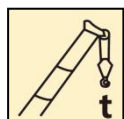


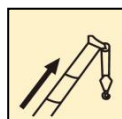
XCT814_1汽车起重机 / Truck Crane

技术规格书

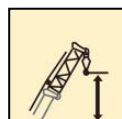
Technical specifications



8.2t



26m



26.5m



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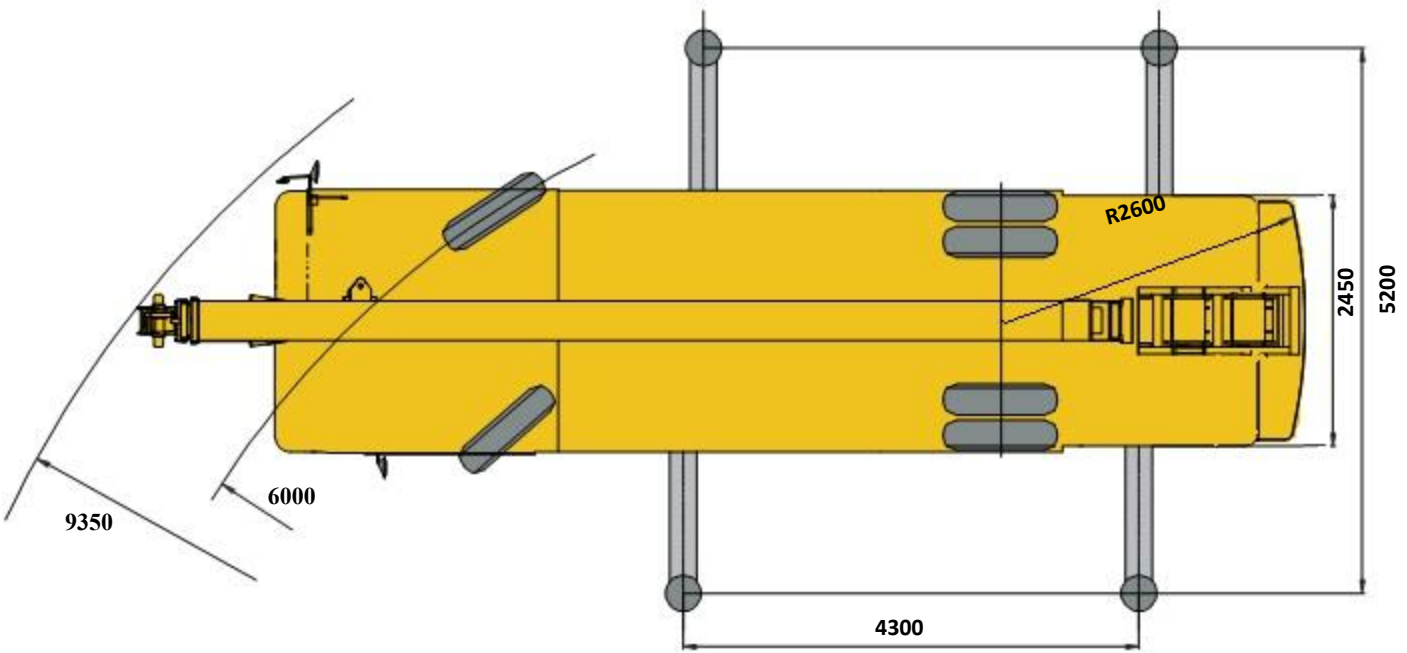
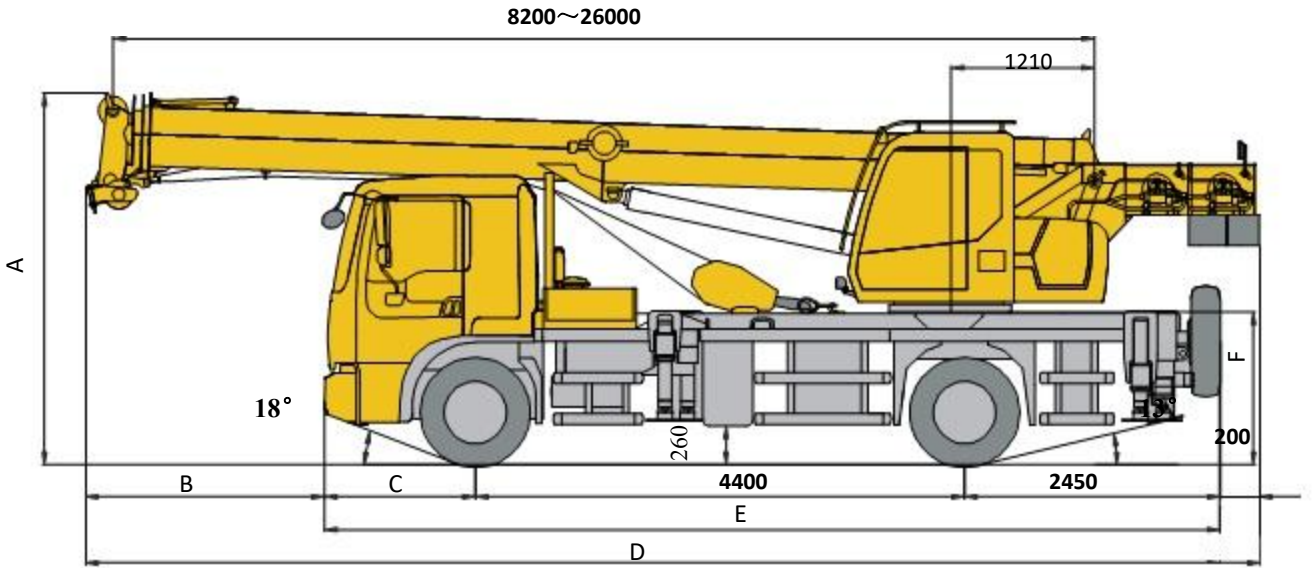
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尺寸参数 Dimensions



	A	B	C	D	E	F
	3250	1470	1300	9820	8150	1259

技术规格

Technical specifications



底盘

副车架	徐工设计、制造，抗扭箱型结构，高强度钢材焊接。支腿箱体位于1桥和2桥之间以及车架后端，具有前后牵引钩。
支腿	H型水平支腿结构，4点支撑，全液压操纵，操纵控制台安装在底盘两侧，控制台装水平仪用于调平起重机。支腿的支脚用球铰装置收存垂直支腿下。支腿设计用于抬起整个起重机身以使起重机在各种工况条件更好地作业。 支脚盘尺寸：直径260mm 最大起重量时支腿反力：140KN
发动机	YC4E140-56，直列4缸4气门水冷电控发动机；玉柴制造，额定功率：103kw/2600rpm，最大基准扭矩：570N.m；国V排放标准；燃油箱容积：160L；尿素箱容积：25L。
	YC4E160-56，直列4缸4气门水冷电控发动机；玉柴制造，额定功率：118kw/2600rpm，最大基准扭矩：670N.m；国V排放标准；燃油箱容积：160L；尿素箱容积：25L。
	YCS04160-68，直列4缸4气门水冷电控发动机；玉柴制造，额定功率：118kw/2300rpm，最大基准扭矩：640N.m；国VI排放标准；燃油箱容积：160L；尿素箱容积：16L。
变速箱	陕齿8JS75TC或8JS85E-C机械式变速箱，手动远距离软轴操纵；8个前进档，2个倒档，工作稳定、可靠。
驾驶室	D912排半平头驾驶室，全新外形造型及仪表内饰，仪表板液晶屏显示。造型上：型面分割协调匀称，特征明显，现代感强。凹凸的型面造型增强驾驶室的层次。犀利的前大灯与进气格栅提升了驾驶室稳重，大气，动感的气质。装备三挡电动刮水器、收音机车窗洗涤器。带冷暖空调。

车桥	2桥底盘，2桥驱动，1桥转向，高强度承载桥，引进国外先进技术设计，名牌厂家制造，性能可靠。 第一桥：单胎，转向不驱动； 第二桥：双胎，驱动不转向；
悬架	前后悬架均采用多片钢板板簧，承载力大，通用性强，维修方便。
轮胎	9.00-20斜胶胎
	9.00R20子午胎（配YC4E160-56）
制动	行车制动：脚踏板操纵的双回路气压制动。第一回路作用于一轴车轮上，第二回路作用于二轴车轮上。 驻车制动：放气制动，作用于二轴上，通过轴上的弹簧储能气室起作用。 辅助制动：发动机排气制动。
转向	1桥机械转向+液压助力
电气系统	24V直流电源，负级搭铁，串联12V蓄电池2个，底盘照明系统按中国道路交通标准，包括前大灯，前后雾灯，倒车灯等；发电机输出电压 $28\pm 0.3V$ ，输出电流70A。

技术规格

Technical specifications



上车

结构	徐工设计、制造，高强度钢材制造。
液压系统	采用定量泵阀控开中心机械操纵式液压系统，起升采用定量马达，最低稳定速度达到100rpm，回转采用低速大扭矩柱塞马达，同时主阀集成并新增自由滑转和回转缓冲功能，阀杆采用复合节流设计微动区间设计微动更精准，回转瞬间系统压力波动小，更平顺；起升采用双泵合流，起升效率高。
操纵方式	机械操纵
主起升机构	由液压马达驱动，内置式行星齿轮减速机和常闭式制动器，双折线卷筒，抗旋转钢丝绳。
副起升机构	由液压马达驱动，内置式行星齿轮减速机和常闭式制动器，双折线卷筒，抗旋转钢丝绳。
回转机构	单排四点接触球外齿式回转支承，由液压马达驱动，内置行星齿轮减速器和常闭式制动器，可连续回转360°，具有动力控制或自由滑转的功能，可无级调速。
变幅机构	单变幅油缸，使用动力式下落的变幅平衡阀。
操纵室	按人机工程学设计，外开式车门，可调式座椅。装有安全玻璃和顶部保护栏。前窗装有遮阳板，风扇。
安全装置	液压平衡阀 液压溢流阀 液压双向锁 力矩限制器 操纵杆弹簧式回中系统 三圈保护器 臂头设置高度限位 自由滑转

配重	固定式平衡重0.6t
起重钩	8t钩 1.5t钩
主臂	伸缩臂采用抗扭曲设计，采用高强度结构钢制造，四节八边形截面主臂，采用单缸绳排伸缩方式。 主臂长度：8.2m ~ 26m
臂端滑轮	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1.5t。

技术规格

Technical specifications




Chassis

Sub-frame	Designed and manufactured by XCMG, anti-torsion box structure, made of imported high strength steel. Outrigger boxes are separately located between 1st and 2nd axles and at the rear of the frame. Front and rear towing eyes are available.
Outriggers	H-type outrigger beam structure with 4-point supported and fully hydraulic controlled. There is an outrigger control panel installed at each side of chassis, with level gauge to level crane. Each outrigger float is stowed under each jack by using a ball joint device. Outriggers are used to jack the whole crane, so as to make the crane work better in various working conditions. Float dimension: diameter 260 mm Reaction force of outrigger at max. lifting load: 140KN
Engine	<p>YC4E140-56, in-line, 4-cylinder, 4-valve, water cooled, electric control diesel engine, made by Yuchai, with rated power of 103kW/2600 rpm , Max.reference torque/rpm: 570 N.m; compliant with China V emission standard; Fuel tank capacity: 160 L; AdBlue tank volume: 25L.</p> <p>YC4E160-56, in-line, 4-cylinder, 4-valve, water cooled, electric control diesel engine, made by Yuchai, with rated power of 118kw/2600 rpm , Max.reference torque/rpm: 670 N.m; compliant with China V emission standard; Fuel tank capacity: 160 L; AdBlue tank volume: 25L.</p> <p>YCS04160-68, in-line, 4-cylinder, 4-valve, water cooled, electric control diesel engine, made by Yuchai, with rated power of 118kw/2300rpm, Max.reference torque/rpm: 640 N.m; compliant with China VI emission standard; Fuel tank capacity: 160 L; AdBlue tank volume: 16L.</p>
Transmission	Mechanical transmission 8JS75TC or 8JS85E-C, made by Shaanxi Fast Gear Co., Ltd., manual flexible shaft control, 8-forward speed and 2-reverse speed, which is reliable and stable.

Driver's cab	D912 half-dimension driver's cab has brand new outline and interior decorations and instrument panel with liquid crystal display. Newly designed cab appearance includes exquisite door handles and step coating, artistic headlamps and air-inlet grille. 3-gear electric wiper, radio and windshield washer are also available. Heater and air conditioner are adopted.
Axles	Two high strength load-bearing axles with reliable performance, axle 2 for driving and axle 1 for steering, made by famous makers through adoption of foreign advanced technology, with reliable performance. 1st axle: single tire, for steering; 2nd axle: double-tire, for driving;
Suspension	The front and rear suspensions all adopt multi-disc leaf springs, with features of large bearing capacity, strong universality and easy maintenance.
Tires	9.00-20 diagonal tires 9.00R20 radial tires (for YC4E160-56)
Braking system	Service braking: foot pedal operated double-circuit air pressure brake. 1st circuit acts on the wheels of 1st axle, 2nd circuit acts on the wheels of 2nd axles; Parking brake: air-release brake, acting on 2nd axle, it works through the spring energy storage air chamber on the axle. Auxiliary brake: engine exhaust brake.
Steering system	1st axle mechanical steering plus hydraulic booster
Electrical system	24V DC, negative ground, 2 batteries of 12V. There is a perfect illuminating system complying with Chinese road traffic standard, including daytime running lamps, front and rear fog lamps and reversing lamp, etc. Generator output voltage is $28 \pm 0.3V$, output electric current is 70A.

技术规格

Technical specifications

	Superstructure
Frame	Designed and manufactured by XCMG, made of high strength steel.
Hydraulic system	Mechanical and valve controlled hydraulic system with fixed displacement pump is adopted. Winch adopts fixed displacement motor with the min. stable speed of 100rpm. Low-speed large torque slewing system is adopted. Main valve also has the function of free swing and slewing buffering. Multi-throttle design is adopted for valve rod with better inching control. Pressure fluctuation of slewing system is flat during the operation and slewing control is smooth. Double-pump confluence technology is applied to the winch system for high lifting efficiency.
Control system	Mechanical control
Main winch	Driven by a hydraulic motor, with built-in planetary gear reducer and constant closed brake fitted. Drum with Lebus-type grooving and rotation-resistant wire rope.
Auxiliary winch	Driven by a hydraulic motor, with built-in planetary gear reducer and constant closed brake fitted. Drum with Lebus-type grooving and rotation-resistant wire rope.
Slewing system	A single-row, four-point contact-ball external slewing bearing is driven by hydraulic motor, with built-in planetary gear reducer and constant-closed brake equipped, and may continuously slew 360°. Power control and free slewing function as well as stepless speed regulation are available.
Luffing system	Single luffing cylinder, the luffing balance valve with power lowering function.
Operator's cab	Operator's cab is designed according to ergonomics with outward-open door and adjustable seat. It is equipped with safe glass and roof protective grille. Windshield is equipped with sun visor and fan.
Safety devices	Hydraulic balance valve
	Hydraulic relief valve
	Double-way hydraulic valve
	Load moment limiter
	Spring centering system for control levers
	Lowering limiter
	Anti-two block at boom head
	Free swing

Counter weight	The weight of the fixed counterweight is 0.6 t.
Hook blocks	8 t hook block
	1.5 t hook block
Boom	Four-section boom with octagonal profile is made of high strength steel, with special anti-deformation design. Single cylinder plus ropes is used to telescope the boom. Boom length: 8.2 m~26 m
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 1.5 t.

车型与选装件

Version and optional equipment

车型	功能描述	选择
标准型	四节主臂26m, 通用底盘	

注释：该产品仅标准型一种车型。

可选装件		选择
上车空调	单冷空调	
	单暖空调	
	冷暖空调	
倒车影像		
液压油散热器		

车型与选装件

Version and optional equipment

Version	Function description	Selection
Standard	Four-section boom of 26 m, general chassis	

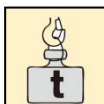
Note: only standard version is available for this model.

Optional equipment		Selection
Superstructure air conditioning and heater	Air conditioning	
	Heater	
	Air conditioning and heater	
Backup camera		
Hydraulic oil cooler		

重量 Weight




车桥 Axle	1	2	总重量 Total weight	备注 Remarks
t	4.3	8.56	13.16	低配底盘 (国五) Low configuration Chassis
t	4.35	9.13	13.48	高配底盘 (国五) High configuration Chassis
t	4.3	8.9	13.2	国六








吊钩 Hook	倍率 No. of lines	吊钩重量 Weight (kg)	吊钩尺寸 Dimensions (mm)	备注 Remarks
8 t	6	99	926×380×234	单钩 Single hook
1.5 t	1	34.5	476×200×200	单钩 Single hook

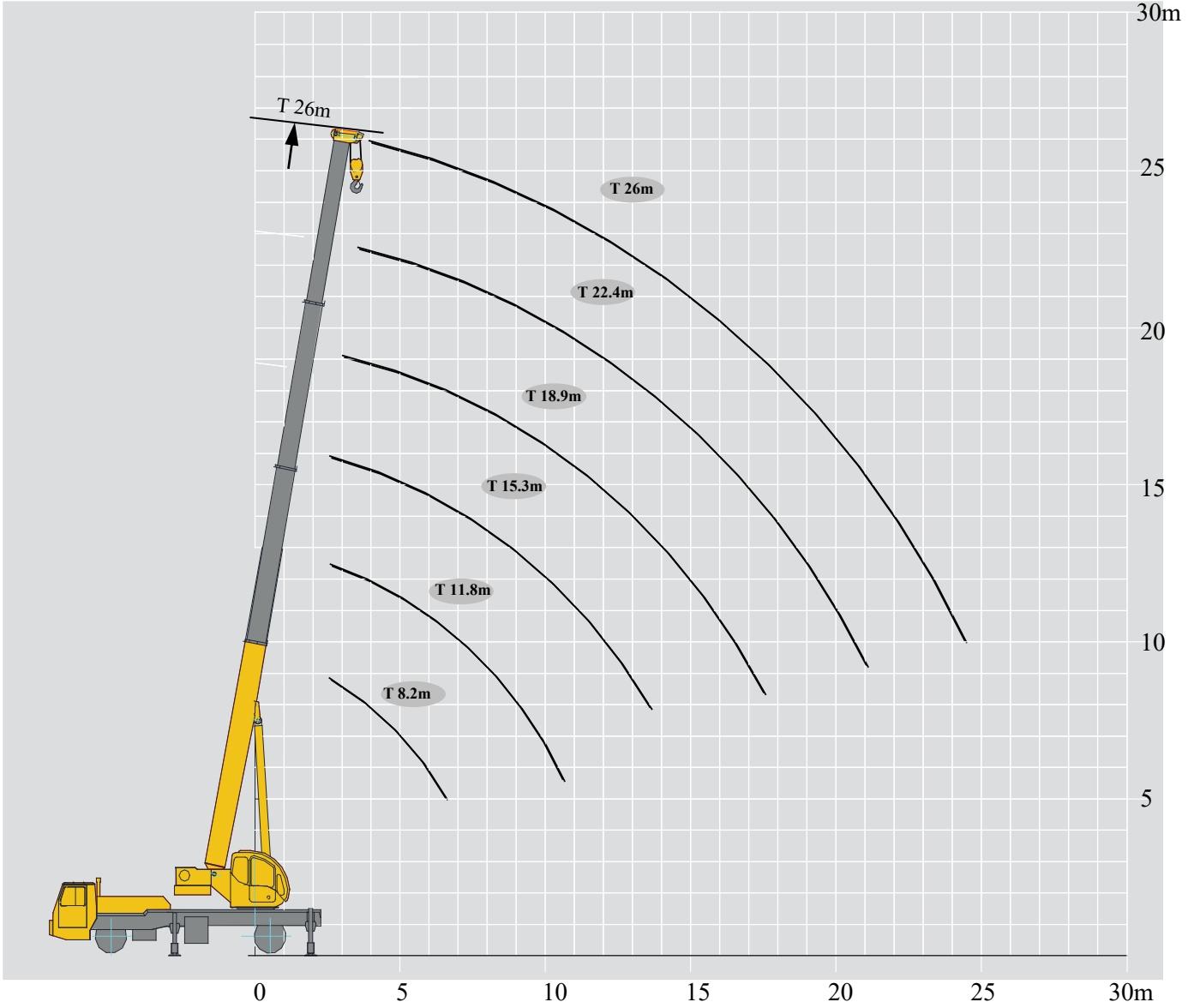
作业速度 Working speeds



	(km/h)	
东风底盘 Dongfeng chassis	国五 (China V) 2 ~ 90 国六 (China VI) 2 ~ 88	YC4E140-56/YCS04160-68底盘: ≥35%; YC4E160-56底盘: ≥44%



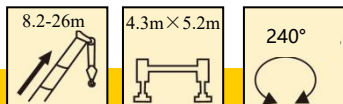
作业机构 Drive	作业速度 Working speed	最大单绳拉力 Max. single line pull	钢丝绳直径/长度 Rope diameter/ length
	0-130 m/min, 单绳, 第四层 m/min, single line, 4th layer	17.88 kN	10 mm/115 m
	0-130 m/min, 单绳, 第四层 m/min, single line, 4th layer	17.88 kN	10 mm/60 m
	0-3.0 r/min		
	从-2°抬起至78°约28s Approx. 28s for boom elevation from -2° to 78°		
	从8m伸出至26m约40s Approx. 40s for boom extension from 8 m to 26 m		



起重性能表

Lifting capacities

T 8.2~26m









	8.2m	11.8 m	15.3 m	18.9 m	22.4 m	26 m	
3	8						3
3.5	8	6.5					3.5
4	8	6.5	6.3				4
4.5	7.2	6.5	6	6			4.5
5	6.3	6.3	6	5.6	4.6		5
5.5	5.5	5.7	5.3	5.2	4.2	3.7	5.5
6	5	5.1	4.8	5	4.1	3.5	6
6.5		4.6	4.3	4.5	3.8	3.3	6.5
7		4.2	3.5	4.3	3.6	3.1	7
7.5		3.8	3.4	4	3.4	2.8	7.5
8		3.2	3	3.3	3.2	2.7	8
9		2.5	2.6	2.6	2.7	2.4	9
10			2.1	2.2	2.2	2.2	10
11			1.7	1.7	1.8	1.8	11
12			1.5	1.5	1.6	1.6	12
13				1.2	1.4	1.3	13
14				1.1	1.2	1.2	14
15				0.9	1	1	15
16					0.9	0.9	16
17					0.7	0.8	17
18					0.6	0.7	18
19						0.6	19
20						0.5	20
21						0.3	21
组合	0%	20%	40%	60%	80%	100%	组合

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 Grade ability
	吊臂仰角 Boom angle		轮胎 Tires
	主臂起升高度 Hoist height with boom		支腿 Outriggers
	吊钩 Hook block		
	卷扬 Winch		
	240°回转 (侧后方作业) 240° operation of the boom (over side or over rear operation)		

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	9820×2450×3250		
	轴距 Wheel base	mm	4400		
	轮距 (前/后) Track (Front/ Rear)	mm	1810/1800或 or 1940/1820 (国五) 1815/1800 (国六)		
	前悬/后悬 Front/ Rear overhang	mm	1300/2450		
	前伸/后伸 Front/ Rear extension	mm	1470/200		
重量参数 Weight	最大允许总质量 Total vehicle mass in travel configuration	kg	YC4E140-56底盘: 13160; YC4E160-56底盘: 13480; YCS04160-68底盘: 13200;		
	轴荷 Axle load	一轴 1st axle	kg	YC4E140-56/YCS04160-68底盘Chassis: 4300; YC4E160-56底盘Chassis: 4350	
		二轴 2nd axle	kg	YC4E140-56底盘: 8860; YC4E160-56底盘: 9130 YCS04160-68底盘: 8900;	
动力参数 Power	发动机型号 Engine model	—	YC4E140-56	YC4E160-56	YCS04160-68
	额定功率/转速 Engine rated power/rpm	kW/(r/min)	103/2600	118/2600	118/2300
	最大净功率/转速 Max. net power/rpm	kW/(r/min)	100/2600	113/2600	114/2300
	最大扭矩/转速 Max. torque/rpm	N.m/(r/min)	500/1300-1600	600/1300~1600	550/1200~1900
行驶参数 Travel	最高车速 Max. travel speed	km/h	国五 (China V) ≥90 国六 (China VI) ≥88		
	最低稳定车速 Min. travel speed	km/h	2~3		
	最小转弯直径 Min. turning diameter	m	≤16		
	臂头最小转弯直径 Min. turning diameter at boom tip	m	≤18.7		
	最小离地间隙 Min. ground clearance	mm	260		
	接近角 Approach angle	°	18		
	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	%	YC4E140-56/YCS04160-68底盘: ≥35; YC4E160-56底盘: ≥44		
	百公里油耗 Fuel consumption per 100 km	L	YC4E140-56/YCS04160-68底盘: 18 YC4E160-56底盘: 19		
噪音 Noise	加速行驶机外噪声 Exterior noise level	dB(A)	≤83		
	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	8	
	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	平衡重处 Counterweight	mm	2300	
	最大起重力矩 Max. load moment	基本臂 Base boom		kN.m	318
		最长主臂 Fully-extended boom		kN.m	215
	支腿跨距 Outrigger span	纵向 Longitudinal		m	4.3
		横向 Lateral		m	5.2
	起升高度 Hoist height	基本臂 Base boom		m	8.8
		最长主臂 Fully-extended boom		m	27
	起重臂长度 Boom length	基本臂 Base boom		m	8
最长主臂 Fully-extended boom		m	26		
工作速度参数 Working speed	起重臂起臂时间 Boom raising time		s	≤28	
	起重臂全伸时间 Boom fully extending time		s	≤40	
	最大回转速度 Max. slewing speed		r/min	≥3.0	
	支腿收放时间 Outrigger extending and retracting time	水平支腿 Outrigger beam	收 Retracting	s	≤18
			放 Extending	s	≤18
		垂直支腿 Outrigger jack	收 Retracting	s	≤18
			放 Extending	s	≤18
	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	≥130
副起升机构 Auxiliary winch		m/min	≥130		
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	

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).