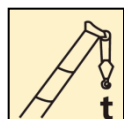


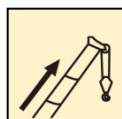
XCT60_Y 汽车起重机 / Truck Crane

技术规格书

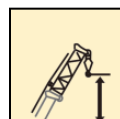
Technical specifications



60t



44m



59.8m

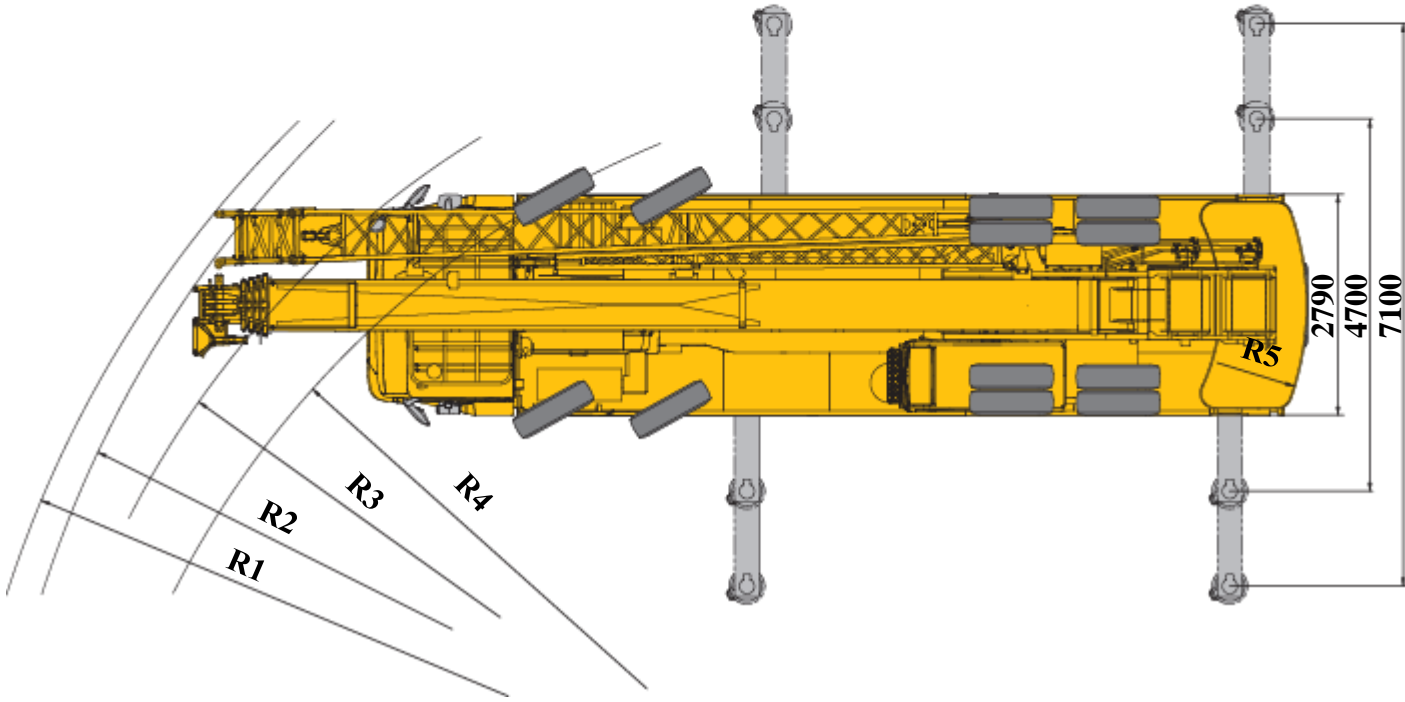
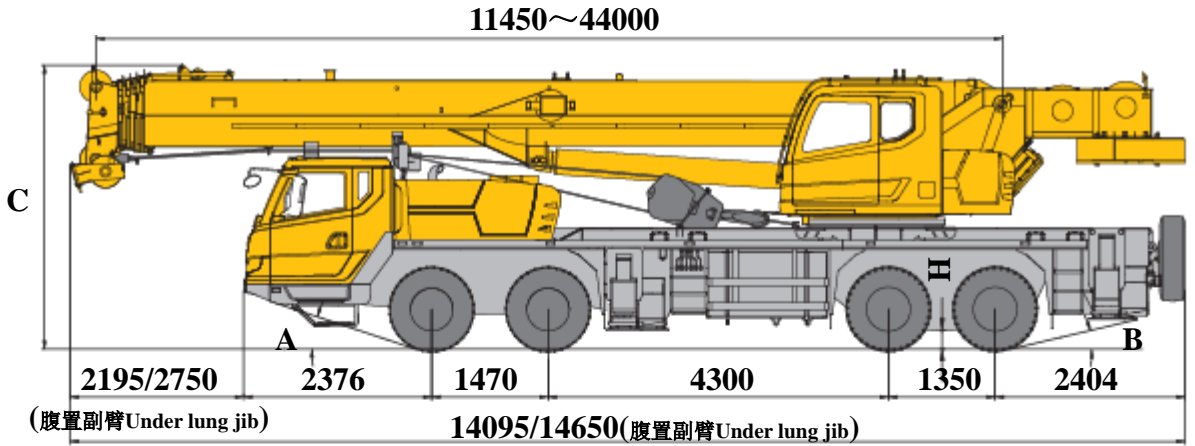


目录

Contents

目录 Contents	
尺寸参数 Dimensions	3
技术规格 Technical specifications	4-9
重量/作业速度 Weight / Working speeds	10
臂架组合方案 Boom / Jib combinations	11
主臂 Boom	12-14
副臂 Jib	15-16
符号标识 Description of symbols	17
注意事项 Notes	18
主要技术参数表 Table of main technical parameters	19-20

尺寸参数 Dimensions



	副臂型式 Jib	A	B	C	H	R1	R2	R3	R4	R5
315/80 R22.5	侧置副臂 Swing-away jib	19°	13°	3615	260	15100	14780	13600	12000	3900
315/80 R22.5	腹置副臂 Under slung jib	19°	13°	4050	260	—	15170	13600	12000	3900

技术规格


Technical specifications

 底盘	配置
车架	徐工设计、制造，全覆盖式走台板，防扭转箱型结构，高强度钢材制造。 ●
支腿	4支腿。纵向H形布置，操作杆控制液压动作。可由底盘任意一侧同时或单独控制各支腿的动作，设有水平仪。带第五支腿，支腿油缸均设有单向阀，且垂直支腿带有双向液压锁。 支脚盘尺寸：φ450mm 最大起重量时支腿反力：504KN ●
发动机	中国重型汽车集团，直列、水冷、四冲程、增压中冷、高压共轨；WD615.334，额定功率247kW/2200rpm，最大扭矩1350Nm/1100-1600rpm，国三排放标准。 燃油箱容积：300L。 ●
	东风康明斯，直列、水冷、四冲程、增压中冷、高压共轨；QSL8.9-C325-30，额定功率242kW/2100rpm，最大扭矩1385Nm/1500rpm，Stage III 排放标准。 燃油箱容积：300L。 ○
变速箱	采用陕齿9JS135TA机械式变速箱，手动远距离软轴操纵，全同步器；9个前进档，1个倒档，工作稳定、可靠。 ●
车桥	高强度桥，引进国外先进技术，名牌厂家制造，性能可靠。 ●
悬挂	后悬挂系统，采用V型推力杆结构、橡胶悬架，增加底盘行驶稳定性，减少轮胎的磨损。 ●
轮胎	315/80R22.5-22PR，无内胎轮胎，重量轻，散热好，行驶噪音低，承载力强，使用寿命长。 ●

制动	行车制动：脚踏板操纵的双回路气压制动。第一回路作用于一、二轴车轮上，第二回路作用于三、四轴车轮上。 驻车制动：弹簧储能制动，作用于二、三、四轴车轮上； 辅助制动：发动机缸内制动、排气制动，安全可靠，延长制动摩擦片使用寿命。 ●
转向	机械式转向机构，带有液压助力。 ●
驾驶室	右驾豪华驾驶室。配备电动升降器的安全玻璃、可调式座椅、简易卧铺、电动调节后视镜、可调节高度及角度方向盘、液晶显示器和收放机等。 标配冷暖空调。 ●
电气系统	直流24伏特，串联 12 伏特的电池组 2 个。 ● 发电机：28±0.3 伏特，70 安培。
安全装置	液压双向锁 ● 旋转报警灯 ○ 黄色反光标识 ○ 倒车影像 ○ ABS ○

技术规格

Technical specifications

 上车	配置
结构	徐工设计、制造，高强度钢材制造。 ●
液压系统	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，起升、变幅、伸缩双泵合流；风冷式液压油散热器； 液压油箱容积：600L ●
操纵方式	机械操纵。 ● 先导液比例操纵，由左右2个操纵手柄控制。无级调速。 ● 机械机型 ● 先导机型 ●
主起升机构	液压控制调速，装有双折线绳槽卷筒，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。 ● 具有轻载高速、重载低速的特点。
副起升机构	液压控制调速，装有双折线绳槽卷筒，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。 ● 具有轻载高速、重载低速的特点。
回转机构	四点接触球式回转支承，由液压马达通过行星齿轮回转机构驱动，可连续回转360°；具有动力控制或自由回转的功能，可无级调速。 ●
变幅机构	单支双作用前置液压变幅油缸，带有平衡阀。 ●
吊钩	60t吊钩 ● 35t吊钩 ○ 4.5t吊钩 ●
平衡重	固定平衡重5.5t，活动平衡重1t。 ●

操纵室	新型钢制操纵室，装有安全玻璃，车窗装有遮阳帘，外开式车门，座椅靠背可倾斜定位。前窗顶窗装有雨刮器，标准的操纵控制件和指示器。配备单冷空调。 操纵杆加长节 ○
安全装置	液压平衡阀；液压溢流阀；力矩限制器；操纵杆弹簧式回中系统；三圈保护器，防止钢丝绳过放；臂头设置高度限位，防止钢丝绳过卷；自由滑转；回转锁止 ● 卷扬监视装置 ○ 三色报警灯 ○ 回转警示灯 ○ 角度指示器 ○ 黄色反光标识 ○

技术规格

Technical specifications

 臂架系统	配置
主臂 由1节基本臂和4节伸缩臂组成，采用抗扭曲设计，高强度结构钢制造。双缸绳排伸缩机构。 主臂长度：11.5m~44m。	●
侧置副臂 2节桁架式焊接结构，具有0°、15°、30°三种固定副臂安装角 固定副臂长度：9.5m/16m	●
腹置副臂 采用两节箱型腹置副臂，一节臂工作长度9.8m，两节臂全伸工作长度16m，安装角度5°、15°、30°。	○
臂端单滑 轮 单滑轮，安装在主臂顶端用于单股钢丝绳起重作业，起重性能与主臂相同，但最大起重量不超过4500kg。	●


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

 Chassis	
Frame	Designed and manufactured by XCMG, it is made of high strength steel with fully covered walking surface and anti-torsion box-typed structure. ●
Outriggers	Four outriggers arranged in H-shape are hydraulically controlled by control levers. There is an outrigger control station located at each side of the chassis, and there is a level gauge on each control station. The outrigger movements can be simultaneously or separately controlled at either side of the chassis. A fifth jack is available. Each jack cylinder is equipped with a double-way hydraulic valve. Outrigger float diameter: $\phi 450$ mm Reaction force of outrigger at max. lifting load: 504 KN ●
Engine	WD615.334, in-line, six-cylinder, water-cooled, four-stroke, supercharging, high pressure common rail engine, manufactured by Sinotruk Group, with rated power of 247 kW /2200 rpm and max. torque of 1350 Nm / 1100-1600 rpm, compliant to China III emission standard. ● Fuel tank capacity : 300 L Dongfeng Cummins Engine Co., Ltd., in line, water cooled, four-stroke, turbocharged intercooler, high pressure common rail; ○ QSL8.9-C325-30 , with rated power of 242kW/2100rpm, and the max. torque of 1385Nm/1500rpm, compliant with Stage III emission standard. Fuel tank capacity: 300L
Transmission	Mechanical transmission 9JS135TA, made by Shaanxi Fast Gear Co., Ltd., manual flexible shaft control, 9-forward speed and 1-reverse speed with a synchronizer. ●
Axles	High strength axles, made by famous makers through adoption of foreign advanced technology, with reliable performance. ●

Suspensions	Rubber suspensions with V-type push rods are adopted for rear suspension system, leading to improved chassis stability and reduced tire wear. ●
Tires	315/80R22.5-22PR , tubeless tire, light weight, good heat dissipation, low noise, strong bearing capacity, long service life. ●
Brakes	Service brake: controlled by foot pedal, double-circuit air pressure brake. The first circuit acts on the wheels of axles 1 and 2, and the second circuit acts on the wheels of axles 3 and 4. ● Parking brake: spring-loaded brake, acting on the wheels of axles 2、 3 and 4. Auxiliary brake: engine compression brake, engine exhaust brake, safe and reliable, and will prolong the service life of brake lining.
Steering	Mechanically steering mechanism with a hydraulic booster. ●
Driver's cab	Luxurious driver's cab for right-hand drive, equipped with adjustable seats, simple sleeper, safety glass, electrically operated door window lifters, electric-adjustable mirrors, steering wheel adjustable in height and angle, liquid crystal display and radio, etc. ● Heater and air conditioner are standard.
Electrical system	DC 24 V, two sets of 12 V battery in series. ● Generator: $28 \pm 0.3V$, 70 A
Safety devices	Double-way hydraulic valve ● Beacon lamp ○ Yellow reflecting marking ○ Backup camera ○ ABS ○

技术规格


Technical specifications

	Superstructure	
Frame	Designed and manufactured by XCMG, made of high-strength steel	●
Hydraulic system	Load sensitive design of compensation at the rear of valve with special throttling device matched, more stable system minimum flow, more reasonable system rigidity, more prominent fine-control and smoothness; confluence technology for lifting, elevating and telescoping double-pump confluence; air-cooled hydraulic oil cooler is fitted. Oil tank capacity: 600 L	●
Operating mode	Mechanical control.	● Mechanical
	Pilot hydraulic proportional control through left and right levers is used for controlling the superstructure. Stepless speed regulation is available.	● Pilot
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, a balance valve and a grooved drum equipped. It has features of high speed with a light load and low speed with a heavy load.	●
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, a balance valve and a grooved drum equipped. It has features of high speed with a light load and low speed with a heavy load.	●
Slewing system	A single-row, four-point contact-ball slewing ring is driven by the planetary gear reducer of slewing mechanism, which is driven by a hydraulic motor, and may continuously slew 360°. Power control and free slewing function as well as stepless speed regulation are available.	●
Elevating system	A front support hydraulic cylinder is equipped for elevating operation, with a balance valve fitted.	●

Hook block	60t Hook block	●
	35t Hook block	○
	4.5t Hook block	●
Counter Weight	Fixed counterweight of 5.5t, Removable counterweight of 1 t.	●
Operator's cab	New steel cab. Safety glass and sun shield are used for windows. A swing-out door is equipped. The cab features a new ergonomic seat design with backrest adjustment. Wipers are fitted for the windshield and roof window; standard controls and indicators are ergonomically arranged in the cab.	●
	Air conditioner is standard. Extension of control lever	○
Safety devices	Hydraulic balance valve, hydraulic relief valve, LMI, spring centering system for control levers, lowering limiter for preventing wire rope from over-releasing, anti-two block at boom head for preventing wire rope from over-winding. Free sliding and slewing locking are also available.	●
	Winch monitoring device	○
	Tri colored light bar	○
	Slewing warning lamp	○
	Angle indicator	○
	Yellow reflective marking	○

技术规格

Technical specifications

	Boom and jib system	
Boom	Comprised of one basic boom and four telescoping boom sections, the boom adopts anti-distortion design and is made of high strength structural steel. Double hydraulic cylinders plus wire ropes mechanism is used to telescope the boom. Main boom length: 11.5 m ~ 44 m	●
Swing-away jib	Two-section, lattice, welded structure; three offset angles of 0°, 15° and 30°. Fixed jib length: 9.5 m/16 m	●
Under slung jib	Two-section box-type under slung jib is available. One jib section is 9.8 m, the total length of two jib sections is 16 m. The jib has offset angles of 5°, 15° and 30°.	○
Single top	Fitted at boom head, used for single line operation. Its lifting performance is the same as that for boom, but the maximum lifting load does not exceed 4500kg.	●

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	3	4	总重量 Total weight
t	8.35	8.35	12.5	12.5	41.7



吊钩 Hook	倍率 Parts of line	吊钩重量 Weight (kg)	吊钩尺寸 Dimensions (mm)	备注 Remarks
60t	13	517	1325×544×537	单钩 Single hook , 标配 Standard
35t	10	403	1334×544×419	单钩 Single hook , 选装 optional
4.5t	1	100(侧置副臂 Swing-away jib) /70(腹置副臂 Under slung jib)	536×298×298 /920×240×240	单钩 Single hook , 标配 Standard

作业速度 Working speeds



315/80R22.5



2 ~ 90



38%



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
	0-128 m/min, 单绳, 第四层 m/min, single line, 4th layer	45 kN	18 mm/190 m
	0-128 m/min, 单绳, 第四层 m/min, single line, 4th layer	45 kN	18 mm/125 m
	0-2r/min		
	从-1°抬起至81°约40s Approx. 40 s for boom elevation from -1° to 81°		
	从11.45m伸出至44m约90s Approx. 90 s for boom extension from 11.45 m to 44 m		

臂架组合方案

Boom / Jib combinations



主管
Telescopic boom

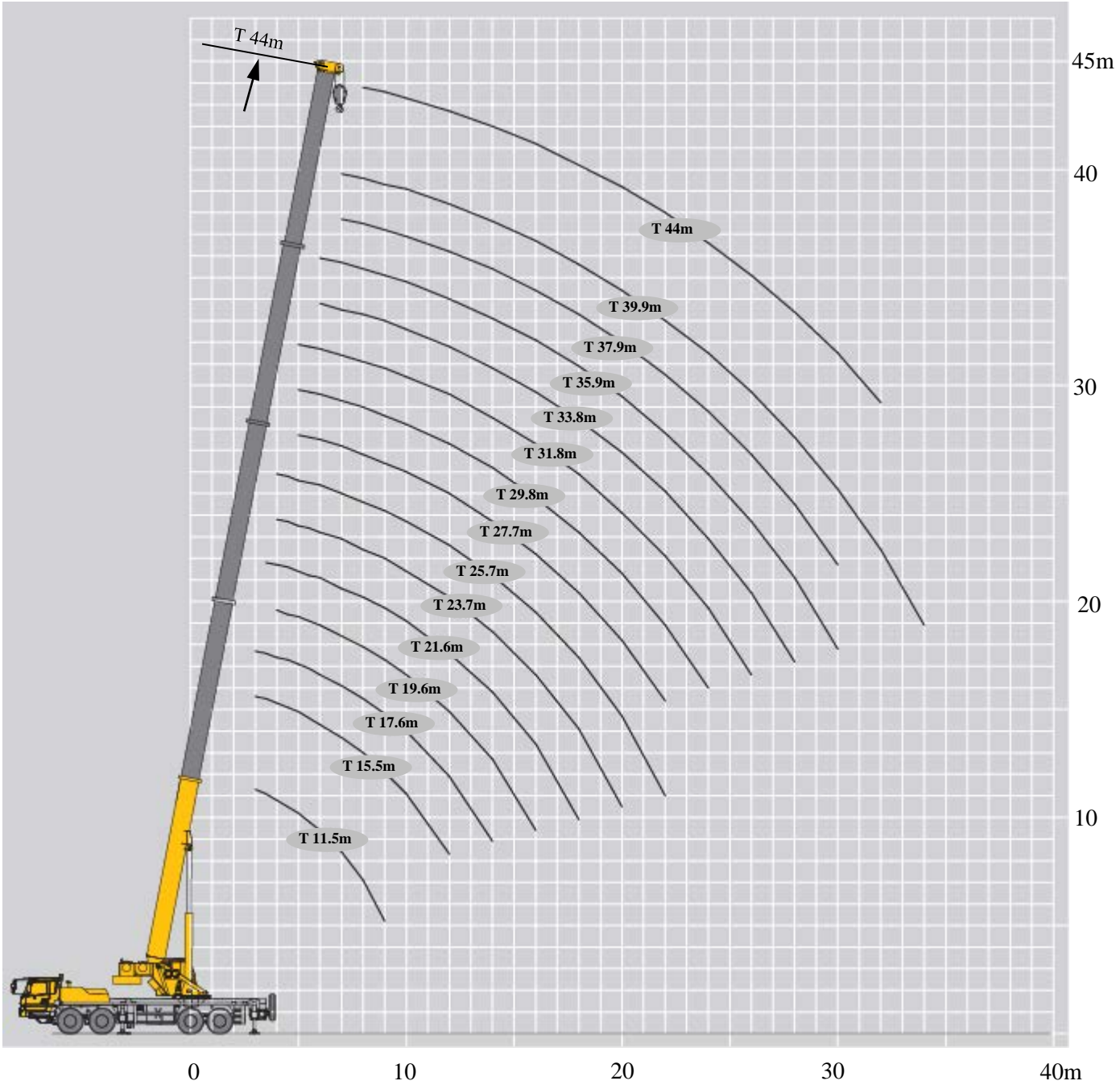
T : 11.5~44m

副臂
Jib

T : 44m

J : 9.5~16m (侧置副臂 Swing-away jib)

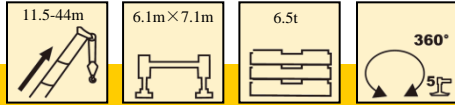
J : 9.8~16m (腹置副臂 Under slung jib)





起重性能表

Lifting capacities

T 11.5~44m

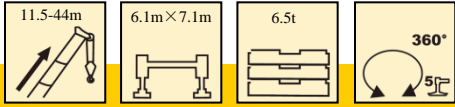


 m	11.5m	15.5m	19.6m	25.7m	31.8m	37.9m	44m	 m
3	60000	45000						3
3.5	55000	45000						3.5
4	48000	45000	33300	25000				4
4.5	45000	43000	33000	25000				4.5
5	41000	40000	32000	25000	18500			5
5.5	36500	36000	29000	25000	18500			5.5
6	33000	32500	27000	23300	18500			6
7	27000	26600	24500	21000	18500	14000		7
8	22200	22600	22500	19000	17700	13200		8
9	17500	18000	17600	17000	16300	12500	9000	9
10		14600	14200	15400	15000	11800	9000	10
12		10000	9800	10700	11300	10300	8600	12
14			7000	7900	8400	8800	7900	14
16			5000	6000	6500	6800	7100	16
18				4500	5100	5400	5600	18
20				3400	3900	4300	4500	20
22				2500	3100	3400	3700	22
24					2400	2700	3000	24
26					1800	2100	2400	26
28						1700	1900	28
30						1200	1500	30
32							1100	32

起重性能表

Lifting capacities

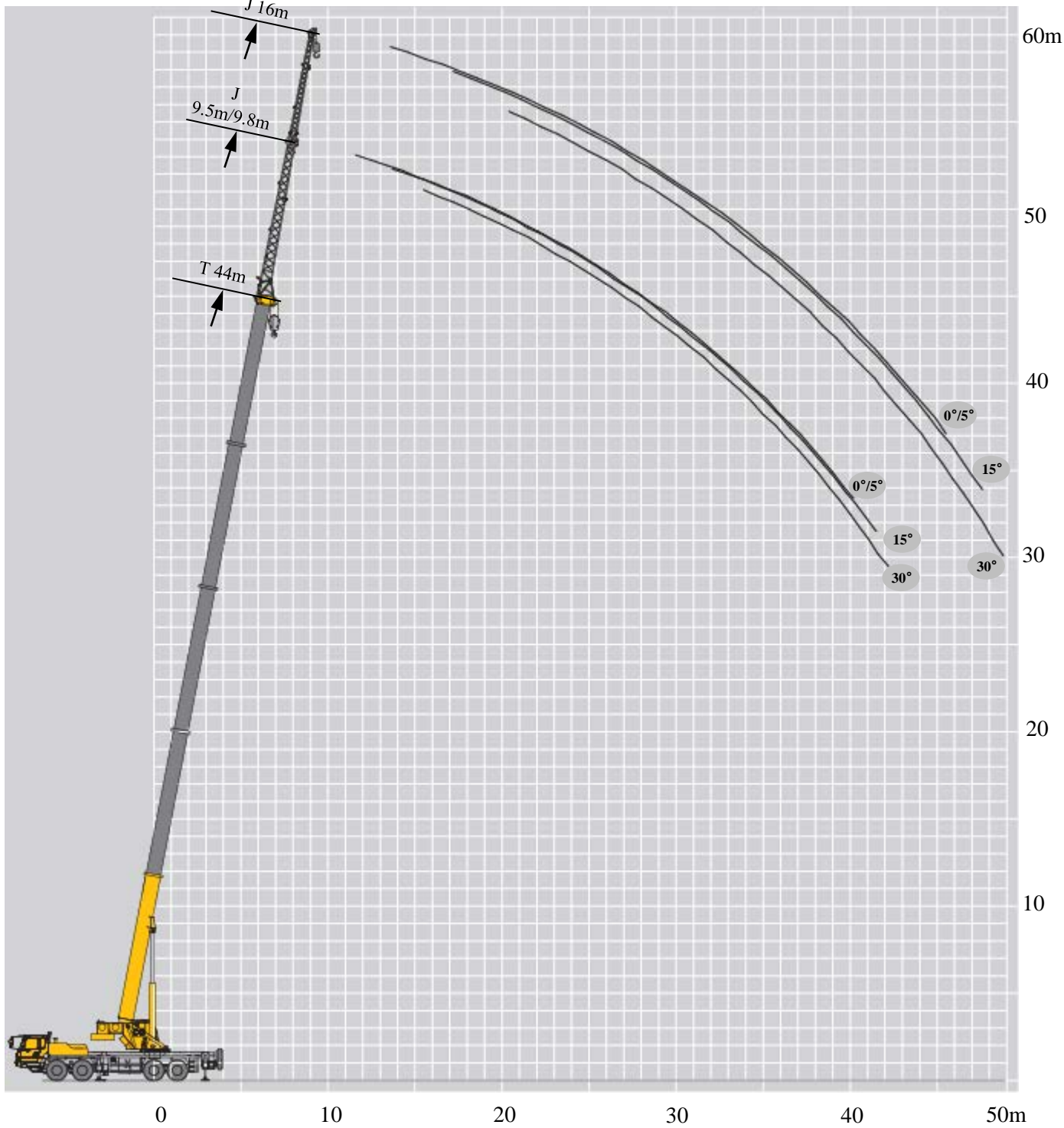
T 17.6~39.9m



m	17.6m	23.7m	29.8m	35.9m	21.6m	27.7m	33.8m	39.9m	m
3	27000								3
3.5	27000				27000				3.5
4	27000	27000			27000				4
4.5	27000	27000			27000				4.5
5	27000	27000	17600		27000	24000			5
5.5	27000	26600	17200		27000	24000			5.5
6	27000	25600	16800	12000	27000	24000	16400		6
7	26000	23700	15300	11900	26000	24000	15300	11000	7
8	25000	22200	14200	11200	24400	23100	14300	10600	8
9	20100	20800	13000	10400	19500	20300	13400	10100	9
10	16600	17300	12000	9700	16100	16800	12500	9500	10
12	11800	12400	10400	8600	11300	11900	11000	8600	12
14	8800	9400	9100	7600	8300	8900	9300	7800	14
16		7300	7700	6600	6300	6900	7200	7000	16
18		5800	6200	6000	4800	5400	5800	6000	18
20		4700	5000	5200		4300	4600	4900	20
22			4100	4300		3400	3700	4000	22
24			3400	3600			3000	3300	24
26				3000			2400	2700	26
28				2500			2000	2200	28
30				2100				1800	30
32								1400	32
34								1100	34

起升高度曲线图

Lifting heights



起重性能表

Lifting capacities

T 44m

78	44m		9.5m/9.8m	6.1m×7.1m	360°	5t	6.5t	0° /5° (腹置副臂 Under lung jib)			78	
	15°	30°										
78	4500							15°	3000	30°	2500	78
75	4100							15°	2800	30°	2400	75
72	3800							15°	2600	30°	2300	72
70	3500							15°	2500	30°	2200	70
65	2800							15°	2300	30°	2000	65
60	1900							15°	1700	30°	1700	60
55	1200							15°	1100	30°	1100	55
50	700							15°	700	30°	700	50

78	44m		16m	6.1m×7.1m	360°	5t	6.5t	0° /5° (腹置副臂 Under lung jib)			78	
	15°	30°										
78	2800							15°	1500	30°	1200	78
75	2400							15°	1400	30°	1100	75
72	2000							15°	1200	30°	1000	72
70	1900							15°	1200	30°	950	70
65	1700							15°	1000	30°	850	65
60	1200							15°	900	30°	750	60
55	850							15°	700	30°	650	55
50	450							15°	400	30°	300	50

符号标识

Description of symbols

常规标识

General symbols

	上车 Superstructure		底盘 Chassis
	起重能力 Lifting capacity		车桥 Axle
	吊臂长度 Boom length		行驶速度 Driving speed
	工作幅度 Radius		爬坡能力 Grad ability
	吊臂仰角 Boom position		轮胎 Tires
	主臂起升高度 Hoist height with boom		支腿 Outriggers
	固定副臂长度 Fixed jib length		吊钩 Hook block
	副臂安装角 Jib offset angle		平衡重 Counterweight
	副臂起升高度 Hoist height with jib		卷扬 Winch
	使用第五支腿360°全回转 360° rotation with 5th jack		360°全回转 360° rotation

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/m²)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/m²).
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 percentage (or digits, which means the percentage of boom sections extended).

主要技术参数表

Table of main technical parameters

类别 Category	项目 Item	单位 Unit	参数 Parameter		
尺寸参数 Dimensions	外形尺寸 (长×宽×高) Dimensions (length×width×height)	mm	14095×2790×3615(侧置副臂 Swing-away jib) 14650×2790×4050(腹置副臂 Under slung jib)		
	轴距 Wheel base	mm	1470/4300/1350		
	轮距 (前/后) Track (Front/ Rear)	mm	2304/2081		
	前悬/后悬 Front/ Rear overhang	mm	2376/2404		
	前伸/后伸 Front/ Rear extension	mm	2195/0(侧置副臂 Swing-away jib) 2750/0(腹置副臂 Under slung jib)		
重量参数 Weight	最大允许总质量 Total vehicle mass in travel configuration	kg	41700		
	轴荷 Axle load	一轴 1st axle	kg	8350	
		二轴 2nd axle	kg	8350	
		三轴 3rd axle	kg	12500	
		四轴 4rd axle	kg	12500	
动力参数 Power	发动机型号 Engine model	—	WD615.334	QSL8.9-C325-30	
	额定功率/转速 Engine rated power/rpm	kW/(r/min)	247/2200	242/2100	
	最大净功率/转速 Max. net power/rpm	kW/(r/min)	245/2200	—	
	最大输出扭矩/转速 Max. output torque/rpm	N.m/(r/min)	1350/1100-1600	1385/1500	
行驶参数 Travel	最高车速 Max. travel speed	km/h	90	50	
	最低稳定车速 Min. travel speed	km/h	2~3		
	最小转弯直径 Min. turning diameter	m	≤24		
	臂头最小转弯直径 Min. turning diameter at boom tip	m	≤29.56(侧置副臂 Swing-away jib)		
			≤30.34(腹置副臂 Under slung jib)		
	最小离地间隙 Min. ground clearance	mm	260		
	接近角 Approach angle	°	19		
	离去角 Departure angle	°	13		
	制动距离 (制动初速度为30km/h) Braking distance (at 30 km/h)	m	≤10		
	最大爬坡能力 Max. grade ability	%	≥38		
百公里油耗 Fuel consumption per 100 km	L	40			
噪音 Noise	加速行驶机外噪声 Exterior noise level	dB(A)	≤84		
	驾驶员耳旁噪声 Noise level at seated position	dB(A)	≤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	
主要性能参数 Main performance	最大额定总起重量 Max. total rated lifting capacity		t	60	
	最小额定工作幅度 Min. rated working radius		m	3	
	转台尾部回转半径 Turning radius at turntable tail		mm	3900	
	最大起重力矩 Max. load moment	基本臂 Base boom		kN.m	2009
		最长主臂 Fully-extended boom		kN.m	1113
		最长主臂+副臂 Fully-extended boom + Jib		kN.m	703
	支腿跨距 Outrigger span	纵向 Longitudinal		m	6.1
		横向 Lateral		m	7.1
	起升高度 Hoist height	基本臂 Base boom		m	11.3
		最长主臂 Fully-extended boom		m	43.6
		最长主臂+副臂 Fully-extended boom + Jib		m	59.8
	起重臂长度 Boom length	基本臂 Base boom		m	11.5
最长主臂 Fully-extended boom		m	44		
最长主臂+副臂 Fully-extended boom + Jib		m	60		
副臂安装角 Jib offset angle			°	0, 15, 30(侧置副臂 Swing-away jib) 5, 15, 30(腹置副臂 Under slung jib)	
工作速度参数 Working speed	起重臂起臂时间 Boom raising time		s	≤40	
	起重臂全伸时间 Boom fully extending time		s	≤90	
	最大回转速度 Max. slewing speed		r/min	≥2	
	支腿收放时间 Outrigger extending and retracting time	水平支腿 Outrigger beam	收 Retracting	s	≤30
			放 Extending	s	≤35
		垂直支腿 Outrigger jack	收 Retracting	s	≤35
			放 Extending	s	≤40
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	≥128	
	副起升机构 Auxiliary winch		m/min	≥128	
噪声 Noise	机外辐射 Exterior noise level		dB (A)	≤122	
	司机位置处 Noise level at seated position		dB (A)	≤90	