

SANY®

SPECIFICATION



60t

45.5m

2156kN·m

STC600C5
SANY TRUCK CRANE

QUALITY CHANGES THE WORLD
crane.sanyglobal.com

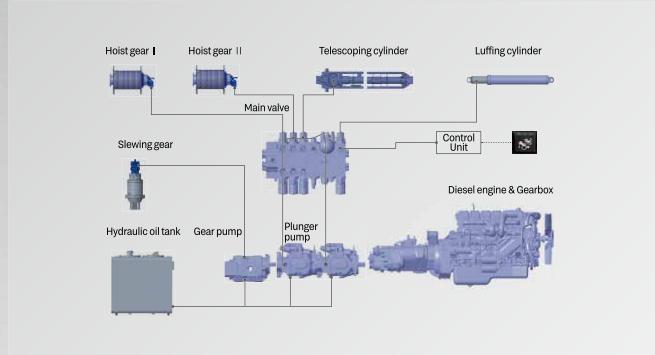


Super long & strong boom

超长超强主臂

45.5m five-section U shape boom made of high-strength welded structural steel, 16m jib, max. boom + jib length 61.5m, max. lifting height 62m, max. lifting moment 2156kN.m.

5节臂，采用U型截面高强度结构钢起重臂，主臂全伸长45.5m，主臂+副臂长61.5m，最大起吊高度62m，最大起重力矩达2156kN.m。



Double pump intelligent flow distribution system

双泵智能流量分配系统

New double pump intelligent flow distribution system, independent luffing, confluent telescoping, combined motion stability increased by more than 50%.

全新开发双泵智能流量分配系统，变幅独立，伸臂合流，复合动作平稳性提升50%以上。

SANY TRUCK CRANE STC600C5 / 60T LIFTING CAPACITY





Strong bearing chassis

高承载适用型底盘

G Class chassis with excellent accessibility, max. gradeability 45% and max. travel speed of 85km/h. Equipped with FAST 9-speed transmission, large speed ratio range, adaptable to slope climbing and high-speed traveling. High bearing capacity axle, rear axle adopts rubber suspension, with reduced driving vibration, more comfortable.

G类底盘,通过性能好;最高行驶速度85km/h,最大爬坡度45%;采用法士特双中间轴9档变速箱,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;高承载车桥,后桥采用橡胶悬挂,行驶震动更小,更舒适。



High strength two stage outriggers

高承载双级支腿

6.24m × 7.7m lower positioned front outrigger in H-layout + high-strength rectangular cross-section frame, improve torsion and bending resistance and working convenience.

6.24m × 7.7m 低前置H型双级活动支腿+高强度矩形截面车架,提升吊载抗扭抗弯能力和作业便利性。



MachineLink⁺

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.

标配树根物联网终端 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。



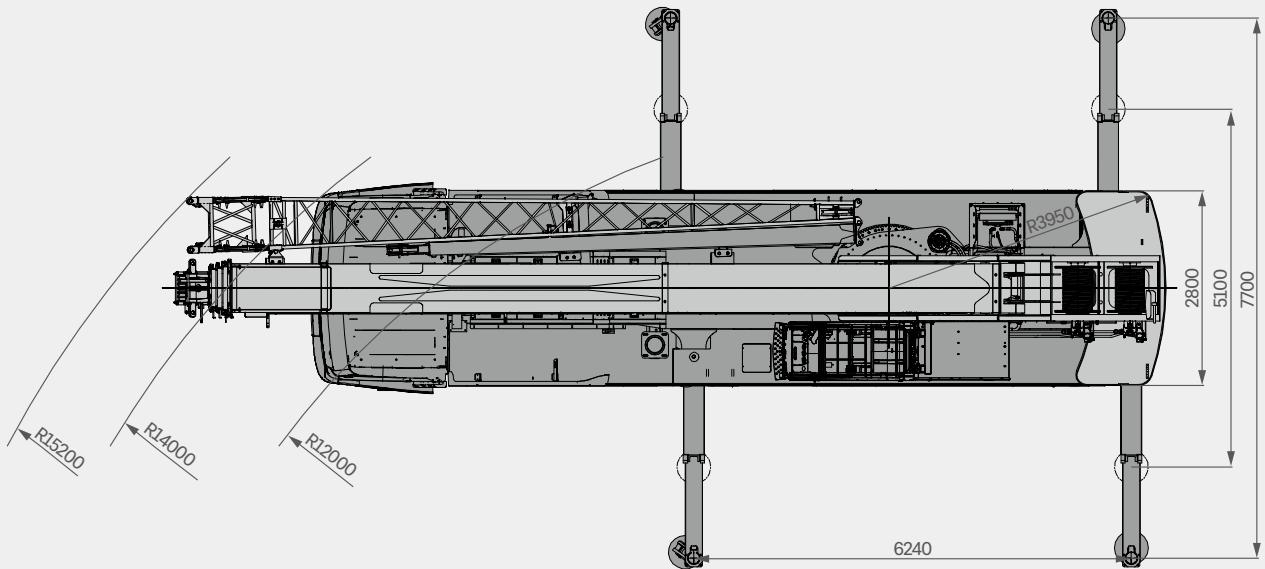
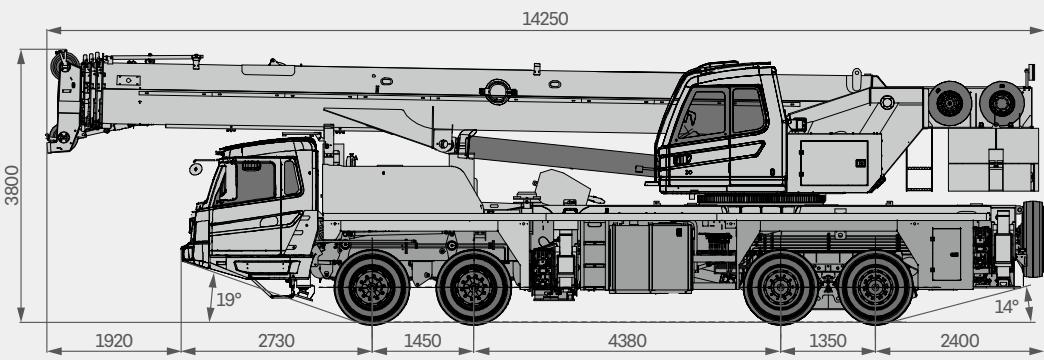
SANY TRUCK CRANE STC600C5 / 60T LIFTING CAPACITY





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	60	
WEIGHT 重量参数	Gross weight 整机总质量	kg	42000	
POWER 发动机参数	Engine model 发动机型号 (排放标准)	-	DF Cummins ISLe340 30(Euro III) 东风康明斯 ISLe340 30 (欧 III)	
	Max. engine power 发动机最大功率	kW/rpm	250/2100	
	Max. engine torque 发动机最大输出扭矩	N·m/rpm	1425/1100~1400	
DIMENSIONS 尺寸参数	Overall length 整机全长	mm	14250	
	Overall width 整机全宽	mm	2800	
	Overall height 整机全高	mm	3800	
TRAVEL 行驶参数	Max. travel speed 最高行驶速度	km/h	85	
	Steering radius 转弯半径	Min.steering radius 最小转弯半径	m	12
		Min.steering radius of boom tip 臂头最小转弯半径	m	15.2
	Wheel formula 车轮模式	-	8 × 4	
	Min.ground clearance 最小离地间隙	mm	255	
	Approach angle 接近角	°	19	
	Departure angle 离去角	°	14	
	Max.gradeability 最大爬坡度	-	45%	
	Fuel consumption per 100km 每 100 公里油耗	L	40	
	Working temperature range 使用温度区间	°C	-20~45	
	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	3.95	
MAIN PERFORMANCE 主要性能参数	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	2156
		Full-extension boom 全伸主臂	kN·m	1286
		Full-extension boom + jib 全伸主臂 + 副臂	kN·m	548
	Boom length 臂长	Basic boom 基本臂	m	11.74
		Full-extension boom 全伸主臂	m	45.5
		Full-extension boom + jib 全伸主臂 + 副臂	m	61.5
	Max.lifting height 最大起重高度	Basic boom 基本臂	m	11.74
		Full-extension boom 全伸主臂	m	46
		Full-extension boom + jib 全伸主臂 + 副臂	m	62
AIRCONDITIONER 空调	Outrigger span (Longitudinal × Transverse) 支腿跨距 (纵 × 横)	m	6.24 × 7.7	
	Jib offset 副臂安装角度	°	0,15,30	
	In operator's cab 上车空调	-	Cooling 制冷	
	In driver's cab 下车空调	-	Heating & cooling 制冷、制热	

Technical Specification

整机参数



Axle Load 轴荷

Axle 轴	1	2	3	4	Gross weight 总重量
Axle load 轴荷 /kg	8250	8250	12750	12750	42000
Remark 备注			-		



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
60	6	12	551
6	/	1	120



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	135m/min	18mm/215m	5t
Auxiliary winch 副卷扬	125m/min	18mm/135m	5t
Slewing speed 回转速度		0-2r/min	
Full luffing up/down time of boom 主臂起落幅时间		70s/90s	
Full extension/retraction time of boom 主臂伸缩时间		90s/110s	
Outrigger jack 垂直支腿	Retraction 收	35s	
	Extension 放	35s	
Outrigger beam 水平支腿	Retraction 收	30s	
	Extension 放	30s	

Crane Introduction

整机介绍

Carrier 下车

Driver's cab 驾驶室

- Self-developed full width cab in ergonomic design, featuring vibration reduction and noise isolation. Outward-opening doors on both sides, one pneumatic suspension seat and pilot seats, three-point safety belt, adjustable steering wheel, large-field rear-view mirror, defroster, heating and cooling A/C, multi-function console screen, control instruments and panel switch, more comfortable, safer and user-friendly.
- 三一自主开发全钢材料和橡胶密封结构，采用人体工程学原理设计，减震性和封闭性优良，两侧外开式车门，配备气动悬置的驾驶座与副驾驶座、三点安全带，可调整式的转向盘、大视野后视镜、配有头枕的舒适驾驶椅、防雾扇、冷暖空调，多媒体娱乐终端显示屏，控制仪器和仪表齐全，按键面板开关，更加舒适、安全、人性化。

Carrier frame 车架

- Designed and manufactured by Sany, the anti-torsion box-type structure welded with high-strength steel, featuring increased bearing capacity.
- 三一设计、制造，由细晶粒高强钢板焊接而成的防扭转箱形结构，承载能力强。

Engine 发动机

- Model: DF Cummins ISLe340 30 Inline six-cylinder diesel engine with watercooler and inter cooler.
- Emission standard: Euro III.
- Fuel reservoir capacity: 350L.
- 型式：直列六缸、水冷却、增压中冷、柴油发动机。
- 排放标准：欧三。
- 燃料箱有效容积：350L。

Transmission 变速箱

- 9-speed manual transmission with synchronizer, large speed ratio range, adaptable to slope climbing and high-speed traveling.
- 9 档手动变速箱带同步器，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。

Axe 车桥

- Axles 1, 2 are steered; axles 3, 4 are drive axles with built-in differential lock, realizing tougher ability to rough-terrain travelling. Press-welding axle housing technology, bearing capacity is stronger.
- 1、2 轴为转向轴，3、4 轴为驱动轴，带有轮间和轴间差速，脱困能力强；冲焊桥壳工艺，承载能力更强。

Suspension system 悬挂

- Front axles adopts independent leaf spring suspension system, rear axles adopt rubber suspension system. The system is verified by 100,000 cycling fatigue tests, ensuring both strength and riding comfort.
- 前轴采用独立式钢板弹簧，中后轴采用橡胶悬架系统，悬挂系统经过超过 10 万次的疲劳试验，保证强度的同时兼顾乘坐的舒适性。

Steering 转向系统

- Mechanical steering adopts larger flow steering gear + steering cylinder, the steering resistance is significantly reduced.
- 液压助力机械转向，采用大流量转向器+转向助力油缸，大大减小转向阻力，转向更轻便。

Tires 轮胎

- 13 radial vacuum tires sized 315/80R22.5, strong bearing capacity and durability.
- 13 (轮胎数) 一轮胎规格：315/80R22.5，钢丝真空轮胎，承载能力大，耐用。

Wheel formula 车轮模式

- 8 × 4 × 4.

Outrigger 支腿

- H-type layout, four point support with high strength steel plate, span (longitudinal × transverse) of 6.24 × 7.7m, easy to operate. Outrigger beams hydraulically telescoping, outrigger jacks adopts two-way holding valve for safety.
- H 型支腿 4 点支撑，纵、横跨距 6.24m×7.7m，易操作、稳定性强；采用细晶粒高强度钢板材料，一、二级支腿全液压横向伸缩。支腿垂直油缸采用双向液压锁进行安全保护。

Brake 制动系统

- The braking system includes service brake & parking brake & emergency brake & assisting brake.
- Service brake: air servo, dual circuits; front axle adopts wedge brake and dual air chambers, delivering stronger braking performance.
- Parking brake: functioning at axles 3 and 4 by spring-loaded air chamber.
- Emergency brake: performed by accumulator releasing pressure.
- Assisting brake: engine exhaust brake, safety assured when driving down long slopes.
- 制动系统包括行车制动、驻车制动、应急制动和辅助制动。
- 行车制动采用双回路制动系统，所有车轮均用空气伺服制动器，前桥采用膜式制动器+双气室，制动力更强。
- 驻车制动是通过气室内弹簧作用在第三、四桥上。
- 应急制动阀由蓄能器储能断气制动兼做应急制动。
- 辅助制动为排气制动，保证在下长坡时的制动安全，保证行车的安全可靠。

Electrical system 电气系统

- 2 × 12V maintenance-free battery and equipped with a mechanical power switch, realizing manual cutting off of the power of the whole vehicle. A bus control system can realize the information communication of chassis and superstructure.
- 2 × 12V 免维护蓄电池，配有机械式电源总开关，可手动切断整车电源；总线控制系统，可实现上下车信息交互。

Crane Introduction

整机介绍

Operator's cab 操纵室

- Large interior space with safety glass, corrosion-resistant steel plate, equipped with full coverage of softened interior, panoramic skylight, adjustable seats; Equipped with AC, electric wiper, more comfortable and easy to operate; 7 inch display screen is configured to realize the linkage of the main control console and operation display system, so that all working conditions of lifting operation data is clear at a sight.
- 超大内部空间，采用安全玻璃，耐腐蚀钢板，配置全覆盖软化内饰、全景式天窗、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 7 英寸显示屏，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 & telescoping system 伸缩系统

- Five-section 45.5m boom of single-plate boom head, 16m jib, and the lifting height of full-extension boom is 46m, plus jib is 62m. It is made of high-strength welded structural steel with U-shape cross-section telescoping via dual cylinder with rope arranger.
- 五节臂，单板臂头，全伸臂长 45.5m，副臂 16m，主臂全伸起升高度 46m，带副臂最大起升高度 62m。由高强度焊接结构钢制成，U 形截面，双缸 + 绳排伸缩方式。

Hoist 起升系统

- Efficient and energy saving speed regulation is realized by via double variables of pump and motor.
- Normally closed type winch brake, winch balance valve coupled with exclusive anti-slip tech contribute to smoother hoisting.
- 551kg main hook with 60t max. lifting capacity , 100kg auxiliary hook with 6t max. lifting capacity.
- Main winch wire rope: left-hand wire rope 18-4V × 39S-5FC-1960 L215m;
- Auxiliary winch wire rope: left-hand wire rope 18-4V × 39S-5FC-1960 L135m.
- 泵、马达双变量调速，高效节能。
- 常闭式卷扬制动器，卷扬平衡阀与独特的防溜钩技术完美结合，重物起落平稳。
- 主钩 : 551kg, 最大吊重量为 60t, 副钩: 100Kg, 最大吊重量为 6t。
- 主卷钢丝绳：左旋钢丝绳 18-4V × 39S-5FC-1960 L215m。
- 副卷钢丝绳：左旋钢丝绳 18-4V × 39S-5FC-1960 L135m。

Luffing system 变幅系统

- Passive luffing down is adopted to reduce energy consumption and improve the stability of the operation.
- Luffing angle: -2°~80°.
- 采用自重落幅系统，降低能耗，提高落幅操作的平稳性。
- 变幅角度：-2°~80°。

Hydraulics 液压系统

- The new intelligent double pump flow distribution system make the control performance of combined actions improved by more than 50%. The boom luffs at shunting mode and telescopes at confluence mode.
- It adopts the load-sensing variable piston pump to adjust the displacement in real time, realizing high-precision flow control, and greatly reducing energy loss.
- The electronically controlled main valve functions flow compensation and load feedback control to easily realize stable control of single action and combined actions under various working conditions.
- The slewing system comes with an integrated slewing buffer valve and free swing mechanism, featuring smooth start and excellent inching-movement.
- Dynamically compensated passive luffing down: active luffing down at large elevation, and passive luffing down at small elevation. This technology can automatically limit the speed to ensure constant speed and smoothness.
- 采用全新开发的双泵智能流量系统，变幅独立，伸臂合流，复合动作操控性提升 50% 以上。
- 采用大流量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，极大的降低能量损耗。
- 主阀具备流量补偿、带负载反馈控制功能，能在各种工况下，轻松实现单个动作和组合动作的稳定控制。
- 回转系统集成功回转缓冲阀，具有自由滑转功能，回转启动和控制平稳，微动性卓越。
- 动态补偿自重落幅技术：大仰角时加压落幅，小仰角时自重落幅，采用流量补偿技术可自动限速，保证落幅匀速平稳。

Slewing 回转系统

- 360° slewing and max. slewing speed 2r/min, the action is stable and the system is reliable. Unique slewing buffer design, make the braking more stable.
- 360° 回转最大回转速度 2r/min, 动作稳定，系统可靠。独特的回转缓冲设计，制动更平稳。

Control system 控制系统

- High-precision LMI display offers multi-dimensional and all-round safety guarantee.
- Controllers, displays, meters, I/O modules, sensors, etc. are integrated in CAN Bus networking, fast-responsive and intelligent.
- Smart controllers, BCM control modules, fault self-diagnosis system, care-free when operating.
- Specialized battery pack, achieving intelligent distribution and control of vehicle power.
- ROOTCLOUD, intelligent monitoring of the machine's movement trajectory and working conditions, functioning statistical analysis and big data management.
- 高精度力矩显示，多维度安全检测，全方位安全保障。
- 控制器、显示器、仪表、I/O 模块、传感器等采用 CAN 总线组网，高速智能。
- 智能控制器，BCM 控制模块、故障自诊断系统，作业更省心。
- 专用电瓶仓，整车电量智能分配和控制。
- 树根互联，智能监控主机运动轨迹、吊载工况，统计分析及大数据管理。

Counterweight 配重

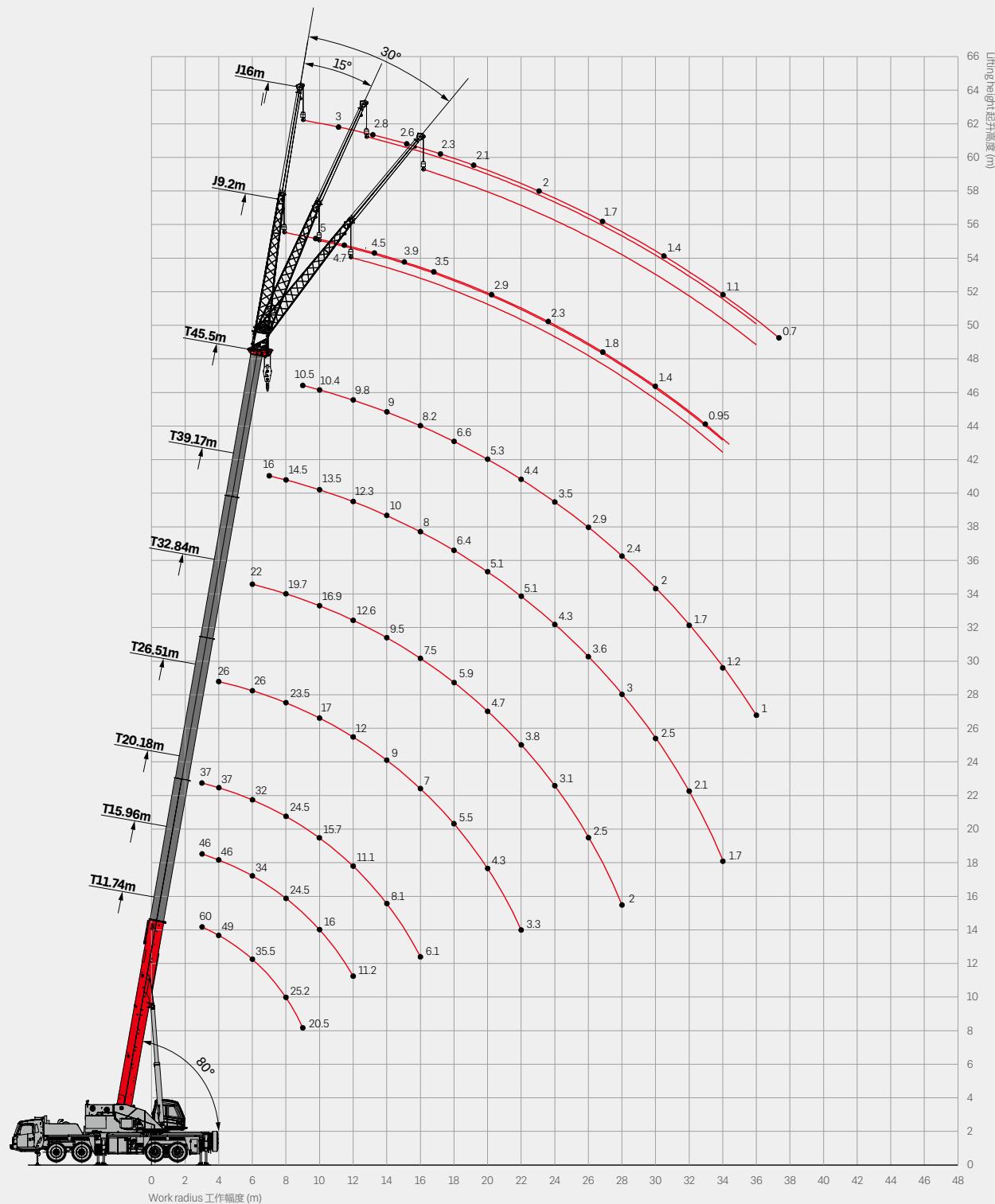
- Fixed counterweight 4.8t, movable counterweight 3.2t, jacking and fixing device available.
- 固定配重 4.8t + 活动配重 3.2t, 配备配重顶升安装装置。

Optional equipment at extra fees 选配

- Anemometer, Spark arrester, Air shut-off valves.
- Customized painting.
- Other equipment available upon request.
- 风速仪、火星灭火器、进气切断阀。
- 特殊涂装。
- 其他配置视需求定。

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	11.74	15.96	20.18	26.51	32.84	39.17	45.5	18.07	24.4	30.73	37.06	22.29	28.62	34.95	41.28	Radius (m) 幅度
3	60000	46000						26000								3
3.5	55000	46000	37000					26000								3.5
4	49000	46000	37000					26000	25000			26000				4
4.5	46000	44500	37000	26000				26000	25000			26000				4.5
5	44000	42000	35500	26000				26000	25000			26000	25000			5
5.5	39000	37500	33500	26000				26000	25000	18800		26000	25000			5.5
6	35500	34000	32000	26000	22000			26000	24500	18400		26000	25000			6
7	30000	28500	29000	25500	21000	16000		26000	22500	17500	13000	26000	24500	17000		7
8	25200	24500	24500	23500	19700	14500		25500	21500	16000	13000	25000	22000	16500	11500	8
9	20500	19500	19500	20400	18300	14000		21500	20700	14500	12000	21000	20000	15400	11100	9
10		16000	15700	17000	16900	13500		17800	18000	13500	11300	17200	17700	14300	10700	10
11		13300	13200	14200	14600	13000		15100	15700	13000	10600	14300	14500	13100	10200	11
12		11200	11100	12000	12600	12300	9800	13000	13500	12800	10100	12300	13000	12600	9800	12
14			8100	9000	9500	10000	9000	9800	10500	10200	9000	9300	9900	10200	9000	14
16			6100	7000	7500	8000	8200		8300	8400	8600	7300	7700	8100	8400	16
18			5500	5900	6400	6600		6700	7000	7000	5700	6200	6600	6900		18
20			4300	4700	5100	5300		5500	5800	5900		5000	5400	5500		20
22			3300	3800	4100	4400			4800	4900		4000	4400	4600		22
24			3100	3300	3500			4100	4200		3300	3700	3800			24
26			2500	2700	2900			3400	3600			3100		3200		26
28			2000	2200	2400					3100			2500	2700		28
30					1700	2000				2600			2000	2200		30
32					1200	1700				2200				1800		32
34						1200								1500		34
36						1000								1100		36
38																38

Telescoping status(%) 伸缩模式

Cylinder I 1号缸	0	50	100	100	100	100	100	0	0	0	0	50	50	50	50	Cylinder I 1号缸
Cylinder II 2号缸	0	0	0	25	50	75	100	25	50	75	100	25	50	75	100	Cylinder II 2号缸
Rope rate 钢丝绳倍率	12	10	8	6	5	4	3	6	5	4	3	6	5	4	3	Rope rate 钢丝绳倍率

Load Chart-Telescopic Boom

性能表 - 主臂

Unit:kg



Radius (m) 幅度	11.74	15.96	20.18	26.51	32.84	39.17	45.5	18.07	24.4	30.73	37.06	22.29	28.62	34.95	41.28	Radius (m) 幅度	
3	60000	46000						26000								3	
3.5	55000	46000	37000					26000								3.5	
4	49000	46000	37000					26000	25000			26000				4	
4.5	46000	44500	36500	26000				26000	25000			26000				4.5	
5	44000	42000	35000	26000				26000	25000			26000	25000			5	
5.5	39000	37400	33000	26000				26000	25000	18800		26000	25000			5.5	
6	35500	34000	31500	26000	21000			26000	24500	18400		26000	25000			6	
7	29300	28500	28000	25000	20000	16000		26000	23000	17500	13000	26000	24500	17000		7	
8	22700	22400	22000	22500	19200	14500		23600	22700	16000	13000	23200	22000	16500	11500	8	
9	18000	17400	17000	18500	17800	14000		19400	19100	15000	12000	18900	19000	15400	11100	9	
10		14000	13600	14900	15500	13500		16000	16500	14400	11200	15400	16000	14300	10700	10	
11		11500	11000	12400	13000	13000		13400	14000	13700	10500	12800	13500	13500	10200	11	
12		9600	9200	10400	11000	11500	9800	11400	12100	11700	10200	10800	11600	11700	9900	12	
14			6500	7600	8200	8600	8800	8500	9200	9500	9300	8000	8600	9000	9000	14	
16				4500	5500	6200	6600	7000		7200	7500	7500	6000	6600	7000	7500	16
18					4200	4800	5200	5600		5700	6000	6300	4600	5200	5600	5900	18
20					3200	3700	4100	4400		4600	4900	5200		4100	4500	4800	20
22					2400	2900	3200	3500			4000	4300		3200	3600	4000	22
24						2300	26000	2800			3300	3600		2500	3000	3300	24
26						1800	2100	2200			2600	3000			2300	2600	26
28						1300	1600	1800				2500			1800	2100	28
30							1200	1500				2100			1500	1700	30
32								1100				1600				1300	32
34																1000	34
36																	36
38																	38

Telescoping status(%) 伸缩模式

Cylinder I 1号缸	0	50	100	100	100	100	100	0	0	0	0	50	50	50	50	Cylinder I 1号缸
Cylinder II 2号缸	0	0	0	25	50	75	100	25	50	75	100	25	50	75	100	Cylinder II 2号缸
Rope rate 钢丝绳倍率	12	10	8	6	5	4	3	6	5	4	3	6	5	4	3	Rope rate 钢丝绳倍率

Load Chart - Fixed Jib

性能表 - 副臂

Unit: kg



Boom angle 主臂仰角 (°)	45.5+9.2m			45.5+16m			Boom angle 主臂仰角 (°)
	0°	15°	30°	0°	15°	30°	
78	5000	3300	2500	3000	2000	1400	78
77	4900	3200	2500	2900	1800	1350	77
75	4700	3200	2500	2800	1750	1300	75
74	4500	3100	2500	2700	1700	1300	74
73	4200	3100	2450	2600	1650	1250	73
70	3900	2800	2300	2300	1500	1200	70
67	3500	2700	2200	2100	1400	1100	67
64	2900	2500	2000	2000	1300	1100	64
61	2300	2100	1850	1700	1250	1000	61
58	1800	1600	1600	1400	1100	950	58
55	1400	1300	1250	1100	1000	850	55
51	950	850	800	700	650	600	51

Unit: kg



Boom angle 主臂仰角 (°)	45+9.2m			45+16m			Boom angle 主臂仰角 (°)
	0°	15°	30°	0°	15°	30°	
78	5000	3300	2500	3000	2000	1400	78
77	4800	3200	2500	2900	1800	1350	77
75	4700	3200	2500	2800	1750	1300	75
74	4500	3100	2500	2700	1700	1300	74
73	4200	3100	2450	2600	1650	1250	73
70	3800	2800	2300	2300	1500	1200	70
67	3000	2700	2200	2100	1400	1100	67
64	2300	2100	1950	1900	1300	1100	64
61	1800	1600	1550	1450	1250	1000	61
58	1300	1200	1200	1100	950	850	58
55	1000	900	850	800	700	650	55

Remark:

- Value listed are the max. capacity when the crane is in a level condition on solid ground or surface.
- Radius refers to actual radius with boom deflection considered.
- Value above are calculated with hooks and lifting slings considered (551kg main hook block, 100kg aux. hook block).
- When the fifth outrigger is landed in position, value listed are applicable for 360 degree operation.
- Rated lifting performance on boom point sheave equals 5000kg; boom load capacity shall be 2300kg less than value given when jib unfolds.
- Load value is given according to the larger radius or boom length value when the actual radius or boom length falls between two numbers above.

Wind can have a significant effect on loads that may be lifted by a crane. Wind forces act differently on a crane, depending upon the direction from which the wind is blowing (e.g., wind on the rear of the boom can result in decreased forward stability, wind on the underside of the boom can result in decreased backward stability, and wind on the side of the boom can result in structural damages, etc.).

Sany Group stipulates that if the wind speed (velocity) is between 32 km/h to 48 km/h, that the load capacities be reduced to account for the size and shape of the load and the wind direction in relation to the machine for all boom, and swingaway boom extension lengths.

Sany Group also stipulates that operation of the crane in wind velocities over 48 km/h be prohibited. To assist you in determining prevailing wind conditions.

备注:

- 起重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额定起重量。
- 起重性能表中工作幅度是指吊载后的实际幅度。
- 起重性能表中额定起重量包括起重钩（主起重钩重 551kg，副起重钩重 100kg）和吊具的重量。
- 打开好第五支腿时，表中数值适用于全方位（360°）作业。
- 使用臂尖滑轮时额定起重量不超过 5000kg。若副起重臂处于展开状态，主臂起吊的额定起重量应减少 2300kg。
- 如果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吊作业。

风会对起重机提升的荷载产生重大影响。风力对起重机的影响取决于风向（例如，动臂后部的风可能导致正向稳定性降低，动臂底部的风可能导致后向稳定性降低，动臂侧面的风可能导致结构损坏等）。

三一集团规定，如果风速（速度）在 32 km/h 至 48 km/h 之间，则应根据吊载尺寸和形状、风向以及副臂长度来减小吊载重量。
三一集团还规定禁止在风速超过 48 km/h 的情况下操作起重机。