


## SPECIFICATION



 55t

 45m

 62m

# SRC500T

SANY ROUGH TERRAIN CRANE

QUALITY CHANGES THE WORLD

[crane.sanyglobal.com](http://crane.sanyglobal.com)



It is one of the core business units in SANY Group, specializing in the development and manufacturing of high-end wheel cranes, crawler cranes and tower cranes, including the complete range of wheel cranes from 8 to 2400t, crawler cranes from 25 to 4500t and tower cranes from 6 to 185t.

三一集团旗下核心事业部，从事高端轮式起重机、履带起重机、塔式起重机系列产品的研发制造。覆盖8-2400吨全吨位轮式起重机，25-4500吨全吨位履带起重机，6-185吨塔式起重机。



SANY CRANE







# SRC500T

SANY ROUGH TERRAIN CRANE  
55T LIFTING CAPACITY

A 55t rough terrain crane with five section 45m boom, featuring stronger capacity yet reduced self-weight. Key components come from International name brands. Operator comfort is improved by brand new cab design.

一款最大起重量55吨，5节臂，全伸臂长45m的越野起重机，自重轻，性能强，核心部件均为国际知名供应商提供，配备全新操纵室，驾驶、操作舒适度全面升级。





## **Strong lifting capacity**

Best in class

**超强性能**

性能超越行业同吨位

## **All new operator's cab**

Ergonomic concept of safety and comfort

**全新操纵室**

操作安全、舒适、人机工程全面升级

## **Convenient transport**

One-trailer transport at low operational cost

**超便捷运输**

一车整运，运营成本低

## **Brand-name components**

DF Cummins engine/Dana transmission/Meritor axles

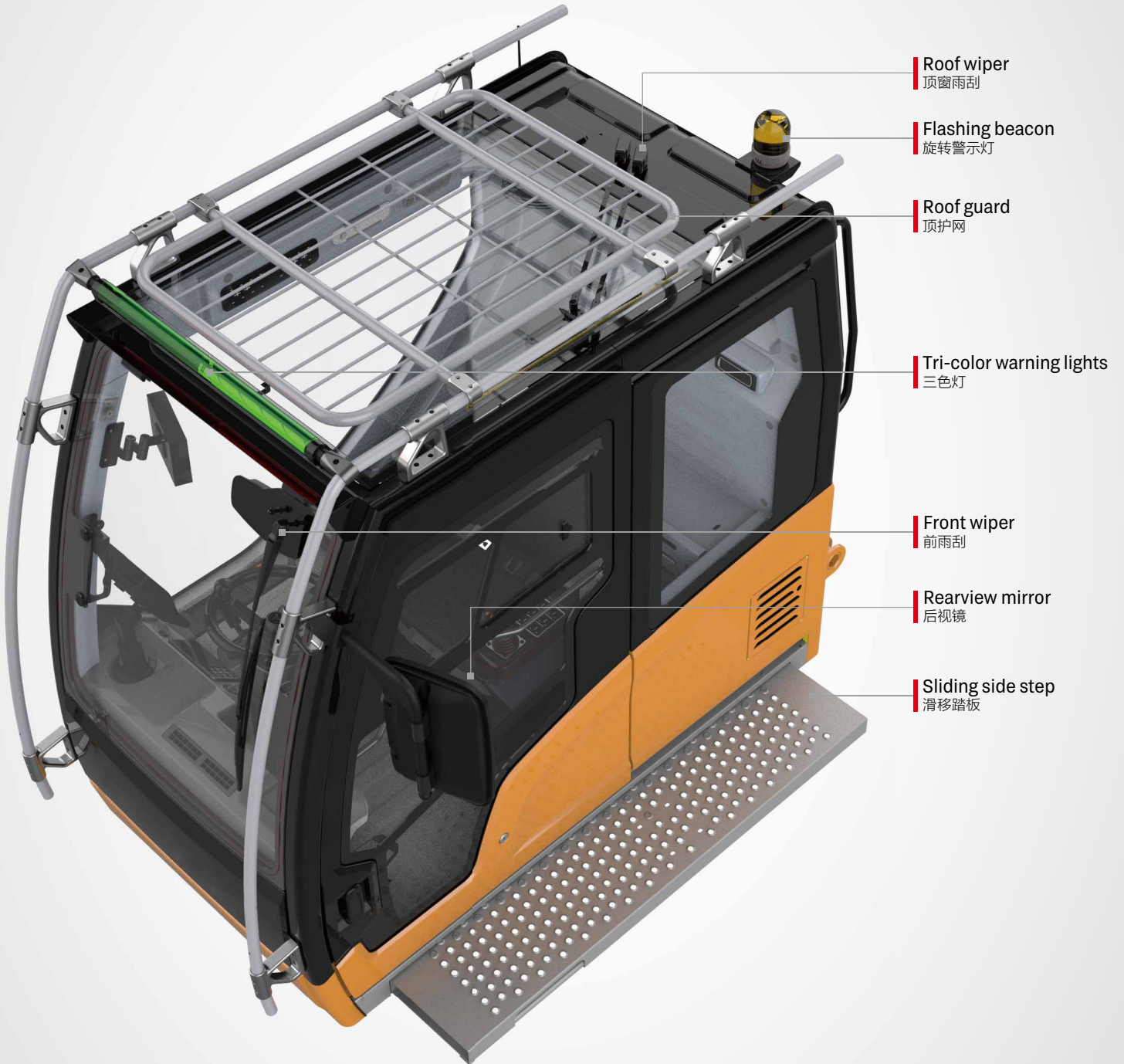
**国际知名供应商**

东风康明斯发动机/德纳变速箱/美驰车桥



# All New Operator's Cab

## 全新操纵室



Roof wiper  
顶窗雨刮

Flashing beacon  
旋转警示灯

Roof guard  
顶护网

Tri-color warning lights  
三色灯

Front wiper  
前雨刮

Rearview mirror  
后视镜

Sliding side step  
滑移踏板



**Safety & Reliability**  
安全可靠



**Comfort & Convenience**  
舒适便捷



**Simplicity & Efficiency**  
简单高效



## SPECIFICATION

Rearview and  
winch monitor  
卷扬监视器

10.1 inch LMI screen  
10.1 吋显示屏

Outrigger control  
panel  
支腿控制面板

Steering column  
方向柱

Pedals  
踏板布置

Upper control panel  
辅助面板

Emergency stop  
switch  
急停开关

Bubble level  
水平仪

Cup holder  
水杯托

Joystick  
手柄

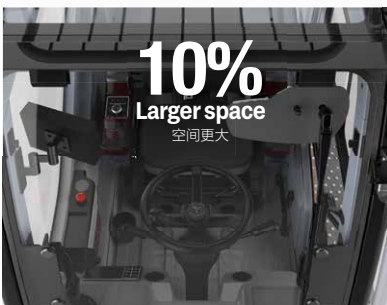
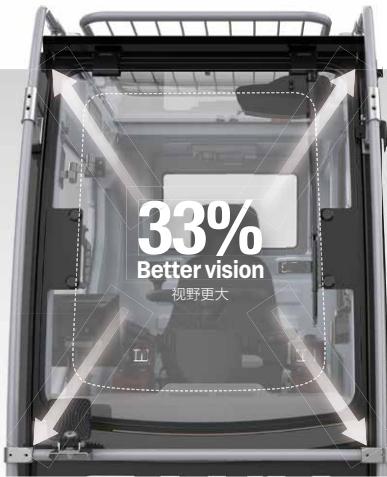
Joystick  
手柄

Left control panel  
左扶手箱控制面板

Right control panel &  
LMI navigation knob  
右扶手箱控制面板

Armrest  
扶手箱





Integrating SUV genes, overall space is enlarged by 10% and forward field of vision is increased by 33%. The front windshield can be opened by 70 degrees, providing better ventilation and a second emergency exit.

融入 SUV 基因, 整体空间增大 10%, 配备超大可开合 70° 前挡风玻璃, 视野提升 33%, 增加空气对流, 并可作为快速逃生通道。



Sliding door transits between tracks when closing to make perfect thermal and acoustical insulation.

侧向变轨, 滑移门完美隔绝外部环境。

Getting in and out is made more convenient with the power sliding side step.

全宽电动伸缩踏板, 超大安全便利进出通道。



## SPECIFICATION

**Adjustable** steering wheel for driving and controlling, modular control panels, and smart user interface deliver intuitive and highly efficient control.

驾控一体的方向盘、模块化控制面板、UI 智能操作界面，操作简单，为高效吊装保驾护航。



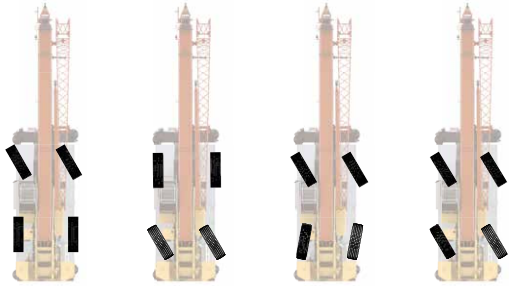


# Convenient Transport

行驶运输便捷性

## Four steering modes

四种转向模型



2 wheel front 前轮转向模式

2 wheel rear 后轮转向模式

4 wheel 四轮转向模式

Crab 蟹行模式



Steering control panel  
转向控制面板

## One-Trailer Transport

一车整运

The basic machine is transported at 38.66t with counterweight, jib and hooks, 2.98m wide and 3.79m high, satisfying road regulations.

主机运输尺寸为宽 2.98m, 高 3.79m, 重量为 38.66t (带配重、副臂和吊钩), 满足道路运输要求。



## Axle Load Distribution (Boom angle 0°)

轴荷分布(起重臂角度 0°)

Items 项目		Weight (kg) 重量	Load on front axle (kg) 前轴轴荷	Load on rear axle (kg) 后轴轴荷
Basic machine 主机		38660	20790	17870
Remove 移除	Counterweight 配重	-6000	2330	-8330
	Fixed jib 副臂	-800	-1342	541
	Aux. boom nose 臂尖滑轮	-35	-105	70
	Main hook 主钩 (55t)	-400	-750	350
	Auxiliary hook 副钩 (5t)	-85	-125	40

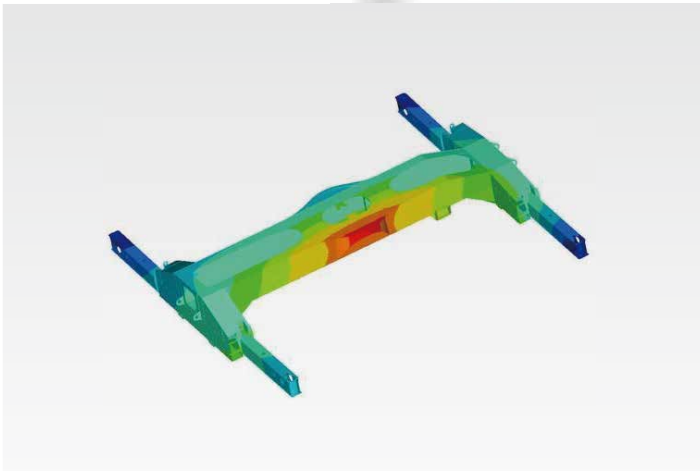


# Carrier Frame

## 车架底盘

Inverted trapezoidal variable cross section frame is 5% less in weight and 10% stronger in rigidity.

倒梯形变截面车架, 实现车架减重 5% 的同时, 刚性提升 10%。



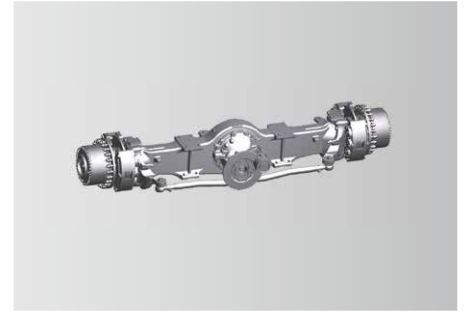
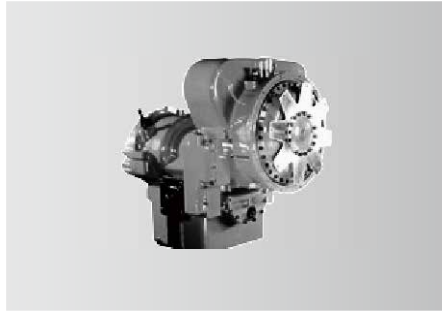
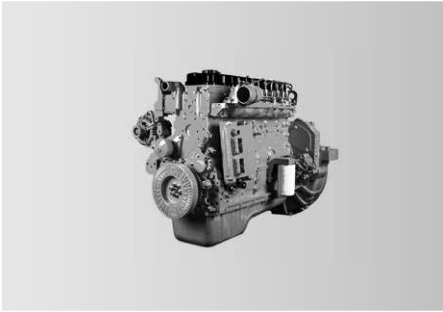
↓ 5%  
Weight 重量

↑ 10%  
Rigidity 刚性



# Power Train

## 动力系统



### Engine

Power comes from a DF Cummins QSB6.7 inline six-cylinder water-cooled, turbocharged and intercooled off-highway diesel engine, complying with Stage III emission standard.  
 Rated power: 194kW/2400rpm.  
 Max. torque: 990N·m/1500rpm.

### 发动机

东风康明斯 QSB6.7 三阶段非道路直列六缸水冷、增压中冷柴油发动机。  
 额定功率 :194kW/2400rpm。  
 最大扭矩 :990N·m/1500rpm。

### Transmission

Dana electronically controlled auto transmission features 6 speeds forward and 3 speeds reverse, wide ratio range, and smooth gearshift with reduced maintenance cost.

### 变速箱

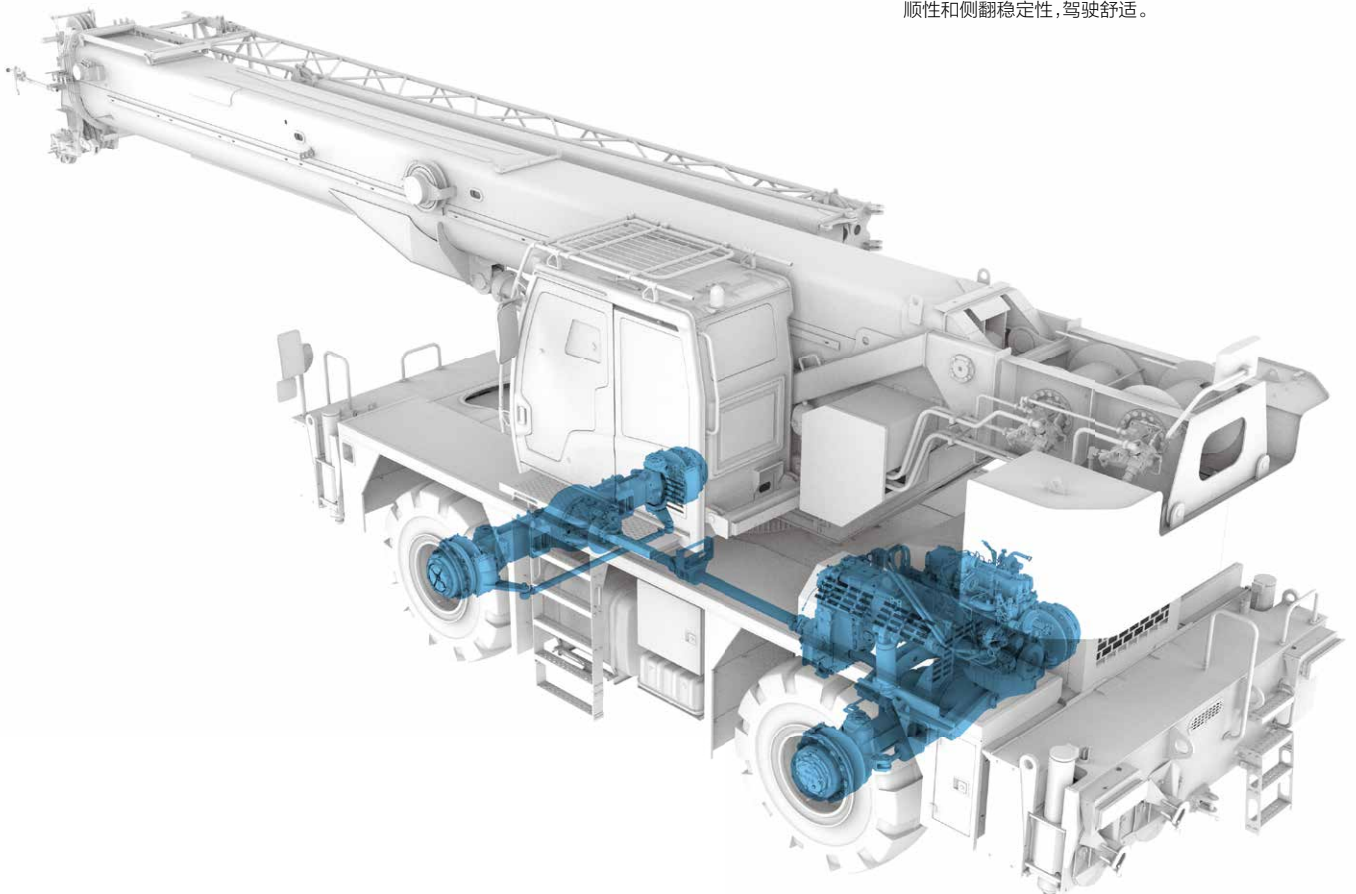
德纳全自动电控变速箱,6 个前进挡、3 个后退挡,速比范围大,换挡平顺无冲击,维修保养成本低。

### Axle and suspension

Meritor axles, both axles are driven and steered. Front axle is mounted to the frame by independent steel plate, and rear adopts oscillation cylinders with hydraulic lockout. Driving comfort and lateral stability is therefore guaranteed on rough terrains and conditions.

### 车桥悬挂

美驰车桥,前后桥均为驱动桥和转向桥。前桥采用独立式钢板连接,后桥采用摆动支架式,液压油缸闭锁悬架系统;能适用各种恶劣工况和路面,保证车辆行驶的平顺性和侧翻稳定性,驾驶舒适。





# Electrical System

## 电气系统

### Smart CAN-BUS communication system

International advanced CAN-BUS data communication network applied for display, instrument panel, I/O module, joysticks and main sensors, allowing for high-speed data transmission and quick response in less than 20ms.

### Cabling

Centralized electric cabinet and heavy-duty connector applied for cabling of superstructure, convenient for maintenance; IP rating up to 67, ensuring high reliability.

### Winch camera (optional)

Winch cameras equipped for monitoring its working condition and identifying rope disorder in time.

### Integrated bus button panel input

Various operating states displayed by button indicator lights, and one-button multi-functional operation realizable by writing various operation modes.

### 智能总线通信系统

国际先进的分布式集成总线数据通信网络，显示器、显示仪表、I/O 模块、操作手柄、主要传感器等采用 CAN 总线组网，高速信息传输、响应速度小于 20ms。

### 电缆布线

上车电缆布线采用集中式分线盒及重载接插件，维护方便；防护等级 IP67，可靠性高。

### 卷扬监控系统(选配)

卷扬摄像头监视卷扬工作及及时发现乱绳的情况。

### 集成总线按键面板输入

可通过按键指示灯显示各种工作状态，通过写入多种操作模式实现一键多功能。



Centralized electric cabinet  
集中式电控箱



Anti-two-block switch  
高度限位器



Third wrap indicator  
三圈保护器



Cable reel  
电缆卷筒



Anemometer (Optional)  
风速仪(可选)



### Multi-functional screen

Large 10.1 inch HD touch screen display with all new interface. Incorporated crane setup, load charts, working conditions, working period, virtual wall, Bluetooth, radio and diagnostics with an additional navigation knob.

### Precise load moment indicator

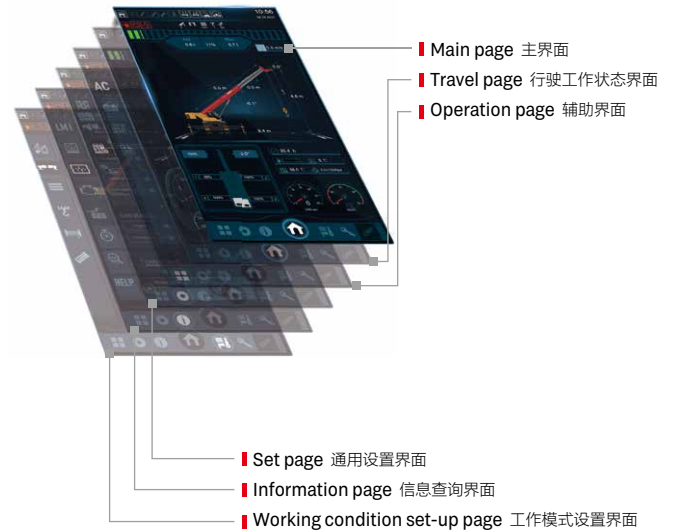
SANY independently developed LMI, accuracy of 0 ~ 5%.

### 高新多功能显示屏

采用 10.1 寸高清显示屏, 全新操作界面, 可实现触摸与旋钮多种方式操控。工况、力矩、发动机、变速箱、控制器 IO 点、工作时间统计等丰富的设备状态信息呈现, 集成虚拟墙、蓝牙、收音机等多种扩展功能。

### 精准力矩器系统

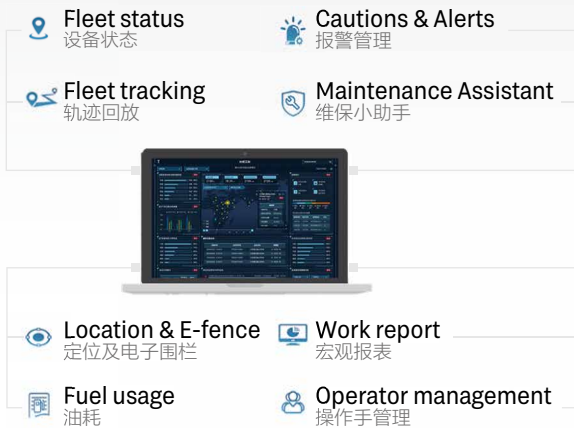
三一自主研发的力矩限制器系统, 精度达 0~5%。



## MachineLink<sup>+</sup>

ROOTCLOUD T-AMS Pro device comes as standard to realize GPS trajectory, machine status, maintenance management, E-fence, alarm management, and operator management on computer or mobile MachineLink+ platform, by remote control of cranes. This telematics package greatly boosts efficiency of customer fleet management and helps provide better after-sales services.

标配树根物联终端 T-AMS Pro, 通过对起重机设备的远程控制, 在电脑或移动端 MachineLink+ 平台实现轨迹回放、设备状态、维保设备、电子围栏、报警管理、操作手管理等功能, 极大提高客户设备管理效率, 提升三一售后服务能力。





## Hydraulic System

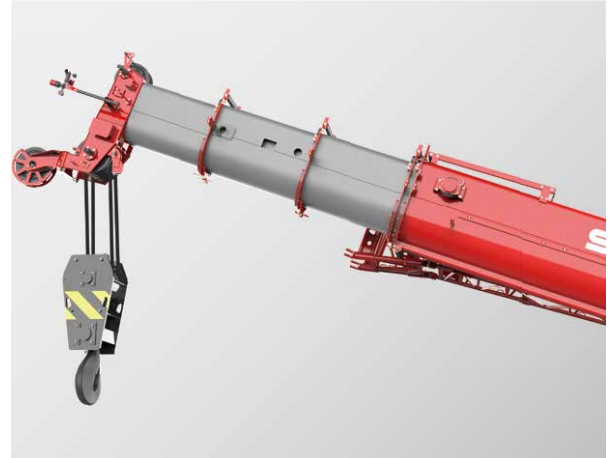
### 液压系统

Four boom sections extended by double cylinder with rope arranger, 2nd boom extended by cylinder I, 3rd ~5th sections telescoped by cylinder II with rope pull. Synchronized telescoping of variable lengths for more applications with higher efficiency.

5 节主臂, 双缸绳排, 一节油缸和钢丝绳伸 2 节臂, 2 节油缸和钢丝绳伸 3、4、5 节臂, 可实现同步伸缩, 臂长任意组合, 省时省力。



Telescoping mode I  
伸缩模式 1



Telescoping mode II  
伸缩模式 2

## Superstructure

### 上车

Open-type electronically controlled load-sensing system and dynamic slewing brake system.

Electro proportional compensated passive luffing-down system applied to control the luffing speed, making luffing more reliable and stable.

Dynamic slewing brake realizing precise control of slewing speed.

Electronically controlled load-sensing hydraulic system, electronic joystick and electronic throttle, ensuring easy operation and more accurate control and millisecond-level action response speed, with min. single-rope hoisting speed 0.8m/min, and distribution difference in case of combined motions 8%.

通过开式电控负载敏感系统和动态回转制动系统；

电比例自重落幅系统控制落幅速度, 更可靠更平稳；

具备动态回转制动功能, 可实现回转速度精准控制。

电控负载敏感液压系统, 采用电手柄、电油门控制, 轻松操作的同时, 控制更精准；动作响应毫秒级速度；卷扬单绳最低速度 0.8m/min；复合动作分配误差 8%。

# Chassis

## 下车

### Steering system

A gear pump installed to supply oil for hydraulic steering, steering pressure controlled by electro-proportional relief valve, four steering modes realized by solenoid directional valve.

### Suspension system

Different modes including normal driving and Pick & Carry with suspension locked, suspension to be locked when the crane is working.

### Outrigger telescoping system

The electro proportional relief valve identifies pressure staging of outrigger telescoping, satisfying operation requirements under high pressure and forming protection under limited pressure.

### 转向系统

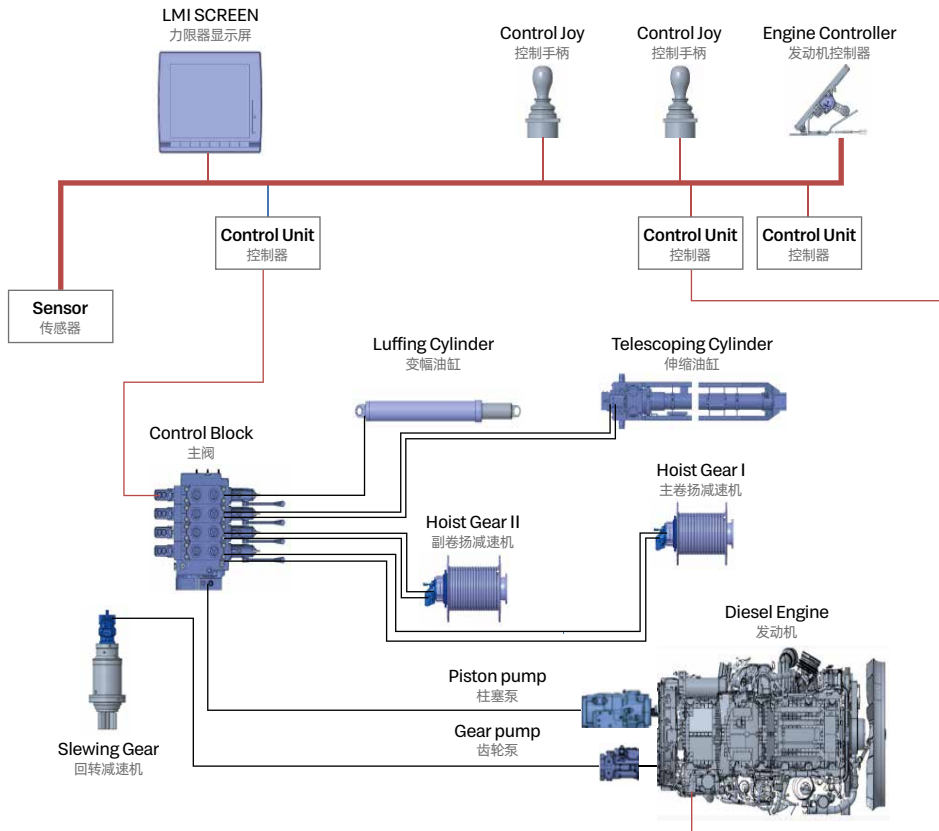
液压转向系统采用齿轮泵提供油源,通过电比例溢流阀精确控制转向压力,通过电磁换向阀实现前轮转向,后轮转向,全轮转向和蟹行转向共计四种转向模式。

### 悬挂系统

悬挂系统通过选择不同的悬挂模式可以实现正常行驶和锁定模式下的带载行驶;在起重机上车作业时能够对悬挂进行锁定。

### 支腿伸缩系统

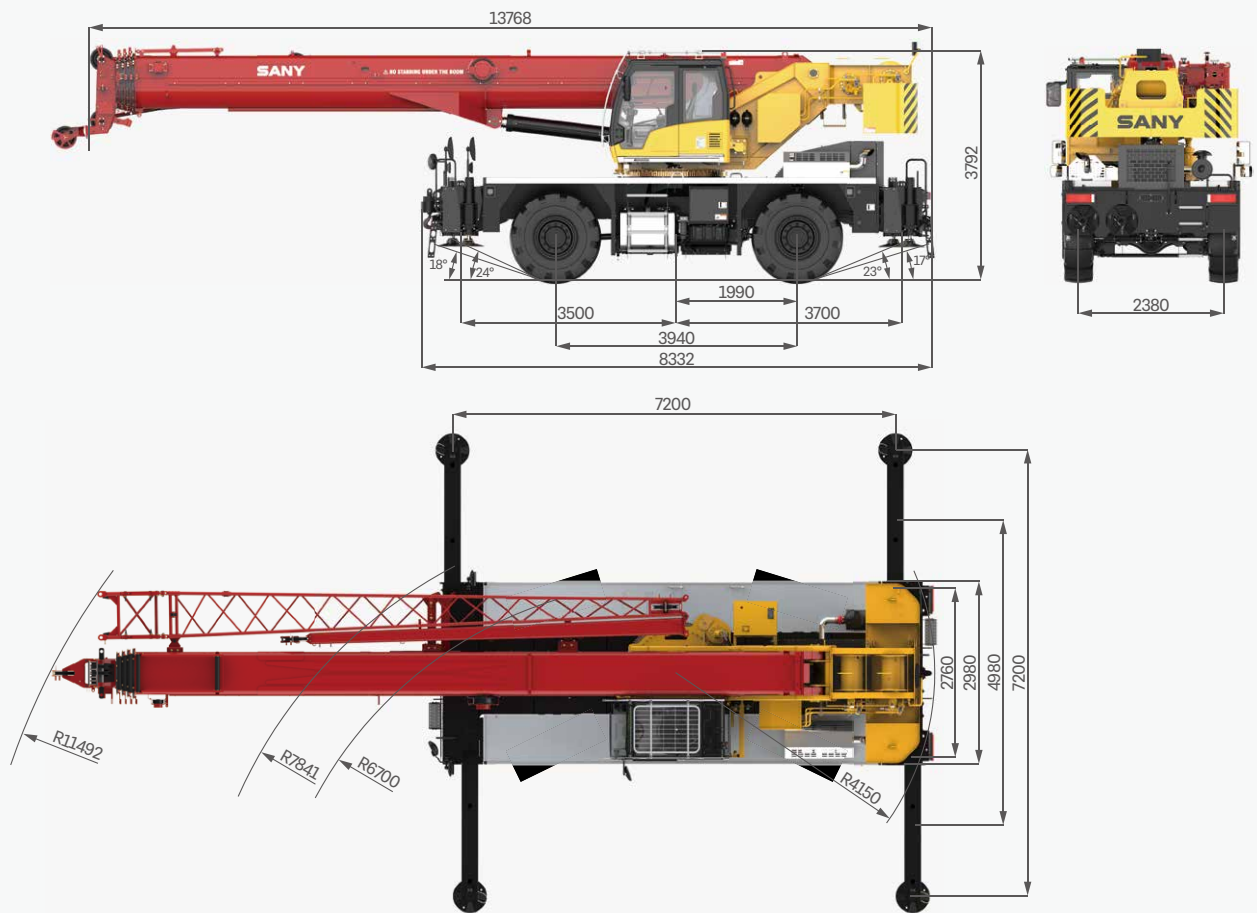
支腿伸缩采用电比例溢流阀对支腿伸缩进行压力分级,既满足高压力动作需求,也可满足限压保护功能。





# Overall Dimensions

整机尺寸



# Technical Specification

## 整机参数

CATEGORY 类型	ITEM 项目	UNIT 单位	VALUE 参数	
CAPACITY 额定起重量	Max. lifting capacity 最大起重量	t	55	
WEIGHT 重量参数	Gross weight 整机总质量	kg	38660	
POWER 发动机参数	Engine model 发动机型号	-	QSB6.7 (EU stage III)	
	Max. engine power 发动机最大功率	kW/rpm	194/2400	
	Max. engine torque 发动机最大输出扭矩	N·m/rpm	990/1500	
DIMENSIONS 尺寸参数	Overall length 整机全长	mm	13768	
	Overall width 整机全宽	mm	2980	
	Overall height 整机全高	mm	3792	
TRAVEL 行驶参数	Max. travel speed 最高行驶速度	km/h	37	
	Steering radius 转弯半径	Min.steering radius 最小转弯半径	m	12.5/6.7
		Min.steering radius of boom tip 臂头最小转弯半径	m	11.49
	Wheel formula 车轮模式	-	4 × 2; 4 × 4	
	Min.ground clearance 最小离地间隙	mm	480	
	Approach angle 接近角	°	24	
	Departure angle 离去角	°	23	
	Max.gradeability 最大爬坡度	-	70%	
MAIN PERFORMANCE 主要性能参数	Working temperature range 使用温度区间	°C	-20~ +51	
	Min.rated lifting radius 最小额定幅度	m	2.5	
	Tail slewing radius 转台尾部回转半径	mm	4.15	
	Boom sections (Qty.) 臂节数	-	5	
	Boom shape 臂形状	-	U shape U 型	
	Max.lifting moment 最大起重力矩	Basic boom 基本臂	kN·m	1715
		Full-extension boom 全伸主臂	kN·m	823
		Full-extension boom + jib 全伸主臂 + 副臂	kN·m	500
	Boom length 臂长	Basic boom 基本臂	m	11.6
		Full-extension boom 全伸主臂	m	45
		Full-extension boom + jib 全伸主臂 + 副臂		61
	Max.lifting height 最大起重高度	Basic boom 基本臂	m	14.9
		Full-extension boom 全伸主臂	m	47.8
		Full-extension boom + jib 全伸主臂 + 副臂	m	62.0
	Outrigger span (Longitudinal × Transverse) 支腿跨距 (纵 × 横)	m	7.2 × 7.2	
Jib offset 副臂安装角度	°	0, 15, 30		
AIRCONDITIONER 空调	In operator's cab 上车空调	-	Heating & cooling 制冷、制热	



# Technical Specification

## 整机参数



### Axle Load 轴荷

Axle 轴	1	2	Gross weight 总重量
Axle load 轴荷 /kg	20790	17870	38660
Remark 备注	Boom angle 0°, with full water and fuel reservoirs, main hook, aux hook placed in front of frame. 起重臂角度 0°、满水、满油、主钩、副钩挂车架前部		



### Hook 吊钩

Rated load 额载 /t	Number of sheaves 滑轮数量	Rope rate 倍率	Hook weight/kg 吊钩重量
55	5	10	400
5	-	1	85



### Operations 主要动作参数

Item 项目	Max.single rope lifting speed (empty load) 单绳速度 (空载)	Rope diameter/length 钢丝绳直径 / 长度	Max. single line pull 最大单绳拉力
Main winch 主卷扬	150m/min	16mm/245m	5.6t
Auxiliary winch 副卷扬	140m/min	16mm/135m	5.6t
Slewing speed 回转速度	2.7r/min		
Full luffing up/down time of boom 主臂起落幅时间	45s/45s		
Full extension/retraction time of boom 主臂伸缩时间	80s/110s		
Outrigger jack 垂直支腿	Extension 伸	25s	
	Retraction 缩	30s	
Outrigger beam 水平支腿	Extension 伸	18s	
	Retraction 缩	10s	

# Crane Introduction

## 整机介绍

Carrier 下车

### Carrier frame 车架

- Double longitudinal beam construction welded by high strength steel plate, higher bearing capacity.
- 车架为高强度钢板焊接而成的双纵梁结构，承载能力强。

### Engine 发动机

- Model: DF Cummins QSB6.7 inline six-cylinder diesel engine with watercooler and inter cooler.
- Rate power: 194kW/2400rpm.
- Emission standard: EU stage III.
- Fuel reservoir capacity: 350L.
- 型号：东风康明斯 QSB6.7 直列六缸、水冷却、增压中冷、柴油发动机。
- 额定功率：194kw/2400rpm。
- 排放标准：符合 III 阶段。
- 油箱容积：350L。

### Transmission 变速箱

- Auto-transmission, 6 forward gears and 3 reverse gears, large speed ratio range, adaptable to slope climbing and high-speed traveling.
- 自动变速箱，变速箱有 6 个前进档、3 个后退档，速比范围大，即可满足低速场地爬坡行驶又可满足高速行驶。

### Axle 车桥

- Two axle chassis of flexible maneuverability, four-wheel drive, excellent dynamic performance.
- 操控灵活，底盘两桥设计，前、后桥驱动，动力性能好。

### Suspension system 悬挂

- The front is rigidly mounted, and the rear axle adopts pivot oscillation suspension with hydraulic lockout.
- 前桥刚性连接，后桥带油缸锁定枢轴摆动悬挂。

### Electrical system 电气系统

- Two packs of 12V, 120Ah batteries.
- 2 块 12V、120Ah 电池。

### Tires 轮胎

- Large diameter off-road 23.5-25 tires deliver large ground clearance and strong off-road agility.
- 大直径越野轮胎，离地间距大，越野性能强，轮胎型号 23.5-25。

### Brake 制动系统

- Dual circuit braking system. When one circuit fails, the other can still work normally, improving the safety and reliability of the braking system.
- 双回路制动系统，当某一回路出现故障时，另一回路仍能正常工作，提高制动系统的安全性和可靠性。

### Hydraulics 液压系统

- Adopt stable and high-quality main oil pump, enhancing system reliability. Precise parameter matching contributes to superior controllability of the vehicle.
- Hydraulic fluid reservoir: 710L.
- 采用稳定、高品质的主油泵，系统可靠性高；通过精确的参数匹配，操控性能优越。
- 液压油箱容积：710L。

### Outrigger 支腿

- H-type telescoping outrigger, 4-point support, with span (longitudinal × transverse) 7.2m × 7.2m.
- 采用 H 形伸缩支腿，4 点支撑，纵、横跨距 7.2m × 7.2m。

### Control system 控制系统

- CAN-BUS: The bus instrument of integrated intelligent control electrical system can display driving parameters at any time, making driving easier. At the same time, engine failure prompt [makes the maintenance and troubleshooting more convenient and faster.
- All-round safety protection, the main and auxiliary hoists are equipped with three-circle indicators and A2B switches to prevent over-hoist-down and over winding of the wire ropes.
- Load moment indicator: It adopts highly intelligent moment indicator system to fully protect lifting operation and ensure accuracy, stability and comfort.
- 总线仪表：采用集成一体智能控制电气系统的总线仪表，可随时掌控行驾参数，驾乘轻松；同时拥有发动机故障提示功能，维修排故方便、快捷。
- 全方位的安全保护系统，主、副卷扬配置三圈保护器和高度限位器，防止钢丝绳过放和过卷，防倾翻保护，极限角度保护。
- 力限器：采用高度智能力矩限制器系统，全方位保护吊载作业，确保操作精准、平稳、舒适。



# Crane Introduction

## 整机介绍

superstructure 上车

### Operator's cab 操纵室

- New generation T-series operator's cab features 20° tilting, curved-rail sliding door, safety glass and corrosion resistant steel construction with softened interior trim. Large internal space with panoramic skylight, adjustable seat and other user-friendly design incl. A/C, electric wiper, making it more comfortable and easier to work. The LMI screen is equipped to realize the logic integration of the control console and the display, so that all working data can be seen at a glance.
- 全新一代 T 系列操纵室，20° 可仰，带变轨滑移门，配备安全玻璃，耐腐蚀钢板，配置软化内饰、超大内部空间、可调式座椅等人性化设计，配有空调、电动雨刮器，操作更舒适、轻松；配置力矩限制器显示屏，实现主控台与操作显示系统有机结合，使吊装作业的全部工况数据一目了然。

### Boom system 臂架系统

- Boom: Five-section, basic boom 11.6m, full-extension 45m, made of high-strength welded structural steel with U-shape cross-section.
- Jib: Two-section, 9.2m / 16m, offset at 0°, 15°, 30°.
- 主臂：五节臂，基本臂 11.6m，全伸臂 45m，由高强度焊接结构钢制成，U 形截面。
- 副臂：两节副臂，分别为 9.2m 和 16m，安装角度为 0° 15° 30°。

### Slewing platform 转台结构

- SANY independently developed, made of fine grain high strength steel in optimized structure.
- 三一自主设计，结构更优化，由细晶粒高强度钢制成。

### Hydraulics 液压系统

- Load sensing variable piston pump can adjust displacement in real time to achieve high precision flow control, greatly reducing energy loss.
- Winch adopts electronically controlled variable motor with high operation efficiency. Max. single rope speed of main and auxiliary winch is 141m/min.
- Slewing system integrating slewing buffer and free swing technology, start & brake process is smoother and the inching motion performance is ever better.
- 采用负载敏感变量柱塞泵，能实时调节油泵排量，实现高精度的流量控制，极大地降低能量损耗。
- 卷扬采用定量马达，作业效率高；主、副卷扬单绳速度最大达 141m/min。
- 回转系统带集成回转缓冲阀，具有自由滑转功能，回转启动和控制平稳，微动性卓越。

### Hoist 起升机构

- Piston pump variable speed regulation, highly efficient and energy saving. Balance valve and unique anti-hook-slip technology are perfectly coupled to achieve smooth rise and fall of the load. Non-rotation high strength wire rope is used.
- 柱塞泵变量调速，高效节能。卷扬平衡阀与独特的防溜钩技术完美结合，重物起落平稳。配备防旋转高强度钢丝绳。

### Luffing system 变幅系统

- Double acting single rod hydraulic cylinder with balance valve, luffing angle: -2°~ 80°. Passive luffing down, reducing energy consumption, improving luffing stability.
- 双作用单活塞杆液压缸，带安全平衡阀，变幅角度：-2°~80°，采用自重落幅系统，降低能耗，提高落幅操作的平稳性。

### Slewing 回转系统

- 360° slewing in both directions, max. speed 2.7r/min. It adopts electro proportional speed control for stable movement and system reliability. The unique slewing balance design makes the braking smoother.
- 360° 转动，最大回转速度 2.7r/min。液控比例调速控制，动作稳定，系统可靠。独特的回转缓冲设计，制动更平稳。

### Counterweight 配重

- Fixed block 6t.
- 固定配重 6t。

### Safety equipment 安全装置

- Load moment indicator: Analytical mechanics is applied and moment limiter calculation system based on the hoisting mechanics model is established. Through online empty-load calibration, the rated accuracy can reach 0~10% to fully protect the hoisting operation. In case of overload, the system will automatically give an alarm to guarantee safety operation.
- The hydraulic system includes balance valve, relief valve, two-way holding valve, etc. to realize system stability and reliability.
- The main and auxiliary winches are equipped with third-wrap indicators to prevent over-hoist-down of the wire rope.
- Boom head and jib head are equipped with A2B switches to prevent the wire rope from over winding.
- The length & angle sensor and pressure sensor are equipped to signify working status in real time, automatically stopping hazardous actions with buzzer alarm.
- 力矩限制器：采用分析力学方法，建立了基于吊重力学模型的力矩限制器计算系统，通过在线空载标定，额定吊重精度达到 0~10%，全方位保护吊装作业；超载作业时，系统自动报警提示，为操纵作业提供安全保障。
- 液压系统配置平衡阀、溢流阀、双向液锁等元件，实现液压系统稳定可靠。
- 主、副卷扬配置三圈保护器，防止钢丝绳过放。
- 主、副臂臂端配置高度限位器，防止钢丝绳过卷。
- 配置长度角度传感器、压力传感器，实时显示起重机作业状态，自动切断危险动作，蜂鸣报警。

### Optional equipment at extra fees 选配

- Slewing buzzer / Navigation beacon / Front towing device / Reversing image / Winch camera / Boom tip camera / Spark arrester / Air intake shutoff valve / Inflator / Outrigger load sensor / other equipment available upon request
- 回转蜂鸣器 / 航标灯 / 前拖钩 / 倒车影像 / 卷扬摄像头 / 臂尖摄像头 / 火星灭火器 / 发动机进气关断阀 / 打气泵 / 支腿压力传感器 / 其他选配视需求定

# Working Conditions

工况组合



Telescopic boom on outriggers  
主臂、支腿吊载

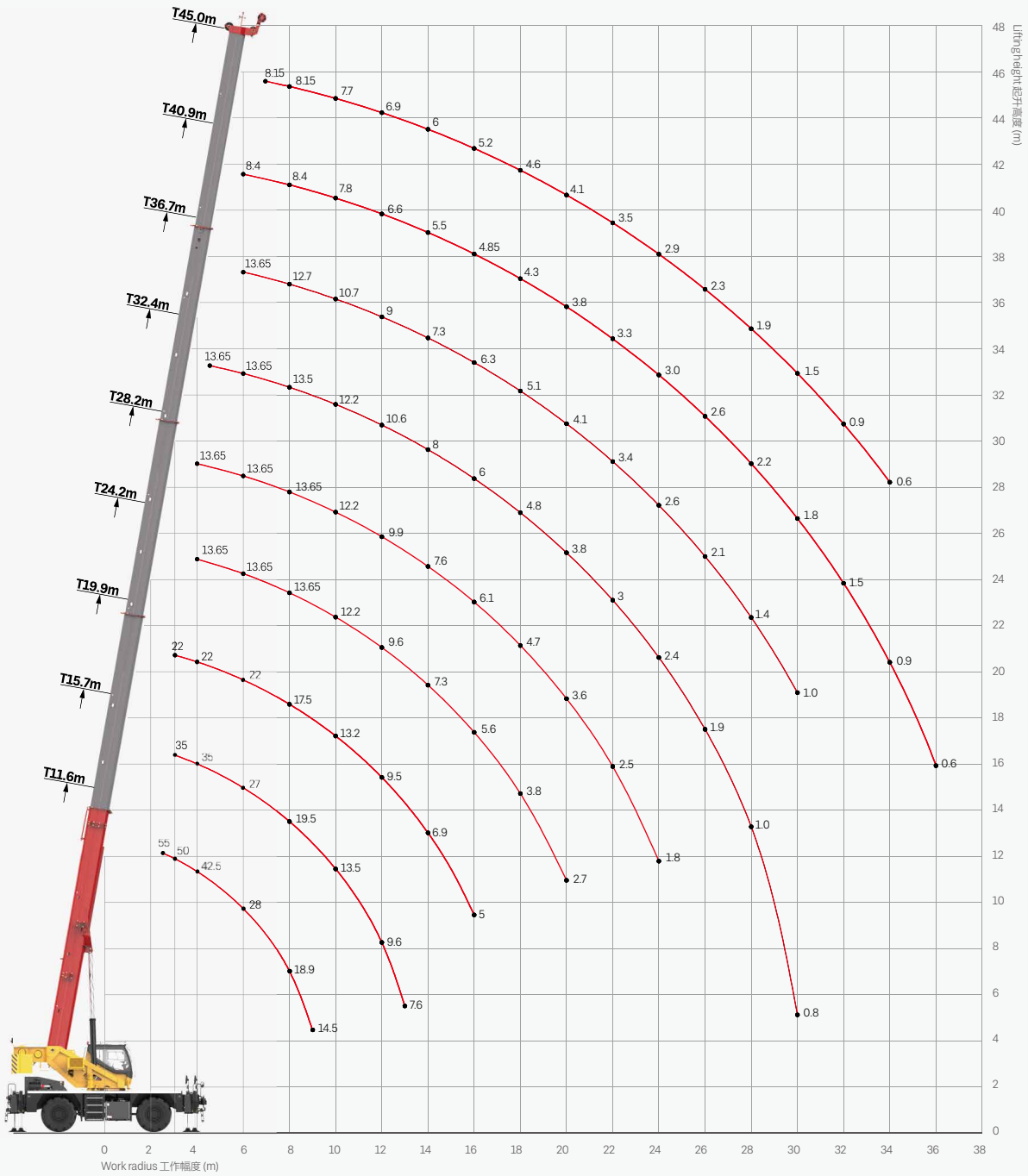
Fixed jib on outriggers  
固定副臂、支腿吊载

Telescopic boom on tires  
主臂、轮胎吊载



# Operating Range - Telescopic Boom

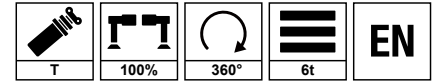
## 起升高度曲线 - 主臂



# Load Chart-Telescopic Boom

## 性能表 - 主臂

Unit: kg



Radius (m) 幅度	11.6	15.7	19.9	19.9	24.2	24.2	28.2	28.4	32.4	32.5	36.7	36.7	40.9	45.0	Radius (m) 幅度
2.5	55000*														2.5
3.0	50000*	35000	22000	13650	13650	13650									3.0
3.5	46500	35000	22000	13650	13650	13650	13650	13650							3.5
4.0	42500	35000	22000	13650	13650	13650	13650	13650							4.0
4.5	38500	35000	22000	13650	13650	13650	13650	13650	13650	13650					4.5
5.0	35000	31000	22000	13650	13650	13650	13650	13650	13650	13650	13650	8400			5.0
5.5	31500	29000	22000	13650	13650	13650	13650	13650	13650	13650	13650	8400			5.5
6.0	28000	27000	22000	13650	13650	13650	13650	12900	13650	13650	13650	8400	8400		6.0
6.5	25800	25500	21000	13650	13650	13650	13650	12200	13650	13650	13650	8400	8400		6.5
7.0	23500	23500	19500	13650	13650	13650	13650	11600	13500	13500	13650	8400	8400	8150	7.0
7.5	21000	21500	18500	13650	13650	13650	13650	11000	13500	13400	13400	8400	8400	8150	7.5
8.0	18900	19500	17500	13650	13650	13650	13650	10500	13000	12700	12700	8400	8400	8150	8.0
9.0	14500	15900	15500	13650	13500	13650	13500	9600	12500	11700	11600	8200	8400	8150	9.0
10.0		13500	13200	13650	12200	13650	12200	8700	11600	10800	10700	8000	7800	7700	10.0
11.0		11500	11300	12800	11000	12800	11000	8000	10600	10000	9800	7500	7100	7400	11.0
12.0		9600	9500	11800	9600	11700	9900	7500	9800	9200	9000	7000	6600	6900	12.0
13.0		7600	8200	10400	8500	10100	8700	6800	8500	8400	8200	6500	6100	6400	13.0
14.0			6900	8900	7300	8900	7600	6300	7500	7400	7300	6000	5500	6000	14.0
16.0			5000	7000	5600	6900	6100	5600	6000	6300	6300	5500	4800	5200	16.0
18.0					3800	5100	4700	4900	4800	5000	5100	5000	4300	4600	18.0
20.0					2700	4000	3600	4400	3800	4200	4100	4500	3800	4100	20.0
22.0							2500	3800	3000	3400	3400	4000	3300	3500	22.0
24.0							1800	3300	2400	2800	2600	3500	3000	2900	24.0
26.0								2500	1700	2300	2100	3000	2600	2300	26.0
28.0									1100	1900	1400	2500	2200	1900	28.0
30.0									800	1600	1000	2100	1800	1500	30.0
32.0												1500	1400	900	32.0
34.0												1200	900	600	34.0
36.0													600		36.0
<b>Telescoping status(%) 伸缩模式</b>															
2nd boom 二节臂	0	50	100	0	100	0	100	0	100	0	100	0	50	100	2nd boom 二节臂
3rd boom 三节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	3rd boom 三节臂
4th boom 四节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	4th boom 四节臂
Top boom 五节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	Top boom 五节臂
Min. angle 最小角度	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	19°	0°	18°	35°	Min. angle 最小角度
Rope rate 钢丝绳倍率	11*/10	8	6	4	4	4	4	4	4	4	4	4	4	4	Rope rate 钢丝绳倍率
Load at min. angle 最小角度吊重	8900	4100	2000	3000	1300	2100	900	1500	600	1100	500	800	500	500	Load at min. angle 最小角度吊重



# Load Chart-Telescopic Boom

## 性能表 - 主臂

Unit: kg



Radius (m) 幅度	11.6	15.7	19.9	19.9	24.2	24.2	28.2	28.4	32.4	32.5	36.7	36.7	40.9	45.0	Radius (m) 幅度
2.5	51000*														2.5
3.0	46000	35000	22000	13650	13650	13650									3.0
3.5	41000	35000	22000	13650	13650	13650	13650	13650							3.5
4.0	36500	35000	22000	13650	13650	13650	13650	13650							4.0
4.5	33000	35000	22000	13650	13650	13650	13650	13650	13650	13650					4.5
5.0	29500	26000	22000	13650	13650	13650	13650	13650	13650	13650	13650	8400			5.0
5.5	24700	22000	19500	13650	13650	13650	13650	13650	13650	13500	13650	8400			5.5
6.0	20600	19100	17200	13650	13650	13650	13500	12900	13650	12500	13650	8400	8400		6.0
6.5	17600	16600	15200	13650	13650	13650	13000	12200	13650	12000	13650	8400	8400		6.5
7.0	15200	14600	13500	13650	13650	13650	12500	11600	13500	11500	13650	8400	8400	8150	7.0
7.5	13300	12800	12000	13650	12800	13650	11700	11000	13000	10500	13000	8400	8400	8150	7.5
8.0	11000	11000	10400	12500	11500	12200	10600	10500	12000	10000	11500	8400	8400	8150	8.0
9.0	8000	8800	8600	10700	9300	10600	9500	9600	9800	9200	9800	8100	8200	8150	9.0
10.0		7100	6900	8900	7500	8900	7800	8500	8200	8200	8200	7500	7800	7600	10.0
11.0		5700	5600	7500	6200	7500	6500	7500	6800	7300	6800	7000	7200	6800	11.0
12.0		4500	4500	6400	5200	6400	5600	6400	5600	6200	5800	6200	6400	6000	12.0
13.0		3000	3500	5500	4200	5500	4700	5500	4600	5400	5000	5400	5300	5200	13.0
14.0			2700	4600	3500	4400	3900	5100	3800	5000	4200	4900	4900	4400	14.0
16.0			1600	3400	2400	3500	2900	4000	2800	4100	3100	4100	3800	3300	16.0
18.0					1500	2700	2200	3000	2000	3200	2300	3200	2900	2500	18.0
20.0					900	2000	1400	2300	1400	2600	1600	2500	2200	1900	20.0
22.0							700	1800	900	2000	1200	2000	1700	1400	22.0
24.0								1300		1500	700	1500	1300	900	24.0
26.0								900		1100		1200	700		26.0
28.0										800		800			28.0
<b>Telescoping status(%) 伸缩模式</b>															
2nd boom 二节臂	0	50	100	0	100	0	100	0	100	0	100	0	50	100	2nd boom 二节臂
3rd boom 三节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	3rd boom 三节臂
4th boom 四节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	4th boom 四节臂
Top boom 五节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	Top boom 五节臂
Min. angle 最小角度	0°	0°	0°	0°	16°	0°	28°	0°	37°	8°	43°	30°	43°	52°	Min. angle 最小角度
Rope rate 钢丝绳倍率	11*/10	8	6	4	4	4	4	4	4	4	4	4	4	4	Rope rate 钢丝绳倍率
Load at min. angle 最小角度吊重	5100	2100	800	1700	500	1100	500	700	500	500	500	500	500	600	Load at min. angle 最小角度吊重

# Load Chart-Telescopic Boom

## 性能表 - 主臂

Unit: kg



Radius (m) 幅度	11.6	15.7	19.9	19.9	24.2	24.2	28.2	28.4	32.4	32.5	36.7	36.7	40.9	45.0	Radius (m) 幅度
2.5	28000														2.5
3.0	22200	19000	12000	13650	13650	13650									3.0
3.5	18200	15500	11500	13650	13650	13650	13650	13650							3.5
4.0	15200	13000	10500	13200	13000	13200	13200	13200							4.0
4.5	13000	11500	9500	12200	11500	12500	12000	12000	8400	8400					4.5
5.0	11000	10000	8200	10800	10000	11500	10400	10800	8200	8400	8000	8200			5.0
5.5	9200	8500	7000	9600	8500	10600	9000	9600	8000	8300	7000	7800			5.5
6.0	8000	7300	6000	8600	7500	9500	7800	8700	7500	8200	6200	7200	6500		6.0
6.5	6800	6400	5200	7600	6500	8500	6800	8000	7000	7800	5500	6600	6000		6.5
7.0	6000	5500	4500	6800	5500	7500	5900	7200	6200	7200	5000	6000	5500	4800	7.0
7.5	5200	4700	3800	6100	4800	6600	5200	6600	5500	6600	4400	5500	5000	4400	7.5
8.0	4500	3900	3100	5300	4100	5800	4400	5800	4800	5800	3800	4900	4400	4000	8.0
9.0	3200	3000	2200	4300	3200	4800	3500	4800	3800	4800	3200	4200	3700	3500	9.0
10.0		2100	1600	3500	2300	4000	2500	4000	2800	4000	2800	3500	3100	3100	10.0
11.0		1500	1200	2800	1600	3100	1800	3200	2100	3200	2300	3000	2500	2600	11.0
12.0		1000	700	2200	1200	2500	1500	2600	1700	2500	1900	2500	2100	2200	12.0
13.0				1700	900	1800	1000	2100	1200	2000	1300	2100	1700	1700	13.0
14.0				1300		1400	800	1700	900	1500	1000	1600	1400	1200	14.0
16.0				800		1000		1000		1100		1100	1000	800	16.0
18.0										800		800			18.0
Telescoping status(%) 伸缩模式															
2nd boom 二节臂	0	50	100	0	100	0	100	0	100	0	100	0	50	100	2nd boom 二节臂
3rd boom 三节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	3rd boom 三节臂
4th boom 四节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	4th boom 四节臂
Top boom 五节臂	0	0	0	33	17	50	33	66	50	83	66	100	100	100	Top boom 五节臂
Min. angle 最小角度	0°	0°	42°	0°	50°	35°	52°	40°	57°	48°	60°	54°	61°	64°	Min. angle 最小角度
Rope rate 钢丝绳倍率	8	6	4	4	4	4	4	4	4	4	4	4	4	4	Rope rate 钢丝绳倍率
Load at min.angle 最小角度吊重	2300	500	600	500	600	700	500	500	600	600	600	600	700	600	Load at min.angle 最小角度吊重

Remark

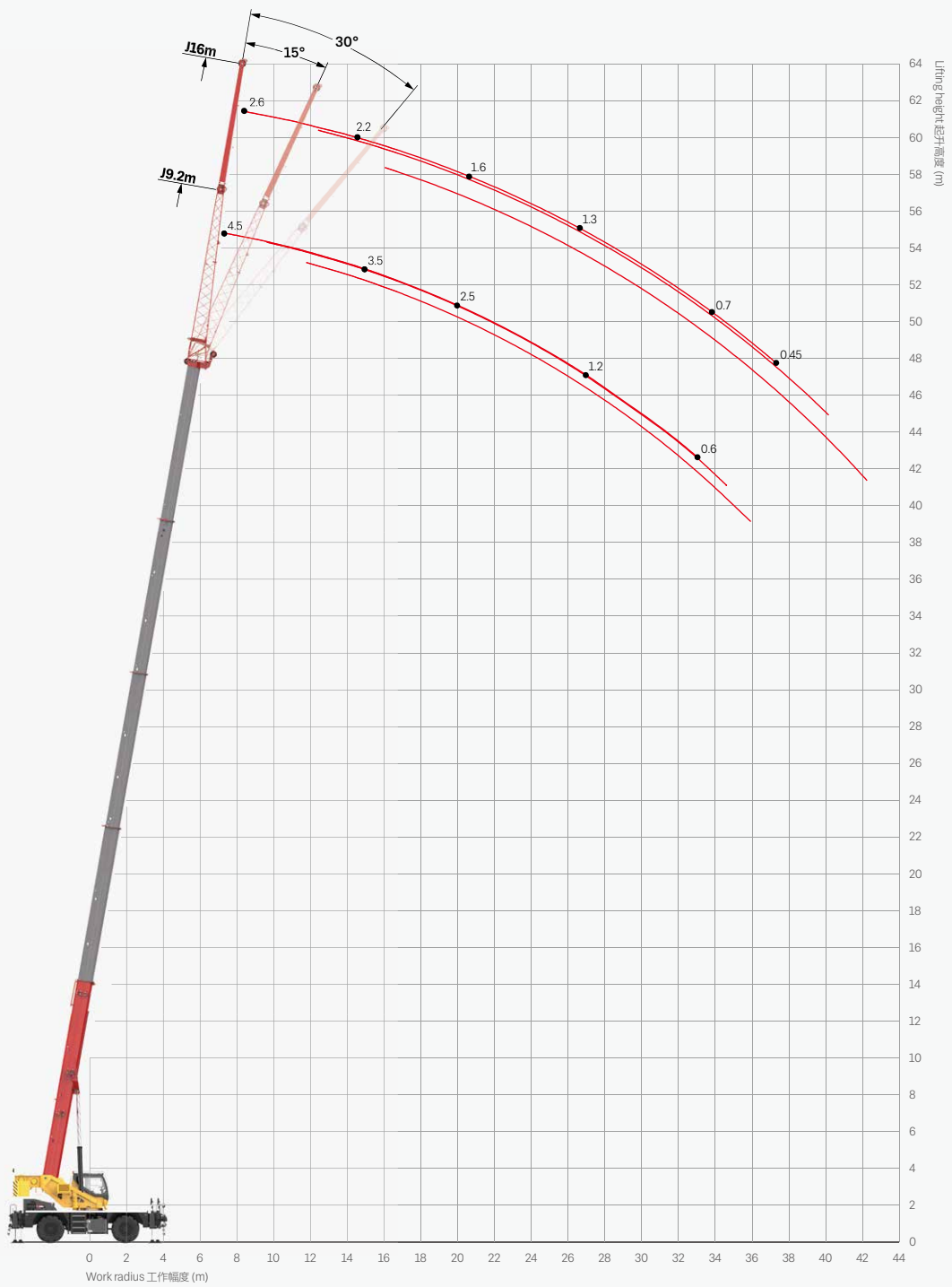
1. Load capacity in the chart is the maximum weight which this crane could hoist include the weight of hook blocks and riggings. The main hook weighs 400kg, the aux. hook weighs 85kg.
2. Radius shown in the chart is the actual radius when loading.
3. The load capacity in the chart is the maximum weight when this crane is supported with the firm ground and stays in level.
4. Choose rated load capacity of the longer boom and radius when the actual boom length and radius are between two values in the charts.
5. The machine can be used only when the wind power is less than grade 6.

1. 性能表中额定起重量包括起重钩（主钩重 400kg，副钩重 85kg）和吊具的重量。
2. 性能表中工作幅度是指吊载后的实际幅度。
3. 性能表中给定数值是在平整坚固的地面上，整机调平状态下起重机的最大起重量。
4. 如实际臂长和幅度介于两个数值之间时，取较长的臂长及较大的幅度所决定的额定起重量进行起重作业。
5. 起重作业风力等级需低于 6 级。



# Operating Range - Fixed Jib

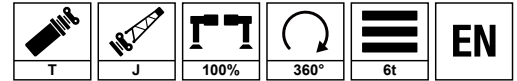
起升高度曲线 - 副臂



# Load Chart - Fixed Jib

## 性能表 - 副臂

Unit: kg



Boom angle 主臂仰角 (°)	45m boom + 9.2m jib			45m boom + 16m jib			Boom angle 主臂仰角 (°)
	0°	15°	30°	0°	15°	30°	
80	4500	2700	2400	2600	1500	1100	80
78	4500	2700	2400	2600	1500	1100	78
76	4000	2500	2300	2400	1400	1100	76
74	3750	2400	2250	2200	1300	1100	74
72	3500	2300	2150	2000	1200	1000	72
70	3000	2200	2050	1800	1150	1000	70
68	2700	2100	1950	1600	1100	950	68
66	2500	2000	1850	1500	1050	900	66
64	2200	1800	1750	1450	1000	850	64
62	2000	1650	1500	1300	950	800	62
60	1700	1450	1200	1100	850	750	60
58	1200	1000	850	900	750	650	58
56	1000	850	750	800	650	600	56
54	800	700	600	700	600	500	54
52	700	600	550	600	500	400	52
50	600	550	500	450	350	300	50
Min. boom angle 最小仰角	50°						Min. boom angle 最小仰角

# Load Chart - Telescopic Boom, Pick & Carry, Load Over Front

## 性能表 - 主臂带载行驶 (正前方)

Unit: kg



Radius (m) 幅度	11.6m	19.9m	28.2m	Radius (m) 幅度
3.0	9100	7200		3.0
3.5	7900	7200		3.5
4.0	7000	7200		4.0
4.5	6200	6700	3100	4.5
5.0	5600	6000	3100	5.0
5.5	5000	5500	3100	5.5
6.0	4500	4900	3100	6.0
6.5	4000	4500	3100	6.5
7.0	3500	4100	3100	7.0
7.5	3200	3800	3100	7.5
8.0	3000	3300	3100	8.0
8.5		2900	3100	8.5
9.0		2400	3100	9.0
10.0		1900	2800	10.0
11.0		1500	2400	11.0
12.0		1200	2000	12.0
14.0		900	1600	14.0
16.0		600	1200	16.0
18.0			800	18.0
Telescoping status(%) 伸缩模式				
2nd boom 二节臂	0	0	0	2nd boom 二节臂
3rd boom 三节臂	0	33	66	3rd boom 三节臂
4th boom 四节臂	0	33	66	4th boom 四节臂
Top boom 五节臂	0	33	66	Top boom 五节臂
Min. angle 最小角度	0°	22°	44°	Min. angle 最小角度
Rope rate 钢丝绳倍率	4	4	4	Rope rate 钢丝绳倍率
Load at min.angle 最小角度吊重	2500	500	400	Load at min.angle 最小角度吊重



# Load Chart - Telescopic Boom, On Tires Stationary, Load Over Front

## 性能表 - 轮胎静止吊载 (正前方)



Unit: kg

Radius (m) 幅度	11.6m	19.9m	28.2m	Radius (m) 幅度
3.0	13900	8100		3.0
3.5	12300	8100		3.5
4.0	10900	8100		4.0
4.5	9800	8100	3400	4.5
5.0	8800	7800	3400	5.0
5.5	8000	7200	3400	5.5
6.0	7000	6600	3400	6.0
6.5	6000	6100	3400	6.5
7.0	4900	5600	3400	7.0
7.5	4100	5000	3400	7.5
8.0	3500	4500	3400	8.0
8.5		4000	3400	8.5
9.0		3300	3400	9.0
10.0		2600	3400	10.0
11.0		2100	2800	11.0
12.0		1500	2100	12.0
14.0		1200	1400	14.0
16.0		800	600	16.0
18.0				18.0
Telescoping status(%) 伸缩模式				
2nd boom 二节臂	0	0	0	2nd boom 二节臂
3rd boom 三节臂	0	33	66	3rd boom 三节臂
4th boom 四节臂	0	33	66	4th boom 四节臂
Top boom 五节臂	0	33	66	Top boom 五节臂
Min. angle 最小角度	0°	0°	44°	Min. angle 最小角度
Rope rate 钢丝绳倍率	4	4	4	Rope rate 钢丝绳倍率
Load at min.angle 最小角度吊重	2100	500	400	Load at min.angle 最小角度吊重

# Load Chart - Telescopic Boom, On Tires Stationary, 360° Slewing

## 性能表 - 轮胎静止吊载 (360°)

Unit: kg



Radius (m) 幅度	11.6m	19.9m	Radius (m) 幅度
3.0			3.0
3.5			3.5
4.0			4.0
4.5			4.5
5.0	4300		5.0
5.5	3500		5.5
6.0	2800	1900	6.0
6.5	2200	1900	6.5
7.0	1700	1600	7.0
7.5	1300	1300	7.5
8.0	900	900	8.0
8.5		600	8.5
<b>Telescoping status(%) 伸缩模式</b>			
2nd boom 二节臂	0	0	2nd boom 二节臂
3rd boom 三节臂	0	33	3rd boom 三节臂
4th boom 四节臂	0	33	4th boom 四节臂
Top boom 五节臂	0	33	Top boom 五节臂
Min. angle 最小角度	26°	54°	Min. angle 最小角度
Rope rate 钢丝绳倍率	4	4	Rope rate 钢丝绳倍率
Load at min.angle 最小角度吊重	600	400	Load at min.angle 最小角度吊重

**Remark**

1. Capacities are applicable at 550kPa cold tire inflation pressure.
2. Capacities are applicable only with machine on firm level surface.
3. On tire lifting with the jib mounted is not permitted.
4. Axle lockouts must be applied when lifting on tires.
5. Parking brake must be applied when lifting on tires stationary.
6. Driving speed shall be ~4km/h at pick & carry mode.

1. 冷态轮胎气压需保持 550kPa。
2. 起重机需在平整坚固的地面上作业。
3. 轮胎吊载工况不允许使用副臂吊载。
4. 轮胎吊载工况中，车桥悬挂需锁定。
5. 轮胎静止吊载工况中，需使用驻车制动。
6. 带载行驶工况中，直线行驶速度需小于等于 4km/h。



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