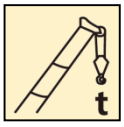
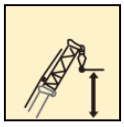
XCT25L5_SR汽车起重机 / Truck Crane

技术规格书
Basic technical specification



25 t

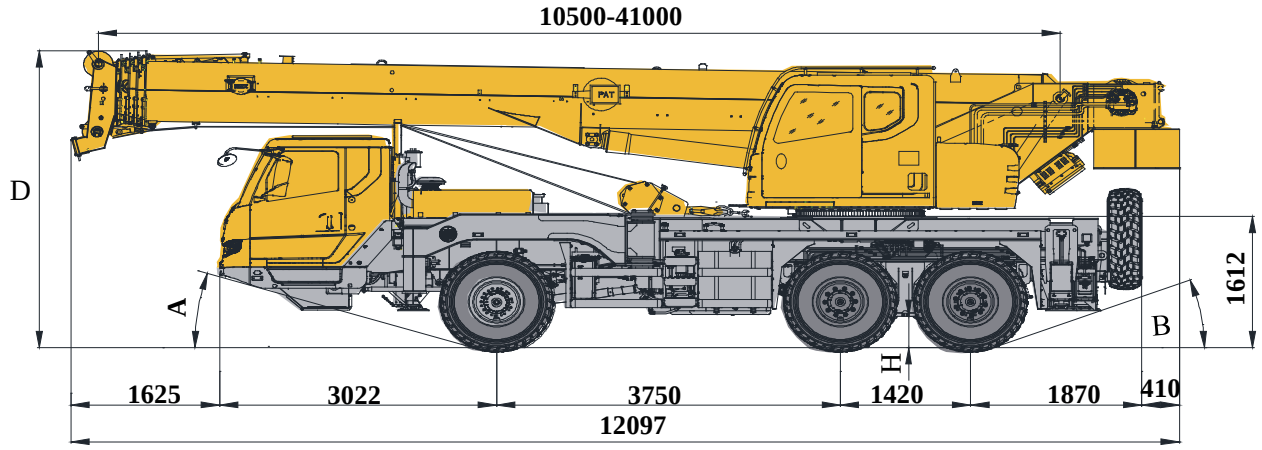
41 m

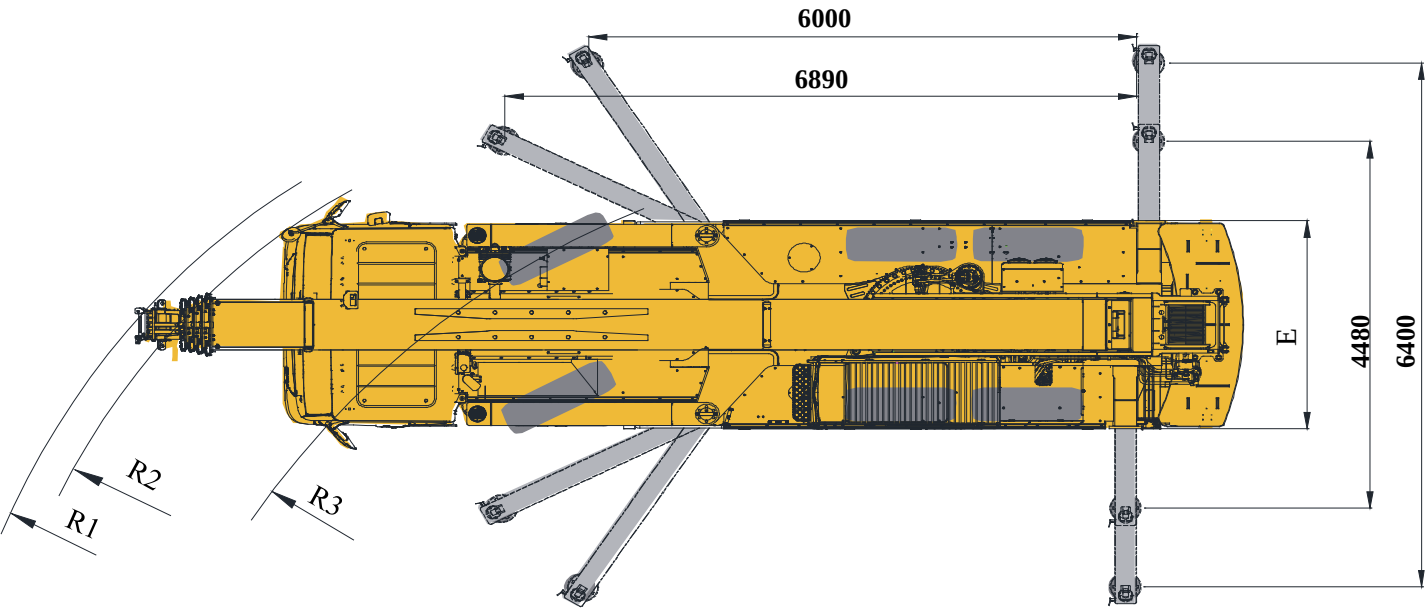


48.3 m

目录 **Content**	

尺寸参数
Dimensions





	A	B	D	E	R1	R2	R3	H
315/80R22.5	18°	21°	3650	2550	12800	12400	11000	351

技术规格
Technical specifications

	**Chassis**	
Frame	Designed and manufactured by XCMG, with all covered walking surface, anti-torsion box structure and optimal load-bearing structure design, made of imported high strength steel.	●
Outriggers	4 outriggers, K-shaped arrangement, lateral and vertical outrigger controlled by the hydr-aulic control. Both sides of the chassis equip-ed with electronic control console, the console installed with luminous level, lighting and speed buttons; outrigger cylinders equipped with one-way valve, and the vertical outrigger has two-way hydraulic lock. Float dimension: 473mm×608mm Reaction force of outrigger at max. lifting load:872KN	●
Engine	SC7H260Q5, in-line six-cylinder water-cooled EFI diesel engine, manufactured by SDEC , rated power 192kW /2300rpm, max. torque 1000N.m / 1200 ~ 1600rpm, the Europe V emission standards.Fuel tank capacity：260L	●
Transmission	Mechanical transmission manufactured by Fast, with 8 forw-ard gears and 2 reverse gears available	●
Transfer case	ZHUZHOU GEAR, with high and low gear ,with differential lock.	
Alxes	High-strength axles, four axles for driving: 6×6.	●
Suspension	Leaf-spring balance suspension is used for front axles; Leaf-spring balance suspension with double longitudinal arms is used for rear axles.	●
Tires	6tires and 1 spare tire; Tire specifications:14.00R20	●

Brakes	Service brake: double-circuit air pressure brake, acting on all wheels. Parking brake: spring energy brake, acting on wheels of 2-3 axles. Auxiliary brake: engine exhaust brake and engine in-cylinder brake.	●
Steering	Mechanically steering mechanism with hydraulic power assisted.	●
Driver's cab	Full-dimension driver's cab, two passengers are allowable. Equipped with radio, adjustable seats, steering wheel, safety glasses, electrically controlled windshield washer, electrically operated rearview mirror , electrically operated door window glove box. and 6 kilograms fire extinguisher. Heater and air conditioner are available.	●
	Independent fuel oil heater	○
Electrical system	24V DC, negative ground, 2 batteries.	●
Safety devices	Double-way hydraulic valve	●
	GLONASS satellite positioning	●
	ABS	●

技术规格
Technical specifications

	**Superstructure**	
Frame	Designed and manufactured by XCMG, made of high strength steel.	●
Hydraulic system	Constant displacement pump + load-sensing multi-way valve; with confluence technology adopted for multi-way valve, double-pump confluence can be realized when lifting, elevating or telescoping operation is carried out independently. Max. hoisting speed of main and auxiliary winches is up to 125 m/min. For simultaneous movements of main/auxiliary winch, telescoping or elevating, the two pumps supply oil separately.	●
Operating mode	Hydraulic pilot control of all crane movements using two control levers. All crane movements are controlled by hydraulic pump and proportional valve.	●
Main and Auxiliaryinch 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, balance valve and a grooved drum equipped. It has features of high speed with a light load and low speed with a heavy load.	●
Slewing system	Single-row, contact-ball, external tooth slewing ring, with a single slewing gear located at right side, is driven by the planetary gear reducer of slewing mechanism, which is driven by a hydraulic motor, and may continuously slew 360°. Power control or free slewing function is available, and the slewing speed may be infinitely regulated.	●
Elevating system	Single cylinder with self-compensation balanced valve.	●
Operator's cab	Ergonomically designed, with swing-out door and adjustable seat. It is equipped with safe glass and roof protective grille. Windshield is equipped with sun visor. Heater and air conditioning device is standard.	●
	Independent fuel oil heater	○
counterweight	5.5 t	●
Hook block	25t Hook block	●
	3t Hook block	○

	**Boom and jib system**	
Boom	Five-section boom with U-shape profile is made of high strength steel, with special anti-deformation design. Single cylinder plus ropes is used to telescope the boom. Boom length: 10.5m～41 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 2.8 t.	●
Fixed jib	The jib consists of a connecting bracket, a rotating bracket and a foldable lattice jib. Three offset angles of 0°, 15° and 30° are available. It is stowed along the side of the boom. Fixed jib length: 8.3m.	○
Safety device	Hydraulic balance valve; Hydraulic relief valve; Load moment limiter; Lowering limiter prevents wire rope from over releasing; Anti-two block at boom head prevents wire rope from over-winding; Free sliding and slewing locking.	●
	Anemometer	○
	Functions for EAC certificate, including virtual wall, low temperature warning , high voltage warning functions and load emergency lowering for safe	○

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

Symbol explanation:

● ——it means the standard configuration;

○ ——it means the optional configuration.

重量
Weight

车桥 Axle	1	2	3	总重量 Total weight
t	10	10	10	30

1)上车携带5节主臂、主卷、25t钩、5.5t平衡重、3t钩、副臂、副卷；
驱动形式：6×6；轮胎规格：14.00R20；
1)For the superstructure, 5 boom sections, main winch, 25t hook block， 5.5t counterweight，3t hook block, jib and auxiliary are included.
Driving type: 6×6; tire specification: 14.00R20.

吊钩 Hook	倍率 No. of lines	吊钩重量 Weight kg	吊钩尺寸 Dimensions mm	备注 Remarks
25t	10	297	1175×450×417	单钩 Single hook ，标配 Standard
3t	1	60	518×236×236	单钩 Single hook ，选装 Optional

作业速度
Working speeds

	km/h	
14.00R20	2.5 ~ 80	45%

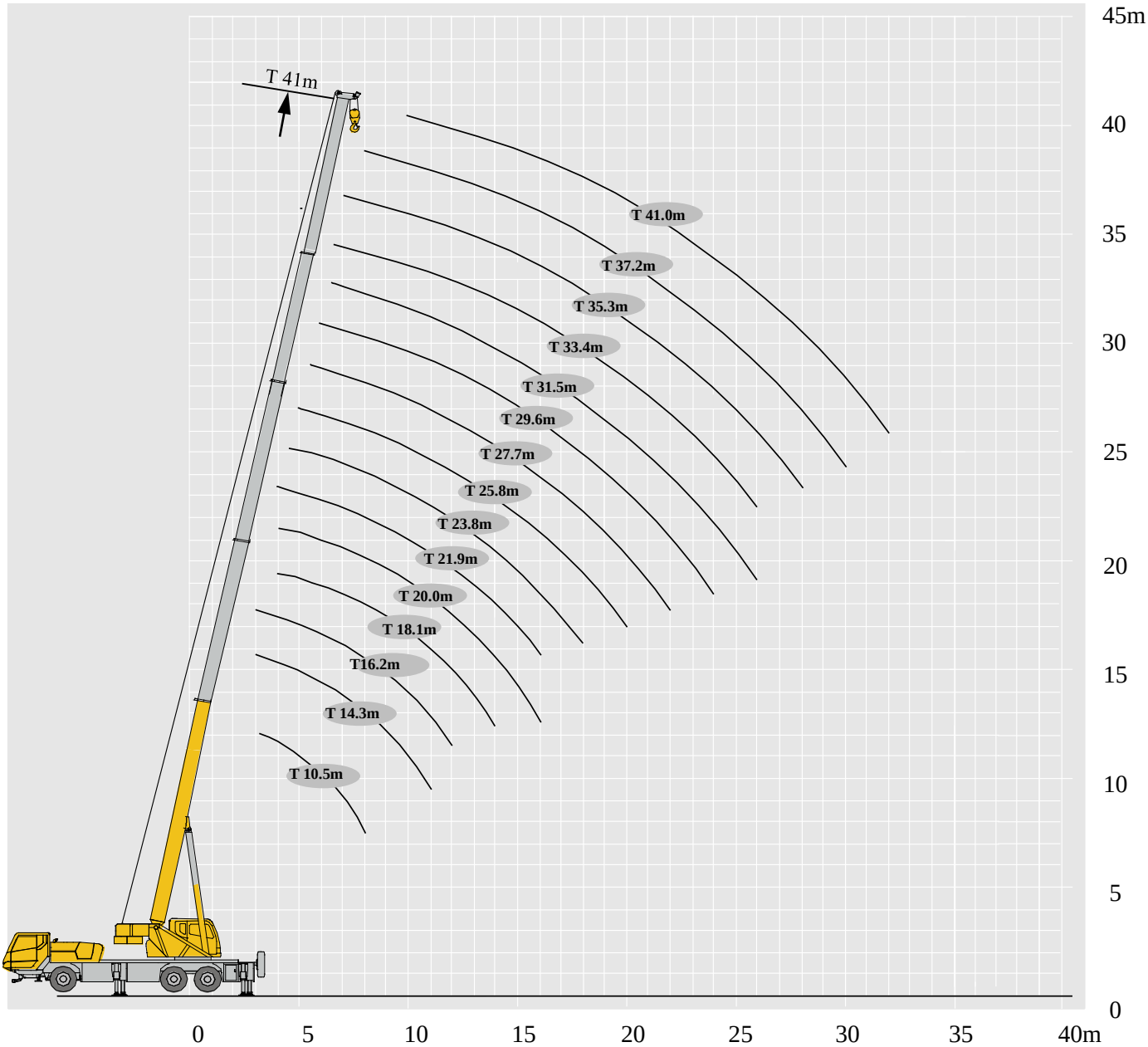
作业机构 Drive	作业速度 Working speed	最大单绳拉力 Max. single line pull	钢丝绳直径/长度 Rope diameter/ length
1	0-125 m/min，单绳，第四层 m/min, single line,4th layer	27.6 kN	14 mm/170 m
2	0-125 m/min，单绳，第四层 m/min, single line,4th layer	27.6kN	14 mm/110 m
360°	0-2.5 r/min		
	从-2°抬起至80°约35s Approx. 35s for boom elevation from -2° to 80°		
	从10.5m伸出至41m约95s Approx. 95s for boom extension from 10.5m to 41m		

臂架组合方案
Boom / Jib combinations

主臂 Telescopic boom	副臂 Jib
T：10.5~41m	T：10.5~41m J：8.3 m

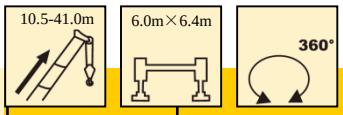
起升高度曲线图
Lifting heights

主臂
Boom



起重性能表
Lifting capacities

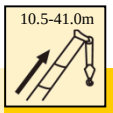
T 10.5~41.0m

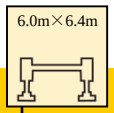


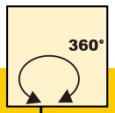
	10.5m	14.3 m	16.2m	18.1m	20 m	21.9 m	23.8m	
3	25000	21000						3
3.5	24800	21000	19000	19000				3.5
4	22800	20000	19000	19000	17600	15000		4
4.5	21000	19600	19000	18000	17600	15000	15000	4.5
5	19600	18400	18600	17000	17600	15000	14300	5
5.5	18200	17000	17600	15800	16600	15000	13600	5.5
6	16800	16000	16600	14800	15600	15000	12800	6
6.5	14900	15000	14800	13800	14000	14000	12000	6.5
7	13300	14000	14500	13000	13000	13700	11400	7
8	11600	11600	12900	11300	12400	12600	10300	8
9		9400	10700	9150	10200	11050	9400	9
10		7750	9000	7500	8500	9350	8200	10
11		6500	7650	6250	7250	8050	6950	11
12			6650	5250	6200	7000	5900	12
13			5800	4450	5400	6150	5100	13
14				3750	4700	5450	4400	14
15				3200	4100	4850	3850	15
16					3600	4350	3350	16
18						3500	2550	18
20							1900	20
22								22
24								24
26								26
28								28
30								30
32								32

起重性能表
Lifting capacities

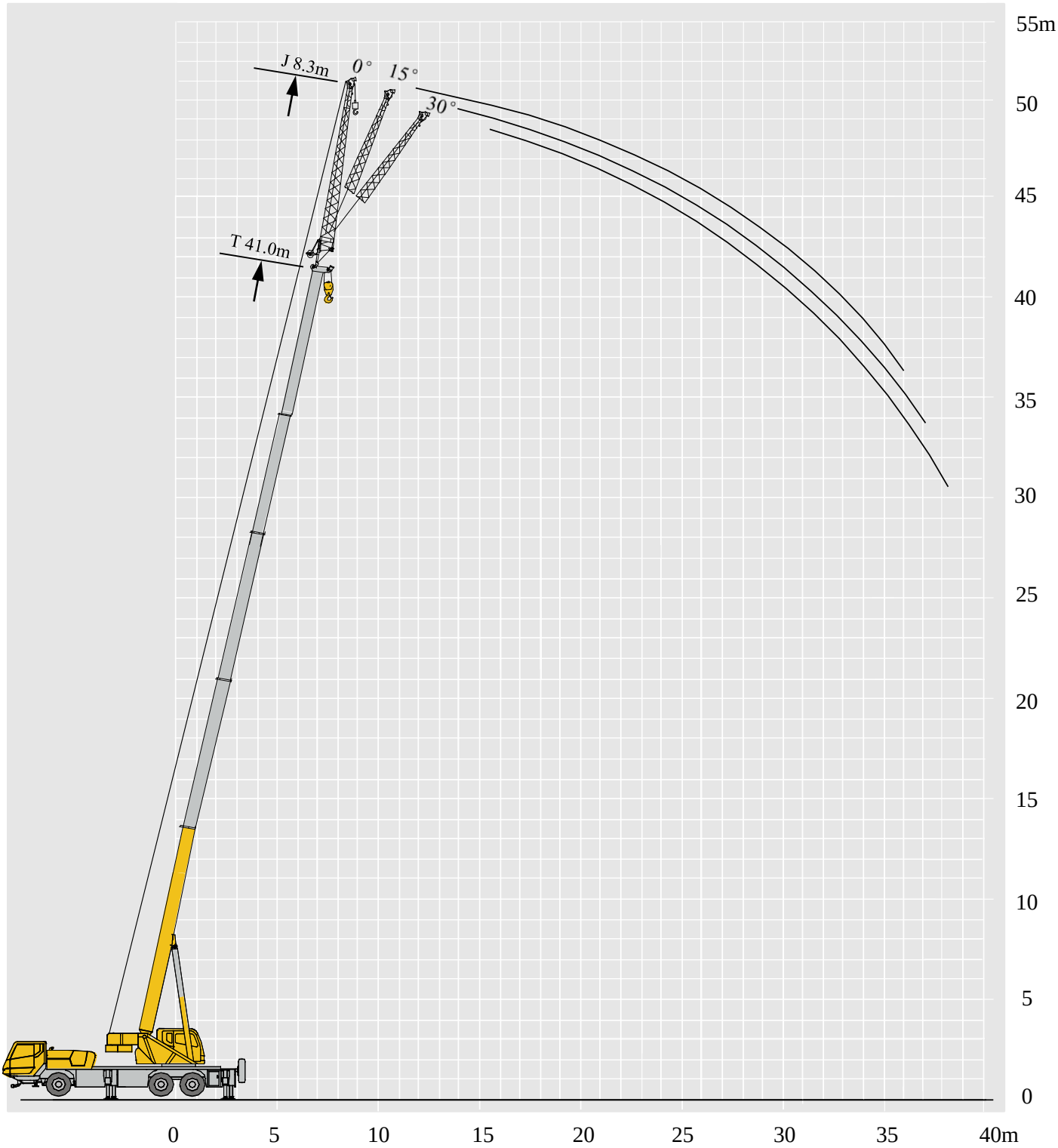
T 10.5~41.0m





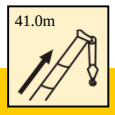


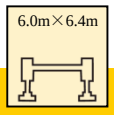
	25.8m	27.7 m	29.6m	31.5m	33.4 m	35.3 m	37.2m	41m	
3									3
3.5									3.5
4									4
4.5	12500	10000							4.5
5	12500	9500	10000						5
5.5	12500	9100	10000	9300					5.5
6	12500	8700	10000	8800	7200	8400			6
6.5	12500	8100	9800	8500	6900	8300	7000		6.5
7	12500	7900	9800	8200	6700	8200	6800		7
8	11600	7300	9000	7600	6200	7400	6400	5600	8
9	10600	6700	8200	7200	5800	6700	6000	5500	9
10	8900	6300	7500	6600	5400	6100	5600	5400	10
11	7600	5800	6900	6200	5000	5600	5200	5000	11
12	6600	5400	6300	5800	4600	5200	4900	4500	12
13	5700	5000	5500	5500	4400	4800	4500	4200	13
14	5000	4700	4800	5300	4200	4400	4200	3800	14
15	4400	4400	4200	4700	3900	4100	3900	3600	15
16	3900	4200	3700	4200	3700	3800	3700	3400	16
18	3100	3700	2900	3400	3300	3150	3300	3000	18
20	2500	3000	2300	2700	3100	2500	2900	2500	20
22	2000	2500	1800	2200	2600	2000	2400	2150	22
24			1400	1800	2200	1600	1900	1750	24
26				1500	1900	1250	1600	1400	26
28					1600	1000	1300	1150	28
30						750	1100	900	30
32								700	32


J 8.3m
0°
15°
30°
T 41.0m
55m
50
45
40
35
30
25
20
15
10
5
0
0
5
10
15
20
25
30
35
40m

起重性能表
Lifting capacities

T 41.0m





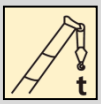
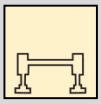
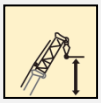
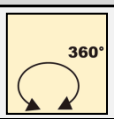
	0°	15°	30°	
78	2800	2000	1600	78
75	2800	1800	1500	75
72	2700	1750	1450	72
70	2500	1650	1350	70
65	2150	1500	1250	65
60	1600	1350	1150	60
55	1000	1000	950	55
50	700	700	700	50
45	500	500	500	45

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 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

	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 Gradability
	吊臂仰角 Boom position		轮胎 Tires
	主臂起升高度 Hoist height with Boom		支腿 Outriggers
	固定副臂长度 Fixed jib length		吊钩 Hook block
	副臂安装角 Jib offset angle		卷扬 Winch
	副臂起升高度 Hoist height with jib		360°全回转 360° rotation

主要技术参数表
Transportation plan

类别 Category	项目 Item		单位 Unit	参数 Parameter
尺寸参数 Dimensions	外形尺寸（长×宽×高） Outline size（length×width×height）		mm	12097×2550×3650
	轴距 Wheel base		mm	3750+1420
	轮距（前/后） Track（Front/ Rear）		mm	2095/2095/2095
	前悬/后悬 Front/ Rear overhang		mm	3022/1870
	前伸/后伸 Front/ Rear extension		mm	1015/299
重量参数 Weight	最大允许总质量 Total weight in travel		kg	30000
	轴荷 Axle load	一轴 1st axle	kg	9000
		二轴 2nd axle	kg	9000
		三轴 3rd axle	kg	9000
动力参数 Power	发动机型号 Engine model		——	SC7H260Q5
	额定功率/转速 Engine rated power/rpm		kW/(r/min)	192/2300
	最大净功率/转速 Max. net power/rpm		kW/(r/min)	188/2300
	最大输出扭矩/转速 Engine rated torque/rpm		N.m/(r/min)	1000/1200-1600
行驶参数 Travel	最高车速 Max. travel speed		km/h	≥80
	最低稳定车速 Min. travel speed		km/h	2.5～3
	最小转弯直径 Min. turning diameter		m	≤22
	臂头最小转弯直径 Min. turning diameter at boom tip		m	≤25.6
	最小离地间隙 Min. ground clearance		mm	351
	接近角 Approach angle		°	18
	离去角 Departure angle		°	21
	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		%	≥45
	百公里油耗 Fuel consumption per 100 km		L	35
噪音 Noise	加速行驶机外噪声 Exterior noise level		dB(A)	≤80
	驾驶员耳旁噪声 Noise level at seated position		dB(A)	≤80

主要技术参数表
Transportation plan

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	25
	最小额定工作幅度 Min. rated working radius			m	3
	转台尾部回转半经 Turning radius at turntable tail	平衡重处 Counterweight		mm	3507
		副卷处 Auxiliary winch		mm	3886
	最大起重力矩 Max. load moment	基本臂 Base boom		kN.m	988
		最长主臂 Fully-extended boom		kN.m	539
		最长主臂+副臂 Fully-extended boom + Jib		kN.m	449
	支腿跨距 Outrigger span	纵向 Longitudinal		m	6.0
		横向 Lateral		m	6.4
	起升高度 Hoist height	基本臂 Base boom		m	10.3
		最长主臂 Fully-extended boom		m	41
		最长主臂+副臂 Fully-extended boom + Jib		m	40.8
	起重臂长度 Boom length	基本臂 Base boom		m	10.5
		最长主臂 Fully-extended boom		m	41
		最长主臂+副臂 Fully-extended boom + Jib		m	49.3
	副臂安装角 Jib offset angle			°	0、15、30
工作速度参数 Working speed	起重臂起臂时间 Boom raising time			s	≤35
	起重臂全伸时间 Boom fully extended time			s	≤95
	最大回转速度 Max. slewing speed			r/min	≥2.5
	支腿收放时间Outrigger extending and retracting time	水平支腿 Outrigger beam	收 Retracting	s	≤20
			放 Extending	s	≤25
		垂直支腿 Outrigger jack	收 Retracting	s	≤20
			放 Extending	s	≤25
	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	≥125
		副起升机构 Auxiliary winch		m/min	≥125
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