



# RT25

## 越野轮胎起重机 Rough Terrain Crane



25t×3m



31m



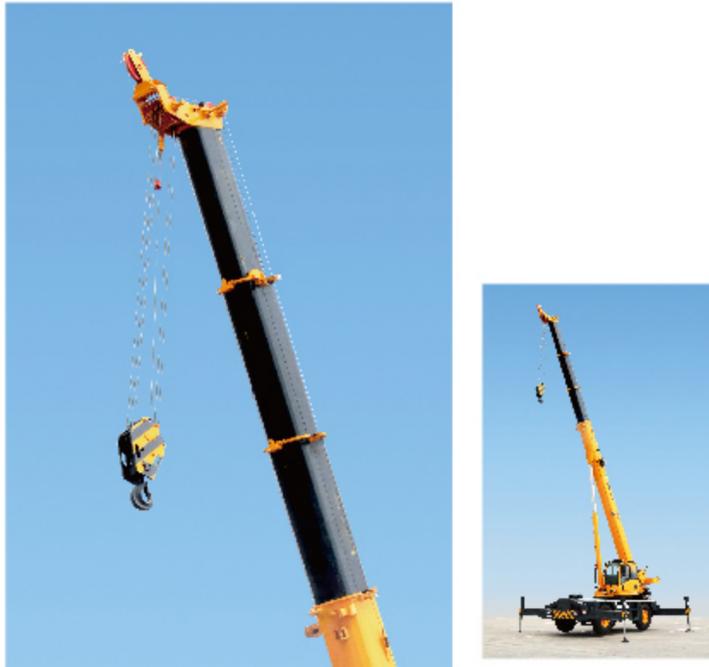
8.15m



## 主臂 Main Boom

四节主臂，臂长9.7m-31m。  
单缸绳排伸缩机构，同步伸缩。

four-section. 9.7 m-31m long .  
Single-cylinder plus ropes telescoping mechanism is for synchronous telescoping.



## 副臂 Jib

一节侧置副臂，臂长8.15m。  
副臂安装角分别为0°、15°、30°。

One section 8.15m long .  
Stows alongside base boom section.  
three offset angles of 0° , 15° and 30°

## 回转 Swing

回转机构采用液压马达驱动，内置行星齿轮减速，内置常闭式制动器。回转速度可无级调速。  
回转支承采用单排四点接触球式，可360°连续全回转，滚柱轨道密封，可防水防尘。

Slewing system is driven by a hydraulic motor, with built-in planetary gear reducer and normally closed brake fitted. Slewing speed may be regulated infinitely.  
Single-row four-point ball contact slewing ring, it can slew 360° continuously, roller raceway seal is water proof and dust proof.

## 卷扬 Winch

液压马达驱动，内置行星齿轮减速机和常闭式制动器，配置抗扭转钢丝绳，主、副起升机构单独运转。  
主卷钢丝绳单绳拉力30.4KN，绳长160m；副卷钢丝绳单绳拉力30.4KN，绳长95m。

Driven by a hydraulic motor, with build-in planetary gear reducer, normally closed brake and anti-winding wire rope equipped. Main and auxiliary hoist systems can be operated separately.

Main hoist system: single line pull is 30.4KN and rope length is 160m.

Auxiliary hoist system: single line pull is 30.4KN and rope length is 95m.

## 变幅系统 Elevating system

1根装有平衡阀的双作用油缸，吊臂变幅角度-1.5°~80°。

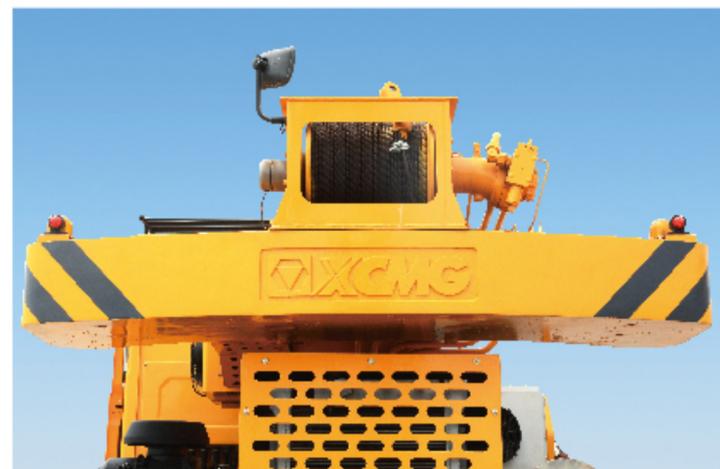
One double-acting oil cylinder with a balance valve equipped.

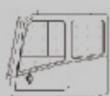
Elevating angle: -1.5° ~ 80° .

## 配重 Counterweight

3.4t固定式配重。

Fixed counterweight, 3.4t.





## 司机室 Cab

驾驶室、操纵室一体化设计，外观简洁、动感。全天候大圆弧玻璃，视角开阔；人机工程设计的内部空间，宽敞舒适。配置冷暖空调。

Cab of integrated design is simple and artistic. It is all-weather and streamlined and has a wide field of view, as well as spacious and comfortable due to ergonomic inner design. Air conditioner and heater are equipped in the cab.



## 吊钩 Hook

25t钩，5组滑轮，299kg  
2.8t钩，58 kg

25t hook, 5 Sheave block, 299kg.  
2.8t hook, 58kg.



## 液压系统 Hydraulic System

起重作业部分采用液压先导操纵系统，操纵手柄移动的角度、主操纵阀的阀芯开口位移与先导输入压力成正比，主操纵阀的阀芯位移与马达、油缸等执行元件的运动速度也成正比，整机具有良好的微动性。  
液压油箱容量：约430升。

Hydraulic pilot control system is adopted in lifting operation, the moving angle of the pilot valve handle is directly proportional to the input pressure, the input pressure of the pilot valve is directly proportional to the

valve spindle displacement of main control valve, and the valve spindle displacement of main control valve is directly proportional to the moving speed of actuator such as motor and oil cylinder. Thus fine inching control is available in the whole machine.

Oil tank capacity: about 430L



## 电气系统 Electric System

电气系统采用24V DC，2个蓄电池，负极搭铁。照明系统配置有前大灯、雾灯、倒车灯及转向灯等。

24V DC from 2 batteries, with negative ground.  
Illumination includes head lamp, fog lamp, reversing lamp and steering lamp, etc.



## 发动机 Engine

东风康明斯发动机，直列六缸、水冷却、增加中冷、压燃式柴油发动机

功率：142kW/2200r/min

排放标准：欧洲非道路 Stage III A

Developed by Dongfeng Cummins.  
six-cylinder, in line, water cooled, supercharging intercooler, compression ignition diesel engine.  
Power: 142kW/2200r/min.  
Off-road Eu Stage III A standard.



## 变速箱 Transmission

德国ZF专为越野轮胎起重机开发的变速箱，具有6个前进档和3个倒退档，手自一体，两种操作模式。

Developed by German ZF for RT Crane.  
6-Speeds forward and 3-Speeds reverse.  
Two operation modes :automatic, manual.

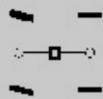


## 车桥及悬架 Axle and Suspension

徐州美驰专为越野轮胎起重机开发的车桥。前后桥均为转向驱动桥，承载能力大，可靠性高，维护方便。  
前后桥均为板簧加液压油缸的悬挂形式。行驶时板簧实现

减振功能，缓冲路面冲击，油缸随车桥一起运动；轮胎工况时可将前后桥悬挂油缸切换至刚性状态，满足刚性支承需要。

Developed by Xuzhou Meritor for RT Crane.  
Both front axle and rear axle are driven, they have heavy load-bearing capacity and high reliability, and are easy to maintain.  
Both front axle and rear axle are consist of plate spring and hydraulic cylinder. When the vehicle travels, The plate spring has the function of attenuating vibration, The cylinder is along with the axle motion. When the vehicle lifts weight on rubber, All cylinders are locked and the suspension state is rigid ,so as to satisfy the application.



## 转向 Steer

并联式全液压多模式转向系统，具有前桥独立转向、小转弯转向、蟹行转向和后桥独立转向功能。  
最小转弯半径：5m。

Paralleled full hydraulic multi-mode steering makes independent front axle steering mode, small turning radius mode, crab walk mode and independent rear axle steering mode available.  
Min. turning radius: 5m.



## 制动 Brake

行车制动：采用双回路全液压盘式制动，作用于所有车轮；  
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。

Service brake: double-circuit full-hydraulic disc brake, acting on all wheels.  
Parking brake: spring-loaded brake, hydraulic-released independent disc brake, acting on front axles.



## 轮胎 Tire

14.00R25的子午线轮胎，承载能力大，专用的越野花纹轮胎，适合越野轮胎起重机的各种使用工况要求。

14.00R25 radial ply tire, heavy load-bearing capacity, with specialized off-road tire patterns, compliant with the working condition requirements of rough terrain crane.



## 支腿 Outrigger System

四组独立的水平支腿、垂直支腿，可在司机室内独立控制。  
支腿跨距：  
纵向：6.3m；  
横向（全伸/半伸）：6.3m/4.8m。

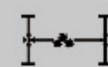
Four independent horizontal beams and vertical jacks with integral holding valves, each independently controlled from cab.  
Outrigger span:  
Longitudinal: 6.3m;  
Lateral(fully/half extended): 6.3m/4.8m.



## 力矩限制器 Load Moment Limiter

赫思曼力限器系统，采用先进的微处理器技术，其功耗小、功能强、灵敏度高、操作简便。大屏幕的液晶显示器，以中文和图形方式显示力矩百分比、实际起重量、额定起重量、幅度、吊臂长度、角度、最大起升高度、工况代码、倍率、限制角度、信息代码等起重作业参数。具有完整的预先报警、超载停止作业功能，同时还具有超载记忆功能（黑匣子）和故障自诊断功能。

Hirschman Load moment limiter system with advanced micro-processing technology employed, has features of less power consumption, powerful function and high sensitivity, and is easy to operate. LCD with large screen will show the lifting operation data, such as moment percentage, actual lifting capacity, rated lifting capacity, working radius, boom length, boom angle, max. lifting height, working condition code, parts of line, limited angle, information code, etc. by means of Chinese and graphical symbol. It has complete forewarning and overloading cutout function, as well as overloading memory (black box) and fault self-diagnosis function.



## 选装配置 Optional configuration

腹置副臂，臂长13m，三种安装角度，分别为5°、20°、40°，同时配有20t（195kg）+2.8t（71kg）吊钩。

20t hook (195kg) +2.8t hook (71kg) +13m long jib, stowed under boom, three offset angles of 5°, 20°, 40°.

**行驶状态主要技术参数表 Main technical data in travel configuration**

类别 Category	项目 Item		参数 Parameter	允差范围 Allowance
尺寸参数 Dimension	整机全长 Overall length		mm 11703	± 1%
	整机全宽 Overall width		mm 2700	- 1% ~ 0
	整机全高 Overall height		mm 3385	- 1% ~ 0
	轴距 Wheel base		mm 3700	± 1%
	轮距 ( 前/后 ) Track (front/rear)		mm 2200	± 1%
	前悬/后悬 Front/rear overhang		mm 1601/1867	± 1%
	前伸/后伸 Front/rear extension		mm 4484/51	± 1%
重量参数 Weight	行驶状态总质量 ( 包括选配部件 ) Total mass ( including optional parts )		kg 26300	± 3%
	轴荷 Axle load	一轴 Front Axle	kg 12696	± 3%
		二轴 Rear Axle	kg 13604	± 3%
动力参数 Power	最高行驶速度 Max. travel speed		km/h 50	≥
	最小转弯半径 Min. turning radius		m 5 ( 四轮 ), 8 ( 两轮 ) 5(4 wheels), 8 (2 wheels)	± 3%
	最小离地间隙 Min. ground clearance		mm 345	± 1%
	接近角 Approach angle		° 22	± 1°
	离去角 Departure angle		° 19	± 1°
	制动距离 ( 制动初速度为 24km/h ) Braking distance (24 km/h)		m 9	≤
	最大爬坡能力 Max. grade-ability		% 55	≥
尺寸参数 Dimension	发动机型号 Engine model		QSB6.7-C190	/
	发动机额定功率 Rated engine power		kW 142	/
	发动机额定转速 Engine rated rotation speed		r/min 2200	/
	发动机排放标准 Engine emission standard		— Off-road, Eu Stage III A	/
	驱动型式 Driving type		— 4 × 2, 4 × 4	/
	轮胎规格 Tire specifications		— 14.00R25	/
	轮胎数量 Number of tires		— 4	/

起重作业状态主要技术参数表 Main technical data for lifting operation						
类别 Category	项目 Item		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. 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 (平衡重) Slewing radius at turntable tail (at counterweight)		mm	3698	±1%	
	最大起重力矩 Max. load moment	基本臂 Base boom	kN·m	989.8	±5%	
		最长主臂 Fully-extended boom	kN·m	588	±5%	
	支腿跨距 Outrigger span	纵向 Longitudinal	m	6.3	±1%	
		横向 (全伸/半伸) Lateral (fully/half extended)	m	6.3/4.8	±1%	
	起升高度 Lifting height	基本臂 Base boom	m	9.1	±1%	
		最长主臂 Fully-extended boom	m	30.8	±1%	
		最长主臂+副臂 Fully-extended boom + Jib	m	37.7	±1%	
	起重臂长度 Boom length	基本臂 Base boom	m	9.7	±1%	
		最长主臂 Fully-extended boom	m	31	±1%	
		最长主臂+副臂 Fully-extended boom + Jib	m	39.15	±1%	
副臂安装角 Jib offset angle		°	0、15、30	±1%		
作业速度 Working speed	主臂起臂时间 Time for boom raising		s	55	≤	
	主臂全伸时间 Time for boom extending fully		s	70	≤	
	最大回转速度 Max. slewing speed		r/min	2.0	≥	
	支腿收放时间 Outrigger extending/ retracting time	水平支腿 Outrigger beam	同时放 Simultaneously extending	s	35	≤
			同时收 Simultaneously retracting	s	30	≤
		垂直支腿 Outrigger jack	同时放 Simultaneously extending	s	45	≤
			同时收 Simultaneously retracting	s	35	≤
	起升速度(空载四层) Hoisting speed (at 4th layer, no load)	主起升机构 Main winch		m/min	130	≥
副起升机构 Auxiliary winch		m/min	130	≥		

## 起重性能表 Load charts

 9.7-31m

 6.3m

 360°

 3.4t

R/L	9.7	14	18.2	22.5	26.7	31
3.0	25					
3.5	25	19.5				
4.0	24	19.5	16			
4.5	22.2	18.5	16	12.8		
5.0	20.2	17.5	16	12.8	9	
5.5	18.2	17.5	15.2	12	8	7.5
6.0	16.5	16.6	14.3	11.5	8	7.5
7.0	13.8	13.7	12.5	10.5	8	7.2
8.0		11	11	9.5	7.5	7
9.0		9	9.3	8.5	7.1	6.5
10		7.5	7.8	7.5	6.5	5.9
12			5.6	5.8	5.6	5
14			4.2	4.4	4.5	4.2
16				3.5	3.6	3.7
18				2.8	2.8	2.8
20				2.2	2.3	2.3
22					1.8	1.9
24					1.5	1.5
26						1.2
28						1
倍率 Parts of line	10	8	6	5	4	3
吊钩 (重量) Hook capacity (weight)	25t ( 299kg )					
最大仰角 Max. boom angle (° )	61	69	73.1	75.7	77.5	78.9
最小仰角 Min. boom angle (° )	20.4	31.7	29.8	10	13.5	15.4
2节臂 2nd section	0	20%	40%	60%	80%	100%
3节臂 3rd section	0	20%	40%	60%	80%	100%
4节臂 4nd section	0	20%	40%	60%	80%	100%

## 起重性能表 Load charts



9.7-31m



4.8m



360°



3.4t

R/L	9.7	14	18.2	22.5	26.7	31
3.0	25					
3.5	25	19.5				
4.0	24	19.5	16			
4.5	22.2	18.5	16	12.8		
5.0	18	17.5	16	12.8	9	
5.5	14.7	15.5	15.2	12	8	7.5
6.0	12.4	13.1	13.4	11.5	8	7.5
7.0	9.1	9.8	10.1	10.3	8	7.2
8.0		7.7	8	8.2	7.5	7
9.0		6.2	6.5	6.7	6.8	6.5
10		5.2	5.4	5.6	5.7	5.8
12			3.9	4.1	4.2	4.3
14			2.9	3.1	3.2	3.3
16				2.4	2.5	2.6
18				1.9	2	2
20				1.5	1.6	1.6
22					1.2	1.3
24					1	1.1
26						0.8
倍率 Parts of line	10	8	6	5	4	3
吊钩 (重量) Hook capacity (weight)	25t ( 299kg )					
最大仰角 Max. boom angle (° )	61	69	73.1	75.7	77.5	78.9
最小仰角 Min. boom angle (° )	20.4	31.7	29.8	10	13.5	27.5
2节臂 2nd section	0	20%	40%	60%	80%	100%
3节臂 3rd section	0	20%	40%	60%	80%	100%
4节臂 4nd section	0	20%	40%	60%	80%	100%

## 起重性能表 Load charts

 9.7-31m

 不行驶 stationary

 360°

 3.4t

R/L	9.7	14	18.2	22.5
3.0	10.8			
3.5	9.4	9.8		
4.0	8.2	8.6	8.8	
4.5	6.8	7.3	7.9	7.7
5.0	5.6	6.1	6.4	6.6
5.5	4.8	5.2	5.5	5.6
6.0	4.1	4.5	4.8	4.9
7.0	3	3.5	3.7	3.8
8.0		2.7	2.9	3.1
9.0		2.1	2.3	2.5
10		1.7	1.9	2
12			1.3	1.4
14			0.8	0.9
倍率 Parts of line	4	4	4	3
吊钩 (重量) Hook capacity (weight)	25t ( 299kg )			
最大仰角 Max. boom angle (° )	61	69	73.1	75.7
最小仰角 Min.boom angle (° )	20.4	31.7	29.8	46.8
2节臂 2nd section	0	20%	40%	60%
3节臂 3nd section	0	20%	40%	60%
4节臂 4nd section	0	20%	40%	60%

## 起重性能表 Load charts

 9.7-31m

 2km/h

 吊臂在正前方 boom over front

 3.4t

R/L	9.7	14	18.2	22.5
3.0	8.9			
3.5	7.7	8.1		
4.0	6.6	7.1	7.3	
4.5	5.8	6.2	6.5	6.6
5.0	5	5.5	5.7	5.9
5.5	4.2	4.7	4.9	5
6.0	3.6	4	4.2	4.4
7.0	2.7	3.1	3.3	3.4
8.0		2.4	2.6	2.7
9.0		1.9	2.1	2.2
10		1.5	1.7	1.8
12			1.1	1.2
14			0.7	0.8
倍率 Parts of line	4	3	3	3
吊钩 (重量) Hook capacity (weight)	25t ( 299kg )			
最大仰角 Max. boom angle ( ° )	61	69	73.1	75.7
最小仰角 Min.boom angle ( ° )	20.4	31.7	29.8	46.8
2节臂 2nd section	0	20%	40%	60%
3节臂 3nd section	0	20%	40%	60%
4节臂 4nd section	0	20%	40%	60%

## 起重性能表 Load charts



工作幅度 Working radius	副臂安装角 Jib offset angle					
	0°		15°		30°	
	起重量 Lifting load	起升高度 Lifting height	起重量 Lifting load	起升高度 Lifting height	起重量 Lifting load	起升高度 Lifting height
8.0	2.7	37.7				
10	2.5	37.1	2.0	37		
12	2.4	36.4	1.7	36.2	1.1	35.7
14	2.3	35.5	1.5	35.4	1.0	34.8
16	2.0	34.5	1.5	34.4	1.0	33.8
18	1.9	33.4	1.4	33.2	0.9	32.6
20	1.7	32.1	1.2	31.9	0.9	31.3
22	1.6	30.6	1.2	30.4	0.8	29.7
24	1.4	28.9	1.1	28.7	0.8	28
26	1.0	26.9	0.9	26.7	0.8	25.9
吊钩 (重量) Hook capacity (weight)	2.8t ( 58kg)					

## 说明 Notes

警告：本载荷表仅供参考，下面的注释仅仅是简单的说明，不能直接用于操作起重机的依据。在操作起重机之前，必须熟读起重机的起重性能表、操作手册和其它说明。

Warning: THIS CHART IS ONLY A GUIDE. The Notes below are for illustration only and should not be relied upon to operate the crane. The individual crane's load chart, operating instructions and other instruction plates must be read and understood prior to operating the crane.

1.表中给出的起重量包括吊钩、索具、其他辅助装置的重  
量、载荷搬运设备以及载物重量之和。当使用的钢  
丝绳倍率大于性能表中要求的最小需求倍率时，额外  
的钢丝绳重量也要考虑到起重载荷中。

Capacities given include the weight of hookblocks, slings, auxiliary lifting equipment, load handling devices and load weight. When more than minimum required reeving of load charts is used, the additional rope weight shall be considered part of the load.

2.表中的起重量值，都针对在坚固、平整的地面上操作  
的起重机。为获得更大的支承面，可在轮胎或支脚盘下  
方铺设垫板。

All capacities are for crane on firm, level surface. It may be necessary to have structural supports under the outrigger flats or tyres to spread the load to a larger bearing surface.

3.当主臂臂长或幅度在表中所列值的范围之间时，应使用  
下一个较大半径或较长主臂长度所列出的最小起重量。

When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.

4.对于使用支腿工况，在起臂或吊重作业前，应按照性能  
表要求将支腿伸出且使轮胎离地。

For outrigger operation, ALL outriggers shall be fully extended according to the requirements of the load charts with tires raised free of ground before raising the boom or lifting loads.

5.对于使用轮胎工况，轮胎气压应达到规定值。

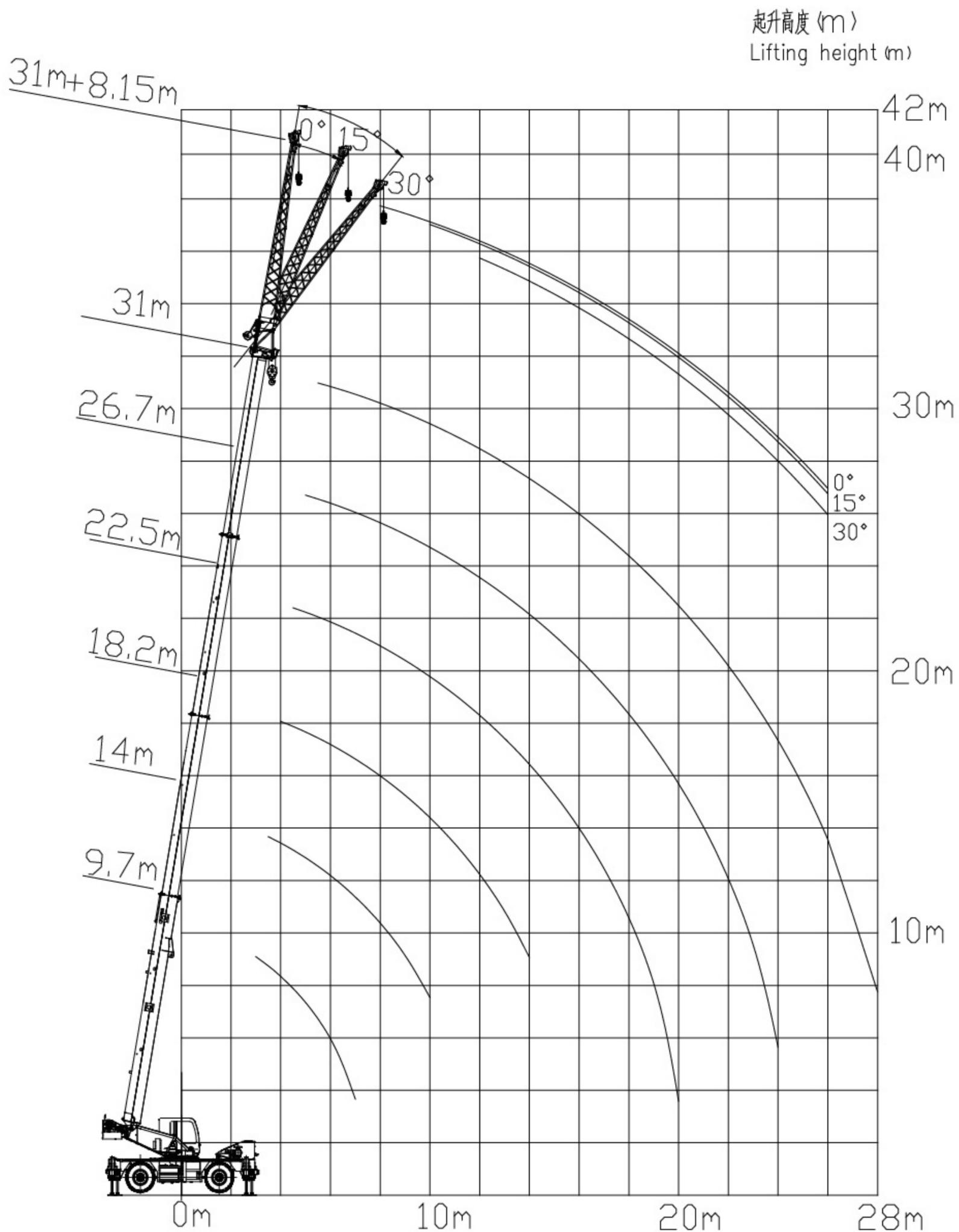
Tyres shall be inflated to the recommended pressure before lifting on rubber.

6.对于副臂处于作业状态而使用主臂吊重时，主臂的额定  
起重量至少要减去600kg。

For jib operation, The rated capacities of the main boom should be reduce at least 600kg when lifting loads with main boom.

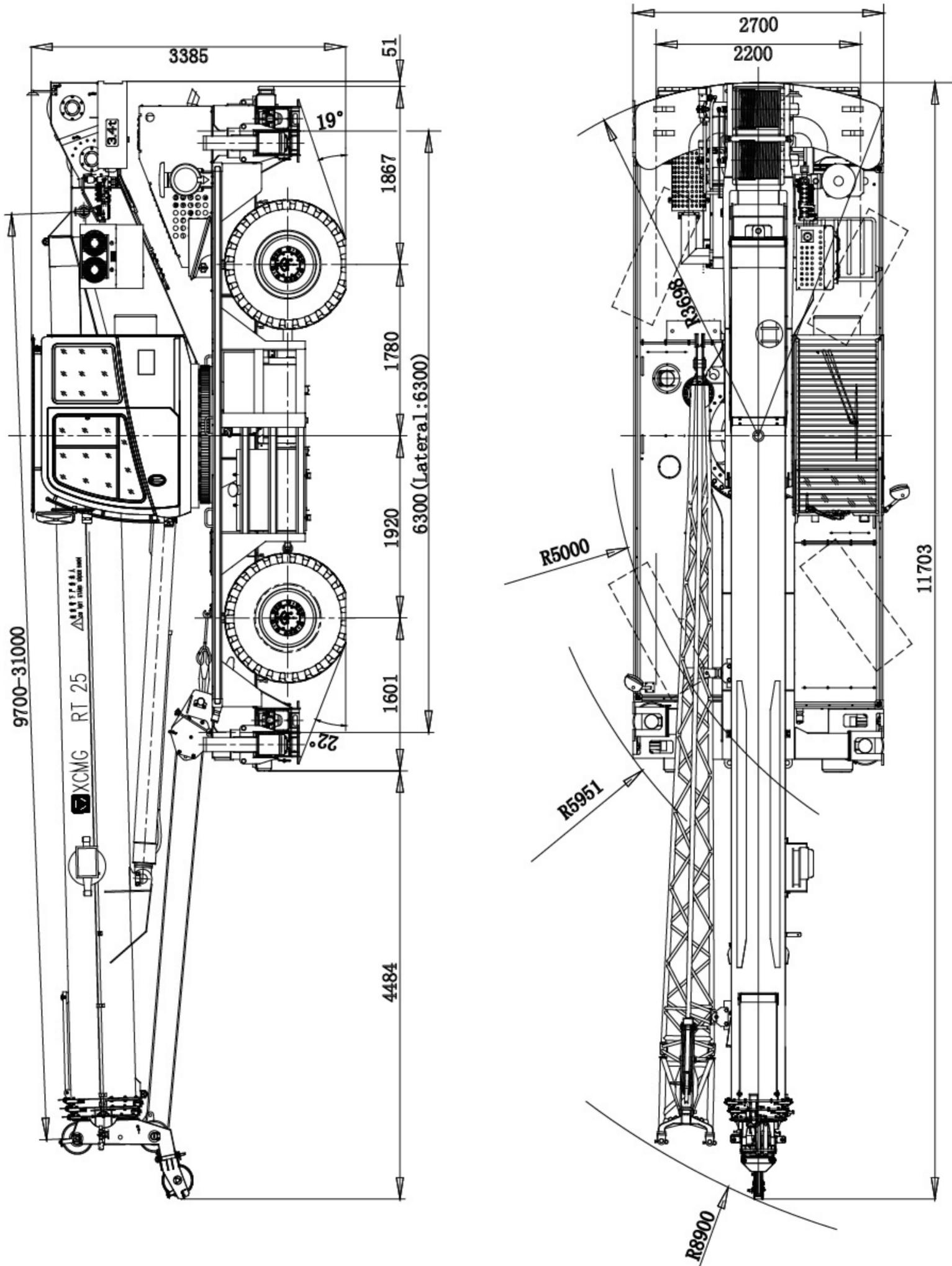


作业范围图 Working range diagram



工作半径 (m)  
Working radius (m)

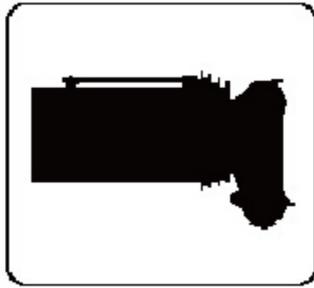
外形尺寸图 ( 遵从技术改进 ) Dimensions (Subject to technology improvement)



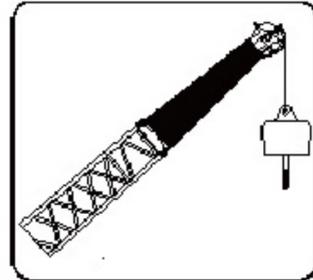
注：尺寸单位为mm，俯视图为四轮转向行驶状态。

Note: Reference dimensions in mm. Vertical view of crane in travel configuration with four-wheel steering.

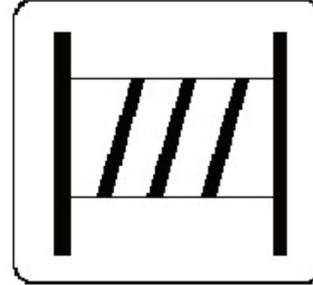
标识 Symbols



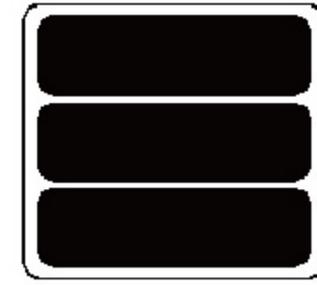
主臂  
Boom



副臂  
Jib



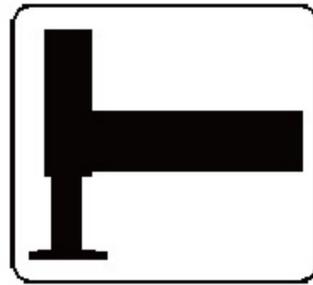
卷扬  
Winches



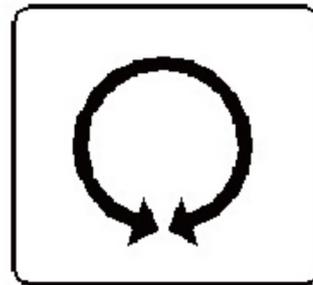
配重  
Counterweight



吊钩  
Hook



支腿  
Outrigger System



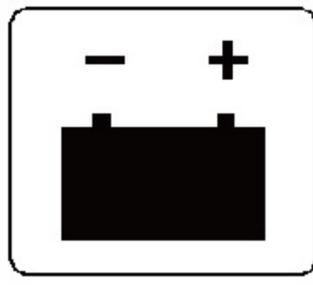
回转  
Swing



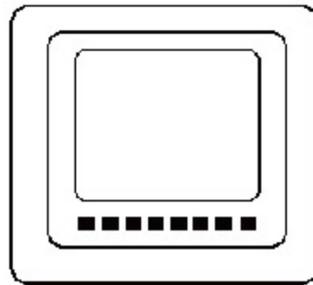
变幅系统  
Elevating System



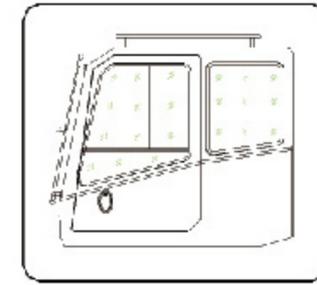
液压系统  
Hydraulic System



电气系统  
Electric System



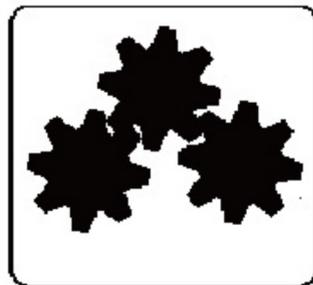
力矩限制器  
Load Moment Limiter



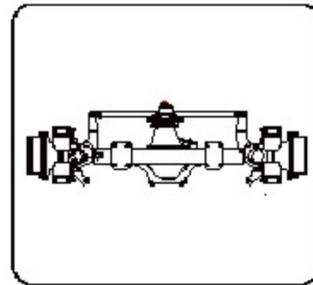
司机室系统  
Cab



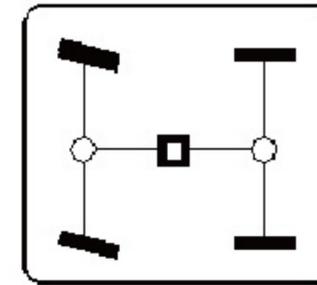
发动机  
Engine



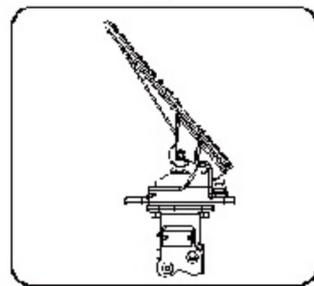
变速箱  
Transmission



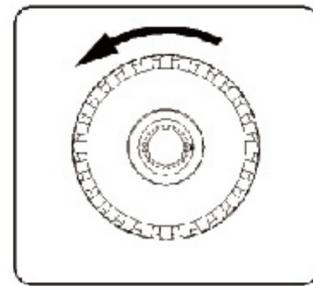
车桥及悬架  
Axle and Suspension



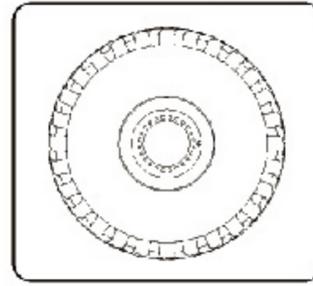
转向  
Steer



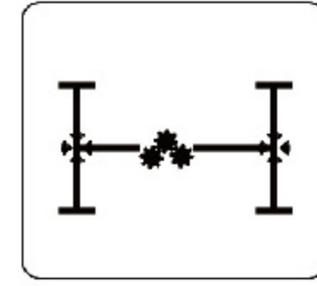
制动  
Brake



轮胎 (行走状态)  
Tire(travel)



轮胎 (静止状态)  
Tire(stationary)



选装配置  
Optional Configuration

For more information on XCMG products, dealer services,  
and industry solutions, visit us on the web at [www.xcmg.com](http://www.xcmg.com)

May 28, 2015  
All Rights Reserved

Materials and specifications are subject to change without notice.  
Featured machines in photos may include additional equipment.  
See your XCMG dealer for available options.

apply to all similar docs: XCMG, WWW.XCMG.COM, their respective logos, "XCMG For Your Success",  
as well as the corporate and product identity used herein,  
are trademarks of XCMG and may not be used without permission.



**Please contact with our district agent:**

**Materials and specifications are subject to change with out notice.**