

XLC22000 Crawler Crane **Technical Specification**



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Highlights of XLC22000 Crawler Crane

XLC22000 crawler crane is high-end hoisting machinery that targets on large-scale projects, like petrochemical construction, wind power plant and ocean engineering projects. It features excellent lifting performance, high efficiency, humanized design, safe and reliable performance, etc.

I. Excellent lifting performance

The max. load moment is 22000t·m, max. rated lifting capacity is 1700t, and the max. boom telescoping code is 222m.

II. High assembly efficiency

- 1. Main and auxiliary winch, luffing system of super lifting device are integrated for transport, re-reeving wire rope for jobsite transfer is no longer needed. Main luffing system includes mast, main and auxiliary winches, luffing tackle and wire ropes; luffing system of super lifting device includes super lifting device mast winch section, luffing winch of super lifting device, luffing tackle of super lifting device and wire ropes.
- 2. Super lifting device counterweight suspending device with pin shaft connection is simple and convenient for re-assembly, as the less components are used, the faster re-assembly speed is.
- 3. Double-row turntable counterweight has a low center of gravity, installers can alternately stand on one row, which makes the installation easier.

III. High operating efficiency

- 1. Single line hoist speed reaches 140m/minutes.
- 2. Super-lifting-device counterweight quick-detaching device enables quick change of different weight of super lifting device counterweight.
- 3. Super lifting device counterweight push unit, can realize quick change of different super-lifting-device counterweight radius of 15m-30m.
- 4. Super lifting device is equipped with a no-load counterweight suspending device, with it, super lifting device can realize slewing and traveling movement while attaching a certain weight of counterweight slabs, without using an additional crane to transfer such counterweight.

IV. Convenient transport and strong adaptability

1. Light transport weight: the max. transport weight of a single component is 45t, with this



feature, this crane can be transported to the whole world.

2. Multiple transport plans have been designed to adapt to a variety of application situations. The three-piece mast kit can be either transported alone or carried along with turntable rear section; the integrated front turntable and slewing bearing can be either transported along or carried together with upper frame.

V. High safe and reliable performance

- 1. Center-of-gravity monitoring system can real time monitor the center of gravity of this crane, and give early warnings, so as to limit potentially dangerous movements and ensure the safety of boom-up/down operations. Multi-position environmental monitoring system can monitor the surroundings with a high-definition digital closed circuit.
- 2. Double-motor and double-hydraulic systems are mutually redundant. They are globally famous components, which are highly reliable.

VI. Humanized design for convenient operation and maintenance

- 1. Maintenance friendly: a power-box type configuration that not only contains integrated system but also supplies power oil source outward.
- 2. Comfortable environment: operator's cab has a super large space and a complete set of devices, and offers luxurious operating experience.
- 3. Convenient operation: the crane is equipped with a wireless remote control that makes component assembly, site transfer and hoisting operation more convenient and safer.
- 4. Reduce the time for preparation: the crane carries a large fuel tank with a volume of 2000L, which is a guarantee of long endurance.



XLC22000 Crawler Crane Technical Specification

I. Outline Drawing

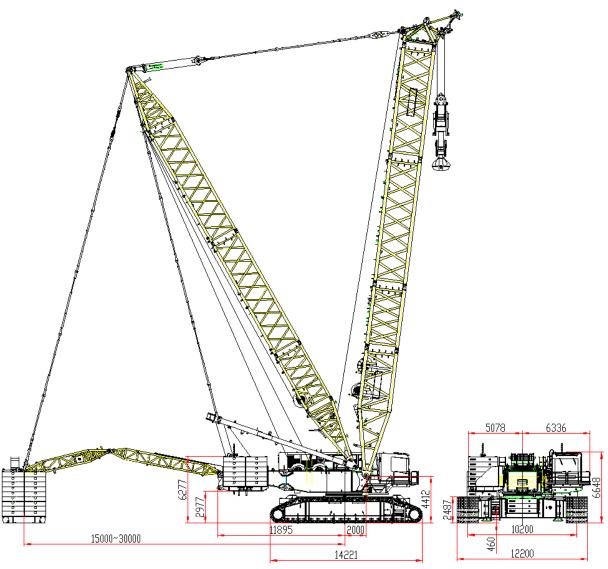


Figure 1-1-1 Outline drawing of XLC22000 crawler crane



II. Main Technical Data

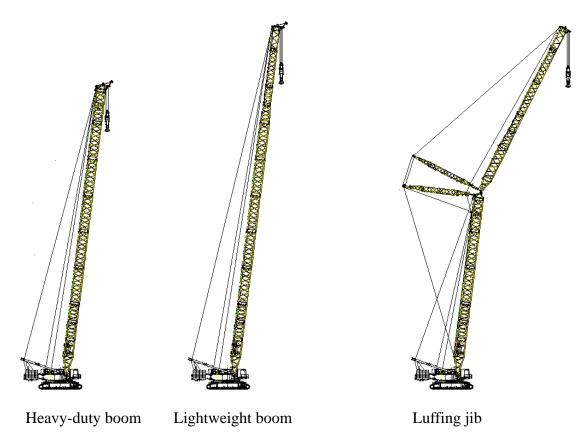
Table 2-1-1 Main technical data of XLC22000 crawler crane

	Item	Unit	Value		
Max. rated lifting ca	pacity	t	1700		
Max. load moment		t.m	22000		
Boom length of	Heavy-duty boom	m	30~96		
standard operation	Lightweight boom	m	48~114		
mode	Luffing jib	m	30~96		
	Heavy-duty boom	m	42~120		
Boom length of	Lightweight boom	m	90~171		
super lifting device	Luffing jib	m	30~114		
operation mode	Special jib	m	18		
	Wind power jib	m	12		
	Max. line speed of winch	m/min	140		
	system	111/111111	140		
	Max. line speed of main	m/min	57×2		
	luffing system	111/111111	31×2		
Mechanism speed	Max. line speed of luffing	m/min	135		
Wiechamsm speed	system of luffing jib	111/111111	133		
	Max. line speed of luffing	m/min	140		
	system of super lifting device	111/111111	170		
	Max. slewing speed	r/min	0.95		
	Max. travel speed	km/h	0.85		
Gradient			30%		
Engine power		kW	2×360		
Track width		m	10.2		
Super lifting counter	weight radius	m	15~30		
Max. single part tran	sport weight	t	45		

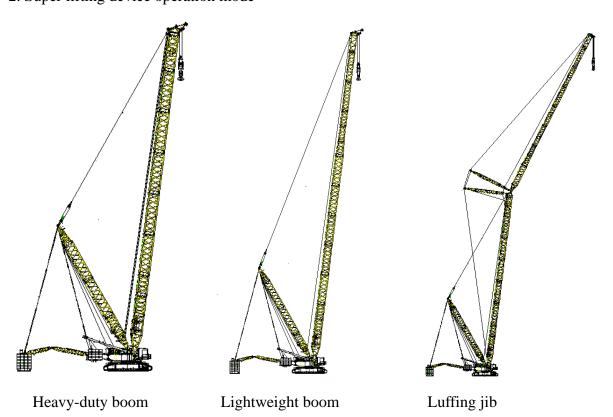


III. Combinations of Operation Mode

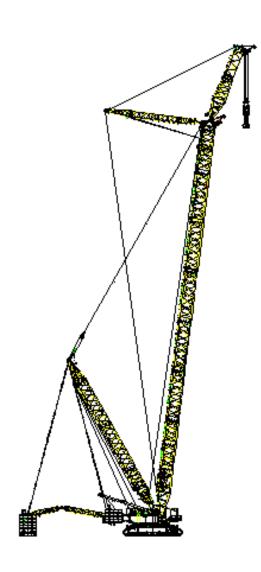
1. Standard operation mode



2. Super lifting device operation mode











Wind power jib



IV. Description of Components and Systems

(i) Superstructure

1. Boom telescoping code

Boom has following operation modes: there are heavy-duty boom, lightweight boom and luffing jib in standard operation mode; there are heavy-duty boom, lightweight boom, special jib and wind power jib operation modes in super lifting device operation mode; the structure type is a four-chord spatial lattice, with uniform section in the middle and variable cross-section at both ends. The material is high strength pipes with strong load-bearing capacity. Here are main operation modes:

- 1. HB: heavy-duty boom of standard operation mode, 30m~96m, one 12m boom base, one 6m thick-wall section, one 6m boom insert, one 12m thick-wall section, one 12m boom insert, three 12m lightweight sections, one 10.5m transition section and one 1.5m boom head.
- 2. LB: lightweight boom of standard operation mode, 48m~114m, one 12m boom base, one 6m thick-wall section, one 10.5m transition insert, three 12m lightweight sections, one luffing-jib 6m transition section, two luffing-jib 6m inserts, one luffing-jib 12m section, one luffing-jib 12m lightweight section and one 7.5m luffing jib tip.
- 3. HW: heavy-duty boom + luffing jib of standard operation mode, luffing jib length: 30m~96m, consisting of one 4.5m luffing jib base, one 12m luffing jib section with large cross-section, one 6m luffing jib cone section, one 6m luffing jib center hitch section, three 12m luffing jib inserts, one 12m luffing jib center hitch section, one 12m luffing jib lightweight section and one 7.5m luffing jib tip.
- 4. SHB, SHB-S: heavy-duty boom of super lifting device operation mode, with a length of 42m~120m, consisting of one 12m boom base, one 6m thick-wall section, one 6m boom insert, one 12m thick-wall section, three 12m boom inserts, three 12m lightweight sections, one 10.5m transition section and one 1.5m boom head. (1350t boom head is equipped; 1600t boom head for optional; 1700t boom head for customization)
- 5. SLB: lightweight boom of super lifting device operation mode, with a length of 90m~171m, consisting of one 12m boom base, one 3m thick-wall section, one 6m thick-wall section, one 6m insert, one 12m thick-wall section, three 12m inserts, three 12m lightweight sections, one 10.5m transition section, one luffing-jib 6m transition section, two luffing-jib 6m inserts, two luffing-jib 12m lightweight sections and one 7.5m luffing jib tip.



- 6. SHW: heavy-duty boom + luffing jib of super lifting device operation mode. Luffing jib length: 30m~114m, consisting of one 4.5m luffing jib base, one 12m luffing jib section with large cross-section, one 6m luffing jib cone section, three 12m luffing jib inserts, one 12m luffing jib center hitch section, two 12m luffing jib lightweight sections and one 7.5m luffing jib tip.
- 7. SHVJ: heavy-duty boom + special jib of super lifting device operation mode. Special jib length is 18m, consisting of one 4.5m luffing jib base, one 6m luffing jib cone section and one 7.5m luffing jib tip.
- 8. SLJ: lightweight boom of super lifting device + wind power jib. The length of wind power jib is 12m, consisting of one 12m wind power jib alone.

2. Boom luffing component

It is a high strength pull plate structure composed of two groups of pull plates. Pull plates are made of high strength steel plates that are smoothly cut, which increases safety.

3. Turntable

The front and rear of turntable are split type, and turntable has a high-strength box structure, with a rigid trunnion connected in the middle.

4. Mast

Standard mast takes a box structure; mast for super lifting device is a lattice structure that has a good stability performance. Mast is equipped with a jacking system; mast of super lifting device is equipped with a hydraulic automatic control anti-back-tipping system. Super lifting device mast can form into a super lifting device mast hoist that offers assistance in boom installation.

5. System composition

Refer to following table for system configurations and applications

System	Application	Location		
The first main winch system	Elevation operation for boom, jib and luffing jib	Front of the turntable		
The second winch system	Elevation operation for boom, jib and luffing jib	Middle of turntable		
Single top	Single top elevation operation of main boom and luffing jib	Base section of boom		
Boom luffing system	Boom luffing	Rear of turntable		
Luffing system of luffing jib	Luffing of luffing jib	Base section of boom		
Luffing system of super lifting device	Main boom luffing operation of super lifting device	Winch section of super lifting device mast		



Slewing system	Superstructure slewing	Front of turntable
Travalina maahaniam	Machine travel	Front and rear of
Traveling mechanism	Wachine traver	crawler
Reeving system	Assist winch and luffing system in reeving	Front of the turntable
Reeving system	wire rope	Tront of the turntable

7. Winch system

Main and auxiliary winch systems have the same model and are driven separately. When loading weight is large, two winch systems can work in sync. Winch has a disc type normally closed brake, a built-in speed reducer and is driven by a variable motor. Main and auxiliary winch systems use box type supports, and are connected to turntable via pin shaft, which is easy for re-assembly. Winch system adopts rotation-resistant wire ropes that never twist.

Main winch system: line pull is 23.5t; diameter and length of wire rope are ϕ 32 mm and 1600m.

Auxiliary winch system: line pull is 23.5t; diameter and length of wire rope are ϕ 32 mm and 1600m.

Single top system: line pull is 23.5t; diameter and length of wire rope are ϕ 32 mm and 450m.

8. Luffing system

Luffing systems of boom, luffing jib and super lifting device include a built-in reducer, a disc type normally closed brake and a ratchet locking device. Boom luffing operation is driven by a duplex winch drum.

9. Slewing system

Located on the front of turntable, slewing system consists of three planet reducers (that externally mesh with slewing bearing) and a disc type normally closed brake; it is hydraulic cushion type and has a free swing function.

10. Slewing bearing

It is a three-row roller slewing bearing with external gear engagement. It has high strength, large bearing moment and is convenient for repair and maintenance.

11. Hydraulic oil cylinder

Hydraulic oil cylinder includes pin shaft extraction cylinder, anti-back-tipping cylinder, counterweight push and lift cylinders and outrigger cylinder, etc. To achieve self-assembly &



disassembly function, main pin shafts are cylinder-driven type; hydraulic oil cylinder includes mast lifting cylinder, lift and push cylinders for super lifting device counterweight, anti-back-tipping cylinders for boom and super lifting device mast and outrigger cylinders.

12. Operator's cab and power box

The design of the all new operator's cab follows the principle of improving humanized operating experience, to this end, the cab structure is made of steel frame, supported by hollowed-out stand columns, and the entire cab adopts a design of penetrated type large-sized glass, which altogether creates a large interior space and offers a bright field of view. Operator's cab is equipped with an adjustable heating type leather seat, adjustable display and follow-up type armrest. These devices satisfy personalized comfortable requirements. Customized side storage space, cabinet and sofa can satisfy operator's requirements for storage and rest; all-dimensional air duct arrangement, air conditioner (heat and cool), stereo equipment, fire extinguisher, closed circuit monitoring system, premium sockets, coat and hat hook, etc are equipped. The pursuit of details helps improve personalized interactive experience.

The all new power box is made of a frame structure and fabricated coverings, and this design greatly improves the convenience for removal, re-assembly and repair. The grid design of power box enhances air-taking performance, and can also prevent dust and rain, and is a way of reinforcement to the overall style. The interior passage is equipped with walking surface, and cable channel that has a load-carrying performance make the interior layout orderly and unified; besides, the power box contains full-coverage sound insulation cotton and fire extinguishers, which fully manifests compassionate care.

(II) Chassis

Chassis consists of frame, connecting beam and track frame. The connecting beam, crane frame and track frame are articulated with pin shafts, and the installation of pin shaft is driven by hydraulic cylinder.

1. Frame

Frame is a box structure, made of high-strength steel plate, with transverse partition added in the middle to strengthen torsional rigidity. Frame has a simple structure, strong carrying capacity and good rigidness.

2. Connecting beam



Connecting beam is a box structure connected with frame and track frame via pin shafts, with transverse partition added in the middle.

3. Track frame

Track frame is composed of track frame structure, track roller, drive sprocket, upper roller, crawler shoe and walking mechanism. The left and right track frames are in symmetrical arrangement. The track frame takes a box structure, whose exterior is equipped with web and whose interior has set up horizontal and perpendicular partitions, which are linked to connecting beam through pin shafts. Track roller, drive sprocket, upper roller and crawler shoes are made of high-strength castings and forgings of alloy steel.

Crawler travel drive system adopts built-in planetary gear reducer and hydraulically controlled brake. Each track frame contains two reducers, and each reducer is driven by two axial-piston variable-displacement motors. The walking mechanisms on the left and right track frames can be synchronously or separately operated for the crane to make straight walking and turning movements.

(iii) Hydraulic system

Hydraulic system is a closed type and electric proportional pilot variable pump system, which is stable and has a fine tuning characteristic of speed. Double-hydraulic systems are mutually redundant and reliable.

Closed type pump control system includes main and auxiliary winch system, main and auxiliary luffing system, walking and slewing operations, the system works stably without causing impact.

Main and auxiliary winches as well as traveling systems that have a large speed regulation range are driven by variable motor and controlled by variable pump, which enables accurate adjustment of motion speed, so system gains a fine micro-motion performance.

(IV) Electric system

Electric system is mainly comprised of following parts: engine control, monitoring instruments, auxiliary devices, hydraulic system control, moment limit and safety monitoring, etc.

Regular electric system is a 24V multiple circuit and a single wire system for connection of electric equipment. This system offers detecting, controlling, acoustic and lighting functions.



Auxiliary device is 220V heavy current system and is mainly used to drive the air conditioner of operator's cab.

(v) Engine System

Manufacturer: Benz

Model: OM460LA.E3A (two);

Rated power: 360kW/1800rpm;

Max. output torque: 2200N.m;

Type: Straight-line, six-cylinder, water-cooled, turbo-charging, intercooler, electronic fuel injection diesel engine;

Emission standard: off-road EU III and China III standards.

Fuel tank capacity: about 1000L×2.

(vi) Hook block configuration

Hook type	1350t	65t	25t
Dead weight (t)	46	4.1	1.4
Number of pulley	36	1	0

Among which, 1350t hook block is a combined type and can be converted into a 750t hook block, a 600t hook block, or 375 hook blocks and 325t hook blocks. Besides, 1600t, 1000t and 500t hook blocks are optional.

(vii) Counterweight

Counterweight includes vehicle body counterweight, turntable counterweight and super lifting device counterweight.

Vehicle body counterweight weighs 90t in total, including two counterweight boxes, each is 15t, and 6 counterweight slabs, each is 10t, respectively installed in counterweight boxes at the front and rear of vehicle frame.

Turntable counterweight is 260t in total. One counterweight pallet assembly, 20t; 24 counterweight slabs, each is 10t.

Super lifting device counterweight is 560t in total, among which, 80t (8 counterweight slabs) are for option. Two counterweight pallets: the large one weighs 20t, the other is a detaching pallet, which contains a 20t counterweight lift cylinder; 52 counterweight slabs, each is 10t. Super lifting device counterweight is equipped with a lift device and a luffing device. The former



can adjust ground clearance; the latter can regulate the distance to rotary center. Super lifting device is equipped with a no-load suspending device; with it, the super lifting device can realize slewing and traveling movement while attaching a certain weight of counterweight slabs, without using an additional crane to transfer such counterweight.

List of counterweight slabs is as follows:

Name	Vehicle body Counterweight box	Vehicle body Counterweight slab	Turntable Counterweight pallet	Turntable Counterweight slab	Super lifting d
Dead weight (t)	15	10	20	10	20
Qty.	2	6	1	24	1

(viii) Centralized lubrication system

It is a progressive centralized lubrication system controlled by computer program, so it can automatically lubricate each point one by one, and make sure oil has been sufficiently added. This system makes vehicle maintenance more relaxing and more convenient.



V. Safety Precautions

Safety devices include emergency stop, LMI, winch rope discharge protector (anti-two-block), winch lowering limiter, ratchet locking device, boom angle limit, audible and visual alarm, tri-colored moment light bar, illuminator, height lamp, anemometer, boom backstop, level gauge, hydraulic system overflow valve, balance valve and bilateral pilot-controlled valve, etc.

1. Emergency stop

In emergency, press emergency stop button to shut down the engine.

2. LMI

Customized advanced micro-processing technology has these features: low power consumption, powerful performance, high sensitivity and user-friendliness.

Detection function: LMI can automatically detect boom angle and lifting load.

Display function: crane working parameters, like moment percentage, actual load, rated load, radius, boom length, angle, max. height, OM code, parts of line, limit angle and information code are displayed on large-screen LCD and indicated in characters and graphics.

Warning function: it has complete pre-warning and overload cut-off function. If it has detected that the actual load exceeds the rated load, boom movement exceeds the limit angle, LMI will give a warning and put a limit to the current movement.

This system has a fault self-diagnosis function.

3. Anti-two-block

When hook block reaches the limit height, winch lowering limiter indicator on the display will turn on, meanwhile, LMI will stop the winch rising movement.

4. Winch lowering limiter

When system detects that only 3 turns of wire rope are left, corresponding indicator on instrument panel turns on; simultaneously, LMI automatically stops the lowering movement of winch.

5. Misoperation prevention function

The safety protection switch is located on the front of handle; when this switch is not pressed down, signals of all movements are shielded, so the handle doesn't work. This switch



can prevent mis-operation caused by body touch during boarding and deboarding.

6. Ratchet locking device

This device is designed to lock up luffing winch. Be sure to open this device before operating boom to fall; otherwise, boom won't fall; this device can keep boom being safely placed during non-working hours. Ratchet status is showed on display screen.

7. Boom angle limit

When boom elevation angle reaches the upper limit, boom-up process will be stopped; when boom radius is out of range, boom-down process will be stopped.

8. Monitoring system

Multi-position environmental monitoring system, composed of camera and monitor, can real time monitor winch, super lifting device counterweight and the surroundings with a high-definition digital closed circuit.

9. Audible and visual alarm

When crawler crane is shifting position or making slewing movement, this alarm starts flashing and giving audible alarm.

10. Tri-colored moment bar

LMI tri-colored bar is comprised of three colors: when load is below 90%, "green lamp" turns on, indicating that crane is running in safe zone; when load is within 90%-100%, "yellow lamp" turns on, showing that crane is approaching rated load range. When load is above 100%, "red lamp" turns on, indicating crane is already overloaded and is in dangerous zone. In this case, control system will automatically cut off any dangerous movement.

11. Illuminator

Illuminator are located on the front of turntable, on top of boom and inside of operator's cab. In the night, illuminator will supply lighting.

12. Height lamp

Height lamp is mounted on top of boom, serving as a kind of high-altitude caution.

13. Anemometer

It real time detects current wind speed and then transmits it to the monitor of operator's cab, reminding the driver to pay attention to operation safety.



VI. Lifting Performance Tables

(i) Heavy-duty boom of super lifting device

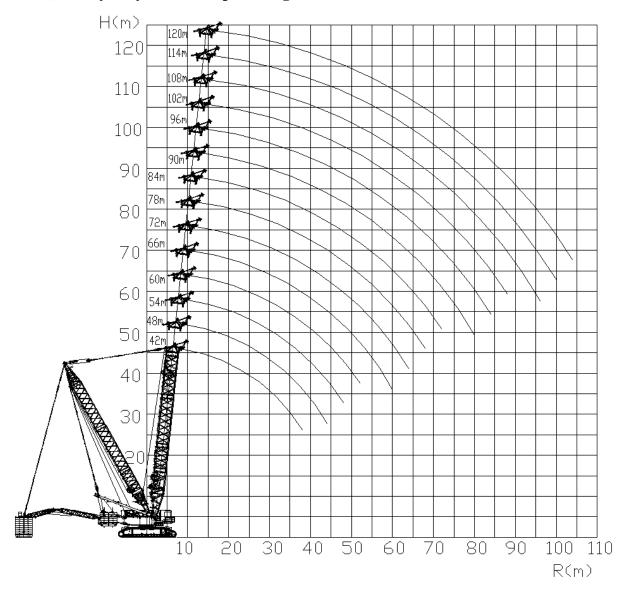


Figure 6-1-1 XLC22000 Working range chart of heavy-duty boom of super lifting device



Table 6-1-1 XLC22000 SHB-S Heavy-duty boom lifting performance table of super lifting device operation mode (1700t configuration)

Radius			ast radi		, super			ength 1		idius. 5				
m	42	48	54	60	66	72	78	84	90	96	102	108	114	120
9	1700	1700												
10	1700	1700	1600	1440										
11	1700	1700	1600	1440	1245									
12	1650	1650	1600	1440	1249	1126	932							
13	1608	1605	1600	1440	1249	1130	934	853	740					
14	1496	1493	1491	1403	1230	1133	936	855	740	675	593			
15	1393	1390	1389	1387	1195	1135	938	858	740	687	595	533	445	
16	1292	1296	1294	1293	1195	1138	940	859	740	688	595	535	446	401
17	1202	1213	1211	1210	1195	1141	941	862	740	689	595	535	446	402
18	1123	1139	1138	1136	1136	1128	943	862	740	690	596	536	447	402
19	1052	1074	1073	1071	1070	1068	945	865	740	692	597	537	447	402
20	989	1015	1014	1012	1012	1009	947	867	740	693	598	538	448	403
22	900	915	913	911	911	908	888	849	740	695	601	539	448	403
24	825	831	830	828	827	825	816	805	740	697	601	540	449	404
26	744	761	760	758	757	754	753	740	728	697	601	540	449	404
28	673	695	700	698	697	694	693	685	679	656	602	540	449	404
30	610	650	648	646	645	643	641	635	632	614	601	540	450	404
32	553	605	603	600	600	597	596	600	593	577	566	540	450	404
34	502	559	563	561	560	557	556	560	555	544	534	518	450	404
36	454	513	525	525	525	522	521	525	520	512	506	490	449	404
38	409	470	496	492	492	490	489	490	490	485	480	466	445	404
40		430	470	462	463	461	461	462	462	460	456	443	423	403
44		356	405	420	412	410	410	412	415	416	414	403	385	374
48			343	377	380	375	368	372	375	375	378	369	353	343
52				325	345	343	340	342	340	340	345	338	325	316
56					304	315	310	310	310	308	315	311	300	292
60					262	280	288	285	285	282	289	285	277	270
64						245	260	260	260	258	265	262	255	250
68							230	238	240	237	244	241	235	232
72								213	219	219	225	223	217	214
76									197	201	209	206	201	198
80									175	182	193	191	186	184
84										164	176	177	173	170
88											160	163	161	158
92												148	149	147
96												134	136	137
100													124	126
104														114



Table 6-1-2 XLC18000 SHB Heavy-duty boom lifting performance table of super lifting device operation mode (1350t configuration)

Radius	1		idst iddi	2011	ı; super		oom le			idias. 5				
m	42	48	54	60	66	72	78	84	90	96	102	108	114	120
9	1350	1350												
10	1350	1350	1350	1145										
11	1350	1350	1350	1145	1065									
12	1350	1350	1350	1145	1065	950	880							
13	1350	1350	1350	1145	1065	950	880	810	736					
14	1350	1350	1350	1145	1065	950	880	810	736	665	593			
15	1350	1350	1350	1145	1065	950	880	810	736	666	595	533		
16	1292	1295	1293	1145	1065	950	880	810	736	668	595	535	448	403
17	1202	1213	1211	1145	1065	950	880	810	736	669	595	535	448	404
18	1123	1139	1138	1136	1065	950	880	810	736	670	596	536	449	404
19	1052	1074	1073	1071	1065	950	880	810	736	671	597	537	449	404
20	989	1015	1014	1012	1012	950	880	810	736	671	598	538	449	405
22	898	915	913	911	911	908	880	810	736	673	601	539	450	405
24	822	831	830	828	827	825	816	800	736	674	601	540	451	406
26	745	761	760	758	757	754	753	736	723	675	601	540	451	406
28	673	695	700	698	697	694	693	682	679	651	602	540	451	406
30	610	648	648	646	645	643	641	630	635	609	596	540	451	406
32	553	603	603	600	600	597	596	589	591	573	566	540	452	406
34	502	559	563	561	560	557	556	553	555	539	534	518	452	406
36	454	513	525	525	525	522	521	518	523	512	506	490	451	406
38	409	470	496	492	492	490	489	487	495	482	480	466	445	406
40		430	470	462	463	461	461	458	468	457	451	443	423	405
44		356	405	420	416	415	410	408	418	413	410	403	385	374
48			343	377	377	375	375	366	375	372	370	368	353	343
52				325	345	342	340	336	340	337	335	333	325	316
56					304	315	310	308	309	307	305	306	300	292
60					262	280	287	283	280	280	280	280	277	270
64						245	260	261	260	258	260	256	255	250
68							230	238	241	238	240	236	235	232
72								213	219	221	220	220	217	214
76									197	201	208	203	201	198
80									175	182	192	188	186	184
84										164	176	175	173	170
88											159	161	161	158
92												148	149	147
96												133	136	137
100													124	126
104														114



(ii) Lightweight boom of super lifting device

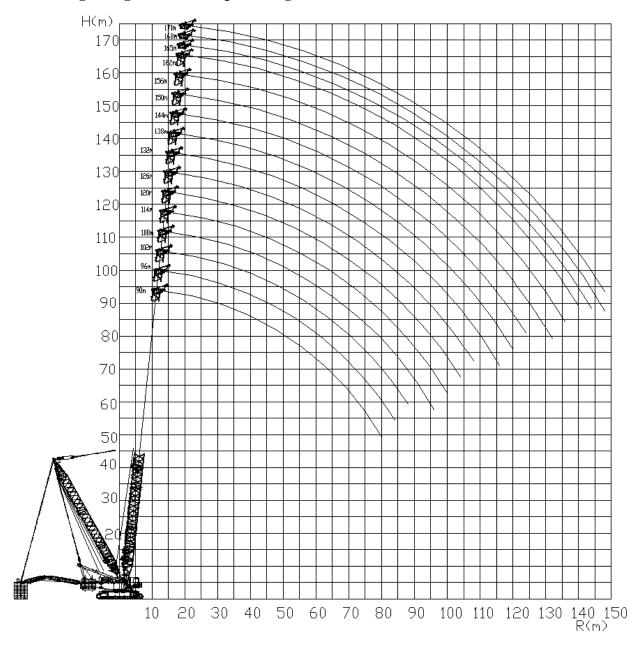


Figure 6-2-1 XLC22000 Working range chart of lightweight boom of super lifting device

Table 6-2-1 XLC22000 SLB Lightweight boom lifting performance table of super lifting device operation mode



Radius							Bo	oom le	ength	m						
m	90	96	102	108	114	120	126	132	138	144	150	156	162	165	168	171
13	650															
14	650	650	585													
15	650	650	585	535												
16	650	650	585	535	470	423										
17	650	650	585	535	470	423	376									
18	650	650	585	535	470	423	376	336	300							
19	650	650	585	535	470	423	376	336	300	270						
20	650	650	585	535	470	423	376	336	300	270	243	219				
22	650	650	585	535	470	423	376	336	300	270	243	219	196	190	171	162
24	650	650	585	535	470	423	376	336	300	270	243	219	196	190	171	162
26	650	650	585	535	470	423	376	336	300	270	243	218	196	189	171	162
28	650	650	585	535	470	423	376	336	300	270	243	218	196	188	171	162
30	643	597	585	535	470	423	376	336	300	270	242	218	196	187	171	162
32	604	585	570	535	470	423	376	336	300	270	242	218	196	186	171	161
34	569	553	538	522	470	423	376	336	300	269	242	218	196	185	170	161
36	538	523	510	495	470	423	376	336	300	269	242	218	195	184	170	161
38	510	496	485	471	458	423	376	336	300	269	242	215	195	183	170	161
40	483	472	461	448	437	423	376	336	300	269	239	215	195	182	170	161
44	433	428	420	408	399	387	376	336	300	268	239	214	193	181	170	160
48	392	387	384	374	366	356	347	322	298	267	237	213	193	180	169	160
52	357	353	351	344	338	328	321	311	273	266	237	212	192	179	169	159
56	325	323	321	317	312	304	297	289	263	266	236	212	192	178	168	159
60	298	296	295	291	289	282	277	269	253	254	235	211	191	177	168	158
64	274	272	271	268	267	263	258	250	245	237	231	210	190	176	166	158
68	254	251	251	248	247	243	241	234	229	222	217	208	188	175	164	156
72	231	233	232	229	229	226	224	219	214	208	203	198	185	173	162	154
76	210	214	216	213	212	209	208	204	201	195	190	186	182	171	160	152
80	189	196	201	198	197	195	193	190	188	183	179	175	172	168	158	150
84		177	184	185	184	181	180	177	175	172	168	164	161	158	151	148
88			168	171	172	169	168	165	163	160	158	154		149	142	139
92				157	160	158	157	154	153	149	148	145	143	140	134	131
96				142	148	148	147	144	143	139	138	136	135	132	126	123
100					135	137 125	137	135	133	130 122	129	127	127	125	119 112	116 109
104						123	128 118	126	125 117	114	120 112	118 110	118 110	116 109		
108							110	118			105		103	109	104 97	102
112 116								108 99	109 101	106 99	98	103 96	96	94	90	95 89
120								フフ	92	99	98	90	90	88	84	83
124									フム	84	85	84	84	82	79	77
128										04	78	78	78	76	73	72
132											71	72	73	71	68	66
136											/ 1	65	68	66	63	62
140												0.5	62	61	59	57
144													02	55	53	53
148														55	48	47



(iii) Wind power jib of super lifting device

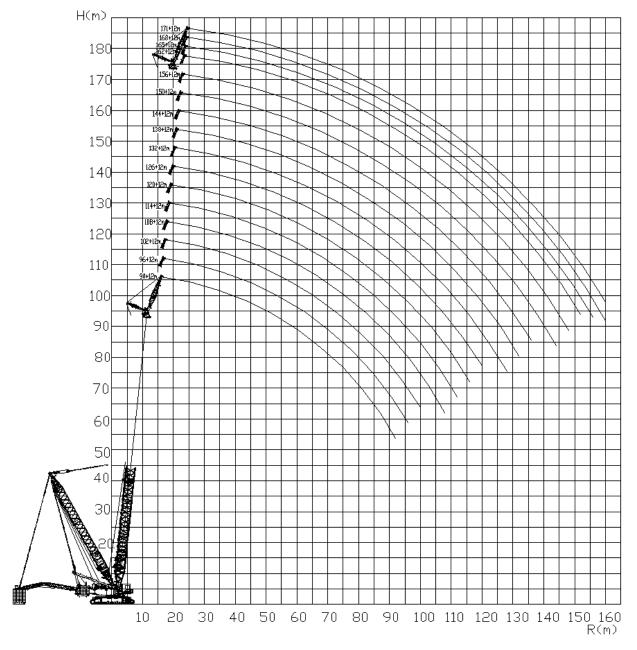


Figure 6-3-1 XLC22000 Working range chart of wind power jib of super lifting device

Table 6-3-1 XLC22000 SHJ Wind power jib lifting performance table of super lifting device operation mode



Radius				Boo	om lei	ngth r	n (iib	lengt	h: 121	m: off	set ar	ngle: 1	15°)			
m	90	96	102	108	114	120	126	132	138	144	150	156	162	165	168	171
16	320							_								
17	320	320														
18	320	320	320	320												
19	320	320	320	320	320	313										
20	320	320	320	320	320	313	270	251								
22	320	320	320	320	320	313	270	251	225	208						
24	320	320	320	320	320	313	270	251	225	208	192	173	156	150		
26	320	320	320	320	320	313	270	251	225	208	192	173	156	150	141	136
28	320	320	320	320	320	313	270	251	225	208	191	173	156	150	141	136
30	312	320	320	320	319	313	270	251	225	208	191	173	156	149	141	135
32	300	309	316	320	318	312	270	251	225	208	191	173	156	148	141	135
34	291	298	307	313	316	311	270	251	224	207	191	173	156	147	141	135
36	281	288	297	305	309	309	270	251	224	207	191	173	156	146	141	135
38	272	280	287	296	302	303	270	251	224	207	191	172	156	145	141	135
40	264	271	279	287	294	299	270	251	224	207	191	172	155	144	141	135
44	248	256	264	271	278	285	270	251	224	207	190	172	155	142	140	135
48	234	242	249	257	264	278	270	250	223	206	186	171	155	140	140	134
52	222	232	244	251	257	269	268	250	223	206	180	167	155	140	140	134
56	213	220	232	239	245	253	258	249	222	206	175	163	152	140	139	134
60	203	210	221	228	234	241	247	244	221	205	169	158	148	138	137	133
64	194	201	212	218	225	231	238	228	220	205	164	153	145	134	133	131
68	188	197	203	210	216	219	218	215	206	204	160	149	140	131	130	128
72	179	189	195	202	205	202	200	198	197	197	155	145	138	128	127	125
76	174	183	189	191	189	187	185	185	185	185	152	142	134	124	124	123
80	168	176	180	177	175	173	171	171	171	170	148	138	130	122	121	119
84	163	168	167	164	163	160	158	158	158	158	145	134	127	120	117	117
88	156	158	156	152	151	151	151	150	150	148	141	132	124	118	114	114
92	149	147	146	146	146	146	146	146	146	145	137	129	121	116	111	111
96		143	138	138	138	138	138	138	138	136	131	126	118	112	108	108
100			134	133		130		130	130	127	127	124		110	106	106
104				126	128	128	125	122	122	119	119	118	113	108	104	104
108				121	119	119	119	116	115	112	113	111	106	106	102	102
112 116					112	112 106	112 103	109 102	108 101	105 98	106 99	104 97	101 97	102 96	99 92	97 91
120						100	97	95	95	92	93	93	91	89	86	85
124							71	87	89	86	87	87	85	83	81	_ <u>83</u> _ 79
124								80	82	80	81	81	81	79	76	74
132								- 00	75	74	77	76	76	74	70	69
136									13	68	72	71	71	69	66	64
140										- 50	66	66	66	64	61	59
144											59	60	61	59	57	55
148											3)	55	56	55	53	51
152												55	51	50	49	47
156														45	44	43
160															39	38



Notes:

- 1. We reserve the right to change the above contents, please take the actual product as final.
- 2. As this technical specification only includes a part of operation modes and performances, for other high-performance requirements and special requests, please contact us.