# XCT80\_Y 汽车起重机 / Truck Crane

# 技术规格书

**Technical Specifications** 



80t



45.5 m



60.9 m





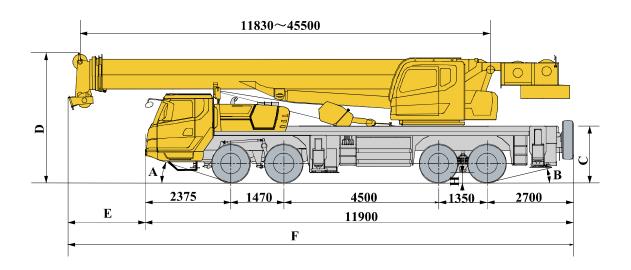
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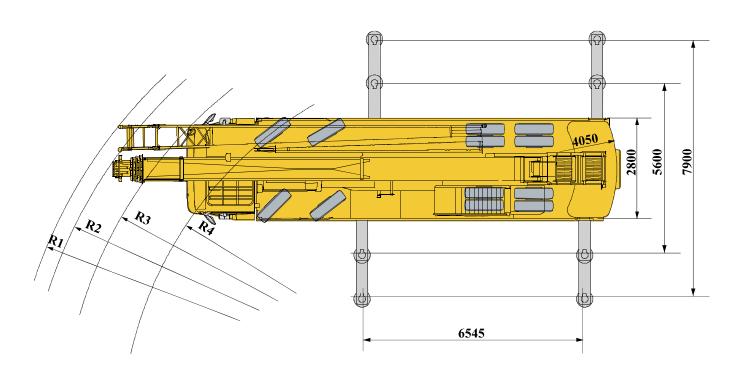
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# 尺寸参数 (右驾 Right-hand drive )

### **Dimensions**





	A	В	С	D	E	F	R1	R2	R3	R4	н
12.00R24	22°	13°	1725	3770	1690	14085	14500	14100	13500	12000	305

# 技术规格 Technical specifications

-J-J-	Chassis	Configuration
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 outrigger arranged, with 5th jack is available. Four outriggers arranged in H-shape are hydraulically controlled by control levers. Double-stage outrigger beam is adopted. 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 any side of the chassis. With 5th jack is available. There is a check valve fitted in each outrigger cylinder, and a double-way hydraulic valve fitted in each jack cylinder.  Outrigger float diameter: φ450 mm Reaction force of outrigger at max. lifting load: 700kN	
Engine	Dongfeng Cummins, In line, water cooled, four-stroke, supercharging, high pressure common rail QSL8.9-C360-30, with rated power of 265kW/2100rpm and max. torque of 1500Nm/1400-1600rpm, compliant to China III emission standard. Fuel tank capacity: 300L. CHINA NATIONAL HEAVY DUTY TRUCK GROUP, In line, water cooled, four-stroke,	•
	supercharging, high pressure common rail WD615.334, 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: 300L.	0
Transmission	Mechanical transmission 10JSD140TB, made by Shaanxi Fast Gear Co., Ltd., manual flexible shaft control, 10-forward speed and 2-reverse speed with a synchronizer.	•

Axles	High strength axle, better reliability	•
Suspensions	Rubber spring suspensions with V-type push rods are adopted for rear suspension system, leading to improved chassis stability and reduced tire wear.	
Tires	12.00R24, low noise during traveling and strong bearing capacity.	•
Braking	Service braking: foot pedal operated double-circuit air pressure brake. 1st circuit acts on the wheels of 1st and 2nd axles, and 2nd circuit acts on the wheels of 3rd and 4th axles.  Parking brake: spring-loaded brake, acting on wheels of axles 2,3 and 4;  Auxiliary brake: engine exhaust brake, which is 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. Safety glass, electrically operated door window lifters, adjustable seats, electrical adjustable mirrors, steering wheel adjustable in height and angle, liquid crystal display and radio-cassette player are equipped. Heater and air conditioner are standard.	•
Electrical system	24V DC, two sets of 12 V battery in series. Generator: $28\pm0.3 \text{ V-}70 \text{ A}$	•
Safety	Double-way hydraulic valve	
devices	Beacon lamp	0
	Backup camera	0
	ABS	0

# 技术规格

# **Technical specifications**

	icai specifications	
4	Superstructure	Configuration
Frame	Designed and manufactured by XCMG, made of high strength steel.	•
Hydraulic system	Variable pump driven by chassis engine, used for hoisting, elevating and telescoping operations. Load sensing proportional multi-way change valve with impact resistance valve and cavitation-proof valve integrated; air-cooled hydraulic oil radiator.  Tank capacity: 972L	•
Operating mode	Pilot hydraulic control is used for controlling the superstructure. All crane movements are controlled by hydraulic pump and proportional valve through two control levers at left and right sides.  Pilot hydraulic control is used for controlling the superstructure. All crane movements are controlled by hydraulic pump and proportional valve through two control levers at	•
Main winch system	left and right sides.  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.	•
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.	•
Slewing system	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. There is a horn switch fitted on the slewing control lever.	•
Elevating system	A front support double-acting hydraulic cylinder is equipped for elevating operation, with a balance valve fitted.	•

Operator's cab	New steel cab with a full-view windshield, safety glass, sun shield and adjustable operator's seat. Windshield wiper and roof window wiper are fitted. Crane control levers are integrated into armrests. A sliding door and a pull-out step are designed for easy and safe access to the cab. Air conditioning is standard.	•
C o m b i n e d counterweight	I wo counterweight configurations	•
Safety devices	Hydraulic balance valve, hydraulic relief valve, LMI, spring centering system for control levers, lowering limiter for preventing wire rope from over-releasing, and anti-two block at boom head for preventing wire rope from over-winding. Free sliding, slewing locking.	•
	Winch monitoring device	0
	Tri colored light bar	0
	Beacon lamp for slewing	0
Hook block	80t hook block 4.5t hook block	•
	35t hook block	0

### 技术规格

### **Technical specifications**

SINK!	Boom and jib system	Configuration
Boom	Comprised of one basic boom and four telescoping boom sections, with U-shaped cross-section, welded structure and adopts anti-distortion design and is made of high strength structural steel. Single-cylinder plus ropes telescoping system  Boom length: 11.83m~45.5m	•
Swing-away	Two-section lattice jib, welded structure.	
jib	Three offset angles of $0^{\circ}$ , $15^{\circ}$ and $30^{\circ}$ . Fixed jib length: $9.5 \text{m} \sim 16 \text{m}$ .	•
Single top	Installed at the boom top, used for single line operation. Its lifting performance is the same as that for boom, but the max. lifting load could not exceed 4.5t.	•

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

**Symbol explanation:** 

——it means the standard configuration;

# 重量 Weight



车桥 Axle	1	1 2		4	总重量 Total weight
t	10	10	13	13	46



τ				
吊钩	倍率	吊钩重量	吊钩尺寸	备注
Hook	Parts of lines	Weight (kg)	Dimensions (mm)	Remarks
80t	13	616	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)	536×298×298	单钩 Single hook , 标配 Standard

### 作业速度 Working speeds

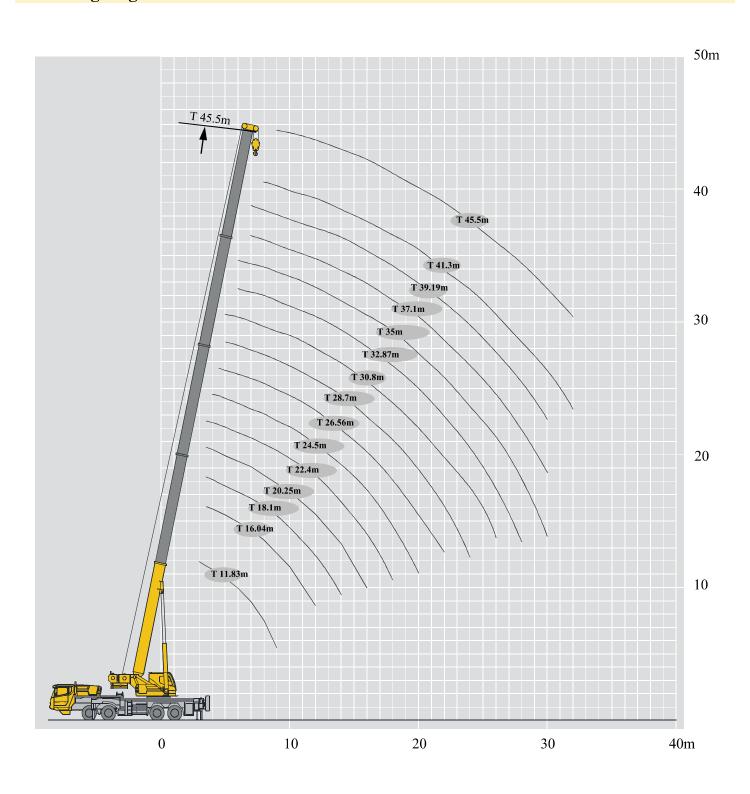


-32-90		
	km/h	
12.00R24	2~50	40%

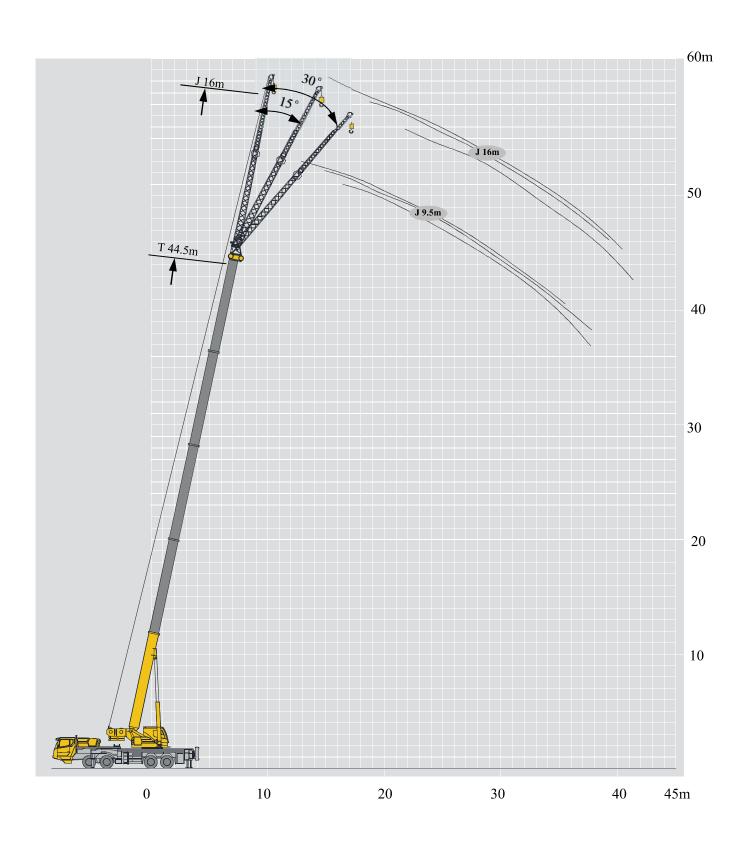


作业机构 Drive	作业速度 Working speed	最大单绳拉力 Max. single line pull	钢丝绳直径/长度 Rope diameter/ length						
	0-145 m/min , 单绳 , 第四层 m/min, single line, 4th layer	6.5t	20 mm/230m						
[2]	m/min , 单绳 , 第四层 m/min, single line, 4th layer	6.5t	20mm/145m						
360*	0-2r/min	· · · · · · · · · · · · · · · · · · ·							
	从-1°抬起至81°约55s Approx. 55s for boom elevation from -1° to 81°								
1/7	从11.83m伸出至45.5m约110s Approx. 110s for boom extension from 11.	4m to 43.5m							





	1	1.83-45.5m	6.545m×	7.9m	360°	5.3t	$\Box$									72W I
A		H ¥	五	<u> </u>	2			ı	ı		ı	ı		ı	ı	A
→ m	11.83	16.04	18.1	20.25	22.4	24.5	26.56	28.7	30.8	32.87	35	37.1	39.19	41.3	45.5	H
3	80															3
3.5	75	55														3.5
4	65	55														4
5	52	50	31	40	30	29.5										5
6	44	42	31	36	30	27.2	30	29.2	19.9	22.5						6
7	36.5	35	30.5	32.5	30	25.1	28	28.3	18.5	21.4	18.4	14.0	15.5			7
8	27.5	27.2	28.8	26.9	29	23.6	25.5	26.5	17.2	19.8	17.4	13.6	15.3	11.6	9.8	8
9	21.7	21.4	23.7	21.1	23	22.4	22.6	24	16.2	18.4	16.4	12.9	14.5	11.6	9.6	9
10		17.4	19.5	17.1	18.9	20.3	18.4	19.7	15.2	17.1	15.6	12.0	13.6	11.5	9.6	10
12		12.1	14.1	11.8	13.5	14.8	13.1	14.2	13.5	13.8	14.0	10.8	12.2	10.7	9.6	12
14			10.6	8.6	10.1	11.3	9.7	10.8	11.8	10.4	11.3	9.6	10.9	9.8	8.9	14
16				6.2	7.8	9	7.4	8.5	9.4	8.1	8.9	8.5	8.5	8.6	8.2	16
18					6.1	7.3	5.7	6.7	7.6	6.4	7.2	7.6	6.8	7.5	7	18
20						5.9	4.4	5.4	6.3	5	5.8	6.5	5.5	6.1	5.8	20
22							3.4	4.4	5.2	4	4.8	5.5	4.4	5.1	4.7	22
24								3.6	4.4	3.2	4	4.6	3.6	4.2	3.9	24
26									3.7	2.5	3.3	3.9	2.9	3.5	3.2	26
28										1.9	2.7	3.3	2.3	3	2.6	28
30											2.2	2.8	1.9	2.5	2.1	30
32												2.4	1.5	2	1.7	32
34														1.7	1.4	34



M	45.5m 9.5m/16m 6.545m×7.9m 5.3t						M
120	9.2m				120		
	0°	15°	30°	0°	15°	30°	
80°	4.5	4	3.2	2.9	2.4	1.3	80°
78°	4.2	3.8	3.2	2.9	2	1.1	78°
75°	4	3.7	3	2.8	1.6	1	75°
72°	3.8	3.5	2.7	2.5	1.4	0.9	72°
70°	3.6	3.2	2.6	2.2	1.2	0.9	70°
65°	2.6	2.4	2.2	1.6	1	0.9	65°
60°	1.7	1.6	1.5	1.2	0.9	0.8	60°
55°	1.2	1.1	1	0.9	0.8	0.7	55°
50°	0.7	0.7	0.7				50°

- 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。
- 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。
- 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。
- 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 to correctly calculate the load weight.
- 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/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 length given in the rated load charts should accord with the telescoping code of boom sections.

常规标识 General symbols						
4	上车 Superstructure		<b>3</b>	底盘 Chassis		
/ t	起重能力 Lifting capacity		₩	车桥 Axle		
1/7	吊臂长度 Boom length		km/h	行驶速度 Driving speed		
	工作幅度 Radius		<b>**</b>	爬坡能力 Grade ability		
	吊臂仰角 Boom angle			轮胎 Tires		
A T	主臂起升高度 Hoist height with boom			支腿 Outriggers		
	固定副臂长度 Fixed jib length		t	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		
360°	使用第五支腿360°全回转 360° operation of the boom with 5th jack down		360°	360°全回转 360° operation of the boom		

## 主要技术参数表

## Table of main technical parameters

类别 Category	项目 Item		单位 Unit	参数 Parameter		
	外形尺寸(长×宽×高) Dimensions(length×width×height)		mm	14085×2800×3770		
	轴距 Wheel base		mm	1470+4500+1350		
尺寸参数	轮距(前/后) Track (Front/ Rear)		mm	2316/2063		
Dimensions	前悬/后悬 Front/ Rear overhang		mm	2375/2700		
	前伸/后伸 Front/ Rear extension		mm	1690/0		
	最大允许总质量 Total vehicle mass in travel configuration		kg	46000		
重量参数		一轴 1st axle	kg	10000		
Weight	轴荷	二轴 2nd axle	kg	10000		
	Axle load	三轴 3rd axle 四轴 4rd axle	kg	13000 13000		
	<del>/</del> ≥=h:		kg		WD615.334	
		发动机型号 Engine model		QSL8.9-C360		
动力参数	额定功率/转速 Rated power/rpm		kW/(r/min)	265/2100	247/2200	
Power		最大净功率/转速 Max. net power/rpm 最大输出扭矩/转速 Max. output torque/rpm		250/2100 1500/1400-1600	245/2200 1350/1100-1600	
	最高车速 Max. travel speed		km/h			
	最低稳定车速 Min. stable 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	≤30.2 (侧置副臂Swing-away jib) ≤30.24 (腹置副臂Under slung jib)		
行驶参数	最 <b>小</b> 离地间隙 Min. ground clearance		mm	305		
Travel	接近角 Approach angle		0	22		
	离去角 Departure angle		o	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		%	≥40		
	百公里油耗 Fuel consumption per 100 km		L	38		
噪音	加速行驶机外噪声 Exterior noise level		dB(A)	≤84		
Noise	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		单位 Unit	参数 Parameter		
	最大额定总起重量 Max. total rated lifting capacity				80
	最小额定工作幅度 Min. rated working radius				3
	转台尾部回转半经	平衡重处 Cour	nterweight	mm	4050
	Turning radius at turntable tail	卷扬处 w	vinch	mm	4190
		基本臂 Base	e boom	kN.m	2587
	最大起重力矩	最长主臂 Fully-ex	tended boom	kN.m	1286
	Max. load moment	最长主臂+ Fully-extended b		kN.m	706
. —	支腿跨距	纵向 Longi	tudinal	m	6.545
主要性能参数 Main	Outrigger span	横向 La	teral	m	7.9
performance		基本臂 Base	boom	m	12.2
	起升高度	最长主臂 Fully-ex		m	46
	Hoist height	最长主臂+ Fully-extended b	poom + Jib	m	60.9
			基本臂 Base boom		11.83
	起重臂长度 Boom length	最长主作 Fully-extende		m	45.5
		最长主臂+ Fully-extended b		m	61.5
	副臂安装角 Jib offset angle				0, 15, 30
	起重臂起臂时间 Boom raising time				≤55
	起重臂全伸时间	s	≤110		
	最大回转返	r/min	≥2		
		水平支腿	收 Retracting	s	≤30
工作速度参数	支腿收放时间 Outrigger extending and	Outrigger beam	放 Extending	S	≤30
Working speed	retracting time	垂直支腿	收 Retracting	S	≤30
		Outrigger jack	放 Extending	S	≤40
	起升速度 (単绳,第四层,空载)	主起升机构	主起升机构 Main winch		≥145
	Hoisting speed (single line, 4th layer, no lo	oad) 副起升机构 A	uxiliary winch	m/min	≥90
 噪声	机外辐射 Exterior noise level			dB ( A )	≤122
Noise	司机位置处 Noise level at seated position			dB ( A )	≤90



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