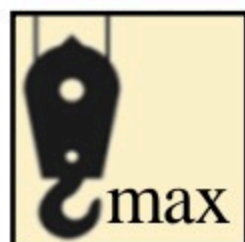


# XCR25L5越野轮胎起重机 / Rough Terrain Crane

## 技术规格书

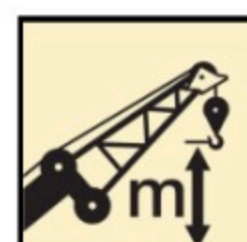
Basic technical specification



25t



40m

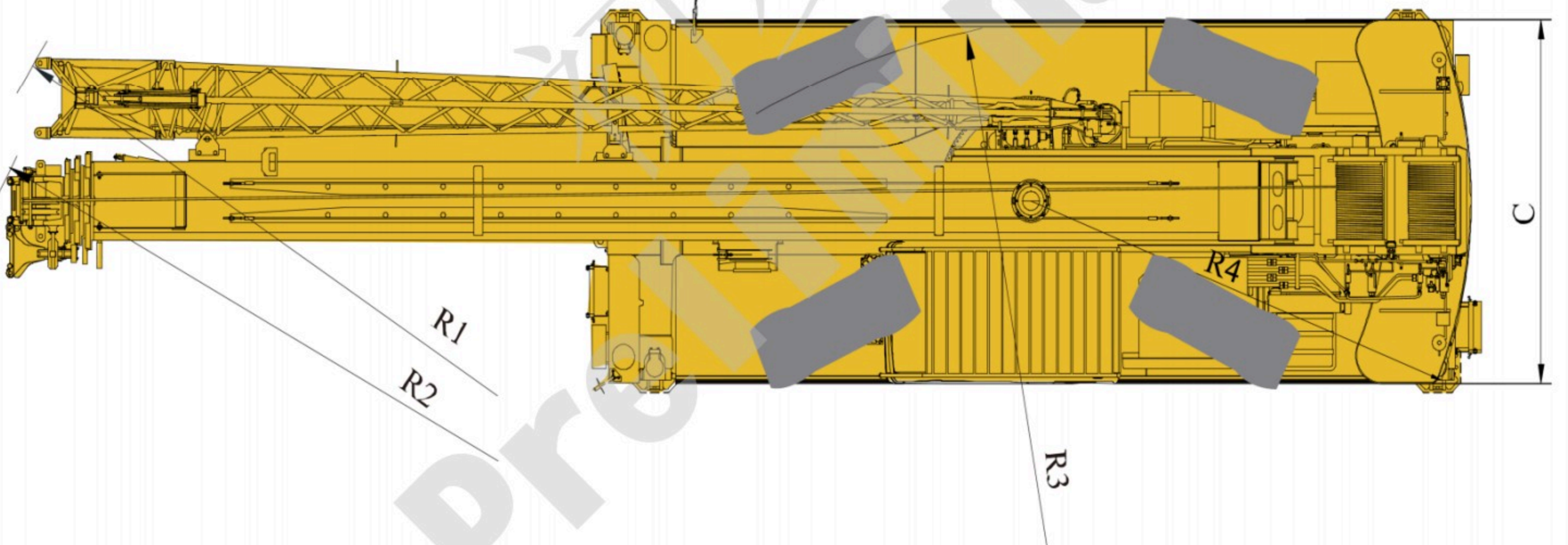
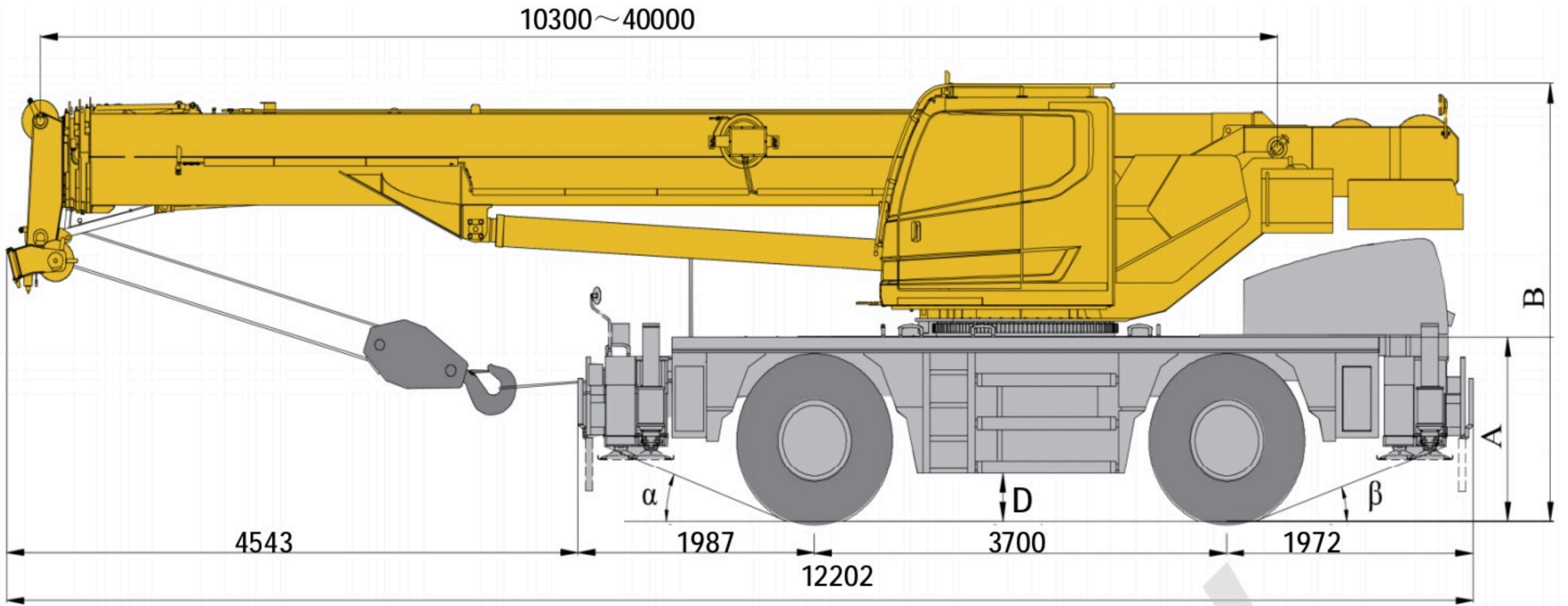


46.6m

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# 尺寸参数 Dimensions



	$\alpha$	$\beta$	A	B	C	D	R1	R2	R3	R4
14.00R25	19.1°	19.3°	1497	3495	2850	413	9180	9049	4900	3823

## 技术规格

### Technical specifications

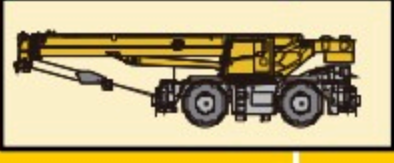
		配置	
			
主臂	1节基本臂和4节伸缩臂，U形截面的焊接结构单缸绳排伸缩机构。臂头标配4个滑轮。主臂长度：10.3m~40m。	●	<b>液压系统</b> 专用节流装置匹配阀后补偿负载敏感设计，系统最低流量更稳定，系统刚度更合理，作业微动性、平顺性更突出；采用分合流技术，作业效率全面领先，复合动作时双泵独立供油，各执行元件流量分配更优化，作业效率突出。 液压油箱容积：约633L。
副臂	1节，桁架式结构，0°、15°和30°三种安装角度，安装在主臂侧面。副臂长度：8.3m。	○	
车架	车架采用细晶粒高强度钢焊接而成，抗扭转大截面框架结构，承载能力强。	●	<b>操纵方式</b> 液控先导操纵系统，由左右2个操纵手柄控制起重机的主要动作。
支腿	4支腿，H型布置，位于车架两端，由电控液压控制。	●	<b>电气系统</b> 直流24伏特，2块12伏电瓶串联。配有力矩限制器和前照灯、转向灯、倒车灯、转台工作灯、吊臂工作灯、回转警示灯等。
发动机	直列六缸水冷压燃式柴油发动机，非道路三阶段 EU Stage IIIA 排放标准。两款配置，满足不同客户需求： 1.东风康明斯,QSB6.7-C190-30,额定功率142kW/2200rpm,最大扭矩931Nm/1400rpm; 2.上柴,SC7H220.1G3,额定功率162kW/2000rpm,最大扭矩900Nm/1300rpm; 燃油箱有效容积：约260L。	●	
变速箱	MYF210AM(CR)，徐工自动变速箱，6个前进档，3个倒档。	●	<b>主、副起升机构</b> 由液压马达通过行星齿轮减速器驱动，内置常闭式制动器并带有平衡阀。
车桥	前后桥均为转向驱动桥，承载能力大。	●	<b>回转机构</b> 单排四点接触球式回转支承，液压马达驱动内置行星齿轮减速器，减速机配备常闭式制动器。
悬挂	前桥与车架刚性连接；后桥采用摆动式液压悬架，公路行驶具有减震功能，缓冲路面冲击；吊重行驶时后悬架油缸锁止至刚性状态，增加作业稳定性。	●	
轮胎	轮胎规格：14.00R25。	●	<b>司机室</b> 固定式司机室，滑移式车门，可调式座椅，装有安全玻璃、顶部保护栏，前风窗及顶部装有遮阳帘。 配置冷暖空调、收音机、12V和24V电源接口。
转向	具有前桥独立转向、小转弯转向、蟹行转向和后桥独立四种转向功能。	●	<b>安全装置</b> 配有液压平衡阀、溢流阀、双向锁、LMI三圈保护器，防止钢丝绳过放；臂头设置高度限位器、防止钢丝绳过卷。 倒车影像及卷扬监视器。
制动	行车制动：双回路全液压盘式制动，作用于所有车轮；当系统压力过低时，具有自动报警、自动制动功能。 驻车制动：弹簧加载、液压解除的独立盘式制动器，作用于前桥。	●	
			<b>平衡重</b> 总重3.95t。 <b>吊钩</b> 20 t 吊钩、3t 吊钩

产品各部件明细如上所述，具体部件明细请参照产品报价单  
 符号说明：

- —— 表示标准配置；
- —— 表示选装配置。

# 技术规格

## Technical specifications

		
<b>Boom</b>	1 basic boom and 4-telescoping sections, U-shape cross section welding structure. One cylinder plus ropes telescoping mechanism. 4 pulleys on boom head are standard. Boom length: 10.3 m ~ 40 m.	●
<b>Jib</b>	One-section lattice structure. Three offset angles of 0°, 15° and 30° are available. It is stowed along the side of the boom. Jib length: 8.3m.	○
<b>Frame</b>	Made of high strength fine grained steel, welded torsion-resistant frame type construction with large cross-section, high load-bearing capacity.	●
<b>Outrigger</b>	4 outriggers, H-shaped arrangement, which are controlled by electrical and hydraulic and located at both sides of chassis frame.	●
<b>Engine</b>	In line six-cylinder water-cooled compression ignition diesel engine, off-road EU Stage IIIA emission standard compliant, two kinds of configuration, meet the needs of different users: 1. Manufactured by DCEC, CHINA, QSB6.7-C190-30, rated power 142kW/2200rpm, max. torque 931Nm / 1400rpm; 2. Manufactured by Shanghai, SC7H220.1G3, rated power 162kW/2000rpm, max. torque 900Nm / 1300rpm; Fuel tank capacity: approx. 260 L	●
<b>Transmission</b>	MYF210AM(CR), automatic transmission from XCMG, with 6 forward and 3 reverse gears	●
<b>Axles</b>	Both front and rear axles are for driving and steering, and the axles have features of great load bearing capacity	●
<b>Suspensions</b>	Front axle is rigidly connected with frame; rear axle is equipped with swing hydraulic suspensions, which have cushioning function when driving on roads; the rear suspension cylinder may be locked to rigid state so as to meet the requirement for travel with a load suspended, increasing operation stability.	●
<b>Tires</b>	Tire specifications: 14.00R25.	●
<b>Steering</b>	Front axle independent steering, tight turning radius steering, crab walk steering and rear axle independent steering modes are available.	●
<b>Brakes</b>	Service brake: double-circuit hydraulic disc brake, acting on all wheels. Automatically braking and alarm are available when the pressure in braking system is too low. Parking brake: spring-loaded brake, acting on front axles, hydraulic-released independent disc brake.	●
<b>Hydraulic system</b>	Dedicated throttle control with LUDV load-sensing design is available. The min. flow of the system is more stable, and the stiffness of the system is more reasonable. Fine control and smoothness of the operation is outstanding. Confluence technology for lifting, elevating and telescoping double-pump confluence; working efficiency is ahead of all same-tonnage cranes. Double-pump independent oil supply for simultaneous movements contributes to optimized flow distribution of actuators and improved working efficiency. Tank capacity: approx. 482L.	●
<b>Operating mode</b>	Hydraulic controlled pilot operation system is equipped with two levers controlling the main movements of the crane.	●
<b>Electrical System</b>	24 V DC, two sets of 12 V battery in series.	●
<b>Main and auxiliary winch system</b>	The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake and a balance valve equipped.	●
<b>Slewing system</b>	Single-row four-point ball contact slewing ring, driven by a hydraulic motor through planetary gear reducer, and with a normally closed brake fitted.	●
<b>Operator's cab</b>	Fixed cab, with sliding door and adjustable seat equipped. It is equipped with safe glass and roof protective grille. Sun shade is available for windshield and roof window. Air conditioning and heater, radio, 12 V and 24 V DC outlets are standard.	●
<b>Safety devices</b>	Hydraulic balance valve, hydraulic relief valve, hydraulic double-way valve and LMI. Lowering limiter is equipped in winch to prevent rope over-releasing. Anti-two block is fitted on the boom head to prevent rope over-winding. Reversing camera and winch Monitor.	● ○
<b>Counterweight</b>	3.95t	●
<b>Hook Block</b>	20t hook block, 3t hook block	●

**Product parts list is as mentioned above. Please refer to the product quotation for specific parts.**

**Symbol explanation:**  
● — it means the standard configuration;  
○ — it means the optional configuration.

## 重量 Weight



车桥 Axle	1	2	总重量 Total weight
kg	14644	13713	28357 (含副臂) 28357 With jib



吊钩 Hook	倍率 No. of lines	吊钩重量 Weight	备注 Remarks
20t	7	202	单钩 Single hook
3t	1	60	单钩 Single hook

## 作业速度 Working speeds



14.00 R 25



40



90%

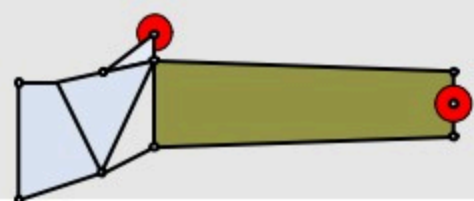


作业机构 Drive	作业速度 Working speed	最大单绳拉力 Max. single line pull	钢丝绳直径/长度 Rope diameter/ length
	0-125 m/min, 空载, 第四层 m/min, no load, 4th layer	30.3kN	14mm/170m
	0-125 m/min, 空载, 第四层 m/min, no load, 4th layer	30.3kN	14mm/110m
	0-2.2r/min		
	从-1°抬起至80°约45s Approx. 45s for boom elevation from -1° to 80°		
	从10.3m伸出至40m约95s Approx. 95s for boom extension from 10.3m to 40m		

## 臂架组合方案

### Boom / Jib combinations

副臂 - 8.3m  
Jib - 8.3m



部件 Component	结构形式 Structure	尺寸 (长×宽×高) mm Size ( L×W×H ) mm	重量 kg ( Weight kg )
一节副臂总成 First jib section		折叠 ( Folded ) : 8310×610×1000	340

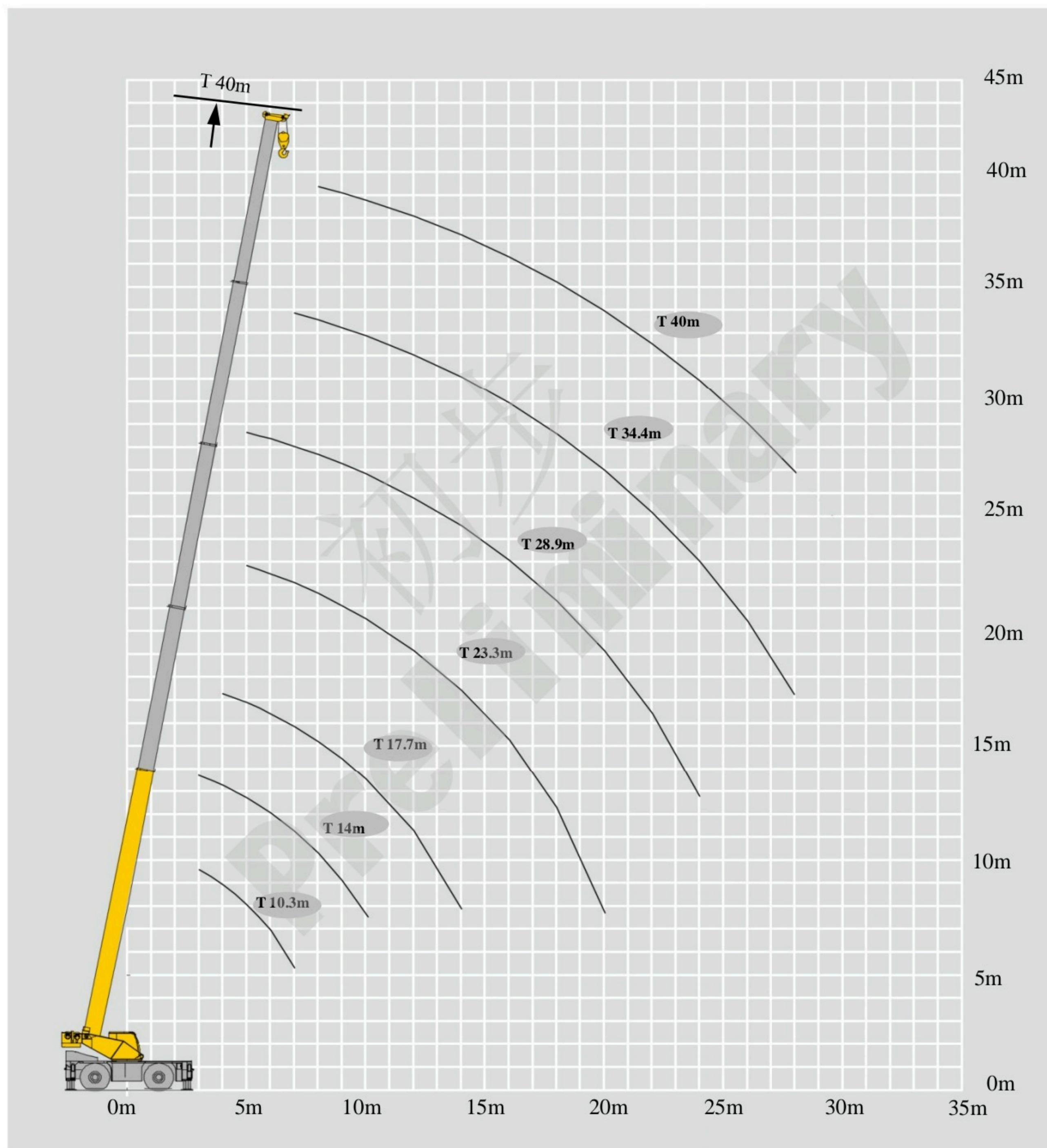
# 臂架组合方案

## Boom / Jib combinations



<b>主臂</b> Telescopic boom	<b>主臂 + 一节副臂</b> Telescopic boom + First jib section
10.3m~40m	40m+8.3m





# 起重性能表

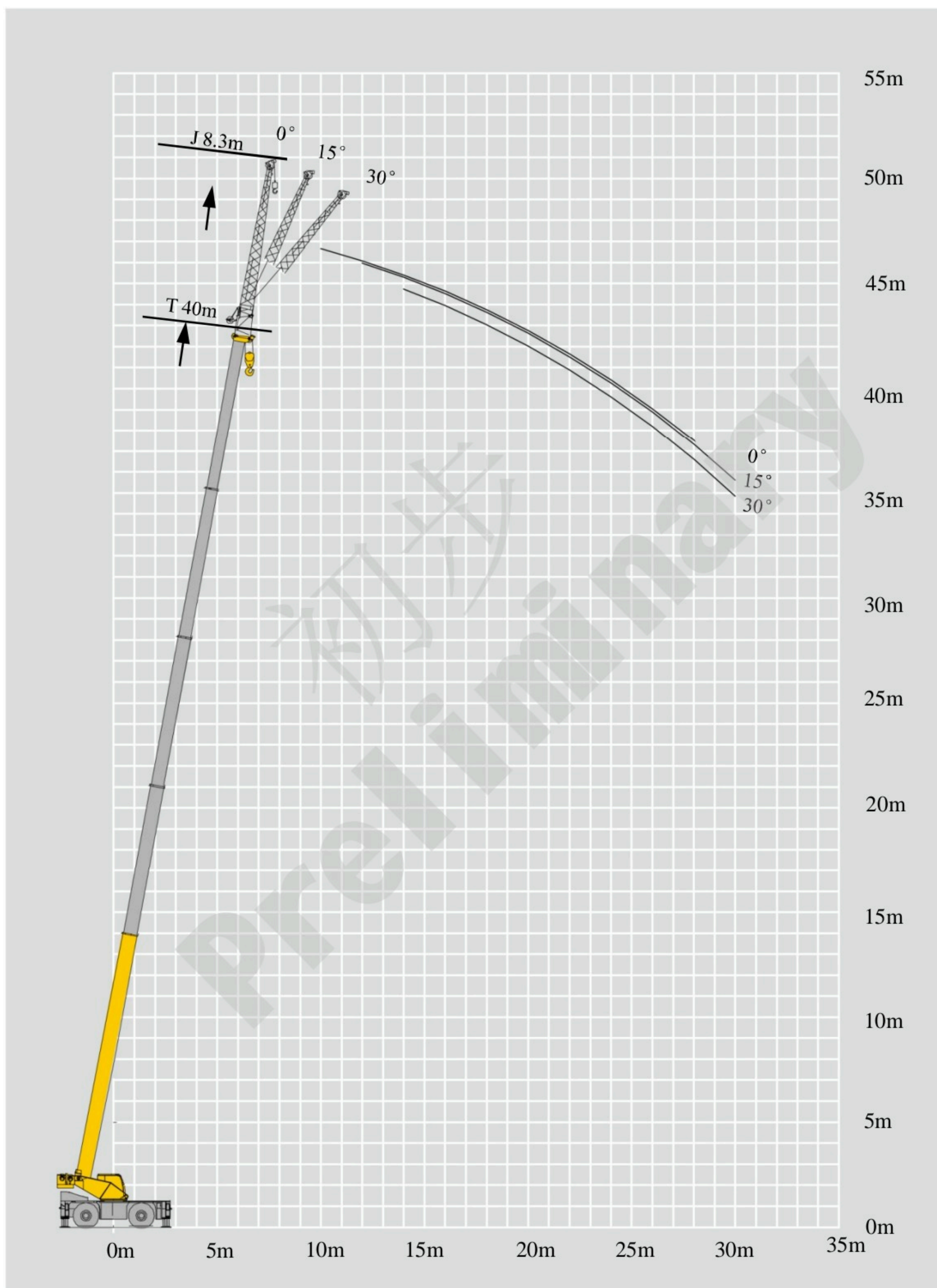
## Lifting capacities

T 10.3~40m

	10.3m	14m	17.7m	23.3m	28.9m	34.4m	40m	
3	25.0*							3
3.5	24.0 *							3.5
4	23.0 *	20.0	18.5					4
4.5	20.0	18.0	18.5					4.5
5	18.0	17.5	17.2	12.9	10.3			5
6	15.0	14.8	15.3	11.9	9.8			6
7	12.5	13.7	13.5	10.9	9.0	7.6		7
8		10.9	10.7	9.9	8.4	6.8	5.9	8
9		8.8	8.8	9.3	7.7	6.4	5.9	9
10		7.15	7.0	7.5	7.1	6.0	5.5	10
12			4.7	5.45	6.0	5.1	4.9	12
14			3.3	3.35	4.4	4.5	4.2	14
16				2.9	3.36	3.6	3.6	16
18				2.0	2.5	2.7	3.0	18
20				1.4	1.8	2.1	2.3	20
22					1.3	1.6	1.8	22
24					0.9	1.2	1.4	24
26						0.8	1.0	26
28							0.7	28
二节臂 2nd	0	50%	100%	100%	100%	100%	100%	二节臂 2nd
三节臂 3rd	0	0	0	25%	50%	75%	100%	三节臂 3rd
四节臂 4th	0	0	0	25%	50%	75%	100%	四节臂 4th
五节臂 5th	0	0	0	25%	50%	75%	100%	五节臂 5th

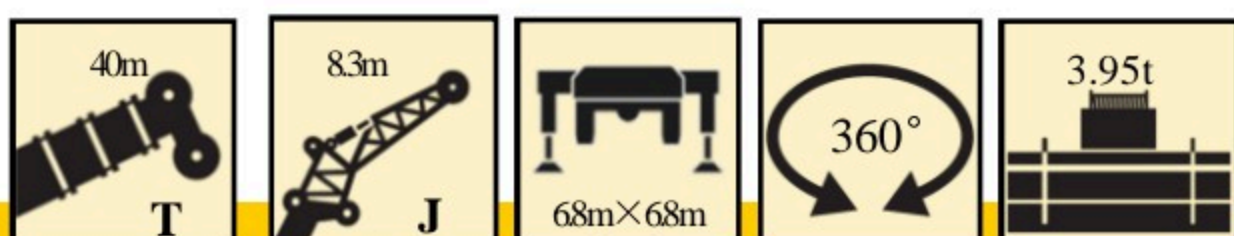
\* 需配置特殊装置。



\*Special equipment is required.



**起重性能表**  
Lifting capacities

**J 8.3m**



 m	Lifting Capacity (t)			 m
	0°	15°	30°	
10	2.7			10
12	2.5	2		12
14	2.3	1.8	1.3	14
16	2.1	1.8	1.3	16
18	2	1.7	1.2	18
20	1.7	1.6	1.1	20
22	1.5	1.5	1	22
24	1.3	1.4	1	24
26	1	1.2	0.9	26
28	0.8	0.9	0.8	28
30		0.8	0.7	30













Preliminary

## 符号标识

### Description of symbols

#### 常规标识

#### Symbol glossary

	支腿 Outriggers		车桥 Axle
	工作幅度 Radius		行驶速度 Driving speed
	吊臂仰角 Boom angle		爬坡能力 Grade ability
	吊臂长度 Boom length		轮胎 Tires
	吊钩 Hook block		平衡重 Counterweight
	360°全回转 360° rotation		上车 Superstructure
	卷扬 Winch		底盘 Chassis

#### 起重作业标识

#### Crane specific symbols

	主臂 Boom		副臂 Jib
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## 主要技术参数表

Table of main technical parameters

类别 Category	项目 Item	单位 Unit	参数 Parameter		允差范围 Allowance
尺寸参数 Dimensions	外形尺寸 (长×宽×高) Outline size (length×width×height)	mm	12202×2850×3495		±1%
	轴距 Wheel base	mm	3700		±1%
	轮距 (前/后) Track (Front/Rear)	mm	2300/2300		±1%
	前悬/后悬 Front/ Rear overhang	mm	1987/1972		±1%
	前伸/后伸 Front/ Rear extension	mm	4543/0		±1%
重量参数 Weight	最大允许总质量 (含副臂) Total vehicle mass in travel configuration (with jib)	kg	28357		±3%
	轴荷 Axle load	一轴 1st axle	kg	14644	±3%
		二轴 2nd axle	kg	13713	±3%
动力参数 Power	发动机型号 Engine model	—	QSB6.7-C190-30	SC7H220.1G3	—
	额定功率/转速 Engine rated power/rpm	kW/(r/min)	142/2200	162/2000	—
	最大输出扭矩/转速 Engine rated torque/rpm	N.m/(r/min)	931/1400	900/1300	—
行驶参数 Travel	最高车速 Max. travel speed	km/h	≥40		—
	最低稳定车速 Min. travel speed	km/h	2.3		—
	最小转弯直径 Min. turning diameter	m	≤9.8		—
	最小离地间隙 Min. ground clearance	mm	413		±1%
	接近角 Approach angle	°	19.1		±1°
	离去角 Departure angle	°	19.3		±1°
	制动距离 (制动初速度为 24km/h) Braking distance (at 24 km/h)	m	≤9		—
	最大爬坡能力 Max. grade ability	%	≥90		—

## 主要技术参数表

Table of main technical parameters

类别 Category	项目 Item		单位 Unit	参数 Parameter	允差范围 Allowance	
主要性能参数 Main performance	最大额定总起重量 Max. total rated lifting capacity		t	25	±5%	
	最小额定工作幅度 Min. rated working radius		m	3	±1%	
	转台尾部回转半径 Turning radius at turntable tail	平衡重处 Counterweight	mm	3823	±1%	
	最大起重力矩 Max. load moment	基本臂 Base boom	kN.m	901.6	±5%	
		最长主臂 Fully-extended boom	kN.m	576.2	±5%	
	支腿跨距 Outrigger span	纵向 Longitudinal	m	6.8	±1%	
		横向 Lateral	m	6.8	±1%	
	起升高度 Hoist height	基本臂 Base boom	m	9.6	±1%	
		最长主臂 Fully-extended boom	m	39.4	±1%	
		最长主臂+副臂 Fully-extended boom + Jib	m	46.6	±1%	
	起重臂长度 Boom length	基本臂 Base boom	m	10.3	±1%	
		最长主臂 Fully-extended boom	m	40	±1%	
		最长主臂+副臂 Fully-extended boom + Jib	m	48.3	±1%	
副臂安装角 Jib offset angle		°	0°、15°、30°	—		
工作速度参数 Working speed	起重臂起臂时间 Boom raising time		s	≤45	—	
	起重臂全伸时间 Boom fully extending time		s	≤95	—	
	最大回转速度 Max. slewing speed		r/min	≥2.2	—	
	支腿收放时间 Outrigger extending and retracting time	水平支腿 Outrigger beam	收 Retracting	s	≤25	—
			放 Extending	s	≤35	—
		垂直支腿 Outrigger jack	收 Retracting	s	≤30	—
			放 Extending	s	≤35	—
	起升速度 (单绳,第四层,空载) Hoisting speed (single line, 4th layer, no load)	主起升机构 Main winch	m/min	≥125	—	
副起升机构 Auxiliary winch		m/min	≥125	—		

## 注意事项

### Notes

1. 表中额定总起重量值，是在平整的坚固地面上本起重机能够保证的最大总起重量，包括吊钩和吊具的重量，所以为了估算重物重量，必须减去上述的装置重量。
2. 表中的工作幅度为起吊重物离地时起重物到起重机回转轴线的水平距离，是包括起重臂变形量在内的实际值，因而起吊前应考虑起重臂变形量。
3. 只允许在5级(瞬时风速14.1m/s，风压125N/m<sup>2</sup>)风以下进行作业。
4. 吊重前操作者必须对物体的重量和工作范围了解后选择合适的作业工况，严禁超出表中的数值。幅度及臂长在相邻两个数值之间时，应依据两个数值中较小值确定起重作业。
5. 应按主臂仰角范围作业，即使是空载，也不应使主臂仰角处于范围外，谨防整机倾翻。
6. 表中的主臂长度应要按照每节臂的伸缩要求进行伸出。

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. The weight of above-mentioned devices should be deducted from the rated lifting load.
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. Take boom deflection into consideration before beginning a lifting operation.
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<sup>2</sup>).
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 should be extended according to the telescoping code shown by digits, which means the percentage of boom sections extended.