

XGC16000 (1250t) Crawler Crane Highlights

1. Various kinds of boom combination

Standard working conditions include heavy boom, light boom, tower jib; Super-lift working conditions include heavy boom, light boom, tower jib, special heavy jib and special light jib, and with wide application.

2. Easy for transport

- 1). Operator's cab and turntable integrated for transport, avoided disassembly and saved assembly time.
- 2). Split-type overall structure, small transport size, except for lower basic machine, transport width 3.538m, other parts transport width smaller than 3.5m.
- 3). Adjustable built-in boom transport device, winch and pulley stored in the winch for transport, reduced transport size, avoided disassembly and saved assembly time.

3. Energy-saving engine system

Engine water radiator and intercooler have independent intelligent control system, can respectively control different strength of heat radiation according to different environment, reduced engine power loss, with energy-saving and high work efficiency.

4. Ergonomic assembly and operation

- 1). Crane operation not only in operator's cab but also remote control outdoor.
- 2). Switch-over from crane assembly mode to crane work mode.
- 3). Engine has cold start-up function.
- 4). Operator's cab adjustable with degree for wide field of vision.

XGC16000 (1250t) Crawler Crane Technical Specifications

Crawler Crane Model: XGC16000

Max. Rated Lifting Capacity: 1250t

I. Parts and System Description

(I) Crane Superstructure

1. Boom Combination

Boom consists of heavy boom, light boom, tower jib, superlift heavy boom, superlift light boom, superlift tower jib, superlift special heavy jib and superlift special light jib.

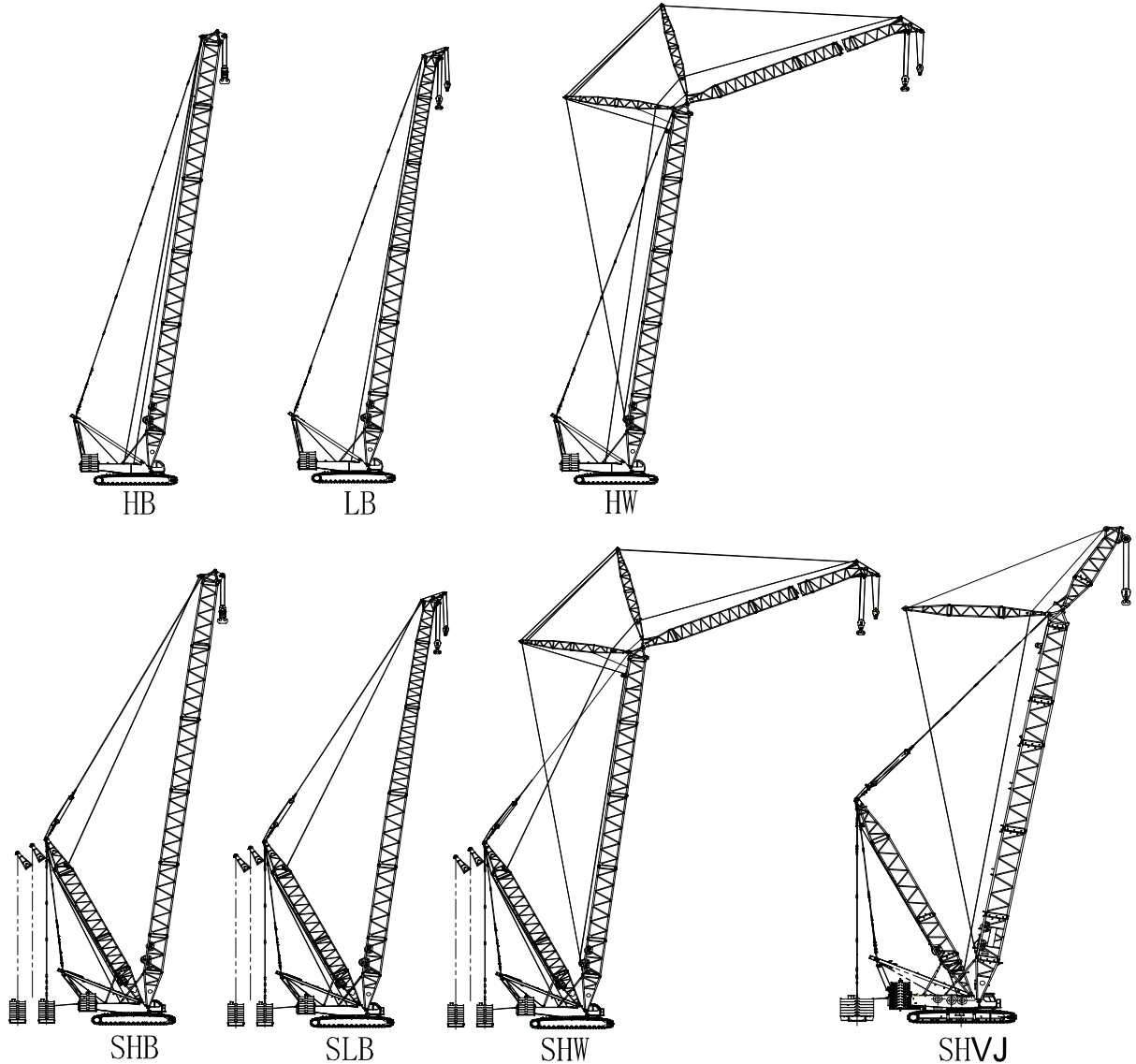
The structure is four-chord lattice type with equal section

in the middle and variable section on both ends, the chord adopts German imported high-strength tube, web rod adopts domestic high quality tube with heavy load bearing capacity. The main working conditions are as the follows:

- 1). HB: heavy boom, 30~96m, one 12m boom base, one 12m thick wall boom insert, two 6m boom inserts, four 12m boom inserts, one 10.5m transition section, one 1.5m heavy boom head, and one 1.5m light boom head.
- 2). LB: light boom, 48~114m, one 12m boom base, one 12m thick wall boom insert, two 6m boom inserts, two 12m boom inserts, one 10.5m transition section, one 6m tower jib transition section, one 6m tower jib insert, two 12m tower jib inserts, and one 7.5m tower jib top.
- 3). HW: heavy boom + tower jib, tower jib 30~96m, one 4.5m tower jib base, one 12m heavy tower jib insert, one 6m tower jib tapered section, one 6m tower jib insert, five 12m tower jib inserts, and one 7.5m tower jib top.
- 4). SHB: superlift heavy boom, 42~120m, one 12m boom base, one 12m thick wall boom insert, two 6m boom inserts, six 12m boom inserts, one 10.5m transition section, one 1.5m heavy boom head, and one 1.5m light boom head.
- 5). SLB: superlift light boom, 90~150m, one 12m boom base, one 12m thick wall boom insert, two 6m boom inserts, three 12m boom inserts, one 10.5m transition section, one 12m heavy tower jib insert, one 6m tower jib transition section, one 6m tower jib insert, three 12m tower jib inserts, and one 7.5m tower jib top.
- 6). SHW: superlift heavy boom + tower jib, tower jib 30~108m, one 4.5m tower jib base, one 12m heavy tower jib insert, one 6m tower jib tapered section, one 6m tower jib insert, six 12m tower jib inserts, and one 7.5m tower jib top.



- 7). SHVJ: superlift special heavy jib 18m, consists of one 4.5m tower jib base, one 12m tower jib insert, and one 1.5m light jib head.
- 8). SHVJ: superlift special light jib 18m, consists of one 4.5m tower jib base, one 6m tower jib tapered section, and one 7.5m tower jib top.



2. Boom luffing component

Boom luffing component is composed of two-group pendant, made of high-strength steel and one-time cutting, with high safety factor. Pendant with triangle type balance beam can efficiently balance the load of two-group pendant for equal applied force.

3. Turntable

Turntable is upper/lower split type and high-strength box type structure, connected with “工” type and box type beam in the middle, and arranged with reinforced plate near slewing center.

4. Mast

Standard mast is box-type structure, superlift mast is lattice type structure, with good overall stability; mast is equipped with raising mechanism, and superlift mast equipped with hydraulic controlled backstop; superlift mast insert uses tower jib insert.

5. Mechanism composition

Crane mechanism and application refer to the table below:

Mechanism	Application	Location
Main hoist winch	Boom, jib, tower jib lifting operation	Near the turntable slewing center
Auxiliary hoist winch	Boom, jib, tower jib lifting operation	At the rear of main hoist winch
Single top (Optional)	Boom, tower jib, single top lifting operation	At 6m boom winch section
Main boom luffing winch	Boom luffing operation	At the mid rear of turntable
Tower jib luffing winch	Tower jib luffing operation	At 6m boom winch section
Superlift luffing winch	Superlift boom luffing operation	At superlift mast winch section
Slewing gear	Superstructure slewing	At the front of turntable
Travel unit	Crane travel	Crawler drive wheel
Rigging unit	Reeving of wire rope for assistant hoist and luffing winch	At the front of turntable

7. Hoist winch

Main/auxiliary hoist winch has same model and with independent drive, two winches can work synchronously for lifting heavy load, with disc type constant closed brake, built-in speed reducer and variable displacement motor for drive; main/auxiliary hoist winch has box-type bracket, connected with turntable by pin shaft, easy for assembly; wire rope is anti-twisting rope imported from Germany to prevent wire rope from twisting.

Main hoist winch rope, single line pull 23.5t, wire rope diam. ϕ 32mm, length 1400m;

Aux. hoist winch rope, single line pull 23.5t, wire rope diam. ϕ 32mm, length 1400m;

Single top rope, single line pull 23.5t, wire rope diam. ϕ 32mm, length 700m;

8. Boom luffing winch

Boom luffing winch is a twin drum independent drive unit, with ratchet locking device, built-in speed reducer, and disc type constant closed brake.

Single line pull 2*23.5t, wire rope diam. ϕ 32mm, length 980m.

Tower jib luffing winch has ratchet locking device, built-in speed reducer, and disc type constant closed brake.

Single line pull 2*23.5t, wire rope diam. ϕ 32mm, length 1170m.

Superlift luffing winch has ratchet locking device, built-in speed reducer, and disc type constant closed brake.

Single line pull 2*23.5t, wire rope diam. ϕ 32mm, length 1600m.

9. Slewing gear

Slewing gear is arranged at front of turntable, made of three planetary reducers and externally meshed with slewing ring, with hydraulic buffering and free-swing; planetary reducer has controllable constant-closed disc brake, reliable work and easy maintenance.

10. Slewing ring

Slewing ring is 3-row roller type internal tooth meshed slewing ring bearings customized by Xuzhou Rothe Erde for our company, with high strength, heavy load bearing, and easy maintenance.

11. Oil cylinder assy.

For realization of self assembly/disassembly, the connection of boom and turntable, the connection of carbody and crawler, use power pinning connection, and equipped with mast raising cylinder, counterweight raising cylinder and outrigger cylinder. Operator's cabin also has tilting cylinder and rotation cylinder.

12. Operator's cabin

Operator's cabin is ergonomic designed, safe and comfortable, with safety glass and guardrail; the window has sun visor, external open door, and adjustable seat; equipped with air-conditioner; when the crane is in transport, the operator's cabin can be turned 90° to the front of turntable (boom base removed) so as to reduce transport length; when the crane is in operation, the operator's cabin can be tilted upward 20° for high level vision.

(II) Crane Undercarriage

Crane undercarriage consists of carbody, track frame, travel unit and carbody counterweight. The carbody and track frame is articulated connection by pin shaft, and pin

shaft installation is completed by hydraulic cylinder.

1. Carbody

Carbody is made of high-strength steel and welded in box type structure, with cross panel installed in the middle to strengthen its stiffness against torsion, simple structure, high loading capacity and good rigidity.

2. Connection beam

Connection beam is box-type structure, connected with carbody and track frame by pin shaft, with cross panel installed in the middle of it.

3. Track frame

Crawler travel unit consists of four track rollers and one track shoe, the track frame is box-type structure, the connection place to frame is partially strengthened, with cross panel installed in the middle of it.

4. Crawler travel unit

Two track frames are symmetrically arranged, with track shoe of 2m width, can be operated synchronously or independently to achieve straight travel and turning around. Each track frame is driven by two travel reducers, and the travel drive unit has German imported built-in planetary reducer and hydraulic release service brake, each reducer is driven by two German imported axial piston variable displacement motors.

(III) Hydraulic System

Combination of closed/open type system with electronic proportional pilot control and variable displacement pump system, good system stability and fine speed regulation.

Main/auxiliary hoist winch, boom/jib luffing winch, travel unit are of open type pump control system, and main/auxiliary hoist winch has the function of two-pump combination.

Variable displacement motor drive is used for main/auxiliary hoist winch and travel unit with large range of speed regulation. Variable displacement motor + variable displacement pump control system can have accurate regulation for movement speed, and with good fine motion.

Hydraulic tank capacity: approx. 1850L.

(IV) Electric System

Electric system mainly includes: operation control and safety monitoring for engine, instrument, auxiliary equipment, hydraulic system and load moment limiter.

Electric system composition: conventional electric system and PLC monitoring system.

Conventional electric system is 24V parallel circuit, the wiring of each electric equipment is single line, including power supply, starter control, engine control and checking, cabin air-condition and acoustics, illumination (lamp), rain wiper, and interphone.

PLC monitoring system includes the operation control for main/auxiliary winch, slewing gear, boom/tower jib luffing, left/right crawler travel, cabin rotation/tilting. All movements use electro-hydraulic proportional control technology, and with PLC logic control, efficiently ensure the realization of all functions, and fully embody the design concept of people first.

(V) Engine System

Manufacturer: Cummins, America;

Model: QSK23;

Rated output power: 641kw/2100rpm;

Max. output torque: 3776N.m;

Type: 6-cylinder in line, water-cooled, turbocharged and inter-cooled, electronic injection, diesel engine;

Fuel tank capacity: approx.1000L.

(VI) Hook Block

Name	1000T	150T	65T	25T
Dead weight (t)	24.5	7.0	3.7	1.6
Number	1	1	1	1
Pulley block	24	3	1	0

Note: 1000t capacity hook block is combined hook block, which can be divided into 500t capacity hook block and 250t capacity hook block. 1250t capacity hook block is optional.

(VII) Counterweight

Carbody counterweight is total 90t, counterweight case is total 10t; counterweight slab is total 8 pieces of each 10t, installed respectively in counterweight case at front and rear of the carbody.

Turntable counterweight is total 260t, with each one at left and right of counterweight case and each weights 10t; left and right counterweight slab each is 12 pieces, and each weights 10t.

Superlift counterweight is total 480t, with one counterweight tray and weights 20t; counterweight slab is 46 pieces, and each weights 10t.

The dead weight and number of the counterweight:

Name	Carbody counterweight	Carbody counterweight case	Turntable counterweight tray	Turntable counterweight	Superlift counterweight tray	Superlift counterweight
Dead weight (t)	10	5	10	10	20	10
Number	8	2	2	24	1	46

(VIII) Centralized Lubrication System

The centralized lubrication system is a progressive lubrication system imported from Germany, with computer programming, can automatically point-to-point lubricate grease, ensure each lubrication point with enough grease, and make vehicle maintenance easy and relaxed.

The lubrication point is track roller, chain roller and drive sprocket.

II. Safety Protection Devices

The safety protection devices comprise: load moment limiter, turntable lock pin, boom backstop, hoist limit switch, anemometer, level gauge, hydraulic system overflow valve, counterbalance valve, two-way hydraulic lock, slewing warning indicator and travel warning indicator, etc.

1. Emergency function

When a breakdown occurs in the system, a button switch on emergency remote control box may be used to control the whole machine into safe state, at this time all the safe protections have no functions.

2. Load moment limiter

The load moment limiter is original instrument imported from Hirschmann, Germany, and is the advanced micro-processor technology commonly developed and custom-made for our company, with features of little power consumption, strong function, high sensitivity and easy operation.

Detection function: automatically detect boom angle and lifting load.

Display function: real time display crane operation data such as load moment percentage, actual lifting load, rated lifting load, working radius, boom length, boom angle, lifting height, mode code, parts of line, limit angle and information code.

Warning function: automatically send out warning and stop crane operation when detecting actual lifting load exceeds total rated lifting load and boom out of limit angle.

The system also has self diagnosis function.

3. Main/Auxiliary winch over-wound protection device

When main/auxiliary winch hoists up to a certain lifting height, an over-wound warning lamp on instrument panel lights on, at the same time, load moment limiter stops crane hoisting up operation.

4. Main/Auxiliary winch over-release protection device

A rope-end limiter is set on main and auxiliary hoist winch to protect wire rope from over-release, and an over-wound protection device is set on boom head to protect wire rope from over-wounding.

5. Safe protection switch

At the front of joystick installed a safe protection switch, when the switch is pressed down, all crane movement signals have been shielded, and the joystick is useless. This switch can be used to prevent malfunction when operator accessing the cabin and toughing

the joystick.

6. Winch ratchet locking device

Winch drum has a ratchet locking device, and it must be turned on when lowering boom, otherwise boom cannot be lowered. The device is used to stow the boom for safety.

7. Boom angle limit

When boom angle is more than 80° , both load moment limiter and hoist limit switch stop boom raising. When boom angle is less than 30° , load moment limiter stops boom lowering and give a sound warning. The hoist limit switch and load moment limiter may control the tower jib upper/lower limit position.

8. Monitor system

The monitor system contains 4 cameras and 2 monitor display, respectively keeping watch on main/auxiliary winch, tower jib luffing winch, superlift luffing winch and superlift counterweight.

9. Audio/Video warning

When crawler crane is moving and slewing, there is light and sound for warning.

10. Load moment tricolor warning lamp

The lamp comprises 3 colors, when crane loading is below 90% of total rated lifting load, “Green Lamp” lights on to indicate crane is running in safety area; when crane loading is in $90\% \sim 100\%$ of total rated lifting load, “Yellow Lamp” lights on to indicate crane is close to total rated lifting load; when crane loading is above $100\% \sim 102\%$ of total rated lifting load, “Red Lamp” and “Yellow Lamp” light on at the same time to indicate crane is overload; In dangerous area, control system can automatically cut off crane movement to dangerous direction.

11. Illumination lamp

There are illumination lamps at front of turntable, on boom and inside operator’s cabin for night operation.

12. Height mark lamp

The boom tip has a height mark lamp for high level operation warning.

13. Anemometer

Anemometer at boom head can detect current wind speed and send wind signal to a monitor in operator’s cabin to alert operator for safe operation. Anemometer is imported from Hirschmann, Germany, with stable performance and accurate measurement.

III. Main Parts List

No.	Parts name		Model	Qty.	Manufacturer	
1	Engine system	Engine	QSK23	1	Cummins, America	
2	Hydraulic system	Main winch	Motor	A6VM200	2	Rexroth, Germany
			Reducer	GFT110W3	2	Rexroth, Beijing
		Auxiliary winch	Motor	A6VM200	2	Rexroth, Germany
			Reducer	GFT110W3	2	Rexroth, Beijing
		Single top winch	Motor	A6V200	2	Rexroth, Germany
			Reducer	GFT110W3	2	Rexroth, Beijing
		Main boom luffing winch	Motor	A2FE160	2	Rexroth, Germany
			Reducer	GFT220W3	2	Rexroth, Beijing
		Tower jib luffing winch	Motor	A6VM200	2	Rexroth, Germany
			Reducer	GFT110W3	2	Rexroth, Beijing
		Superlift luffing winch	Motor	A6VM200	2	Rexroth, Germany
			Reducer	GFT110W3	2	Rexroth, Beijing
		Swing	Motor	A2FE80	2	With reducer
			Motor	A6VE80	1	With reducer
			Reducer	GFB80T3	3	Rexroth
		Travel	Motor	A6VE	8	Rexroth, Germany
			Reducer	F700	4	O&K, Germany
		Pump group	Main pump 1	A4VG250	1	Rexroth, Germany
			Main pump 2	A4VG250	1	Rexroth, Germany
			Main pump 3	A4VG250	1	Rexroth, Germany
			Main pump 4	A4VG250	1	Rexroth, Germany
			Slewing pump P5	A4VG180	1	Rexroth, Germany
			Auxiliary pump	A11V060	1	Rexroth, Germany
			Backstop pump	A11V040	1	Rexroth, Germany
		Valve block	Upper multi-way valve	PVG32	1	Danfous, America
			Lower multi-way valve	DL10/4-Y4	1	Shengbang, Zhejiang
			Slewing combined valve	LLFZ-XZ1000-09	1	Shanghai Lunlian Electric Co., Ltd.
		Control system	Main winch luffing	JC6000	1	P + G, UK

No.	Parts name		Model	Qty.	Manufacturer
		handle			
		Aux. winch swing handle	JC6000	1	P + G, UK
3	Electric control system	Load moment limiter	IFLEX5		Hirschmann
4	Swing system	Slewing ring	132.50.3040.002.04.03D3	1	Xuzhou Rothe Erde
5	Wire rope	Main winch rope	(φ 32mm)	1400M	Pfeifer (Casar), Diepa
		Aux. winch rope	(φ 32mm)	1400M	Pfeifer (Casar), Diepa
		Single top rope	(φ 32mm)	700M	Pfeifer (Casar), Diepa
		Main luffing rope	(φ 32mm)	980M	Pfeifer (Casar), Diepa
		Tower jib luffing rope	(φ 32mm)	1170M	Pfeifer (Casar), Diepa
		Superlift luffing rope	(φ 32mm)	1600M	Pfeifer (Casar), Diepa
6	Crawler travel unit	Drive roller		4	Jiangsu Renmin Machine Tools Co.
		Idle roller		4	Yongsheng, Jining
		Track roller		36	Yongsheng, Jining
		Track shoe		154	Xingsheng, Fushun

V. Main Technical Specifications

1. XGC16000 Crawler Crane Outline Dimensions

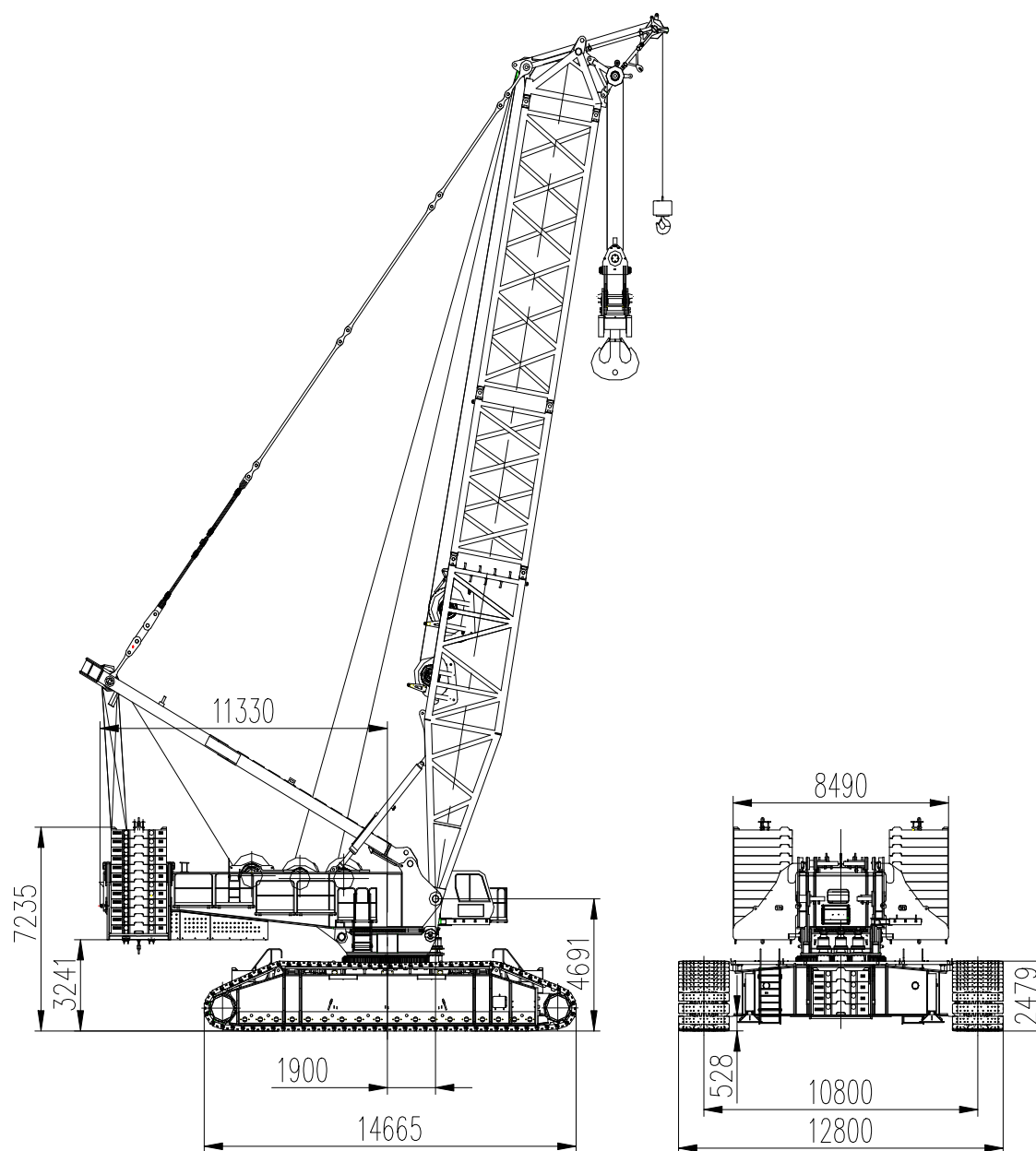


Fig.1 XGC16000 Crawler Crane Outline Dimensions in Standard Working Condition

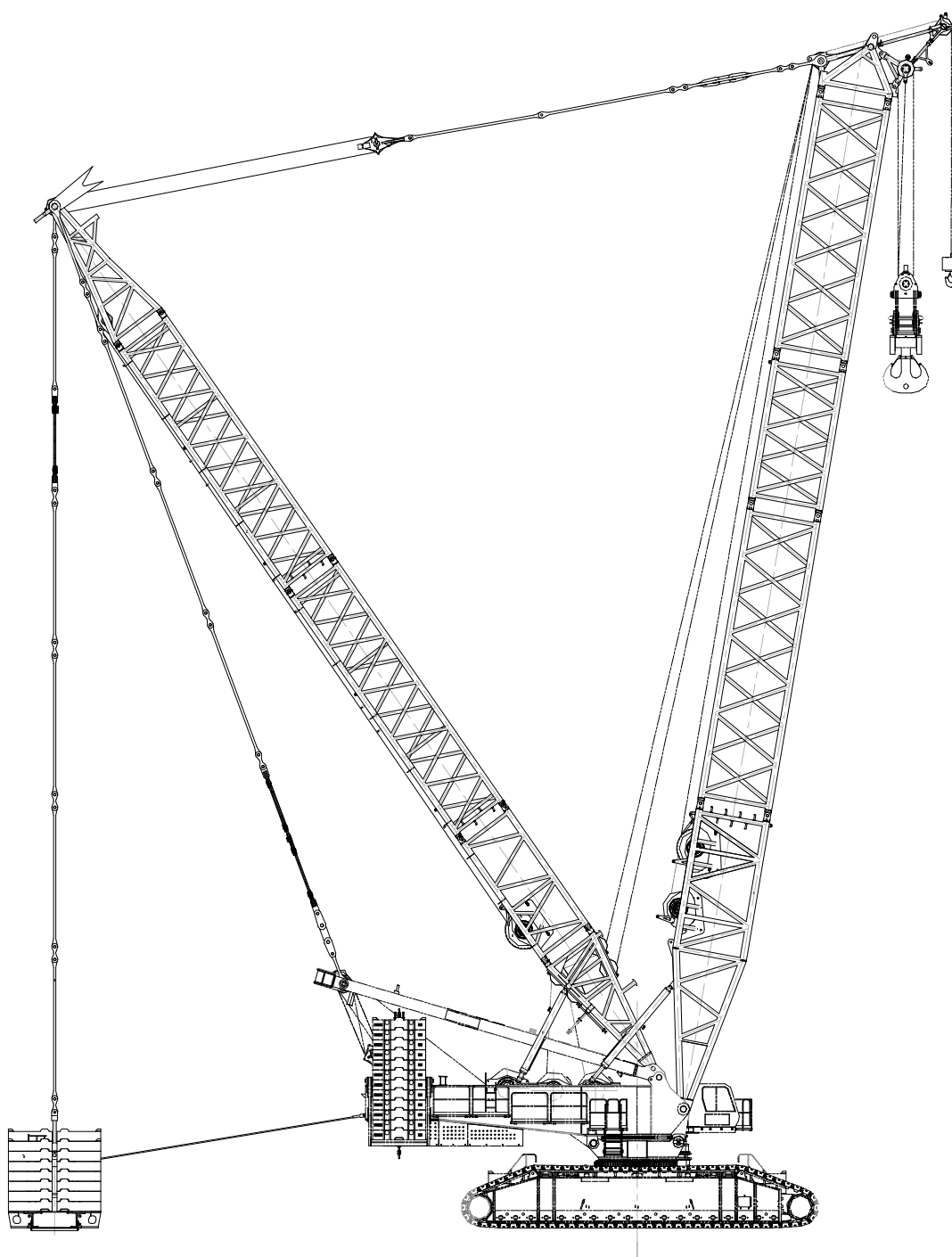


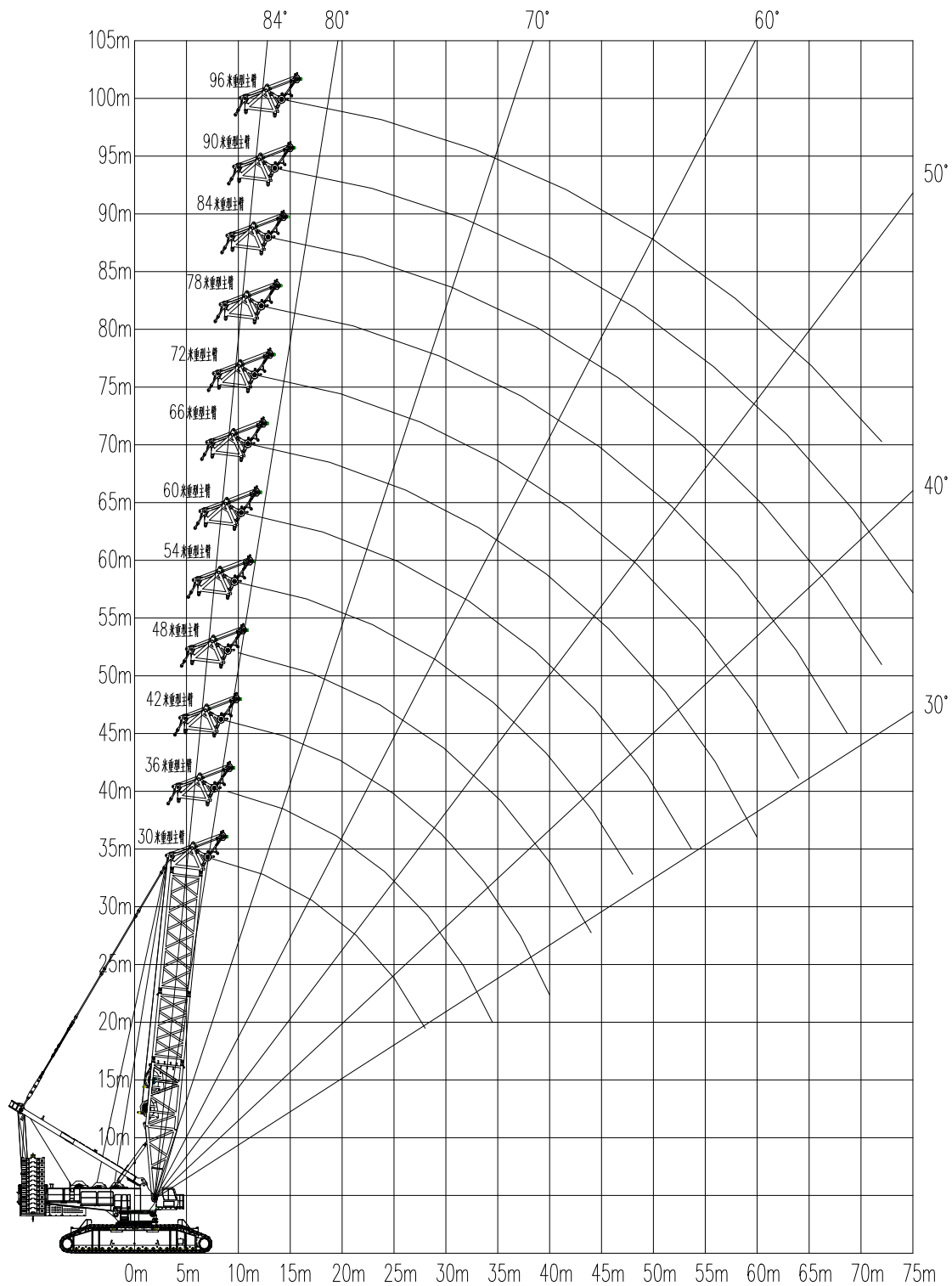
Fig.2 XGC16000 Crawler Crane Outline Dimensions in Superlift Working Condition

2. XGC16000 Crawler Crane Main Technical Specifications

Item		Unit	Data
Max. rated lifting capacity	Standard working condition	t	820
	Superlift working condition	t	1250
Max. load moment	Standard working condition	t.m	6090
	Superlift working condition	t.m	15510
Dimensions in standard working condition	Boom luffing angle	°	-3°~85°
	Heavy boom length	m	30~96
	Light boom length	m	48~114
	Tower jib length	m	30~96
Dimensions in superlift working condition	Heavy boom length	m	42~120
	Light boom length	m	90~150
	Tower jib length	m	30~108
	Special heavy jib	m	18
	Special light jib	m	18
Speed	Hoist winch max. single line speed (no load at 10th layer)	m/min	130
	Boom luffing winch max. single line speed (no load, at 9th layer)	m/min	53×2
	Max. swing speed	r/min	0.9
	Max. travel speed	km/h	0.8
Grade-ability			30 %
Mean ground pressure		MPa	0.156
Engine output power		kW	641
Total vehicle mass (30m heavy boom, 1000t hook block)		t	850
Max. mass of single unit (basic machine) in transport		t	59
Max. dimension of single unit (basic machine) in transport (L×W×H)		m	15.5×3.4×3.12

V. Lifting Performance Table for Typical Working Condition

1. XGC16000 HB Heavy boom working range in standard working condition



XGC16000 HB Heavy boom lifting performance table in standard working condition

Table 1-1 XGC16000 HB Heavy boom lifting performance table in standard working condition (260t turntable counterweight + 90t carbody counterweight)

Boom (m) Radius (m)	30	36	42	48	54	60	66	72	78	84	90	96
7	820											
8	745	740										
9	673	670	665									
10	599	596	585	570								
11	543	540	522	493	468							
12	492	489	469	467	466	464	450					
13	450	447	426	424	422	416	404	360				
14	413	410	393	391	389	378	368	357	348			
15	377	375	362	350	347	337	329	320	313	300	287	
16	351	345	338	334	326	319	313	306	300	293	285	228
18	312	305	300	294	289	283	278	272	266	260	254	206
20	278	273	268	263	259	254	248	243	238	234	227	183
22	241	241	241	238	234	229	224	219	214	210	205	164
24	212	212	212	211	209	205	202	198	194	190	183	148
26	188	188	188	187	187	184	181	177	174	170	167	134
28	166	169	168	168	167	166	163	160	157	153	150	121
30		152	152	151	150	149	148	145	142	139	136	111
32		138	138	137	136	135	134	132	129	126	123	101
34		126	126	125	124	123	122	120	118	115	112	93
36			115	115	114	112	111	109	108	106	103	85
38			106	105	104	103	102	100	98	97	94	79
40			97	97	96	95	94	92	90	88	87	71
42				90	89	87	86	84	83	81	79	65
44				82	82	81	79	78	76	74	72	58
46					76	75	72	72	70	68	66	53
48					71	70	68	66	65	63	61	48
50						64	63	61	60	58	56	43
52						60	59	57	55	52	51	39
54						54	54	53	51	49	47	36
56							51	49	47	45	43	32
58							46	45	44	42	40	29
60							42	42	40	38	37	26
64								34	34	33	31	21
68									27	27	26	16
72										19	19	12
76											14	

2. XGC16000 SHB Heavy boom working range in superlift working condition

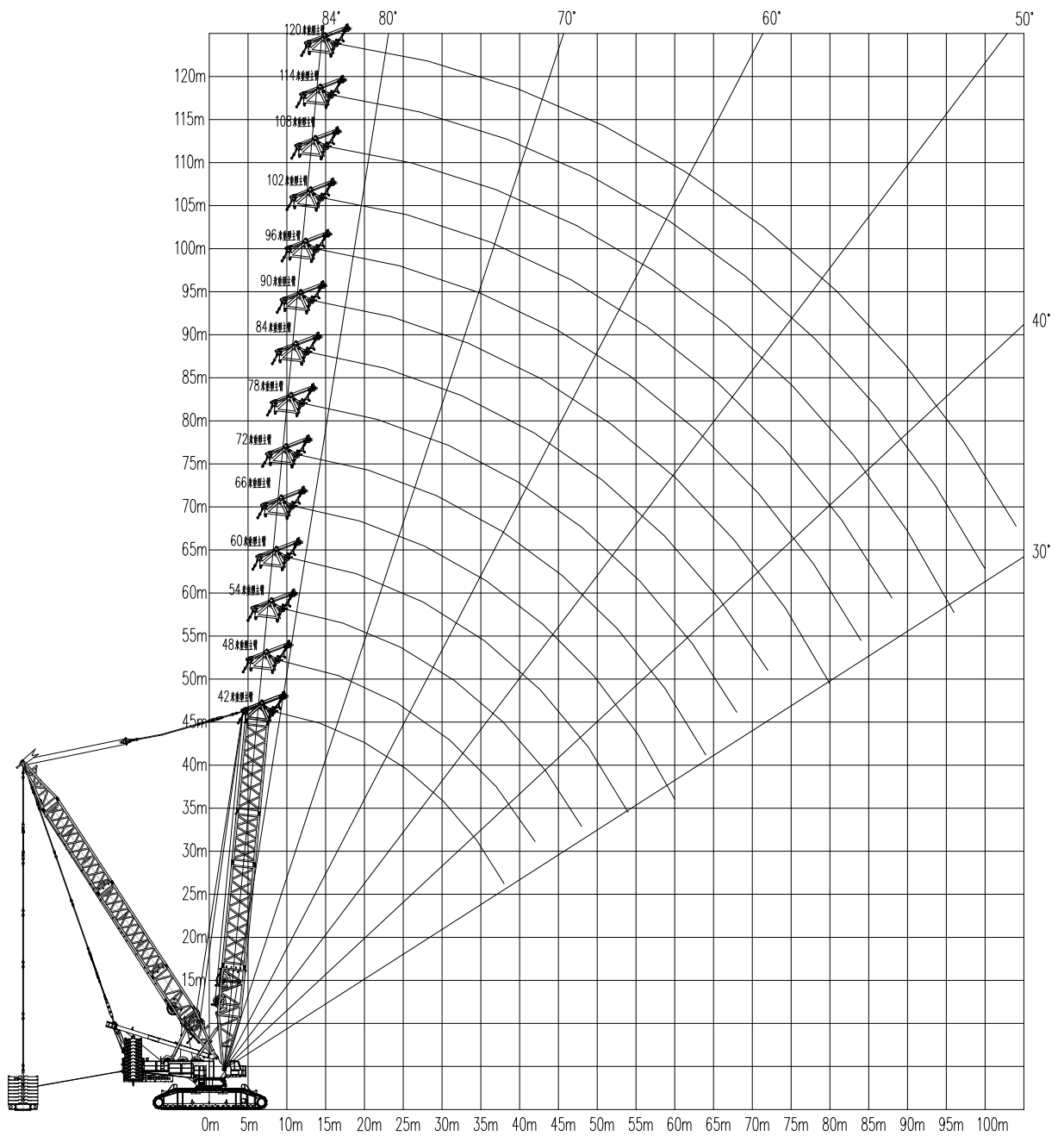


Table 2-1 XGC16000 SHB Heavy boom lifting performance table in superlift working condition (260t turntable counterweight + 90t carbody counterweight + 480t superlift counterweight, superlift counterweight radius 24m)

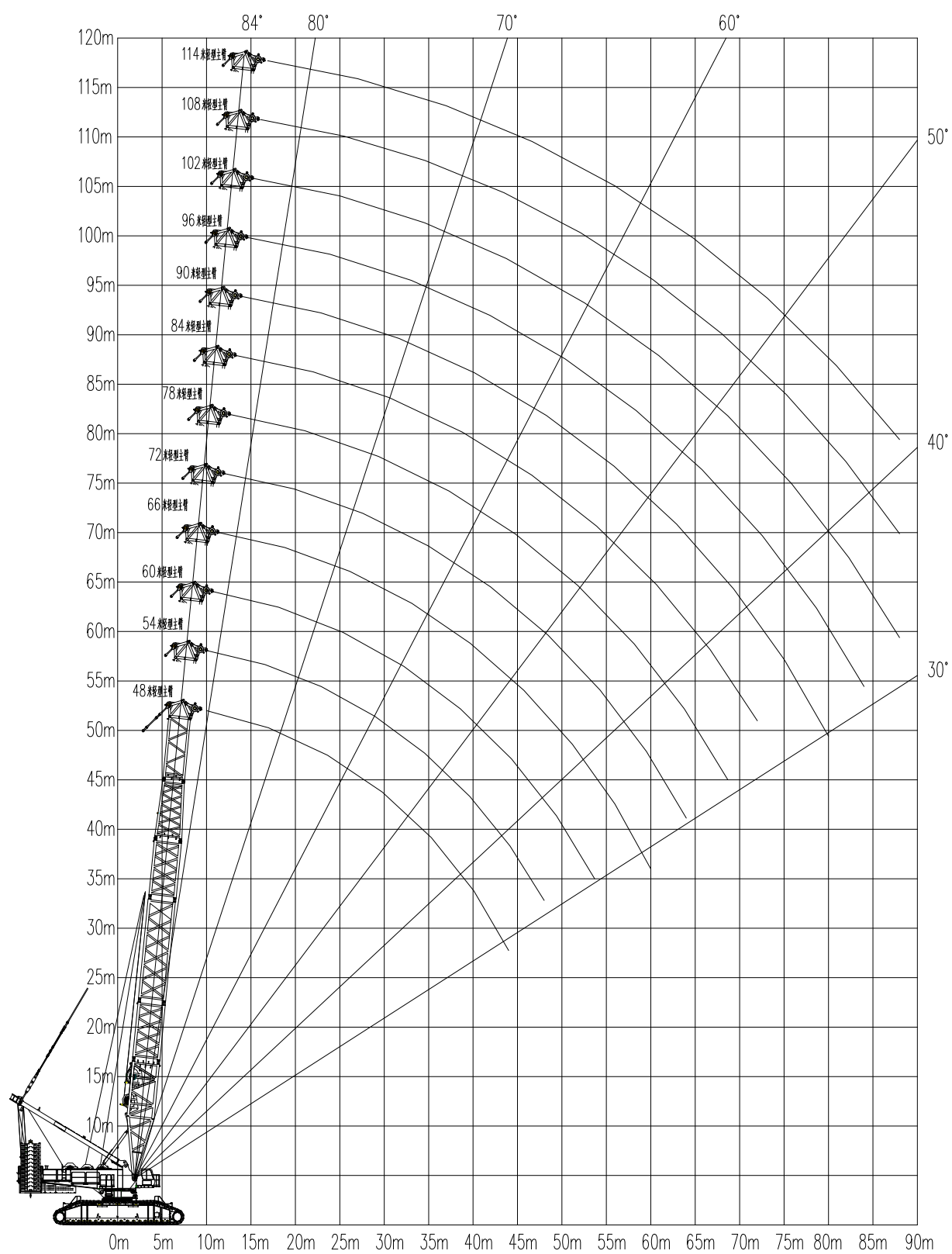
Boom (m) Radius (m)	42	48	54	60	66	72	78
10	1250*	1140*					
11	1140*	1130*	1045*				
12	1132*	1125*	1045*	900*			
13	1070*	1062*	1018*	900*	835*		
14	1025*	1005*	948*	900*	835*	766*	
15	980*	950*	930*	900*	827*	766*	680*
16	950	915	914	865*	815*	763*	680*
17	900	880	865	825*	810*	753*	680*
18	850	840	830	793	797	749*	678*
19	810	800	782	762	760	729	677*
20	775	755	745	743	736	722	672
22	705	675	675	679	669	651	641
24	628	630	621	618	615	601	595
26	578	568	567	564	561	556	551
28	521	535	530	527	521	513	507
30	480	484	480	479	477	475	473
32	429*	461	455	450	446	443	441
34	392*	414	410	409	408	406	404
36	353*	380	373	371	370	369	367
38	315*	350	354	349	345	345	343
40		330	338	337	337	335	335
44		273*	305	303	308	311	313
48			263	266	281	286	287
52				243	255	259	261
56					220	233	238
60					200	203	214
64						183	182
68							167
倍率	2×24	2×24	2×24	900t/2×23# 870t/2×22	835t/2×21# 800t/2×20	766t/2×19# 730t/2×18	2×17
吊钩	1000 t	1000 t	1000 t	1000 t	1000 t	1000 t	1000 t
钩重(t)	24.5	24.5	24.5	24.5	24.5	24.5	24.5

Note: 1250t hook block and 10.5m boom insert are optional parts

XGC16000 SHB Heavy boom lifting performance table in superlift working condition Continued Table 2-1 (260t turntable counterweight + 90t carbody counterweight + 460t superlift counterweight, superlift counterweight radius 24m)

Boom (m) Radius (m)	84	90	96	102	108	114	120
16	610*						
17	610*	558*	502*				
18	610*	555*	502*	449*			
19	610*	550*	501*	449*	394*		
20	610*	550*	501*	448*	392*	348*	296*
22	594*	545*	497*	447*	390*	348*	296*
24	552	537*	492*	445*	389*	346*	296*
26	528	501	477*	442*	387*	346*	296*
28	503	472	449*	433*	385*	344*	296*
30	470	438	435	417	382*	342*	292*
32	439	410	407	397	373*	339*	290*
34	402	381	379	377	358	335*	287*
36	364	359	356	356	345	324*	282*
38	343	338	334	333	330	309	279*
40	338	328	319	315	312	300	273*
44	311	299	288	282	279	277	258
48	283	271	257	254	251	250	240
52	254	246	233	230	227	226	220
56	231	225	214	210	207	206	202
60	213	207	194	192	190	189	185
64	192	191	182	177	174	173	170
68	174	177	167	163	161	160	158
72	152	162	154	149	148	148	146
76		147	143	136	136	136	135
80		130	129	126	124	124	125
84			117	118	116	113	113
88				111	108	103	102
92					102	93	93
96					96	85	84
100						77	75
104							66
倍率	2×15	2×14	2×12	2×11	2×10	2×9	2×7
吊钩	1000 t	1000 t	500 t	500 t	500 t	500 t	500 t
钩重(t)	24.5	24.5	17.5	17.5	17.5	17.5	17.5

3. XGC16000 LB Light boom working range in standard working condition

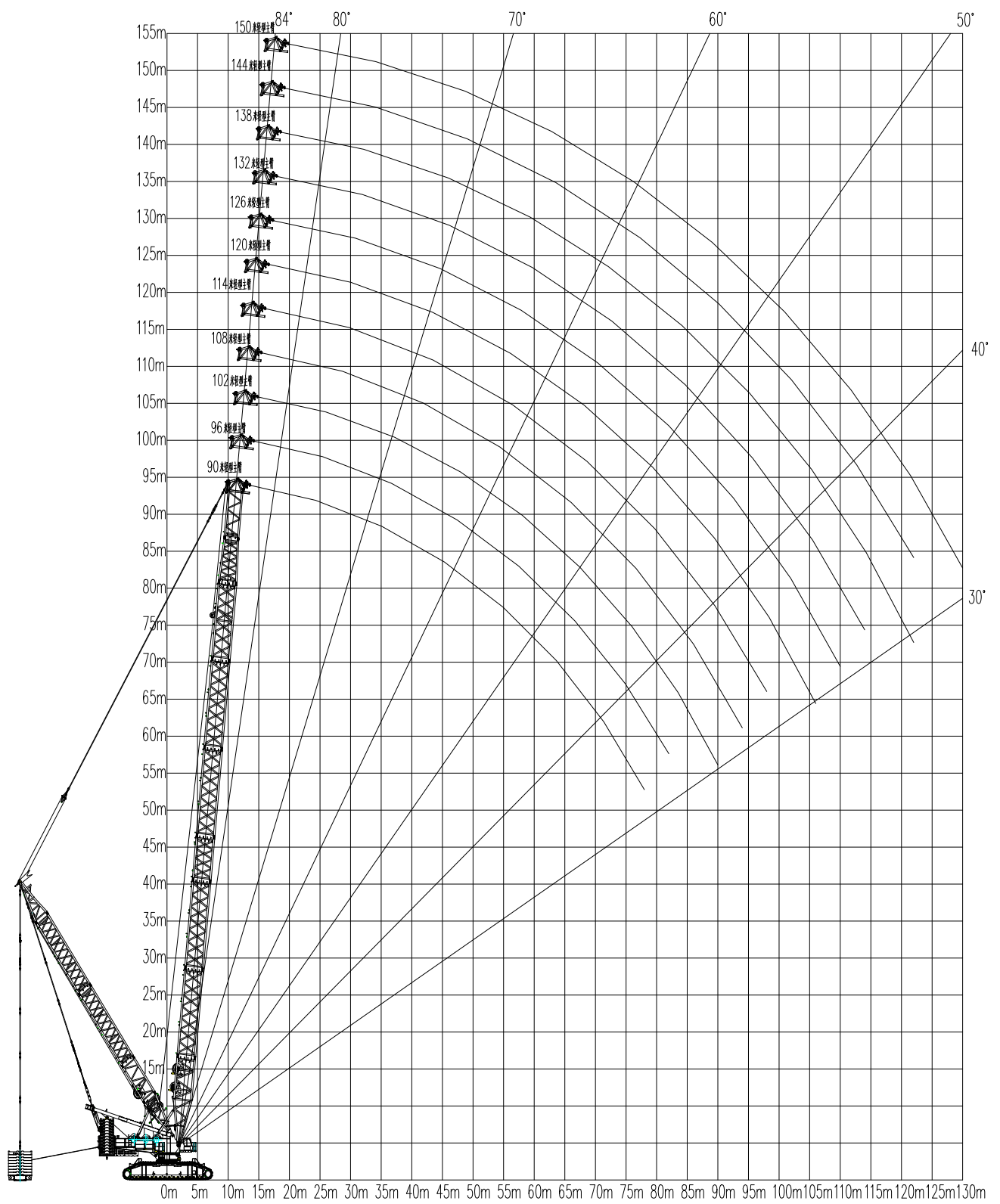


XGC16000 LB Light boom lifting performance table in standard working condition

Table 3-1 (260t turntable counterweight + 90t carbody counterweight)

Boom (m) Radius (m)	48	54	60	66	72	78	84	90	96	102	108	114
9	500											
10	490	475	470									
11	479	474	469	430								
12	442	438	434	426	418	380						
13	412	408	404	397	390	370	360					
14	382	378	374	368	361	355	346	325	315			
15	358	355	351	346	339	333	325	312	300	282		
16	335	332	328	323	317	311	304	296	284	270	178	150
17	316	313	310	305	300	294	287	281	270	258	177	149
18	298	295	292	288	283	276	270	265	257	246	175	147
19	282	280	277	272	268	263	256	251	244	234	173	145
20	267	265	262	257	253	249	242	238	232	222	171	142
22	241	239	237	233	228	224	218	214	210	203	166	139
24	216	214	212	209	206	203	199	195	191	186	160	136
26	195	193	191	188	186	182	179	175	171	168	149	132
28	175	173	171	170	167	164	161	158	155	151	135	127
30	158	157	155	154	152	150	146	143	140	137	124	119
32	144	142	141	140	139	137	133	131	128	124	114	111
34	131	130	129	128	126	125	121	119	116	113	106	103
36	120	118	117	117	116	114	112	110	107	104	98	95
38	110	109	108	107	106	105	103	101	98	96	91	89
40	101	100	99	99	98	97	95	93	91	88	84	82
42	94	93	92	92	91	89	87	86	84	81	78	76
44	87	87	86	85	84	83	80	79	77	74	71	70
46		79	79	79	78	77	73	72	70	69	66	64
48		74	73	73	72	70	68	67	65	63	60	59
52			64	63	62	61	59	57	55	53	51	49
56				55	54	53	51	49	47	45	43	42
60					47	46	44	42	40	38	37	35
64					41	40	38	36	34	33	31	29
68						34	32	31	29	28	26	24
72							27	27	24	23	22	20
76								23	19	17	18	16
80								20	16	14	15	13
84									13	12	12	10
88										10	9	7

4. XGC16000 SLB Light boom working range in superlift working condition

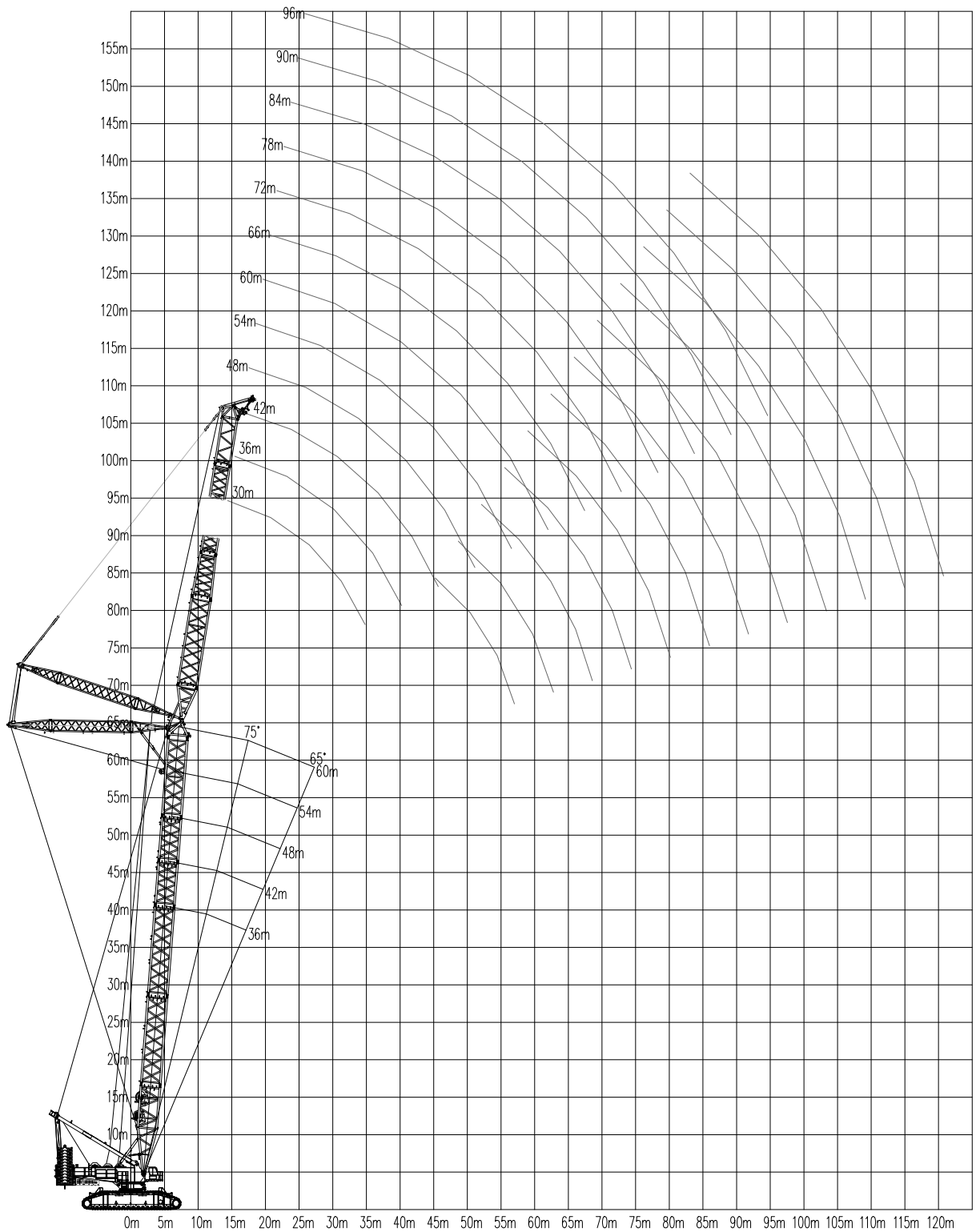


XGC16000 SLB Light boom lifting performance table in superlift working condition

Table 4-1 (260t turntable counterweight + 90t carbody counterweight + 460t superlift counterweight, superlift counterweight radius 24m)

Boom (m) Radius (m)	90	96	102	108	114	120	126	132	138	144	150
16	450*	405*									
17	440*	402*	368*								
18	430*	400*	368*	330*							
19	420*	395*	368*	329*	275*						
20	416*	392*	368*	328*	275*	231*	204*				
22	405*	376*	368*	323*	275*	228*	202*	172*	142*		
24	392*	369*	356*	315*	270*	225*	201*	170*	141*	124*	104*
26	384*	360*	345*	304*	263*	223*	199*	168*	140*	123*	104*
28	376*	350*	335*	300*	260*	221*	197*	165*	139*	122*	103*
30	369*	338*	324*	295*	255*	219*	196*	162*	138*	121*	102*
32	360*	329*	316*	288*	250*	217*	195*	160*	137*	120*	101*
34	350	322*	304*	281*	246*	215*	195*	158*	136*	119*	100*
36	338	315*	298*	275*	243*	213*	192*	156*	135*	118*	99*
38	324	306	291*	266*	242*	210*	188*	154*	134*	117*	98*
40	310	297	286	261*	240*	208*	184*	152*	133*	116*	97*
42	296	285	281	253*	237*	205*	180*	149*	132*	115*	96*
44	281	273	274	248	235*	202*	176*	147*	131*	114*	95*
46	267	264	261	242	231	199*	172*	145*	130*	113*	94*
48	254	251	249	235	228	197*	169*	143*	129*	112*	93*
50	243	239	237	228	225	195*	167*	141*	128*	111*	92*
54	222	218	216	212	211	188	163*	138*	126*	109*	90*
58	203	200	198	197	196	181	158*	135*	124*	107*	88*
62	188	185	182	181	181	172	153	131*	122*	104*	86*
66	174	172	173	172	172	167	150	129*	120*	103*	84*
70	162	158	156	155	155	157	143	126	118*	101*	82*
74	148	148	145	142	142	140	137	121	116	99*	80*
78	137	135	140	140	139	134	127	116	113	97*	78*
82		121	128	126	127	123	118	111	106	93	76*
86			118	117	119	117	111	105	104	89	74*
90			105	107	108	110	104	100	99	85	72
94				98	100	103	99	92	94	81	70
98					92	94	91	86	87	77	68
102						86	83	79	78	73	66
106						77	74	72	71	69	64
110							63	62	61	62	60
114								55	55	56	56
118									53	53	53
122										51	48
126											44
130											42

5. XGC16000 HW Tower jib working range in standard working condition



XGC16000 HW Tower jib lifting performance table in standard working condition

Table 5-1 Boom length 42m, boom angle 85°, 260t turntable counterweight + 90t carbody counterweight

Tower jib (m) Radius (m)	30	36	42	48	54	60	66	72	78	84	90	96
18	296											
19	281											
20	268	262	258									
22	245	240	236	232								
24	224	220	216	212	208							
26	206	202	199	195	192	188						
28	189	186	183	179	176	173	169					
30	175	172	169	166	163	159	156	153				
32	162	159	157	154	151	148	144	141	138			
34	151	148	146	143	141	137	134	133	130	126	123	
36		139	137	134	132	129	125	123	120	117	114	85
38		130	128	125	123	120	117	115	112	109	106	85
40		120	120	117	115	112	110	107	104	102	99	85
42			112	110	108	106	103	100	98	95	93	84
44			105	104	102	99	97	94	92	89	88	78
46			98	98	96	93	91	89	88	85	83	72
48				92	91	88	87	85	83	80	77	68
50				87	87	84	82	80	77	74	72	63
54					77	75	73	70	68	66	64	57
58					68	67	65	63	61	58	56	51
62						60	58	56	54	52	50	47
66							52	50	48	46	44	43
70							47	45	43	42	41	39
74								42	40	38	37	35
78									36	34	33	32
82										31	30	29
86										28	27	26
90											25	23
94												21
98												18

XGC16000 HW Tower jib lifting performance table in standard working condition

Continued Table 5-2 Boom length 48m, boom angle 85°, 260t turntable counterweight + 90t carbody counterweight

Tower jib (m) Radius (m)	30	36	42	48	54	60	66	72	78	84	90	96
18	290											
19	275											
20	262	257										
22	237	232	227									
24	217	212	208	204	200							
26	198	194	191	187	184	180						
28	182	179	176	173	169	166	162					
30	169	166	162	159	156	153	150	146				
32	156	153	151	148	145	141	138	135	134			
34	146	143	141	137	135	133	130	126	123	120		
36	131	134	132	130	126	123	120	117	115	111	100	
38		125	123	120	118	115	112	109	107	104	100	84
40		117	115	113	111	108	105	102	100	97	92	84
42			108	106	104	101	99	96	93	91	85	83
44			102	100	98	95	93	90	88	86	79	77
46			96	94	92	90	88	86	83	81	74	72
48				89	88	86	83	81	79	75	69	67
50				85	83	81	79	75	73	71	64	62
54					74	71	69	67	65	62	57	55
58					66	64	62	60	57	55	52	50
62						57	55	53	51	49	47	45
66							49	48	46	44	43	41
70							44	43	42	40	39	37
74								39	38	37	36	34
78									34	33	32	31
82									31	30	29	28
86										27	27	25
90											24	22
94												19
98												16

XGC16000 HW Tower jib lifting performance table in standard working condition

Continued Table 5-3 Boom length 54m, boom angle 85°, 260t turntable counterweight + 90t carbody counterweight

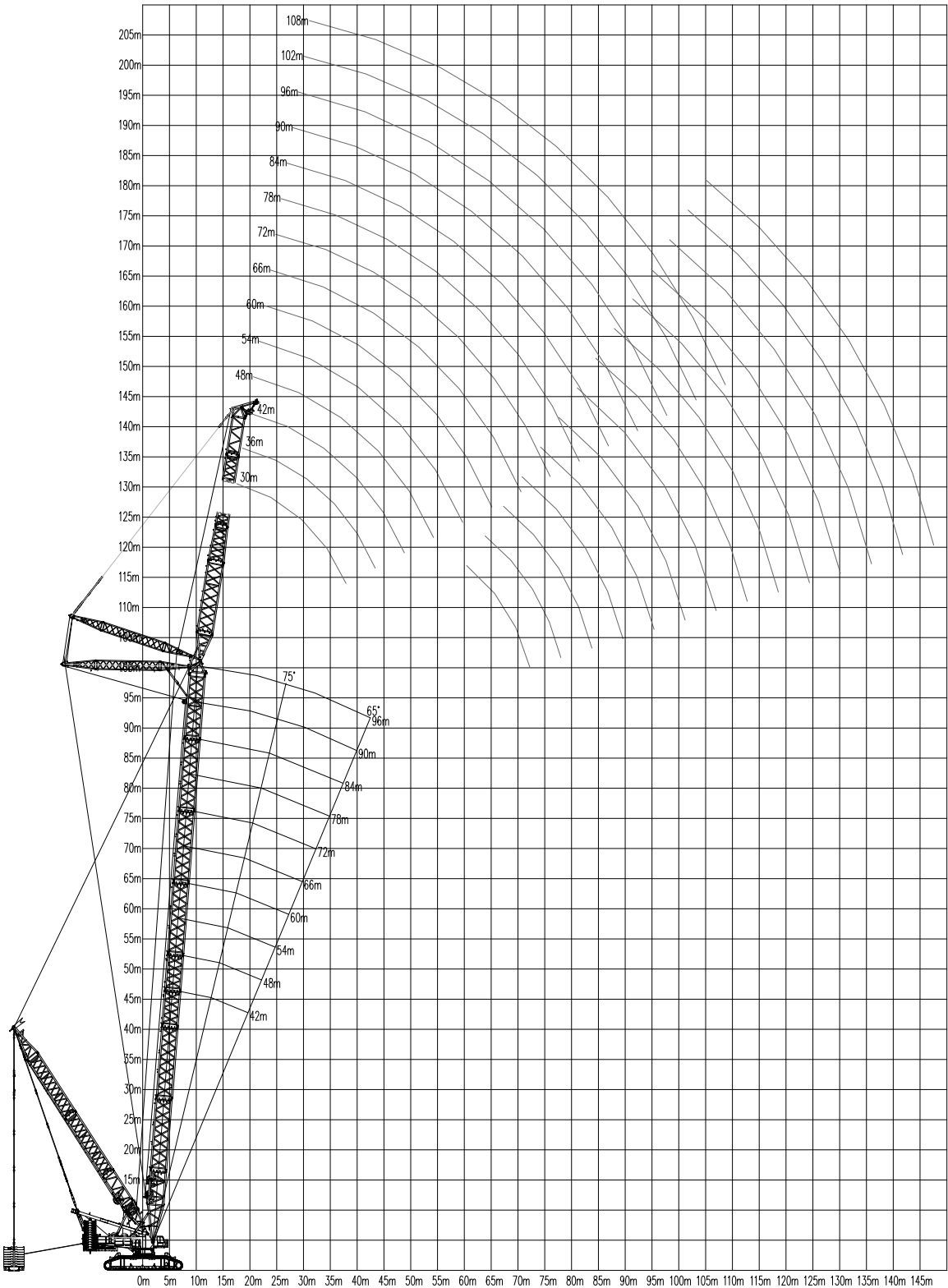
Tower jib (m) Radius (m)	30	36	42	48	54	60	66	72	78	84
19	266									
20	252									
22	227	223	220							
24	208	204	200	196						
26	191	187	183	180	176					
28	176	172	169	166	162	159	155			
30	162	159	156	153	150	147	143	140		
32	151	148	145	142	139	136	134	131	101	
34	140	137	135	134	131	126	124	121	101	100
36	132	130	126	124	121	118	115	112	101	100
38		120	118	116	113	110	108	105	101	99
40		113	111	108	106	103	100	98	94	92
42		106	104	102	100	97	94	92	87	85
44			98	96	93	91	88	87	81	79
46			92	90	88	87	84	82	75	73
48			77	86	84	82	79	77	71	69
50				82	80	77	74	72	66	64
54					70	68	66	64	59	56
58					63	61	59	57	54	51
62						55	53	50	49	47
66							47	45	45	43
70							43	41	41	39
74								38	37	36
78									34	33
82									31	29
86										27

XGC16000 HW Tower jib lifting performance table in standard working condition

Continued Table 5-4 Boom length 60m, boom angle 85°, 260t turntable counterweight + 90t carbody counterweight

Radius (m)	60 m Boom					
	30 m TJ	36 m TJ	42 m TJ	48m TJ	54m TJ	60m TJ
19	256					
20	256					
22	228	224	199			
24	206	202	199	177		
26	187	184	181	177	159	
28	170	168	165	162	159	143
30	154	153	152	149	146	143
32	142	141	140	138	135	133
34	130	129	128	126	124	122
36	120	120	119	117	115	113
38		110	109	108	106	104
40		103	102	101	99	97
42		96	95	94	92	90
44			89	88	86	85
46			83	82	81	79
48			76	77	76	74
50				72	71	69
54				63	63	63
58					56	56
62						51
66						46

6. XGC16000 SHW Tower jib working range in superlift working condition



XGC16000 SHW Tower jib lifting performance table in standard working condition

Table 6-1 Boom length 48m, boom angle 85°, 260t turntable counterweight + 90t carbody counterweight + 460t superlift counterweight, superlift counterweight radius 24m

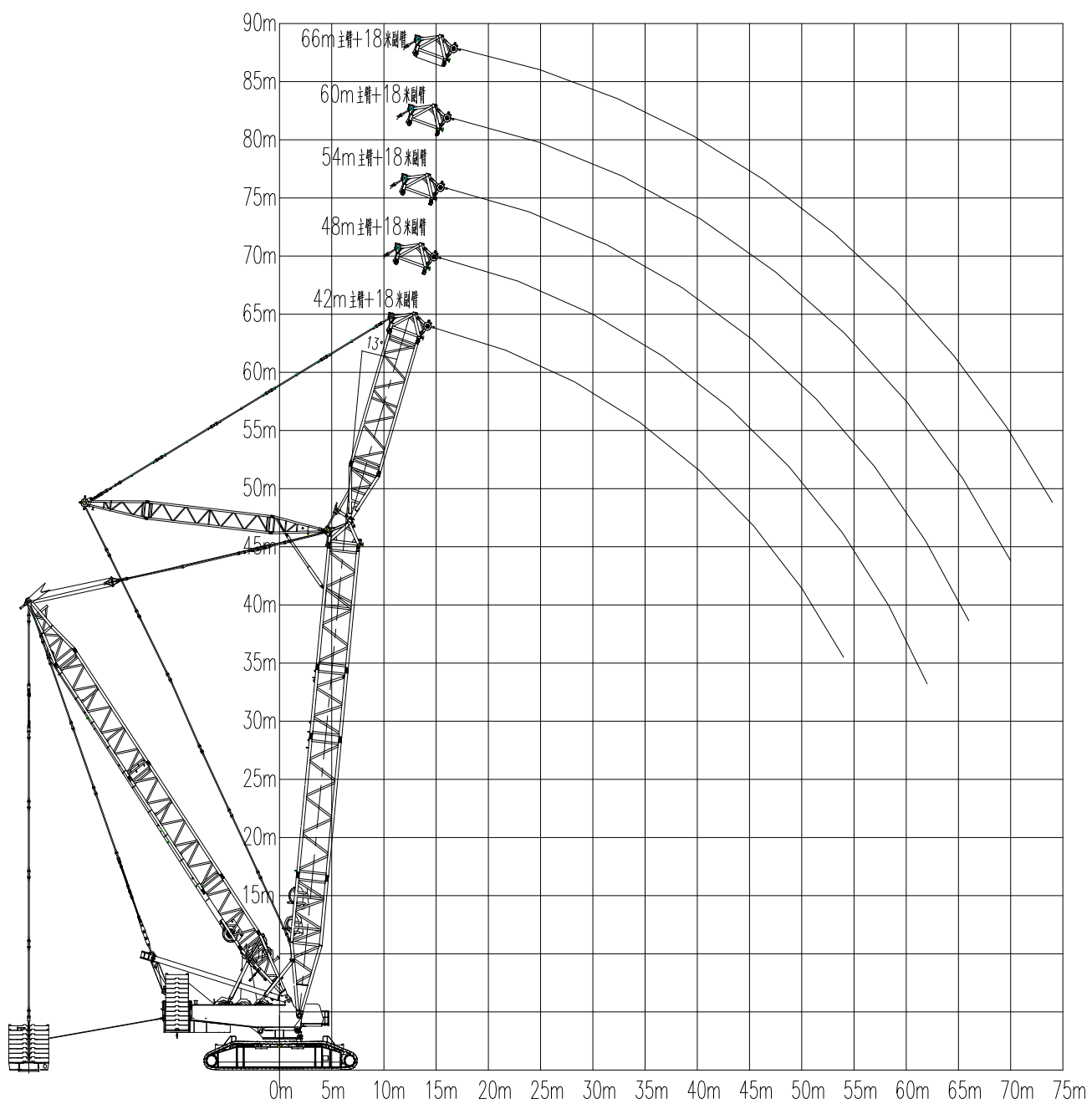
Boom (m) Radius (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	108
17	477													
18	477													
19	472	472												
20	444	444	412											
22	418	428	388	387										
24	393	403	365	369	349									
26	370	376	350	347	331	314								
28	355	353	339	328	314	300	277							
30	335	332	323	314	298	285	267	248						
32	315	313	304	296	286	272	254	245	216					
34	290	296	288	281	267	259	243	235	215	185	152			
36		280	273	267	254	247	233	225	208	183	151	124		
38		255	259	253	242	235	222	216	201	182	150	122	89	
40		227	246	241	230	224	213	207	193	180	148	121	88	78
42			225	230	220	214	203	199	186	178	146	120	83	77
44			204	218	210	204	199	191	178	169	145	119	82	76
46			184	201	201	196	189	183	171	163	143	118	81	75
48				185	191	187	181	176	165	159	142	116	80	74
50				170	177	178	174	168	158	151	139	115	80	75
54					152	159	160	157	148	142	127	114	78	74
58					122	139	144	145	139	132	115	108	77	72
62						115	125	131	129	125	103	95	74	69
66							108	115	116	112	93	83	73	67
70							90	99	104	102	83	74	72	66
74								84	86	77	75	64	65	64
78									78	75	67	57	57	62
82									62	71	66	56	56	56
86										59	65	54	55	51
90											54	53	51	46
94											43	49	44	37
98												41	41	33
102													36	29
106														26
110														23

XGC16000 SHW Tower jib lifting performance table in standard working condition

Continued Table 6-2 Boom length 96m, boom angle 85°, 260t turntable counterweight + 90t carbody counterweight + 460t superlift counterweight, superlift counterweight radius 24m

Boom (m) Radius (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	108
22	227													
24	211	208												
26	197	194	192	186										
28	185	182	180	176	166									
30	174	171	169	166	164	148								
32	165	162	160	157	154	147	134							
34	157	155	153	150	145	142	133	121						
36	147	145	143	140	138	135	131	120	108					
38	138	137	135	133	132	129	124	119	108	98				
40		130	129	126	124	121	118	116	107	98	87	78		
42		125	124	121	117	115	113	111	106	96	87	78	59	
44		117	117	114	112	110	106	104	100	96	86	77	58	53
46		111	113	108	108	105	101	99	95	93	85	76	57	51
48			105	104	102	99	97	94	91	88	83	75	56	50
50			100	101	98	94	93	91	88	84	81	73	55	49
54				91	88	87	83	81	79	75	73	69	51	46
58					81	80	77	75	71	70	66	64	46	42
62					73	72	69	67	66	63	60	57	42	38
66						66	64	62	59	57	54	52	38	33
70							58	56	54	51	49	47	33	30
74							52	51	49	47	45	42	30	27
78								46	44	42	40	38	27	24
82									39	38	37	34	24	22
86									36	35	33	31	21	19
90										31	29	27	19	17
94											26	24	13	12
98											23	21	13	11
102												18	12	10
106													10	
110														

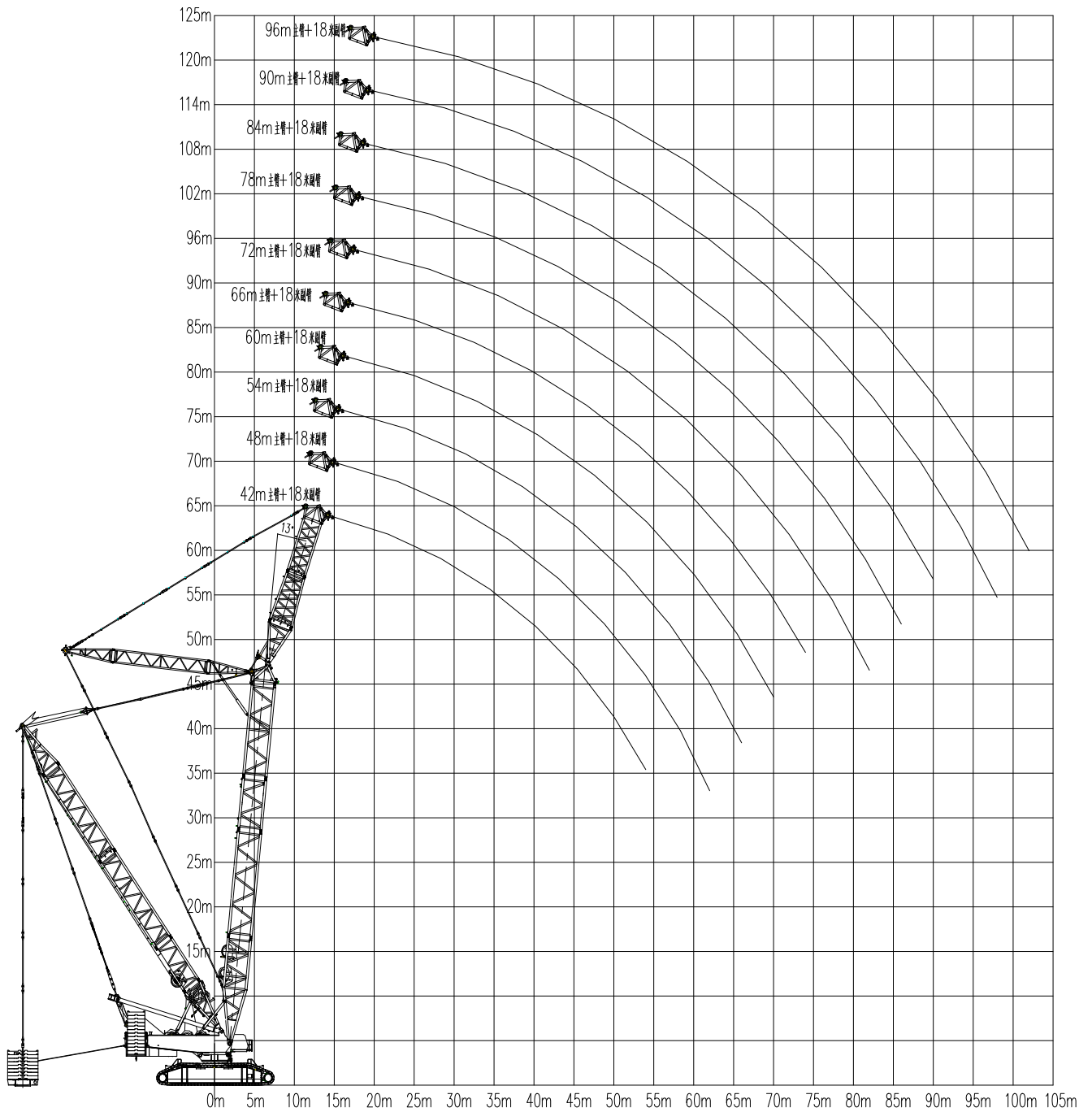
7. XGC16000 SHVHJ Special heavy jib working range in superlift working condition



XGC16000 SHVHJ Special heavy jib lifting performance table in standard working condition Table 7-1 Special jib length 18m, offset angle 13°, (260t turntable counterweight + 90t carbody counterweight + 460t superlift counterweight, superlift counterweight radius 24m

Boom (m) Radius (m)	42	48	54	60	66
16	629				
17	616	553			
18	594	553	482		
19	574	553	482	424	
20	554	544	482	424	381
22	520	513	482	424	381
24	490	486	482	424	381
26	463	462	477	424	381
28	439	440	450	424	381
30	417	420	417	412	381
34	362	364	360	356	370
38	304	319	316	312	319
42	257	277	280	276	279
46	217	237	248	246	247
50	183	204	214	220	220
54	151	173	185	194	197
58		146	160	169	174
62		120	135	146	151
66			113	125	130
70				106	111
74					94

8. XGC16000 SHVLJ Special light jib working range in superlift working condition



XGC16000 SHVLJ Special light jib lifting performance table in standard working condition Table 8-1 Special jib length 18m, offset angle 13°, (260t turntable counterweight + 90t carbody counterweight + 460t superlift counterweight, superlift counterweight radius 24m

Boom (m) Radius (m)	42	48	54	60	66	72	78	84	90	96
16	477									
17	477	477								
18	477	477	470							
19	477	477	470	425						
20	477	477	470	425	374	328				
22	477	477	470	425	374	328	288	253		
24	477	477	470	425	374	328	288	253	224	196
26	472	472	470	425	374	328	288	253	224	196
28	455	459	462	425	374	328	288	253	223	195
30	433	433	428	420	374	328	288	252	222	194
34	375	377	372	369	362	324	287	251	220	192
38	317	333	328	325	322	315	282	247	217	190
42	270	291	291	288	285	282	275	242	212	185
46	229	251	260	258	256	253	248	237	208	181
50	194	216	227	233	231	228	223	220	203	176
54	163	185	197	207	209	206	202	198	195	171
58		157	171	182	188	187	184	180	178	166
62		130	146	159	166	170	167	164	161	158
66			124	138	146	151	153	150	146	143
70				117	127	134	136	137	134	131
74					111	117	121	123	123	119
78						102	107	109	109	108
82						87	93	96	98	97
86							80	84	86	86
90								73	76	76
94									65	66
98									55	57
102										47

Vi. Market application:

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X
C
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G's

thousand-ton crawler crane is transferred to the new energy project site with an investment of 5.3 billion yuan by yankuang group in ordos city.



A 760 ton hydrocracking reactor was lifted from Qingdao, shandong province.



XGC16000 right wing middle banner of chahar 5MW fan hoisting



XGC16000 crawler crane helps lift the dome of rizhao oceanarium



On February 5, 2012, the comprehensive energy coal-to-gas project of henan yima coal industry was under construction