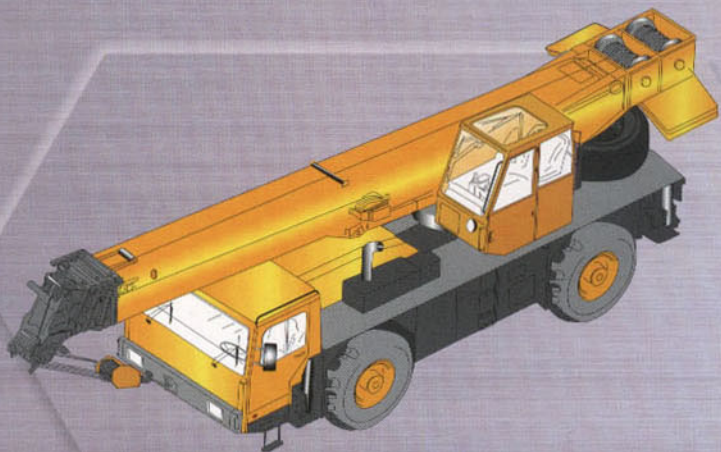


QAY25 全地面起重机

ALL TERRAIN CRANE



QAY25 All Terrain Crane is designed and manufactured by Xuzhou Heavy Machinery Works XCMG with its many year's successful experiences in manufacture of truck crane, in absorption of foreign high-tech and combined with the development of international all terrain crane. It is designed with computer in 3D configuration. The crane has the advanced technology including open type variable displacement system, hydraulic proportional control, hydro-pneumatic suspension and multiple chord boom profile. It features outstanding performance of load lift and road travel, not only meet the need of ordinary customers at home and abroad but also is suitable for use in western plateau, oil-field, semi-desert, etc., particularly for narrow site and rough road. It is truly an all terrain crane suited to the conditions in China.

Xuzhou Heavy Machinery Works XCMG is the leading manufacturer in China's construction crane industry.

主要技术特点

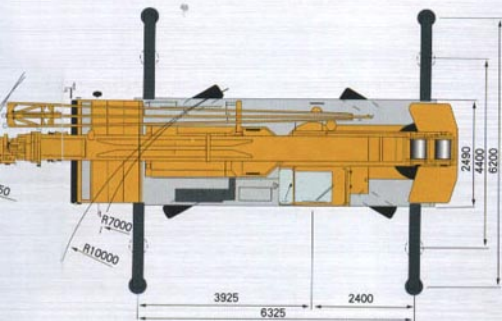
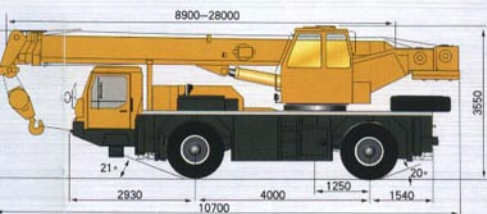
- 不用第五支腿，可以360°全方位作业，不受前方区域的限制，并可根据作业场地的情况半伸支腿作业。
- 当场地狭窄，不便于收放支腿时，可以使用轮胎支撑作业，并可吊重行驶，大大扩展了起重机的使用范围。
- 采用先进的六边形大圆角截面的吊臂形式，单缸加绳排的伸缩机构，有效提高了承载能力。
- 结构紧凑，重量轻，外型尺寸小，通过性好。接近角、离去角均大于20°，最小离地间隙360mm，整机长度小于10.7m。
- 越野能力强，适应范围广泛
 - ◆ 采用两桥底盘，全轮驱动，全桥转向，并可蟹形行走，前桥转向时转弯直径为20m，全桥转向时，转弯直径可减小至14m，最大爬坡度可达55%。采用八档变速，加一越野档，配置米其林14.00-24（32层级）越野轮胎。
 - ◆ 采用国际上最先进的悬挂技术之一油气悬挂。可根据路面高低不平的反馈，自动调平车架，并可根据指令改变车架高度，通过泥泞路面时，可将车架抬高，以增加通过能力。在平坦路上行驶时，可将车架降低，以降低重心。
- 液压系统采用变量泵定量马达系统，该系统为恒功率系统，主泵为斜轴式柱塞泵，具有负载反馈功能。可根据负载变化自动调节系统流量和压力。溢流损失小，效率高。上车控制方式为先导液比例控制，对系统进行了多参数优化匹配，操作舒适轻便，微动性好，操作性能极佳。下车支腿操纵采用电控方式，操纵简便准确。
- 体现以人为本的设计思想，运用三维造型技术、人机工程学原理，对整机布局、外观造型、驾驶室、操作室、操纵件的布局进行全新设计，大大提高了操纵的安全及舒适性。
- 该产品是真正意义上的高原起重机，完全适应西部高原、油田等地区的作业环境。可配置高原型增压中冷发动机，排放可达欧II标准，冷暖空调，强化了两室的设计，提高密封性和隔热性。可选装防紫外线玻璃和防辐射窗帘。

Main Technical Features

- 360° full swing without 5th outrigger and no limit of front area, and mid-position for outrigger is available according to working site.
- Lifting operation can be on the support of tires and travel with a lifted load on a narrow site not convenient for extension of outriggers.
- Hexagonal large angle cross-section of boom profile and single cylinder plus wire ropes for telescoping system greatly reduce the weight and increase the load bearing ability for the boom, and ensure a powerful lifting capacity for the crane.
- Compact structure, light weight, small overall dimensions and good passing ability, more than 20° approach and departure angles, 380mm minimum ground clearance, and less than 10.7m overall length.
- Powerful off-road capability and wide range of suitability.
 - ◆ 2-axle chassis, all-axle drive, all-wheel steering and crab walk possible, 20m turning diameter for front axle steering and reduced 14m turning diameter for all-wheel steering, maximum gradeability 55%, 8-speed transmission gear plus 1 off-road, equipped with Michelin 14.00-24 (32-layer) off-road tires.
 - ◆ Hydro-pneumatic suspension, one of the international most advanced suspension technology, can level the carrier automatically depending on road condition, and also can change the height of the carrier according to a signal. To negotiate a muddy road, the carrier can be raised in order to increase passing ability. To travel on high-way, the carrier can be lowered in order to reduce the center of gravity.
- The hydraulic system is a constant power system with variable displacement pump and constant displacement motor. The main pump is an axis-inclined piston motor with the function of load feedback to adjust automatically the flow and pressure in the system depending on the variability of the load, little loss in overflow and higher working efficiency. A pilot proportional control system is for the superstructure operation, easy and comfortable for operation and good in fine motion control. The outriggers on the carrier are of electric control.
- The design of this machine, based on ergonomic theory, uses 3D computer configuration for the whole arrangement, outline profile, driver's cab and operator's cab, and control parts, greatly increasing the comfort and easiness for operation.
- This product is truly a plateau type crane, fully suitable for the working conditions in the plateau of West China, oil field and other areas. A turbocharged & aftercooled engine which complies with regulation EURO II can be equipped for plateau type, also with air-conditioner. The optimized design of two cabs increases the sealing and insulation, and the anti-ultraviolet ray glass and the anti-radiation curtain are for option.

QAY25 全地面起重机

ALL TERRAIN CRANE



Outline dimensions	L × W × H	10700 × 2490 × 3550mm
Total mass		25.2t
Lifting performance	Max. load moment	948 kN.m
	Max. lifting height	Boom 28.2m, Boom + Jib 36.6m
	Max. lifted load for travel	6t
Travel performance	Approach angle	21°
	Departure angle	20°
	Min. ground clearance	360mm
	Max. travel speed	70km/h
	Min. turning diameter	20m for front wheel steering, 14m for all wheel steering, crab walk possible.
	Max. gradesability	58 %
Boom	No. of section	4
	Length	8.9m-28m
	Cross-section	Hexagonal large round angle cross-section, reasonable load, heavy load bearing capability
	Telescoping	Single cylinder plus wire ropes, synchronous telescoping
Jib	No. of section	1
	Type	Triangle lattice structure, good stability and light-weight.
	Length	8.15m
Hoisting	Type	Main and auxiliary winches, build-in planetary reducer, driven by constant displacement piston motor.
	working speed	Not less than 140m/min.
Swing	Type	Two-stage planetary reducer, external coupling and central-adjusting, convenient for adjustment and maintenance, and controlled free-swing available. 360° full swing, swing speed is not less than
	working speed	2.5r/min. *
Elevating		Single cylinder with imported balance valve for front support elevation, hoist down by gravity, low energy consumption.
Outrigger	Type	H-type outriggers at front and rear.
	Extension width	lateral extension 6.2m, longitudinal extension 6.325m, mid-position extension (4.4m) permissible
Hydraulic system	Oil pump	Imported triplex gear pumps, main pump is piston variable displacement pump with load feedback function.
	Control	Hydraulic pilot proportional control, convenient, sensitive and accurate.
Safety device		Automatic moment limiter (AML) contributes dynamic display of crane motions by configuration, and with automatic overload protection. Overwind cut-out device, height limiter, outrigger hydraulic lock and balance valve.
Carrier		Self-made 2-axle carrier with all-axle drive, all wheel steering and crab walk possible.
Engine		6-cylinder, water cooling and turbo-charged & aftercooled diesel engine, exhaust emission complies with regulations EURO II, max. output 184kW, plateau type engine is for option.
Transmission		Mechanical control, change gear with synchronizer, eight gears plus one off-road gear.
Suspension		Hydro-pneumatic suspension with auto-leveling, manually raise/lower and rigidly lock the carrier. Max. stroke 160mm.

起重机主要起重参数

QAY25

QAY25全地面起重机主臂起重性能表

——全伸支腿 (跨距6200mm), 360° 作业

QAY25 All Terrain Crane Total Rated Lifting Load For Boom

——On Full-extend Outriggers (Extension 6200mm), 360° Swing

幅度 Working radius (m)	臂长 boom length 8900mm		臂长 boom length 15200mm		臂长 boom length 21600mm		臂长 boom length 28000mm	
	起重量 Lifting load (t)	起升高度 Lifting height (m)	起重量 Lifting load (t)	起升高度 Lifting height (m)	起重量 Lifting load (t)	起升高度 Lifting height (m)	起重量 Lifting load (t)	起升高度 Lifting height (m)
3.0	25	8.86						
3.5	25	8.51						
4.0	24	8.11	15	15.42				
4.5	21.5	7.6	14.2	15.21				
5.0	18.7	7.09	13.5	14.97	9	21.89		
5.5	17	6.43	12.8	14.7	8.5	21.71		
6.0	14.3	5.62	12.2	14.41	7.7	21.52	6.0	28.29
6.5	12.3	4.52	11.5	14.1	7.3	21.32	5.6	28.14
7.0			10.2	13.76	7	21.1	5.3	27.98
8.0			8.7	12.98	6.4	20.63	4.8	27.62
9.0			7.15	12.05	5.9	20.08	4.4	27.22
10.0			6.0	10.93	5.1	19.46	4.1	26.78
11.0			5.1	9.53	4.7	18.77	3.8	26.29
12.0			4.4	7.69	4.4	17.98	3.5	25.75
13.0					3.9	17.1	3.2	25.15
14.0					3.45	16.08	3.0	24.49
15.0					3.0	14.92	2.8	23.78
16.0					2.7	13.58	2.6	22.99
17.0					2.4	11.96	2.5	22.12
18.0					2.1	9.94	2.2	21.16
19.0							2.0	20.1
20.0							1.8	18.93
22.0							1.4	16.09
24.0							1.1	12.19
倍率 Parts of line	10		6		4		3	
吊钩重量 Weight of hook block	250kg							



QAY25全地面起重机主臂起重性能表

—半伸支腿 (跨距4400mm), 360° 作业

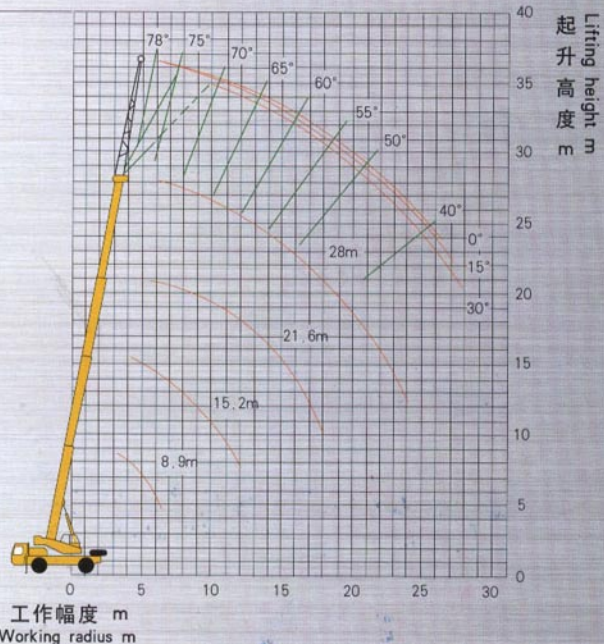
QAY25 All Terrain Crane Total Rated Lifting Load For Boom

—On Mid-extend Outriggers (Extension 6200mm), 360° Swing

幅度 Working radius (m)	臂长 boom length 8900mm		臂长 boom length 15200mm		臂长 boom length 21600mm		臂长 boom length 28000mm	
	起重量 Lifting load (t)	起升高度 Lifting height (m)	起重量 Lifting load (t)	起升高度 Lifting height (m)	起重量 Lifting load (t)	起升高度 Lifting height (m)	起重量 Lifting load (t)	起升高度 Lifting height (m)
3.0	25	8.86						
3.5	25	8.51						
4.0	21.6	8.11	15	15.42				
4.5	16.2	7.6	14.2	15.21				
5.0	13.0	7.09	13.5	14.97	9	21.89		
5.5	11.0	6.43	11.5	14.7	8.5	21.71		
6.0	9.3	5.62	9.8	14.41	7.7	21.52	6.0	28.29
6.5	8.0	4.52	8.5	14.1	7.3	21.32	5.6	28.14
7.0			7.3	13.76	7	21.1	5.3	27.98
8.0			5.8	12.98	5.9	20.63	4.8	27.62
9.0			4.75	12.05	4.9	20.08	4.4	27.22
10.0			3.9	10.93	4.0	19.46	4.1	26.78
11.0			3.3	9.53	3.4	18.77	3.5	26.29
12.0			2.8	7.69	2.9	17.98	3.0	25.75
13.0					2.5	17.1	2.6	25.15
14.0					2.1	16.08	2.2	24.49
15.0					1.85	14.92	1.9	23.78
16.0					1.6	13.58	1.7	22.99
17.0					1.4	11.96	1.5	22.12
18.0					1.2	9.94	1.3	21.16
19.0							1.1	20.1
20.0							0.9	18.93
倍率 Parts of line	10		6		4		3	
吊钩重量 Weight of hook block	250kg							

起升高度曲线

Lifting height curves



起重机主要起重参数

QAY25

QAY25全地面起重机副臂起重性能表

—— 全伸支腿 (跨距6200mm), 360° 作业

QAY25 All Terrain Crane Total Rated Lifting Load For Jib

—— On Full-extend Outriggers (Extension 6200mm), 360° Swing

主臂仰角 Boom angle (Deg.)	0°		15°		30°	
	幅度(m) Radius	起重量(kg) Lifting load	幅度(m) Radius	起重量(kg) Lifting load	幅度(m) Radius	起重量(kg) Lifting load
78°	7.05	2800	8.84	2500	10.42	1900
75°	8.87	2800	10.63	2400	12.15	1750
72°	10.67	2750	12.4	2200	13.85	1700
70°	11.85	2650	13.54	2100	14.96	1600
65°	14.73	2150	16.34	1800	17.65	1500
60°	17.48	1800	19.0	1600	20.18	1400
55°	20.08	1450	21.5	1350	22.55	1230
50°	22.52	1100	23.83	1050	24.74	1000
40°	26.63	500	27.88	460	28.5	400
倍率 Parts of line	10		6		4	
吊钩重量 Weight of hook block	250kg					

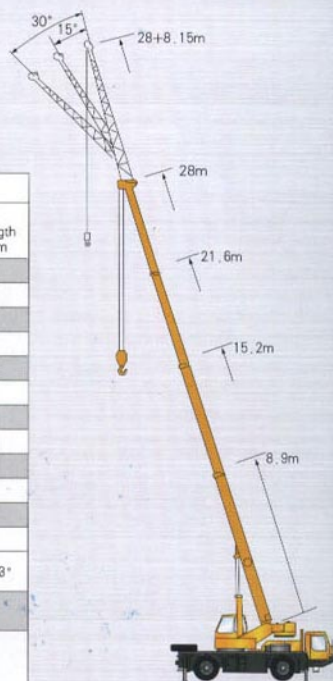
QAY25全地面起重机主臂起重性能表

—— 轮胎支承

QAY25 All Terrain Crane Total Rated Lifting Load For Boom

—— On Tires

幅度(m) Radius	正后方Boom at the rear		360° Swing	
	臂长 Boom length 8900mm	臂长 Boom length 15200mm	臂长 Boom length 8900mm	臂长 Boom length 15200mm
3.0	6000	5950	5460	4970
3.5	5180	5320	4550	4130
4.0	4620	4760	3820	3500
4.5	4340	4200	3220	2940
5.0	3850	3780	2730	2450
5.5	3320	3430	2340	2100
6.0	2870	3080	2000	1820
6.5	2520	2800	1680	1540
7.0		2520		1330
8.0		1960		980
9.0		1470		700
10.0		1050		500
吊臂仰角 Boom angle	23° - 60°	41° - 73°	23° - 60°	41° - 73°
倍率 Parts of line	10	6	10	6
吊钩重量 Weight of hook block	250kg			





全自动力矩限制器,可由图形动态显示作业参数,超载时可自动停止危险方向的动作,并可自动记录超载工况。

Load moment limiter (LML) contributes dynamic display of crane motions by configuration, and with automatic overload limit protection.



对液压系统进行了多参数优化设计,进口关键件,大大提高系统效率,安全性和可靠性。

Hydraulic system is optimized in multiple-data design and equipped with imported parts, greatly increasing working efficiency, safe and reliable for operation.



后桥双气室加复位弹簧锁死机构,传感器检测,安全可靠。

Rear axle has dual-chamber air brake plus return spring locking, and monitored by sensor, safer and more reliable for axles.



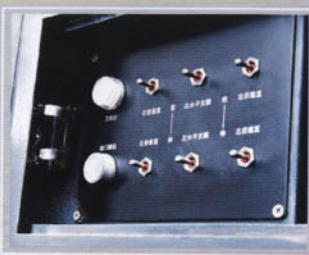
先进的液比例控制系统,操纵轻便灵敏,安全舒适,微动性好。

Advanced hydraulic joystick, easy and comfortable for operation and good in fine motion control.



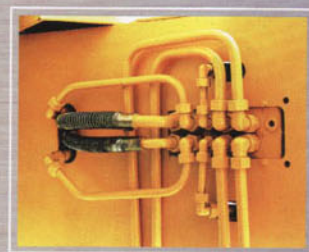
外啮合回转机构,两极行星减速,可调心式,进口平衡阀,可控自由滑转机能,操纵平稳,可靠。

Swing gear is two-stage planetary reduction with imported balance valve, external coupling and central-adjusting type, and controlled free-swung is available.



下车支腿操纵采用电控方式,操纵简便,可靠性高,并配有油门增速按钮和照明灯。

Outriggers use electric control mode, easy operation and higher reliability, and fitted with acceleration switch and illumination light.



变量液压系统,进口起升马达和平衡阀,起升速度可达140m/min,安全可靠。

Hoist gear is a variable displacement system with imported hoist motor and balance valve, working speed at 140m/min.



全轮转向系统,转弯直径可达14m,可在狭窄场地作业。

All wheel steering, turning diameter is reduced to 14m for narrow site operation.



先进的油气悬挂系统,每个悬挂缸均有两个传感器检测其位置,保证行驶的舒适性,并可调整车架高度。

Advanced hydro-pneumatic suspension, each suspension shock absorber has two sensors for monitoring to ensure the comfort for travel, and the height of the carrier can be adjusted automatically depending on road condition.



All specifications are subject to technical modifications without notice.

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