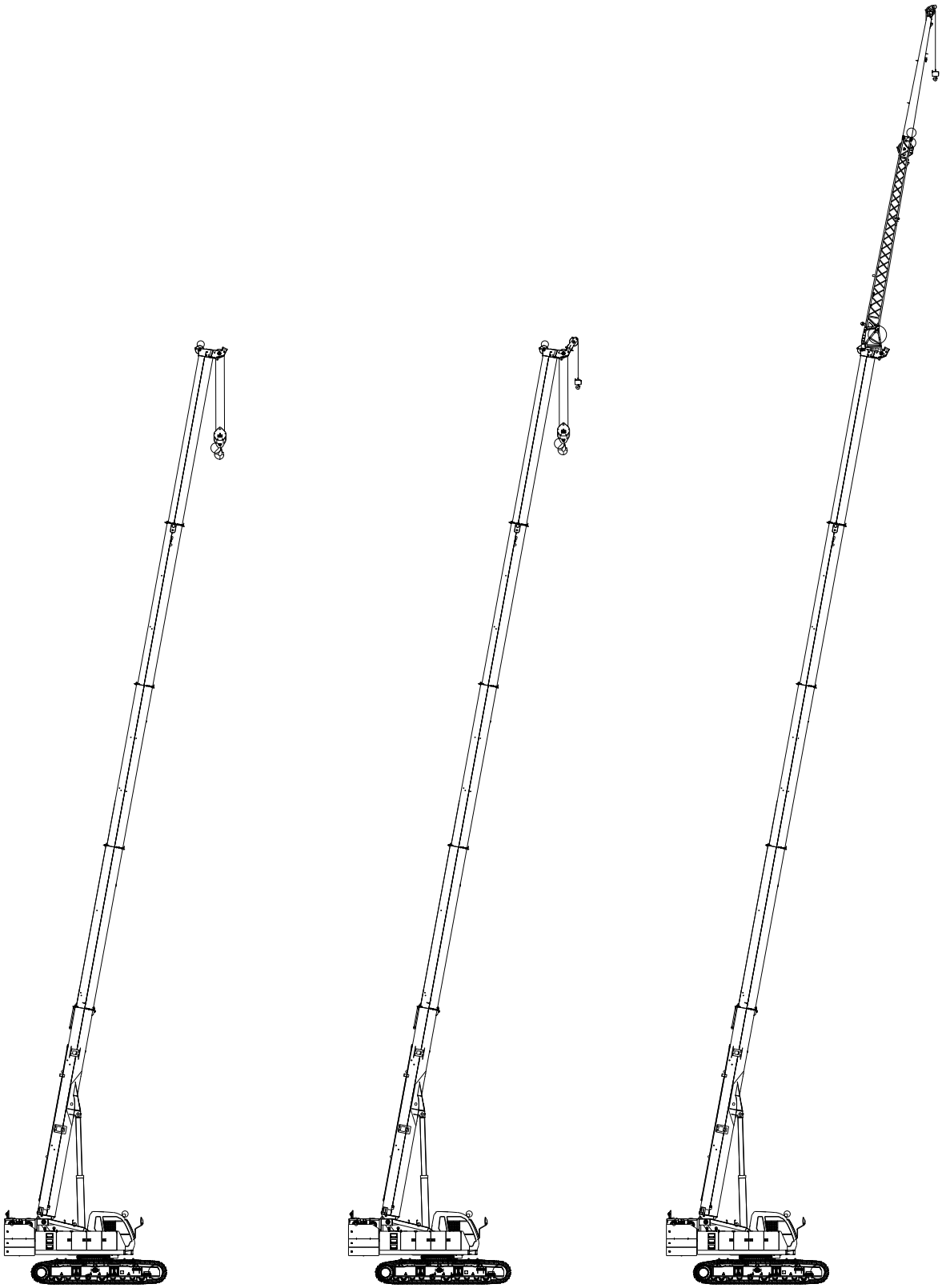
➢ Safety devices

- Safety devices include: load moment indicator, rope end limiter, hook latch, closed-circuit monitoring system, height mark lamp, electronic level indicator, buzzer and warning light, function interlock, emergency function, automatic fault diagnosis system, power-off protection and etc.

Main technical parameters

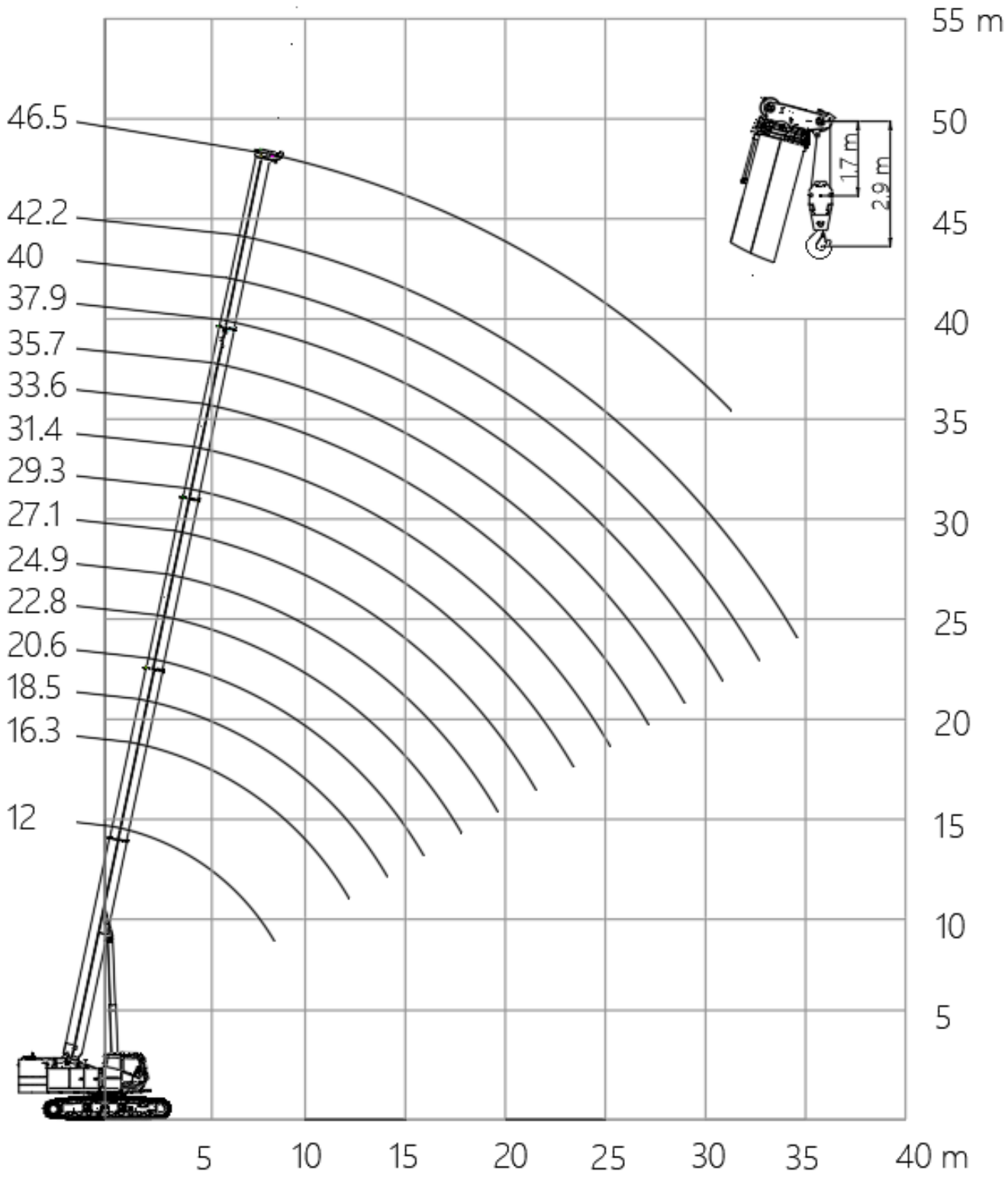
Item		Unit	Parameters
Lifting performance parameters	Main boom max. rated lifting capacity	t	65
	Max. rated lifting moment	t.m	220
	Fixed jib max. rated lifting capacity	t	6.5
	Main boom length	m	12 ~ 46.5
	Jib length	m	9.5/16
	Max. main boom and jib combination	m	62.5 (46.5+16)
Working speeds	Main hoisting system	m/min	140
	Auxiliary hoisting system	m/min	140
	Slewing speed	r/min	0 ~ 2
	Travel speed	km/h	0 ~ 2.4
Power parameters	Engine model	/	Cummins B6.7
	Rated power/revolution speed	kW/rpm	209/2200
	Emission standard	/	EU Stage V
Weight and dimension parameters	Overall crane weight	t	68.4
	Outline dimension	mm	14616×4960(3400)×3398
	Crawler shoe width	mm	760
	Max. mass of single-piece in transport state	t	31.5
	Max. dimension of single-piece in transport state (L×W×H)	mm	14616×2990×2966
Other parameters	Wire rope diameter (main and aux. hoisting ropes)	mm	φ18
	Single line pull (main and aux. hoisting ropes)	t	5.6
	Counterweight weight	t	19.5
	Grade ability	%	45
	Ground pressure	Mpa	0.08
	Slewing radius	mm	4453

Operation modes and lifting performance

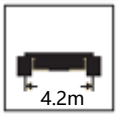


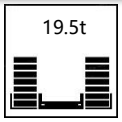
Main boom	Main boom + boom end single pulley	Main boom + fixed jib
Main boom: 12～46.5m	Main boom: 12～46.5m	Main boom: 12～46.5m Fixed jib: 9.5m/16m

Operation modes and lifting performance-main boom operation mode (HB)

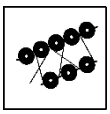


Operation modes and lifting performance-main boom operation mode (HB)



Main boom length 12~27.1m

	12	16.3	18.5	20.6	22.8	24.9	27.1
3	65.0						
3.5	55.0	50.6					
4	51.5	50.6	30.2				
4.5	49.5	48.4	30.2	37.0	29.5	27.0	
5	45.0	45.4	30.2	36.5	29.5	27.0	29.5
6	37.2	36.4	30.2	33.6	29.5	25.3	29.5
7	29.3	28.9	30.1	26.9	27.7	23.7	25.3
8	23.2	23.1	24.9	21.9	22.8	22.0	20.9
9	18.8	18.8	20.9	18.3	19.3	19.9	17.6
10	14.0	15.6	17.6	15.5	16.5	17.2	15.0
12		11.1	13.0	11.0	12.6	13.4	11.4
14		8.0	10.0	8.1	9.6	10.7	8.9
16			7.7	5.9	7.4	8.6	7.0
18				4.3	5.8	6.9	5.5
20					4.5	5.7	4.3
22						4.6	3.3
24							2.4
	12	10	8	8	6	6	6
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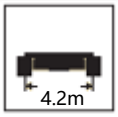
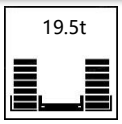
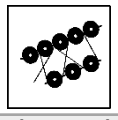
The 3rd boom section	0%	0%	25%	0%	25%	50%	25%
The 4th boom section	0%	0%	25%	0%	25%	50%	25%
The 5th boom section	0%	0%	25%	0%	25%	50%	25%

Operation modes and lifting performance-main boom operation mode (HB)

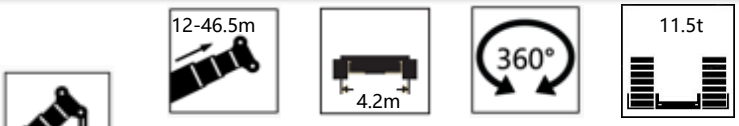





Main boom length 29.3~46.5m

	29.3	31.4	33.6	35.7	37.9	40	42.2	46.5
5	24.6							
6	24.6	18.2	24.9					
7	24.6	18.2	22.9	18.2	12.5			
8	21.2	17.0	19.0	17.1	12.5	16.5	12.0	
9	18.0	15.9	16.1	16.2	12.5	14.2	11.6	11.2
10	15.5	14.9	13.9	14.0	11.9	12.2	11.3	10.3
12	11.9	12.3	10.6	10.8	11.0	9.4	9.4	7.8
14	9.5	10.0	8.3	8.7	8.9	7.4	7.5	6.2
16	7.7	8.2	6.7	7.1	7.3	5.9	6.1	4.9
18	6.4	6.9	5.4	5.9	6.2	4.8	5.1	4.0
20	5.3	5.9	4.5	4.9	5.3	4.0	4.3	3.3
22	4.2	5.1	3.7	4.2	4.6	3.3	3.6	2.7
24	3.4	4.3	3.1	3.6	4.0	2.8	3.1	2.2
26	2.7	3.6	2.4	3.1	3.5	2.3	2.7	1.8
28		3.0	1.9	2.6	3.1	1.9	2.3	1.5
30			1.3	2.1	2.7	1.6	2.0	1.2
32				1.6	2.3	1.4	1.7	1.0
34					1.9		1.5	
36							1.2	
	5	5	5	4	4	4	3	3
The 2nd boom section	50%	0%	100%	50%	0%	100%	50%	100%
The 3rd boom section	50%	75%	50%	75%	100%	75%	100%	100%
The 4th boom section	50%	75%	50%	75%	100%	75%	100%	100%
The 5th boom section	50%	75%	50%	75%	100%	75%	100%	100%

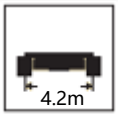
Operation modes and lifting performance-main boom operation mode (HB)

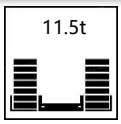


Main boom length 12~27.1m

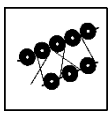
	12	16.3	18.5	20.6	22.8	24.9	27.1
3	65.0						
3.5	55.0	50.6					
4	51.5	49.7	30.2				
4.5	45.7	42.1	30.2	37.0	29.5	27.0	
5	40.5	36.3	30.2	33.0	29.5	27.0	29.5
6	29.9	28.0	29.3	25.7	26.5	25.3	29.5
7	22.5	21.9	23.3	20.1	21.0	23.7	18.8
8	17.6	17.4	19.0	16.2	17.1	22.0	15.3
9	14.0	14.0	16.0	13.3	14.3	15.0	12.7
10	11.3	11.4	13.4	11.0	12.1	12.9	10.7
12		7.7	9.6	7.7	9.0	9.8	7.8
14		5.2	7.2	5.3	6.8	7.7	5.9
16			5.4	3.5	5.0	6.2	4.5
18				2.2	3.7	4.9	3.4
20					2.6	3.8	2.4
22						3.0	1.6
	12	10	8	8	6	6	6
The 2nd boom section	0%	50%	0%	100%	50%	0%	100%
The 3rd boom section	0%	0%	25%	0%	25%	50%	25%
The 4th boom section	0%	0%	25%	0%	25%	50%	25%
The 5th boom section	0%	0%	25%	0%	25%	50%	25%

Operation modes and lifting performance-main boom operation mode (HB)

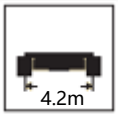



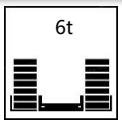


Main boom length 29.3~46.5m

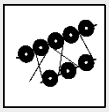
	29.3	31.4	33.6	35.7	37.9	40	42.2	46.5
5	24.6							
6	23.8	18.2	20.9					
7	19.0	18.2	16.7	16.5	12.5			
8	15.7	15.8	13.6	13.6	12.5	11.5	11.2	
9	13.2	13.4	11.4	11.5	11.5	9.6	9.4	7.4
10	11.2	11.6	9.7	9.8	9.9	8.1	8.1	6.2
12	8.4	8.9	7.1	7.4	7.6	6.0	6.0	4.5
14	6.5	7.0	5.4	5.7	6.0	4.5	4.7	3.3
16	5.2	5.7	4.1	4.5	4.8	3.4	3.6	2.5
18	4.1	4.7	3.2	3.6	4.0	2.6	2.9	1.8
20	3.3	3.9	2.5	2.9	3.3	2.0	2.3	1.3
22	2.6	3.3	1.9	2.4	2.8	1.5	1.8	
24	1.9	2.7	1.4	1.9	2.3	1.1	1.4	
26	1.3	2.2	1.0	1.6	2.0		1.1	
28		1.7		1.3	1.7			
30					1.5			
32					1.2			
	5	5	5	4	4	4	3	3
The 2nd boom section	50%	0%	100%	50%	0%	100%	50%	100%
The 3rd boom section	50%	75%	50%	75%	100%	75%	100%	100%
The 4th boom section	50%	75%	50%	75%	100%	75%	100%	100%
The 5th boom section	50%	75%	50%	75%	100%	75%	100%	100%

Operation modes and lifting performance-main boom operation mode (HB)

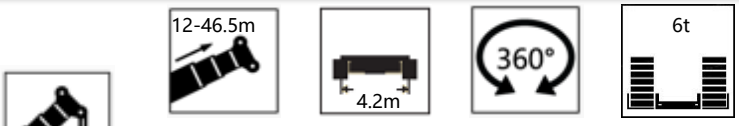





Main boom length 12~27.1m

	12	16.3	18.5	20.6	22.8	24.9	27.1
3	60						
3.5	55	48.6					
4	45.8	40	30.2				
4.5	38.2	33.7	30.2	30.2	29.5	27	
5	32.4	28.9	30.2	26.1	27.2	27	24.2
6	23.8	22	23.4	19.9	20.7	21.1	18.1
7	17.6	16.9	18.3	15.3	16.2	16.8	14.1
8	13.5	13.4	14.9	12	13.1	13.7	11.3
9	10.6	10.5	12.3	9.7	10.7	11.5	9.2
10	8.3	8.3	10.4	7.9	9	9.7	7.6
12		5.3	7.2	5.3	6.4	7.3	5.3
14		3.2	5.2	3.3	4.7	5.6	3.7
16			3.6	1.8	3.3	4.4	2.6
18					2.2	3.4	1.8
20					1.3	2.5	1.1
22						1.8	
	12	10	8	8	6	6	6
The 2nd boom section	0%	50%	0%	100%	50%	0%	100%
The 3rd boom section	0%	0%	25%	0%	25%	50%	25%
The 4th boom section	0%	0%	25%	0%	25%	50%	25%
The 5th boom section	0%	0%	25%	0%	25%	50%	25%

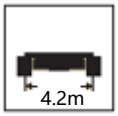
Operation modes and lifting performance-main boom operation mode (HB)

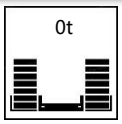


Main boom length 29.3~46.5m

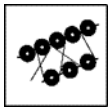
	29.3	31.4	33.6	35.7	37.9	40	42.2	46.5
5	24							
6	18.3	18.1	15.5					
7	14.4	14.5	12.2	12.1	11.8			
8	11.7	11.9	9.8	9.8	9.7	7.7	7.5	
9	9.7	10	8	8.1	8.1	6.3	6.2	4.2
10	8.2	8.5	6.6	6.8	6.9	5.2	5.1	3.4
12	5.9	6.4	4.7	5	5.1	3.6	3.6	2.1
14	4.4	4.9	3.3	3.7	3.9	2.4	2.6	1.3
16	3.3	3.9	2.3	2.7	3	1.6	1.9	
18	2.5	3.1	1.6	2	2.4	1	1.3	
20	1.9	2.5	1	1.5	1.9			
22	1.4	2		1.1	1.5			
24		1.6			1.2			
26		1.2						
	5	5	5	4	4	4	3	3
The 2nd boom section	50%	0%	100%	50%	0%	100%	50%	100%
The 3rd boom section	50%	75%	50%	75%	100%	75%	100%	100%
The 4th boom section	50%	75%	50%	75%	100%	75%	100%	100%
The 5th boom section	50%	75%	50%	75%	100%	75%	100%	100%

Operation modes and lifting performance-main boom operation mode (HB)

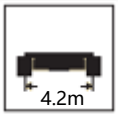



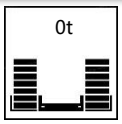


Main boom length 12~27.1m

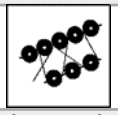
	12	16.3	18.5	20.6	22.8	24.9	27.1
3	55.4						
3.5	42.5	36.2					
4	34.1	29.5	30.2				
4.5	28.1	24.6	26.1	21.8	23	23.5	
5	23.6	20.8	22.5	18.6	19.6	19.9	16.5
6	17.1	15.4	16.8	13.5	14.4	14.9	12
7	12.3	11.4	13	10	11	11.6	9
8	9.1	8.8	10.3	7.5	8.6	9.3	7
9	6.8	6.7	8.4	5.8	6.9	7.6	5.4
10	5	5.1	6.9	4.4	5.5	6.3	4.3
12		2.7	4.6	2.4	3.6	4.5	2.6
14		1.1	3	1.1	2.3	3.2	1.4
16			1.8		1.4	2.3	
18						1.7	
20						1	
	12	10	8	8	6	6	6
The 2nd boom section	0%	50%	0%	100%	50%	0%	100%
The 3rd boom section	0%	0%	25%	0%	25%	50%	25%
The 4th boom section	0%	0%	25%	0%	25%	50%	25%
The 5th boom section	0%	0%	25%	0%	25%	50%	25%

Operation modes and lifting performance-main boom operation mode (HB)

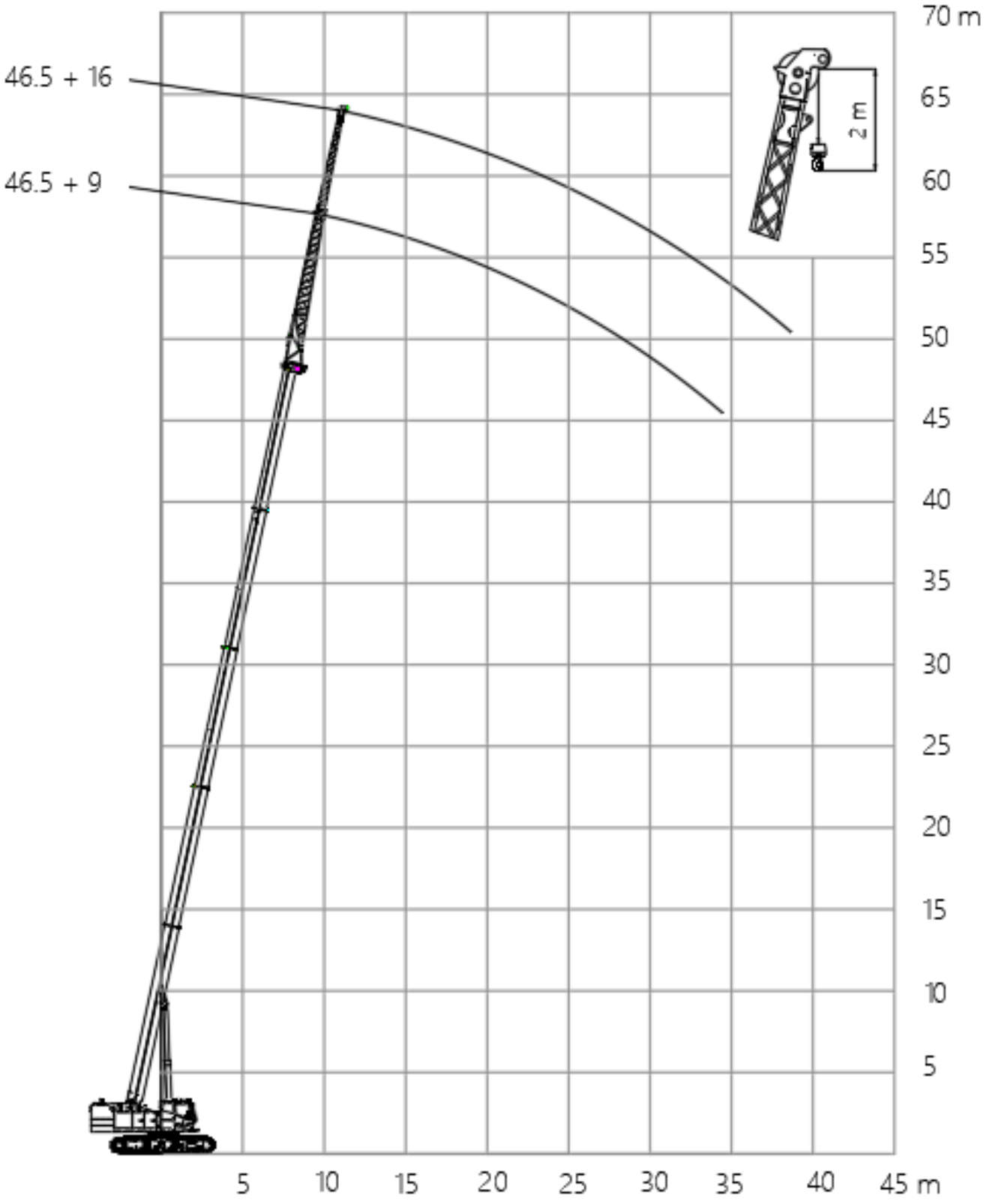





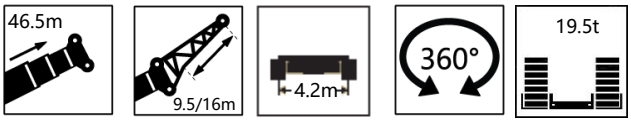
Main boom length 29.3~46.5m

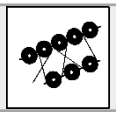
	29.3	31.4	33.6	35.7	37.9	40	42.2	46.5
5	16.4					Forbidden		
6	12.2	12.2	9.6					
7	9.4	9.5	7.2	7.2	7			
8	7.4	7.7	5.6	5.7	5.6			
9	6	6.3	4.3	4.5	4.5			
10	4.8	5.2	3.4	3.6	3.7			
12	3.2	3.7	2	2.3	2.5			
14	2.1	2.6	1	1.4	1.7			
16	1.3	1.9			1.1			
	5	5	5	4	4			
The 2nd boom section	50%	0%	100%	50%	0%			
The 3rd boom section	50%	75%	50%	75%	100%			
The 4th boom section	50%	75%	50%	75%	100%			
The 5th boom section	50%	75%	50%	75%	100%			

Operation modes and lifting performance-fixed jib operation mode (HF)

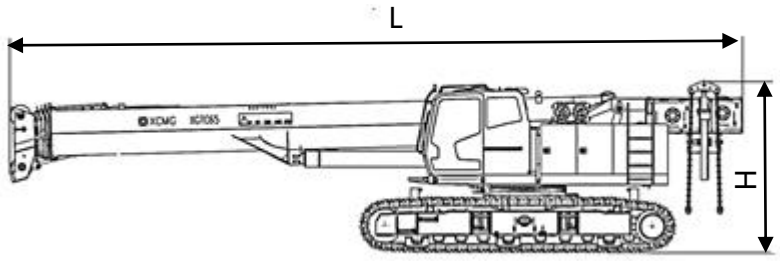


Operation modes and lifting performance- fixed jib operation mode (HF)

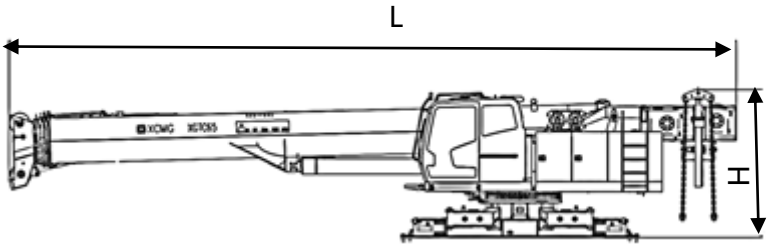


	46.5+9.5			46.5+16			
	0°	15°	30°	0°	15°	30°	
80°	5	3.5	3.0	3.0	2.5	1.8	80°
78°	5	3.5	3.0	3.0	2.4	1.7	78°
75°	4.8	3.4	2.8	2.9	2.2	1.5	75°
72°	4.5	3.2	2.6	2.8	2.0	1.4	72°
70°	4.2	3.0	2.5	2.6	1.8	1.3	70°
65°	3.4	2.8	2.3	2.4	1.6	1.3	65°
60°	2.3	2.2	2.1	1.5	1.4	1.2	60°
55°	1.5	1.5	1.5	0.9	0.8	0.9	55°
50°	1.1	1.0	1.0	0.5	0.4	0.5	50°
	1						

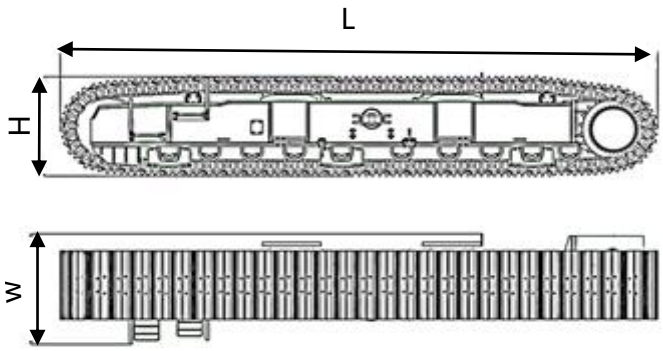
Dimensions of transported components



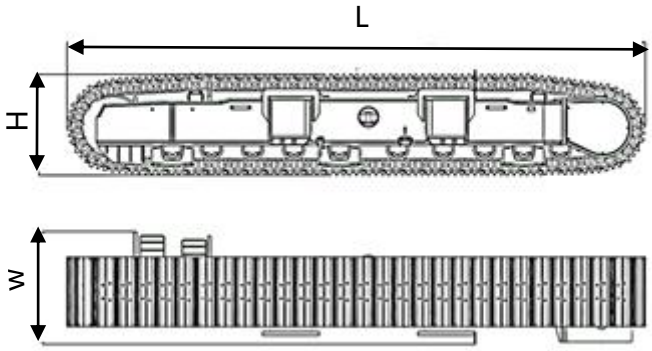
Basic machine (with jib)	×1
L	14616 mm
W	3400 mm
H	3398 mm
Weight	47970 kg



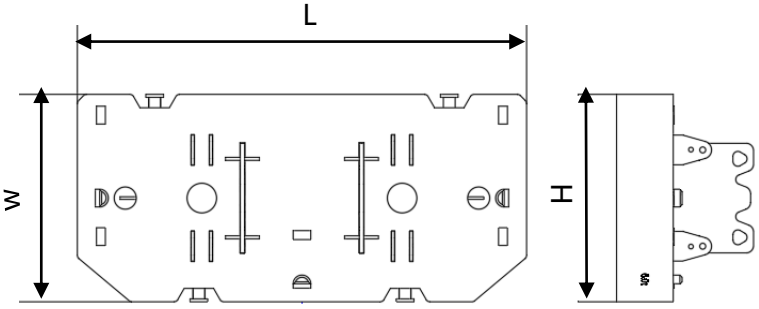
Main body (with jib)	×1
L	14616 mm
W	2990 mm
H	2966 mm
Weight	31550 kg



Left track frame	×1
L	6336 mm
W	1227 mm
H	1103 mm
Weight	8210 kg

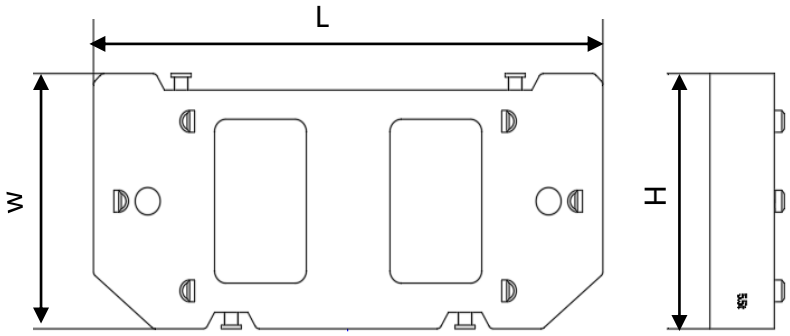


Right track frame	×1
L	6336 mm
W	1227 mm
H	1103 mm
Weight	8210 kg

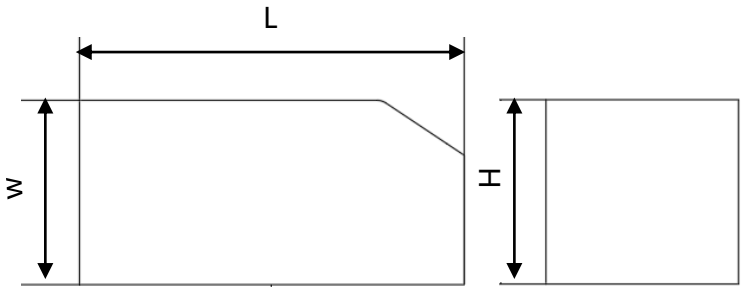


Turntable counterweight tray	×1
L	3050 mm
W	1400 mm
H	930 mm
Weight	6000 kg

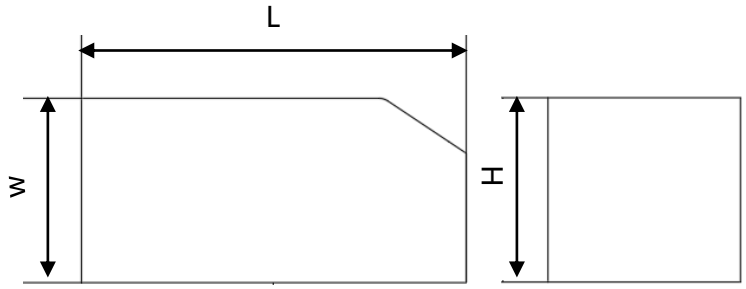
Dimensions of transported components



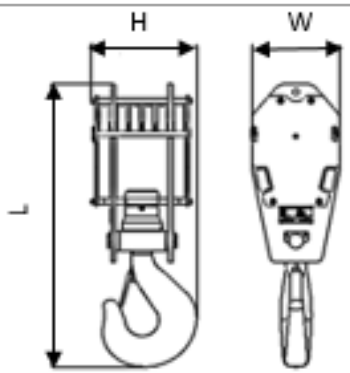
Turntable counterweight slab I	×1
L	3050 mm
W	1400 mm
H	545 mm
Weight	5500 kg



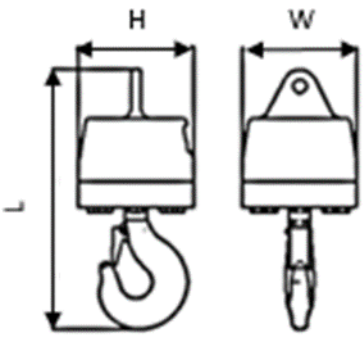
Turntable counterweight slab II	×1
L	1400 mm
W	700 mm
H	870 mm
Weight	4000 kg



Turntable counterweight slab III	×1
L	1400 mm
W	700 mm
H	870 mm
Weight	4000 kg

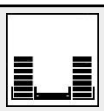


60t hook block	×1
L	1490 mm
W	560 mm
H	490 mm
Weight	520 kg



5t hook block	×1
L	510 mm
W	297 mm
H	297 mm
Weight	93 kg

Symbols

	360° slewing
	Turntable counterweight
	Parts of line
	Fixed jib
	Rated lifting capacity

	Main boom length
	Main boom working radius
	Main boom angle
	Track gauge

Points for attention

1. This document and all information are for reference only. Do not rely on it to operate the crane! For correct operating instructions of the crane, please refer to "Operation Manual" and "Rated Lifting Capacity Manual".

2. The crawler tracks must be fully extended (track gauge 4200mm) when the crane is working.

3. The unit of lifting capacity listed in the lifting performance table is “t”. It is the maximum total lifting capacity that the crane can guarantee on a stable and horizontal surface with gradient not more than 1% under the current boom length and radius, including the weight of the hook and sling. The actual weight of the load is the value after the weight of above items is subtracted.

2. The working radius in the lifting performance table is the horizontal distance from the center of gravity of the lifted load to the slewing axis of the crane when the load is lifted off the ground.

5. The average ground pressure, refers to that of the basic boom of standard operation mode, with no load, the ground is solid, smooth and no-subsidence, ground gradient ≤ 0.5%. The actual ground pressure is related with the ground conditions, operation mode combinations.

6. Operate the crane within the range of main boom elevation angle, do not exceed this range even though no load is lifted.

7. This crane can travel with load suspended. As uneven ground and operation may cause impact on the lifted load, the speed for traveling with load shall below 0.4km/h.

8. The rated loads shown in the lifting performance tables are calculated according to standard EN13000：2010+A1：2014 when the wind speed is below 9.8m/s.

9. This product has multiple operation modes, and the product images in the document may not be standard configurations. All functional component can be customized and purchased according to different needs.

10. This printed material does not belong to the contract. We reserve the right to make changes to product models, parameters and configurations without notice due to the need of continuous product improvement. The pictures are for reference only, please prevail to the actual product.

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