Truck Crane

Model: XCT130

Basic technical specifications

Lifting capacity	
Max. lifting load	130t
Dimension	
Overall length	15195mm
Overall width	3000mm
Overall height	3970mm
In travel configuration	
Total weight	55000Kg
1st axle	10000Kg
2nd axle	10000Kg
3rd axle	13000Kg
4th axle	13000Kg
5th axle	9000Kg
Performance	
Max. travel speed	80Km/h
Max. grade ability	45%
Boom	6 sections，13.1m～61m
Length of boom + jib	89m
Max. lifting height of boom	60.7m
Max. lifting height of boom + jib	85.3m

Xuzhou Heavy Machinery CO.,LTD

Features and advantages of XCT130 Truck Crane

Based on the mature technology of K series accumulated for more than 10 years, XCT130, an XCMG G generation 130-ton truck crane combines the most advanced technology of truck cranes and all terrain truck cranes with the integration of XCMG latest scientific and technological achievements. It is a brilliant product for users with improved intrinsic quality.

XCT130 adopts five-axle truck crane chassis, six U-shaped booms, fixed extended jib, concealed double independent winches, external-geared slewing mechanism, combined counterweight, open hydraulic system. Main pump adopts variable pump, supplemented by fixed-displacement pump. Winch applies variable motor and slewing mechanism adopts fixed-displacement motor to meet different needs. Load-sensitive system brings higher working efficiency. Multiple-mode monitoring function is supported by computer-integrated control technology, which contributes to safer operation. The new outline of XCT series shows great elegance with stratified curved cover and large monolithic control panel in operator's cab. All these features contribute to larger working range, stronger lifting capacity and easier operation.

(1) High performance

Overall optimized matching technology is adopted with five-axle truck crane chassis and six-section high strength U-shaped boom. The six-section U-shaped boom is made of imported high strength steel with optimized aspect ratio, which reduces boom torsion, side-bending, etc. Inserted sliders may efficiently increase the overlapping length of adjacent boom sections and avoid point contact or line contact between slider and boom while the boom is lifting a load, avoiding local buckling phenomenon. Compact boom tail structure improves boom telescoping ratio, which effectively contributes to longer boom. The boom length takes the lead in the same class products in the crane industry at home and broad with the lifting capacity increased by 30% and working efficiency improved by 15%, which contributes to more flexible driving and stronger pass-ability.

(2) Energy-saving

In-house developed load-sensitive valve control technology brings low failure rate, smooth manipulation and fine control. The application of large discharge variable pump with high-voltage electronic priority power control provides strong power for the crane with stability of system pressure and flow, as well as avoids boom shaking caused by shock. Imported large diameter multi-way valve applied with load-sensitive filter technology contrbutes to the improvement of user's efficiency by 15% with the increased superstructure operation speed. Multi-way valve with V-groove throttle and optimized-matching electric proportional handle control strategies contribute to smooth lifting manipulation and fine control.

Taken power and economy into consideration, matching low-speed large-torque power system perfectly combines optimal power and economy.

(3) Intelligent

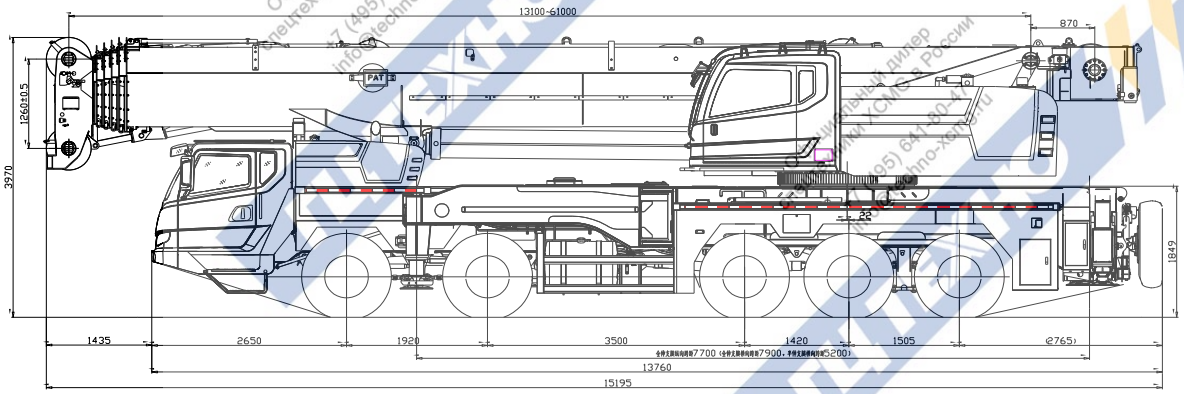
The latest control technology platform is adopted to update the system with the realization of intelligent crane operations and travel control, such as automatic planning of working conditions, winch servo control technology, lifting elevating compensation control technology,etc. With breakthrough of traditional crane control idea, the in-house design of the intelligent crane boom technology can realize the online planning of hoisting route according to hoisting demand and crane's current conditions. Automatic elevating compensation is realized in the hoisting process, when the hook height above the ground and the clearance between the hook and boom head is not changed. These features contribute to the improvement of boom control automation, hoisting sales and safety.

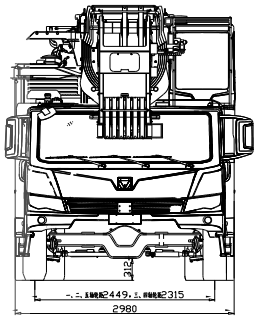
Road traveling and tight turning radius modes are available through rear-axle hydraulic control servo steering technology to ensure stable high-speed traveling and flexible low-speed traveling.

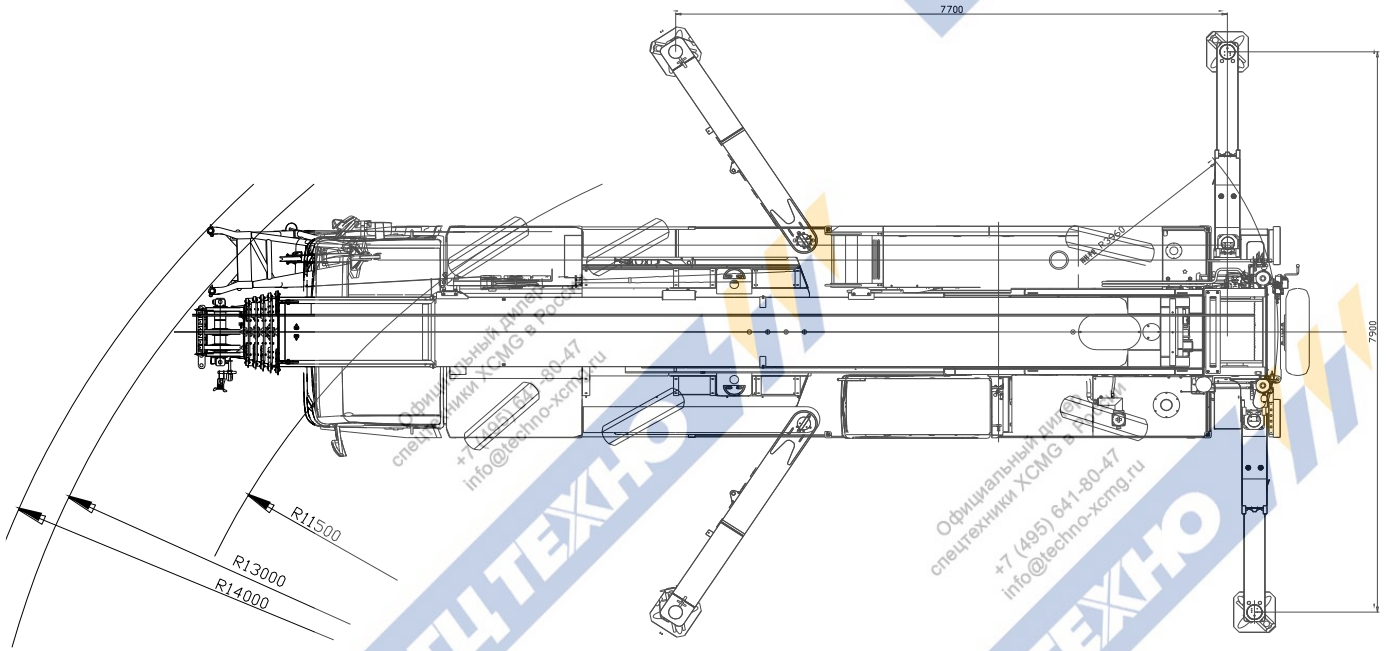
(4) Appearance and ergonomics

A new generation of appearance design makes the whole vehicle harmonized and unified with sturdy and elegant style, reliable in operation.

Overall dimension and turning track of crane in travel configuration







We reserve the right to modify the design without notice for improvement.

Technical specifications of superstructure

Model XCT130

Engine

Model	WP6G240E330	OM906LA.E3A/2
Type	In line, six-cylinder, water cooled, supercharging intercooler	
Manufacturer	Weichai Power Co., Ltd	Benz
Power/kw/rpm	176/2300	190/2200
Torque/N.m/rpm	860/1200-1700	1000/1200-1600
Displacement/ml	6750	6370
Fuel consumption /g/kw.h	200	203
Fuel tank capacity /L	About 280L	
Emission standard	China national III	
Remark	____	____

Hydraulic system

Hydraulic pump: variable pump and gear pump driven by superstructure engine, used for hoisting, elevating, telescoping and slewing operation.

Control valve: Load-sensitive proportional multi-way change valve, controlled by electric proportional pilot hydraulic oil.

Oil circuit: air-cooled hydraulic oil cooler, which may effectively reduce the temperature of oil in the system.

Oil tank capacity: about 1100 L.

Boom

Anti-torsion design is adopted in telescoping boom with high strength steel structure. Six telescoping booms are highly stable with the application of U-shaped cross section. The sliders which support the boom are also adjustable. Single-cylinder pinning telescoping mode is adopted to realize various combination of working conditions.

Boom length:13.1m～61m

Speed: 460s for boom extending to 61m

Jib	Fixed extended jib and optional inserts of 8 m are stored besides the main boom with 0 °, 15 °and 30 °jib offset angles available. Length:11.55m/20m/28m
Single top (required) (boom auxiliary pulley)	Single pulley is fitted at boom head, used for single line operation..
Elevating system	Single-cylinder elevating with boom gravity fall mode to save fuel. Speed:65s for elevating operation from -1 °to +81 °.
Main winch system	Hydraulic control is used for speed regulation. The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake, balance valve and a grooved drum equipped. The main winch can be operated separately. It has features of high speed with a light load and low speed with a heavy load. Single line pull……126KN Single line speed(no load) …… 135m/min Dimension × length…… φ24mm ×265m
Auxiliary winch system	Hydraulic control is used for speed regulation. The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake, balance valve and a grooved drum equipped. The auxiliary winch can be operated separately. It has features of high speed with a light load and low speed with a heavy load. Single line pull ……126KN Single line speed (no load) ……135m/min Diameter × length…… φ 24mm×200m
Hook blocks	

No.	Type	Lifting capacity (t)	Parts of line	Weight (kg)	Qty	Remark
1	130t	6	12	1580	1	Double-hook
2	70t	3	7	980	1	Single hook
3	30t	1	7	490	1	Single hook
4	11t	0	1	458	1	Single hook

Slewing system

Three-row roller external tooth slewing ring is driven by the planetary gear reducer of slewing mechanism driven by a hydraulic motor, may continuously slew 360°. Power control or free slewing function is available, and the slewing speed may be infinitely regulated.

Slewing speed·····0～2r/min

Operating mode

Pilot electric proportional control is used for controlling the superstructure with PLC integrated intelligent control technology and CAN-BUS control network. Besides normal control functions, it also has the functions such as real-time monitoring, fault automatic diagnosis, fuzzy working conditions searching and wireless remote control counterweight erection (optional).

Operator's cab

New fully-enclosed steel cab has better sealing and anti-corrosive properties and it's safe and comfortable to use.

It is equipped with a full-view front window. Safety glass and sun shield are used for windows. The cab features a new ergonomic seat design with backrest adjustment and armrests with joysticks fitted. A sliding door and a pull-out step are available to make it easy and safe as access and egress the cab.

Wipers are fitted for the windshield and roof window.

Standard controls and indicators are ergonomically arranged in the cab.

Safety devices

Hydraulic system: hydraulic balance valve, hydraulic relief valve, double-way hydraulic valve, etc. are available to make hydraulic system safe and stable.

The advanced microprocessor technology and embedded operating system are adopted in the control system, which can

realize low power dissipation, high performance, high sensitivity and easy operation. LCD touch screen displays the load moment percentage, rated lifting capacity, working radius, boom length & angle, Max. lifting height, working condition codes, parts of line, limiting angle, information codes and other lifting operation parameters, illustrating with Chinese and pictures. Equipped with pre-alarm and overload alarm, system overload control output can effectively avoid danger during lifting. Special working angle limit function makes more reliable lifting operation under complex working conditions. The system also has an overload memory function (black box).

The safety system includes displayer, central controller, length/angle sensor, over-winding switch, oil pressure sensor, etc.

Lowering limiter switch can make the drum maintain three circles of wire ropes at least.

Height limiter switch can make the lifting height within the Max. limit.

LMI

Hirschmann load moment limiting system, a safety protective unit for real-time calculation of load moment.

When actual load moment is approaching overloading value, audible and visible warning will be sent out, and the dangerous movement will be automatically stopped ahead of overloading.

Overload memory function (black box) and fault self-diagnosis function are available.

What can be shown as follows:

Load moment percentage
Actual lifting capacity
Rated lifting capacity
Working radius
Boom length
Boom angle
Max. lifting height
Working condition code
Parts of line
Limit boom angle

Information code

Combined counterweight

Total weight is 45 t.

Counterweights of 0 t, 13 t, 23 t, 33 t and 45 t are available.

Combination of counterweight slabs

Working condition	Total weight (t)	Combination sequence
1	45	①+②+③+④×2
2	33	①+②+③
3	23	①+②
4	13	①
5	0	0

Dead weight and number of counterweight slabs

Item	Fixed slab ①	Slab ②	Slab ③	Slab ④
Dead weight (t)	13	10	10	6
Number of slabs	1	1	1	2

Centralized lubrication system for superstructure

Centralized lubrication system is controlled by computer program.

Automatic lubricating points are located on the slewing ring, the bearing seats of main and auxiliary winches, the higher and lower pivots of elevating cylinder, the tilting cylinder pivot of operator's cab and the rear pivot of boom.

Color

The color of chassis and wheel rim is white.

The color of driver’s cab, superstructure and boom is engineering yellow.

Technical specification of chassis

Type

Left-hand drive steering wheel, drive/steering type is 10×6×6, 2nd, 3rd and 4th axles for driving, 1st, 2nd and 5th axles steering.

Frame

In-house designed and manufactured frame with load-bearing structure optimized. It is made of high strength steel and has anti-torsion box structure with walking surface covered.

Engine

Model	ISM11E4 440	WP12.430 E40	WP12.430 E50
Type	In-line, 6 cylinder, 4 stroke, supercharging intercooler, water cooled, diesel engine		
Manufacture	Xi'an Cummins Ltd.	Weichai Power Co., Ltd.	Weichai Power Co., Ltd
Power/kw/rpm	318/1900	316/1900	316/1900
Torque/N.m/rpm	2080/1200-1300	2060/1000-1400	2060/1000-1400
Displacement/ml	10800	11596	11596
Fuel consumption/g/kw.h	192	203.7	193
Fuel tank capacity/L	About 360L		
Emission standard	China National IV		China National V
Remarks	Standard	Optional	Standard

Hydraulic system

Constant displacement open-type system. The constant displacement gear pump is connected to transmission through PTO for controlling the movements of outriggers.

Transmission

Xi'an Cummins engine and Weichai engine is equipped with imported American Allison 6-speed automatic transmission; Weichai engine applies Shaanxi gear manual transmission, with 12 forward gears and 2 reverse gears available, steady and

	reliable.
Clutch	Pull-type (Shaanxi Gear)
Transfer case	German ZF transfer case (China National V) with high and low gears and axial differential lock Kessler (Germany) transfer case (China National IV)
Steering system	1st and 2nd axles are mechanically steered plus rear axial hydraulic servo
Axles	Five-axle chassis with reliable performance, axles 2, 3 and 4 for driving, axles 1, 2 and 5 for steering, made by distinguished manufacturers with the introduction of advanced technology at home and abroad. 1st axle: single tire, for steering; 2nd axle: single tire, for steering and driving; 3rd axle: double tires, for driving; 4th axle: double tires, for driving; 5th axle: single tire, for steering;
Drive shaft	Cross serrated flange is adopted for connection of drive shafts, so transmission torque is enlarged and power transmission is optimized. Consequently, smooth and reliable transmission may be realized.
Suspensions	Front suspension adopts leaf spring balanced suspension and rear suspension adopts double trailing arm leaf spring balanced suspension, which increase the suspension regulating range and bring higher pass-ability and optimal effect for axle restraint.
Brake system	Service brake: pedal operated double-circuit air pressure brake. The first circuit acts on wheels of axles 1 and 2; the second circuit acts on wheels of axles 3, 4 and 5. Parking brake: air-release brake, acting on the rear four axles by the spring energy storing air chamber on each axle;

Auxiliary brake: engine exhaust brake, engine compression brake

Hydraulic system

Outrigger hydraulic system is a fixed-displacement open circuit. Fixed-displacement gear pump is connected to the transmission through PTO. Horizontal, vertical and swing cylinder switch are controlled by solenoid valve:

1. Front outriggers are controlled by swing and rear outriggers are controlled by telescoping.
2. Outriggers pipes are distributed more reasonably with the working efficiency improved by 30%.

Outriggers

Front and rear outrigger structure is supported by four points, operated fully by hydraulic system. There is an outrigger control station located at each side of the chassis, and there is a level gauge on each control station. Outrigger floats are secured under jacks through ball pivots. The outriggers are designed to support the entire crane for better operations under various working conditions.

Outrigger span：

Longitudinal ×lateral……7.7m×7.9m
Float dimension……480mm×615mm
Reaction force of outrigger at max. lifting load……104000N

Electric system

24V DC, negative ground, 2 batteries. There is a perfect illuminating system complying with Chinese road traffic standard, including head lamp, fog lamp and reversing lamp, etc.

Chassis adopts CAN-BUS system with LCD used as centralized data display device; comprehensive fault analysis and alarm function can be realized in this intelligent system with its high digital processing speed, stability and accuracy.

Driver's cab

New full-dimension enclosed cab, luxury and comfort. It is designed to be leakproof, anti-corrosive and shockproof. It is equipped with a windshield offering outstanding visibility, rear mirrors, electric control washer, electronic lifters of doors and windows, heater & air conditioner, radio cassette player, etc. An air suspension seat for the driver and a simple sleeper for

the co-driver's seat are installed to supply comfort and reduce fatigue. Well-proportioned outline shows strong modern sense with outstanding features. Newly designed cab appearance includes exquisite coating of door handle and step, decoration of rear of side window and A-pillars, headlamps and air-inlet grille.

Tires

12.00R24-20PR, suitable for heavy truck with great universality.

Tools

A set of maintenance tools is supplied.

List of parts transported (road travel)

No.	Name		Weight (kg)	Total weight (t)	Dimension (mm)	Remark
1	Jib inserts		2400	2.4	11550×850×1260	Optional inserts
2	Single top		107	0.107	870×822×612	Standard
3	Auxiliary winch (rope included)		1647	1.647	1512×1003×904	Standard
4	Counterweight	Slab A	13000	45	3250×2102×372	Standard
5		Slab B	10000		3250×2102×312	
6		Slab C	10000		3250×2102×300	
7		Slab D	6000×2		1363×1310×934	
8	Hook block	130t	1580	3.508	1969×900×688	Standard
9		70t	980		1871×920×357	
10		30t	490		1344×544×460	
11		11t	458		896×476×476	

List of parts transported (jobsite transfer)

No.	Name		Weight (kg)	Total weight (t)	Dimension (mm)	Remark
1	Jib inserts		465	0.465	8000×580×800	Optional inserts
1	Counterweight	Slab A	13000	45	3250×2102×372	Standard
2		Slab B	10000		3250×2102×312	
3		Slab C	10000		3250×2102×300	
4		Slab D	6000×2		1363×1310×934	
5	Hook block	130t	1580	3.508	1969×900×688	Standard
6		70t	980		1871×920×357	
7		30t	490		1344×544×460	
8		11t	458		896×476×476	

Main parts list

(Take real parts as standard)

No.	Name	Manufacturer
1	Chassis engine	Xi'an Cummins
		Weichai Power Co., Ltd.
2	Superstructure engine	Weichai Power Co., Ltd. MTU Hong Kong Ltd.
3	Transmission	ALLISON America
		Shaanxi Fast Gear Co., Ltd
4	Steering gear	Jiangmen Xingjiang Steering Gear Co., Ltd.
5	Transfer box	Kessler Germany
		ZF Germany
6	Axle	Xuzhou Meritor Axle Co., Ltd.
7	Tire	Double Coin Heavy-Duty Tire Co./Guizhou Tyre Co., Ltd./Double Coin Tire (Rugao) Co., Ltd. / Double Coin Tire (Chongqing) Co., Ltd.
8	Chassis hydraulic pump	Xuzhou Keyuan hydraulic pressure Co., Ltd.
9	Superstructure hydraulic pump	Bosch Rexroth
10	Chassis outrigger operating valve	Yidun Liquid Motivity (Shanghai) Co., Ltd.
11	Superstructure multi-way valve	Bucher, Germany
12	Slewing bearing	Xuzhou Rothe Erde Slewing Bearing Co., Ltd. Ma'anshan FangYuan Slewing Bearing Co., Ltd.
13	Slewing motor	Beijing Huade Hydraulic Pump Branch Guizhou Liyuan
14	Slewing reducer	Bosch Rexroth Tai'an Taishan Fushen Gearbox Co., Ltd.Dalian Huarui
15	Main winch motor	Bosch Rexroth SAMHYDRAULIK (Italy) America
16	Main winch reducer	Dalian Huarui Tai'an Taishan Fushen Gearbox Co., Ltd.
17	Main winch rope	OLIVEIRA Portugal ArcelorMittal France
18	Auxiliary winch motor	Bosch Rexroth SAMHYDRAULIK America
19	Auxiliary winch reducer	Dalian huarui Tai'an Taishan Fushen Gearbox Co., Ltd.
20	Auxiliary winch rope	OLIVEIRA Portugal ArcelorMittal France
21	Elevating cylinder	Chengdu Hydraulic Cylinder Co., Ltd. Xuzhou Hydraulic Parts Co., Ltd. XCMG
22	Telescoping cylinder	Chengdu Hydraulic Cylinder Co., Ltd. Xuzhou Hydraulic Parts Co., Ltd. XCMG
23	LMI	Xuzhou Hirschmann Electronics Co., Ltd.
24	Boom steel plate	SSAB Sweden

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25	Pipe connection in hydraulic system of whole vehicle	Parker America
26	Electric proportional handle	P+G Britain(Shanghai Pal-fin)

Technical Specifications

Main Technical Data Table of XCT130 in Travel configuration

(Subject to technical improvement)

Category	Item		Unit	Parameter		
Dimensions	Overall length		mm	15195		
	Overall width		mm	3000		
	Overall height		mm	3970		
	Wheel base		mm	1920+3500+1420+1505		
	Track		mm	2449/2449/2315/2315/2449		
	Front overhang		mm	2650		
	Rear overhang		mm	2765		
Weight	Total weight in travel configuration		kg	55000		
	Axle load	1st axle	kg	10000		
		2nd axle	kg	10000		
		3rd axle	kg	13000		
		4th axle	kg	13000		
		5th axle	kg	9000		
Power	Chassis engine model			ISM11E4 440	WP12.430 E40	WP12.430 E50
	Engine rated power		kw/(r/min)	318/1900	316/1900	
	Engine rated torque		N.m/(r/min)	2080/1200～1300	2060/1000～1400	
	Superstructure engine model			WP6G240E330	OM906LA.E3A/2	
	Engine rated power		kw/(r/min)	176/2300	190/2200	
	Engine rated torque		N.m/(r/min)	860/1200-1700	1000/1200-1600	
Travel	Travel speed	Max. travel speed	km/h	80(China National IV)/90(China National V)		
		Min. travel speed	km/h	3		
	Turning	Min. turning diameter	m	23		
	Min. ground clearance		mm	312		
	Approach angle		°	18		

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	Departure angle	°	13
	Braking distance (at 30 km/h)	m	≤10
	Max. grade ability	%	45
	Oil consumption per 100 km	L	65(Xi'an cummins)
			72(Weichai)
	Exterior noise level	dB(A)	≤88
	Noise level at seated	dB(A)	≤90

Main Technical Data Table for Lifting Operation

(Subject to technical improvement)

Category	Item			Unit	Parameter
Main performance	Max. total rated lifting capacity			t	130
	Min. rated working radius			m	3
	Turning radius at turntable tail	Counterweight		mm	4800
		Auxiliary winch		mm	4950
	Max. load moment	Base boom		kN.m	5116
		Fully-extended boom		kN.m	2506
		Fully-extended boom + Jib (11.55m)		kN.m	1666
	Outrigger span (fully-extended)	Longitudinal		m	7.7
		Lateral		m	7.9
	Hoist height	Base boom		m	13.4
		Fully-extended boom		m	60.7
		Fully-extended boom + Jib(28m)		m	85.3
	Boom length	Base boom		m	13.1
		Fully-extended boom		m	61
		Fully-extended boom + Jib(28m)		m	89
	Jib offset angle			°	0、15、30
Working speed	Elevating time	Boom raising		s	65
	Telescoping time	Fully extended/retracted		s	460
	Max. slewing speed			r/min	2
	Outrigger extending and retracting time	Outrigger beam	Extending Simultaneously	s	35
			Retracting Simultaneously	s	30
		Outrigger jack	Extending Simultaneously	s	50
			Retracting Simultaneously	s	40
	Hoisting speed (single line, 4th layer)	Main winch		m/min	135
		Auxiliary winch		m/min	135
Noise	Exterior noise level			dB（A）	≤122
	Noise level at seated position			dB（A）	≤90

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Rated Load Charts of XCT130 Truck Crane

Rated Lifting Load Tables for Boom

(Lifting load in t, boom length and radius in m)

On fully-extended outriggers of 7.9 m, with counterweight of 45 t													
R/L	13.1	17.5	17.5	17.5	21.9	21.9	21.9	26.3	26.3	26.3	30.7	30.7	30.7
3	130	70.5	100	110									
3.5	126	70	95	110									
4	117	68	90	106	61	90	91	59	70	77			
4.5	109	65	87	101	58	90	91	56	69	77			
5	100	63	85	96	56	87	91	52	67	75	55	63	60
6	87	61	80	85	52	83	87	47	63	71	48	62	57
7	73	58	75	75	48	73	80	41	61	68	46	57	55
8	63	52	70	65	45	64	68	39	55	61	44	53	49
9	55	48	65	57	42	57	60	36	49	56	38	50	47
10	48.5	44	55	51	39	51	53	33	45	50.5	34	47	46
12		36	40.5	40	35	40.6	39.9	31	39	40.6	31	41.5	40
14		32.5	32.3	30.5	31.5	32.3	31	28	32.3	31.7	27	32.5	31
16					27	26	24.9	27	26.1	25.6	26	26.4	25.2
18					22	21.5	20.5	22.5	21.7	21.2	23	21.9	20.8
20								19	18.3	17.8	19.5	18.5	17.4
22								17	15.6	15.1	17	15.8	14.8
24											14.5	13.7	12.6
26											12.8	11.9	10.9
Telescoping code of boom sections	00000	00001	00100	01000	00011	01100	11000	00111	02100	11100	01111	11110	21100
Boom angle	25-80	26-78			26-78			26-81			27-81		
Hook block capacity	130t										70t		
Parts of line	12	10			8			7			6		

We reserve the right to modify the design without notice for improvement.

Rated Lifting Load Tables for Boom

（Lifting load in t, boom length and radius in m）

On fully-extended outriggers of 7.9 m, with counterweight of 45 t																
R/L	35.1	35.1	35.1	39.5	39.5	39.5	43.9	43.9	43.9	48.4	48.4	48.4	52.8	52.8	57.2	61
6	48	50	53													
7	45	48	50	36.3	39.5	40.5										
8	42	46	47	35.2	38.5	40	25.2	28.5	30.5							
9	37	45	46	34.1	37.4	37	24	28	30	21.1	23.6	26.2				
10	33	40	42	31.9	35.2	35	23	27	29	20.5	23	25	17.2	19		
12	30	36.3	38	27.5	31	31	21	25	27	19.5	22	23	17	18.5	17.9	13.5
14	26	31.9	32	25.3	28	28	19	23.5	25	18.2	20	21.5	16	17	16	13.3
16	23.5	26.4	25.5	23.1	23.5	24	17.5	21.5	23	16.5	17.5	19.5	15.6	15.5	14.5	13
18	22	22.5	21.5	22	20.9	21	16	18	21	15.2	16	17.5	15	14.7	13.8	12.7
20	18.5	19.3	18.1	19.8	18.7	18	15	16	18.8	14	15	16	14	14	13	11.5
22	17	16.6	15.4	16.5	16.5	15.6	14	14.5	15.8	13	13.5	15	13	13	12.5	10.7
24	14.8	14.4	13.3	15	14.3	13.5	13.2	13.7	13.6	12	12.5	13.5	12.2	12.3	11.7	10
26	13	12.6	11.5	13.2	12.5	11.7	12	12.5	12	11.2	11.5	12	11.5	11.5	11.2	9.2
28	11.5	11.1	10	11.7	11	10.4	11	11	10.4	10	10.5	10.5	11	10.9	10.4	8.5
30	10.2	9.9	8.8	10.4	9.8	9.1	10.3	9.6	9.2	9.3	9.8	9	9.8	9.6	9.8	8.2
32				9.3	8.7	8	9.4	8.5	8.1	8.5	8.7	8	8.8	8.4	9	8
34				8.4	7.7	7	8.5	7.5	7.1	8	7.7	7	7.8	7.5	8.2	7.3
36							7.5	6.8	6.3	7.5	6.9	6.3	7.2	6.6	7.2	6.9
38							6.7	6	5.2	6.6	6.3	6	6.5	5.9	6.5	6.5
40										6.1	5.7	5	5.5	5.2	5.9	5.9
42										5.5	5	4.3	5	4.5	5	5.2
44													4.5	4	4.7	4.6
46													4	3.5	4.2	4.2
48															3.7	3.7
50															3.1	3.3

52																3
54																2.7
Telescoping code of boom sections	02111	11111	21110	11112	12111	21111	11122	12211	22111	11222	12221	22211	12222	22221	22222	33333
Boom angle	27-81			27-81			28-81			28-81			29-82		29-81	28-82
Hook block capacity	70t						30t									
Parts of line	5			4			3						2			

Rated Lifting Load Tables for Boom

（Lifting load in t, boom length and radius in m）

On fully-extended outriggers of 7.9 m, with counterweight of 0 t													
R/L	13.1	17.5	17.5	17.5	21.9	21.9	21.9	26.3	26.3	26.3	30.7	30.7	30.7
3	130.0	70.5	91.0	110.0									
3.5	126.0	70.0	90.0	105.0									
4	117.0	68.0	90.0	99.0	51.0	70.0	91.0	48.0	60.0	77.0			
4.5	109.0	65.0	85.0	95.0	50.0	69.0	88.0	47.0	59.0	75.0			
5	78.6	62.0	80.0	79.0	48.0	67.0	77.8	45.0	57.0	73.0	45.0	63.0	58.0
6	47.4	50.2	48.6	47.6	45.0	48.6	46.8	43.0	48.6	47.8	43.0	48.9	47.1
7	33.0	35.4	34.1	33.2	36.4	34.1	32.6	36.5	34.0	33.4	36.2	34.3	32.9
8	24.7	26.9	25.8	25.0	27.8	25.7	24.3	27.9	25.7	25.0	27.5	25.9	24.6
9	18.4	20.9	19.5	18.7	21.8	19.5	18.0	22.0	19.5	18.8	21.6	19.8	18.3
10	14.0	16.3	15.1	14.3	17.2	15.1	13.8	17.4	15.0	14.5	17.0	15.4	14.0
12		10.8	9.8	9.0	11.6	9.8	8.6	11.7	9.7	9.2	11.4	9.9	8.8
14		7.6	6.6	5.9	8.3	6.6	5.5	8.4	6.6	6.1	8.2	6.8	5.8
16					6.2	4.6	3.5	6.2	4.6	4.1	6.0	4.7	3.8
18					4.6	3.1	2.1	4.7	3.1	2.6	4.5	3.3	2.3
20								3.6	2.0	1.6	3.4	2.2	
22								2.7			2.5		

24											1.8		
Telescoping code of boom sections	00000	00001	00100	01000	00011	01100	11000	00111	02100	11100	01111	11110	21100
Boom angle	25 °~80 °	26 °~78 °			26 °~78 °			26 °~81 °	36 °~81 °		35 °~81 °	48 °~81 °	53 °~81 °
Hook block capacity	130t										70t		
Parts of line	12	10			8			7			6		

On fully-extended outriggers of 7.9 m, with counterweight of 0 t																
R/L	35.1	35.1	35.1	39.5	39.5	39.5	43.9	43.9	43.9	48.4	48.4	48.4	52.8	52.8	57.2	61
6	45.8	46.0	48.2													
7	35.8	35.4	33.8	33.0	35.2	34.7										
8	27.3	26.8	25.4	27.5	26.7	26.3	25.2	26.9	26.2							
9	21.4	20.8	19.2	21.6	20.6	20.2	22.0	20.9	20.1	21.1	21.3	20.4				
10	16.7	16.2	14.8	17.0	16.1	15.7	17.4	16.3	15.6	17.4	16.7	15.8	17.2	16.2		
12	11.2	10.8	9.5	11.4	10.6	10.3	11.7	10.8	10.2	11.8	11.1	10.4	11.6	10.7	11.2	11.2
14	7.9	7.5	6.4	8.2	7.4	7.1	8.4	7.6	7.0	8.5	7.9	7.2	8.3	7.5	7.9	8.0
16	5.8	5.4	4.4	6.0	5.4	5.0	6.2	5.4	5.0	6.3	5.8	5.1	6.2	5.4	5.8	5.8
18	4.3	4.0	3.0	4.5	3.8	3.6	4.7	4.0	3.5	4.8	4.3	3.7	4.6	3.9	4.3	4.3
20	3.2	2.9	1.8	3.4	2.7	2.5	3.6	2.9	2.4	3.7	3.2	2.6	3.5	2.9	3.2	3.2
22	2.3	2.0		2.5	1.9	1.6	2.7	2.0	1.6	2.8	2.3	1.8	2.6	2.0	2.3	2.4
24	1.6			1.8			2.1			2.1	1.6		1.9		1.7	1.7
26										1.5						
Telescoping code of boom sections	02111	11111	21110	11112	12111	21111	11122	12211	22111	11222	12221	22211	12222	22221	22222	33333
Boom angle	46 °~81 °		51 °~81 °	55 °~81 °	53 °~81 °	57 °~81 °	58 °~81 °	61 °~81 °	61 °~81 °	59 °~81 °	62 °~81 °	65 °~81 °	65 °~82 °	68 °~82 °	68 °~81 °	70 °~82 °
Hook block capacity	70t						30t									
Parts of line	5			4			3						2			

Rated Lifting Load Tables for Boom

（Lifting load in t, boom length and radius in m）

On half-extended outriggers of 5.2m, with counterweight of 23 t													
R/L	13.1	17.5	17.5	17.5	21.9	21.9	21.9	26.3	26.3	26.3	30.7	30.7	30.7
3	105.0	70.5	91.0	110.0									
3.5	100.0	70.0	90.0	105.0									
4	95.0	68.0	90.0	99.0	51.0	70.0	91.0	48.0	60.0	77.0			
4.5	89.0	65.0	85.0	89.4	50.0	69.0	88.0	47.0	59.0	75.0			
5	69.4	62.0	70.6	69.6	48.0	67.0	68.8	45.0	57.0	69.7	45.0	63.0	58.0
6	47.2	49.6	48.3	47.4	45.0	48.2	46.8	43.0	48.2	47.6	43.0	48.5	47.1
7	35.2	37.3	36.2	35.4	38.1	36.1	34.8	38.2	36.1	35.5	37.8	36.3	35.0
8	27.6	29.5	28.5	27.8	30.2	28.4	27.3	30.3	28.4	27.9	30.1	28.6	27.5
9	22.3	24.2	23.2	22.6	24.9	23.2	22.1	25.0	23.1	22.6	24.7	23.4	22.3
10	18.5	20.3	19.4	18.7	21.0	19.4	18.2	21.0	19.3	18.8	20.8	19.5	18.5
12		15.0	14.1	13.5	15.6	14.1	13.1	15.7	14.1	13.6	15.4	14.2	13.3
14		11.5	10.7	10.2	12.2	10.7	9.8	12.2	10.6	10.2	12.0	10.9	9.9
16					9.7	8.3	7.4	9.8	8.3	7.9	9.6	8.5	7.6
18					7.9	6.5	5.6	8.0	6.6	6.2	7.8	6.7	5.8
20								6.6	5.1	4.8	6.4	5.4	4.5
22								5.5	4.1	3.7	5.3	4.2	3.4
24											4.4	3.4	2.6
26											3.7	2.6	1.8
Telescoping code of boom sections	00000	00001	00100	01000	00011	01100	11000	00111	02100	11100	01111	11110	21100
Boom angle	25 °～72 °	26 °～78 °			26 °～78 °			26 °～81 °			27 °～81 °		
Hook block capacity	130t										70t		
Parts of line	12	10			8			7			6		

We reserve the right to modify the design without notice for improvement.

On half-extended outriggers of 5.2m, with counterweight of 23 t																
R/L	35.1	35.1	35.1	39.5	39.5	39.5	43.9	43.9	43.9	48.4	48.4	48.4	52.8	52.8	57.2	61
6	45.8	46.0	47.9													
7	37.6	37.2	35.8	33.0	35.5	36.6										
8	29.8	29.4	28.2	30.1	29.3	29.0	25.2	28.5	28.9							
9	24.5	24.1	23.0	24.7	24.0	23.7	24.0	24.2	23.6	21.1	23.6	23.8				
10	20.6	20.2	19.1	20.8	20.1	19.8	21.0	20.2	19.8	20.5	20.6	19.9	17.2	19.0		
12	15.3	15.0	13.9	15.4	14.8	14.6	15.7	15.0	14.5	15.8	15.3	14.6	15.6	15.0	15.3	13.5
14	11.8	11.5	10.5	12.0	11.4	11.1	12.2	11.5	11.0	12.3	11.8	11.2	12.2	11.5	11.8	11.8
16	9.4	9.1	8.2	9.6	9.0	8.7	9.8	9.1	8.6	9.8	9.4	8.8	9.7	9.1	9.4	9.4
18	7.6	7.3	6.4	7.8	7.2	7.0	8.0	7.4	6.9	8.1	7.6	7.0	7.9	7.3	7.6	7.7
20	6.2	5.9	5.0	6.4	5.8	5.6	6.6	5.9	5.5	6.6	6.2	5.7	6.6	5.9	6.2	6.2
22	5.1	4.8	3.9	5.3	4.7	4.5	5.5	4.9	4.5	5.5	5.1	4.6	5.4	4.8	5.1	5.2
24	4.2	3.9	3.0	4.4	3.8	3.6	4.6	4.0	3.6	4.6	4.2	3.7	4.6	3.9	4.2	4.2
26	3.5	3.2	2.3	3.7	3.1	2.9	3.8	3.2	2.8	3.9	3.5	3.0	3.8	3.2	3.5	3.5
28	2.9	2.6	1.8	3.0	2.5	2.2	3.2	2.6	2.2	3.3	2.9	2.3	3.1	2.6	2.9	2.9
30	2.3	2.1		2.5	2.0	1.8	2.7	2.1	1.7	2.7	2.3	1.8	2.6	2.1	2.3	2.4
32				2.0	1.5		2.2	1.6		2.3	1.8		2.2	1.6	1.9	1.9
34				1.6			1.8			1.9			1.8		1.5	1.5
36							1.5			1.5						
Telescoping code of boom sections	02111	11111	21110	11112	12111	21111	11122	12211	22111	11222	12221	22211	12222	22221	22222	33333
Boom angle	27 °～81 °		34 °～81 °	27 °～81 °	34 °～81 °	40 °～81 °	34 °～81 °		43 °～81 °	47 °～81 °	42 °～81 °	50 °～81 °	53 °～81 °	51 °～82 °	54 °～82 °	56 °～81 °
Hook block capacity	70t						30t									
Parts of line	5			4			3						2			

Rated Lifting Load Tables for Boom

（Lifting load in t, boom length and radius in m）

On half-extended outriggers of 5.2m, with counterweight of 0 t													
R/L	13.1	17.5	17.5	17.5	21.9	21.9	21.9	26.3	26.3	26.3	30.7	30.7	30.7
3	65.0	60.0	57.0	55.0									
3.5	60.0	55.0	52.0	50.0									
4	55.0	50.0	48.0	47.0	51.0	50.0	48.0	52.0	50.0	49.0			
4.5	43.7	46.9	45.1	43.9	48.2	45.0	43.0	47.0	45.0	44.1			
5	33.4	36.2	34.6	33.6	37.3	34.6	32.8	37.4	34.6	33.8	37.0	34.9	33.2
6	21.8	24.2	22.9	22.1	25.1	22.9	21.4	25.2	22.8	22.2	24.9	23.1	21.7
7	15.6	17.7	16.5	15.8	18.5	16.5	15.2	18.6	16.5	15.8	18.2	16.7	15.4
8	11.6	13.5	12.5	11.8	14.2	12.5	11.3	14.4	12.4	11.9	14.1	12.6	11.5
9	8.9	10.7	9.7	9.0	11.4	9.7	8.6	11.5	9.7	9.2	11.2	9.8	8.8
10	6.9	8.6	7.7	7.0	9.3	7.7	6.6	9.4	7.7	7.2	9.1	7.8	6.8
12		5.8	4.9	4.3	6.4	4.9	3.9	6.5	4.9	4.5	6.2	5.1	4.2
14		3.9	3.1	2.6	4.6	3.1	2.2	4.6	3.1	2.7	4.4	3.3	2.4
16					3.3	1.8		3.4	1.8		3.1	2.0	
18					2.3			2.4			2.2		
20								1.6					
Telescoping code of boom sections	00000	00001	00100	01000	00011	01100	11000	00111	02100	11100	01111	11110	21100
Boom angle	25 °～72 °	26 °～78 °			26 °～78 °	38 °～78 °	46 °～78 °	36 °～81 °	50 °～81 °	56 °～81 °	53 °～81 °	58 °～81 °	62 °～81 °
Hook block capacity	130t										70t		
Parts of line	12	10			8			7			6		

On half-extended outriggers of 5.2m, with counterweight of 0 t																
R/L	35.1	35.1	35.1	39.5	39.5	39.5	43.9	43.9	43.9	48.4	48.4	48.4	52.8	52.8	57.2	61
6	24.6	24.1	22.6													
7	18.0	17.6	16.2	18.2	17.4	17.0										
8	13.8	13.4	12.2	14.1	13.4	13.0	14.4	13.4	12.9							
9	11.0	10.6	9.4	11.2	10.5	10.2	11.5	10.6	10.1	11.5	11.0	10.3				
10	8.9	8.6	7.4	9.1	8.5	8.2	9.4	8.6	8.1	9.4	8.9	8.2	9.3	8.6		
12	6.1	5.8	4.7	6.2	5.7	5.4	6.6	5.8	5.3	6.6	6.1	5.4	6.4	5.8	6.1	6.2
14	4.2	3.9	3.0	4.4	3.8	3.5	4.6	3.9	3.5	4.7	4.2	3.7	4.6	3.9	4.2	4.3
16	3.0	2.6	1.7	3.1	2.6	2.3	3.4	2.6	2.2	3.4	3.0	2.4	3.3	2.6	3.0	3.0
18	2.0	1.7		2.2	1.6		2.4	1.8		2.4	2.0		2.3	1.7	2.0	2.0
20							1.7			1.7			1.6			
Telescoping code of boom sections	02111	11111	21110	11112	12111	21111	11122	12211	22111	11222	12221	22211	12222	22221	22222	33333
Boom angle	59 °~81 °		63 °~81 °	64 °~81 °		67 °~81 °	64 °~81 °	67 °~81 °	70 °~81 °	67 °~81 °	70 °~81 °	73 °~81 °	70 °~82 °	72 °~82 °	74 °~81 °	76 °~82 °
Hook block capacity	70t						30t									
Parts of line	5			4			3						2			

We reserve the right to modify the design without notice for improvement.

Rated Lifting Load Tables for Boom

（Lifting load in t, boom length and radius in m）

On fully-extended outriggers of 7.9m, with counterweight of 45 t																		
	52800			57200			61000			52800			57200			61000		
L	10600									18100								
R/A	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30
16	8.7																	
18	8.3	6.3		7.8			7.6											
20	8.0	6.0	5.5	7.5	5.7		7.3	5.7		4.9								
22	7.7	5.7	5.2	7.1	5.3	5.2	7.0	5.3	4.8	4.6	3.4		4.3			4.0		
24	7.3	5.3	5.0	6.8	5.1	5.0	6.6	5.1	4.6	4.3	3.2		4.0			3.9		
26	7.1	5.1	4.7	6.4	4.8	4.7	6.2	4.7	4.3	4.0	3.1	2.2	3.8	2.8		3.7	2.6	
28	6.7	4.8	4.4	6.0	4.6	4.4	6.0	4.5	4.2	3.7	2.9	2.1	3.7	2.7	2.2	3.5	2.5	
30	6.3	4.3	4.2	5.7	4.3	4.2	5.6	4.3	4.1	3.5	2.6	2.1	3.5	2.6	2.1	3.4	2.4	2.0
32	6.0	4.1	4.0	5.4	4.1	4.0	5.2	4.0	4.0	3.3	2.5	2.0	3.3	2.5	2.0	3.3	2.3	1.9
34	5.7	3.9	3.9	5.0	3.8	3.9	5.0	3.8	3.9	3.1	2.4	2.0	3.1	2.4	2.0	3.2	2.2	1.8
36	5.4	3.8	3.8	4.8	3.6	3.8	4.6	3.5	3.8	2.9	2.3	1.9	2.9	2.3	1.9	3.1	2.1	1.8
38	5.0	3.6	3.8	4.5	3.5	3.8	4.3	3.4	3.7	2.7	2.2	1.9	2.7	2.2	1.9	3.0	2.0	1.7
40	4.8	3.4	3.7	4.3	3.3	3.7	4.0	3.2	3.6	2.5	2.2	1.9	2.5	2.1	1.9	2.8	2.0	1.6
42	4.5	3.3	3.6	3.8	3.1	3.6	3.4	3.1	3.5	2.4	2.1	1.8	2.4	2.1	1.8	2.7	1.9	1.6
44	4.2	3.1	3.6	3.3	3.0	3.6	2.9	2.8	3.5	2.3	2.1	1.8	2.3	2.0	1.8	2.6	1.9	1.5
46	3.8	2.9	3.5	2.9	2.8	3.3	2.7	2.6	3.3	2.2	2.0	1.8	2.2	2.0	1.8	2.5	1.8	1.5
48	3.4	2.7	3.1	2.4	2.6	2.8	2.4	2.5	2.8	2.1	2.0	1.7	2.1	1.9	1.7	2.4	1.8	1.5
50	2.8	2.6	2.7	2.1	2.3	2.4	2.0	2.2	2.4	2.0	1.9	1.7	2.0	1.9	1.7	2.2	1.7	1.4
52		2.2	2.3	1.7	1.9	2.0	1.7	1.9	2.0	1.9	1.9	1.7	1.9	1.8	1.7	2.0	1.7	1.4
54				1.4	1.6	1.6	1.4	1.5	1.7	1.9	1.8	1.6	1.7	1.8	1.6	1.6	1.7	1.3
56						1.3	1.1	1.2	1.3	1.8	1.8	1.6	1.4	1.7	1.6	1.3	1.6	1.3
58									1.0	1.5	1.7	1.6	1.1	1.4	1.6	1.1	1.4	1.2

60											1.4	1.5		1.1	1.3		1.1	1.2
62															1.0			1.0
Telescoping code of boom sections	12222			22222			33333			12222			22222			33333		

On fully-extended outriggers of 7.9m, with counterweight of 45 t									
	52800			57200			61000		
L	28m								
R/A	0	15	30	0	15	30	0	15	30
20	3.2								
22	3.0	2.2		2.8			2.8		
24	3.0	2.1		2.7			2.7		
26	2.8	2.0		2.6	2.0		2.6	2.0	
28	2.6	1.9	1.6	2.4	1.9	1.6	2.4	1.9	
30	2.4	1.8	1.6	2.3	1.8	1.5	2.3	1.8	1.5
32	2.3	1.8	1.5	2.2	1.8	1.5	2.2	1.8	1.5
34	2.2	1.7	1.5	2.1	1.7	1.5	2.1	1.7	1.4
36	2.1	1.7	1.4	2.0	1.7	1.4	2.0	1.6	1.4
38	2.0	1.6	1.4	1.9	1.6	1.4	1.9	1.6	1.4
40	1.9	1.6	1.4	1.8	1.6	1.4	1.8	1.6	1.3
42	1.8	1.5	1.3	1.7	1.5	1.3	1.7	1.5	1.3
44	1.7	1.5	1.3	1.5	1.5	1.3	1.5	1.5	1.3
46	1.6	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.2
48	1.5	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.2
50	1.4	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2
52	1.3	1.3	1.2	1.3	1.2	1.2	1.3	1.2	1.2
54	1.3	1.3	1.2	1.2	1.2	1.1	1.2	1.2	1.1
56	1.3	1.3	1.2	1.2	1.2	1.1	1.2	1.2	1.1
58	1.2	1.2	1.1	1.2	1.2	1.1	1.2	1.2	1.1
60	1.2	1.2	1.1	1.2	1.2	1.1	1.1	1.1	1.0
62	1.2	1.2	1.1	1.2	1.1	1.1	1.1	1.1	1.0
64	1.0	1.0	1.0		1.0	1.0		1.0	1.0
66					1.0			1.0	
68								1.0	
70								1.0	
Telescoping code of boom sections	1222			2222			3333		

Notes on the rated load charts:

1.The total rated loads given in the rated load charts are the maximum lifting capacity when the crane is set up on firm and level ground, which includes the weight of the hook block and slings.

2.The working radius shown in the rated load charts is the radius when the load is lifted off the ground, and it is the actual value including loaded boom deflection.

3.A lifting operation is permissible only when the wind force is below grade 5 (instantaneous wind speed is 14.1 m/s, wind pressure is 125 N/m^2).

4. Before beginning lifting operation, the operator should know the weight of the load to be lifted and its working range, and then select proper working conditions. Never operate the crane beyond the limit shown in the chart. Use the lower value from the chart when the boom length or working radius is between the range of values.

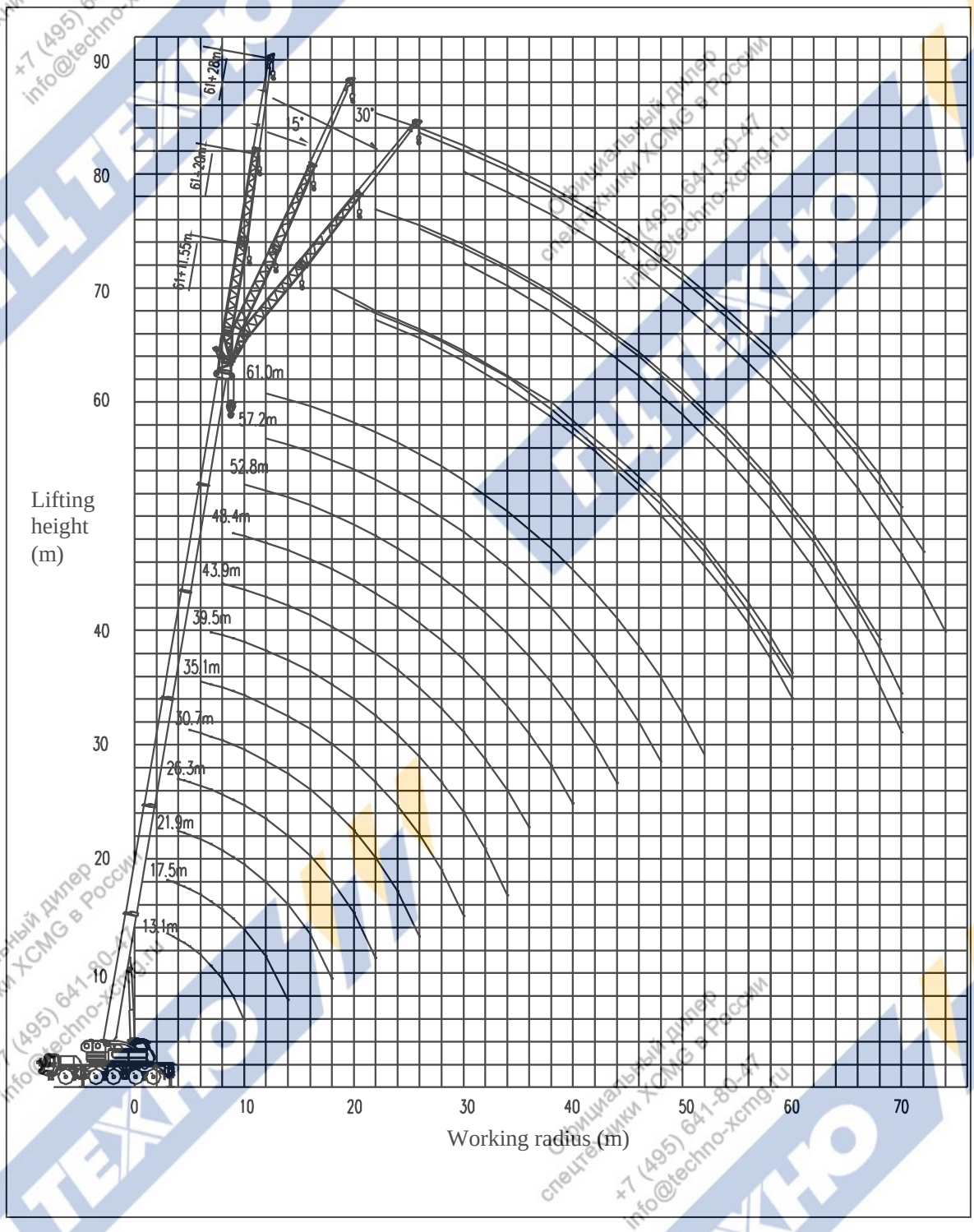
5. Observe the boom angle limit. Never operate the crane with the boom angle beyond the recommended limit even if a load is not being carried. Otherwise, the crane will tip.

6.The boom length given in the rated load charts should be extended according to the telescoping ratio of each section

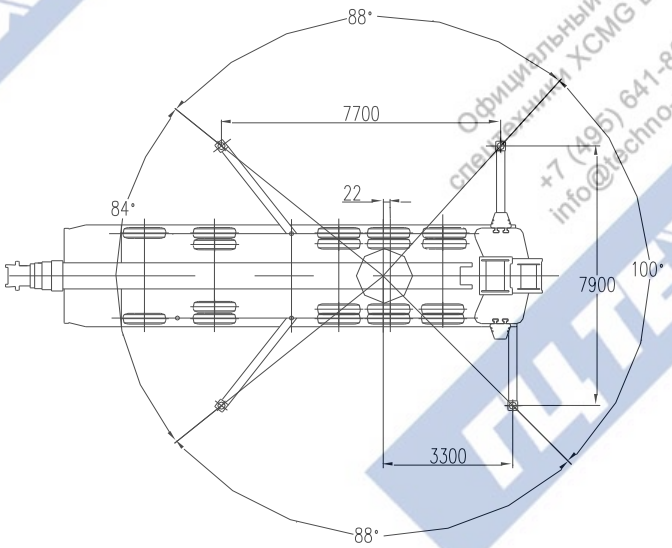
7.The total rated load for single top is the same as that for the boom, and the max. lifting load should not exceed 11500 kg.

8.Total rated load shown in tables is the value without the jib attached. When the jib is attached to the boom head, 5000 kg must be deducted from the rated lifting load according to the actual situation.

Lifting Height Chart



Working Areas of Crane
(on fully-extended outriggers)



Working Areas of Crane
(on half-extended outriggers)