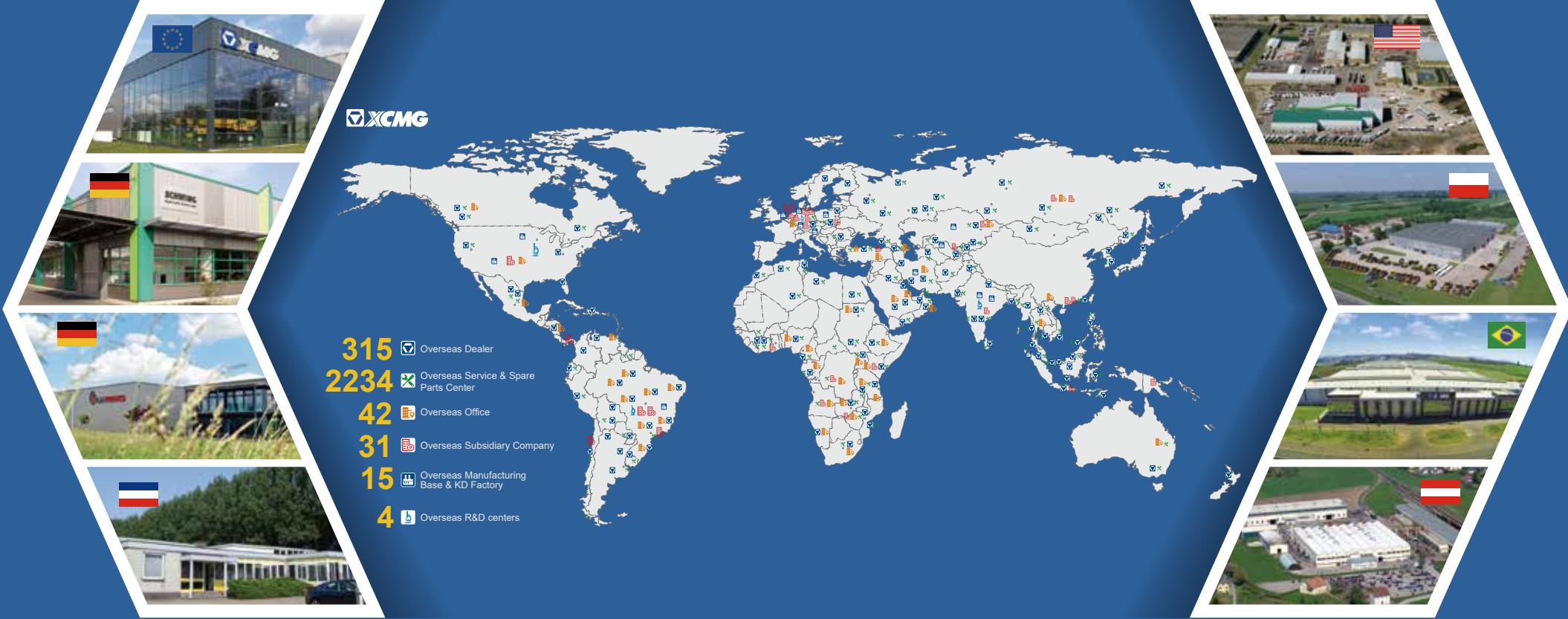


All Terrain Crane XCA150_U



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INTRODUCTION OF XCMG

XCMG is the leading construction equipment manufacture in China and is the third largest equipment manufacture in the world. In addition, XCMG ranks 305th among the worlds top brands.

XCMG builds 16 categories of equipment including cranes, excavators, concrete production and transporting, earth moving, mining, and road reclamation and paving. XCMG also produces many of its own hydraulic, power transmission, and electronic control systems components. XCMG is the top manufacture in the world of cranes, foundation machines and concrete production and distribution equipment.

XCMG's research and development groups have accumulated more than 9000 patents in China and 130 international patents. There are R&D centers and manufacturing facilities in 10 countries including Germany, the United States, Brazil and India. The manufacturing facility in Brazil has become a model of economic cooperation between China and Brazil. XCMG exports equipment to 187 countries around the world.

OVERVIEW

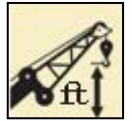
With 6-section boom of 203.4 ft, the max. lifting load of 150 USt, the max. lifting height of 303.5 ft and the max. working radius of 230 ft, the 5-axle all terrain crane enjoys a high jobsite transfer performance, and leads the industry in capacity and built-in intelligence.




150 USt



230.4 ft



303.5 ft



Wireless remote control technology is applied, so the remote control of outriggers, lifting, luffing, counterweight erection, jib unfolding and folding with one person can be realized. Innovative heavy-duty single-transverse arm independent suspension system contributes to strong off-road capacity and 15% higher operation stability. Efficient job site transfer with various axle loads is realized, so job site transfer is more convenient.



STRENGTHS AND HIGHLIGHTS

Proven power train, excellent ride ability

- Mercedes-Benz OM471 diesel engine, rated power 482.8 bhp, max. torque 1769.9 lb-ft. ZF 12-speed AMT automatic gearbox.
- Max. travel speed: 49.7 mph(14.0R25/16.0R25 tires)/43.5 mph(20.5R25 tires). Max. grade ability: 60%.

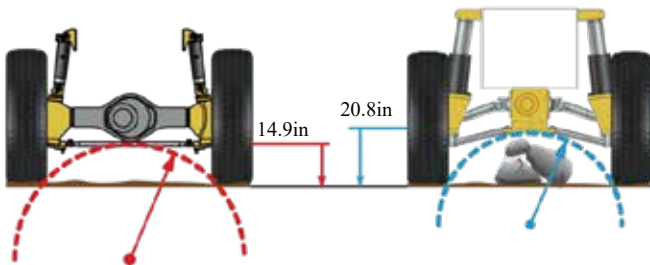


Large tonnage crane's single-engine system

One shared chassis engine is adopted for the whole crane. Power is transmitted to the superstructure hydraulically. Maintenance workload is reduced since there is only one engine. The annual maintenance cost of power system is saved by more than 40%.

Innovative heavy-duty single-transverse arm independent suspension system

The tires on left and right side move up/down separately to adapt to the road conditions, to effectively enhance the stability of steering operation at high speed and achieve excellent off-road performance when driving on the narrow road or the road with poor road conditions.



Suspension system

- Functions such as automatic leveling, moving up and down of suspension, and switching over of elastic and rigid suspension are available.
- Stroke of cylinder: -0.5 ft~0.5 ft.

Brake system

- Dual circuit air disk brakes.
- Spring applied, air released parking brakes on axles 2, 4 and 5
- Auxiliary: engine retarder brake, transmission retarder brake.



Driver cab

- Large color 312mm (12.3in) touch screen in the drivers cab provides for setup, information, and chassis configuration settings and diagnostic checking.
- Virtual driver cab instruments and chassis monitoring within easy reach of the driver provide extensive chassis information.

Operator cab

- Ergonomically designed working space makes operation safer and more comfortable.
- 10.4 in color touch screen display.
- Operator cab can be tilted up or down by 20°.





STRENGTHS AND HIGHLIGHTS

High mobility

- All-axle steering with tight turning radius, four-axle driving is suitable for rough road traveling.
- The axles 1 and 2 are steered mechanically with hydraulic servo, and electric-control hydraulic steering is available for the axles 3, 4 and 5.
- Min. turning diameter: 59.0 ft.



5 steering modes

- The axles 1 and 2 employ mechanical control plus hydraulic servo steering, and the axles 3, 4 and 5 are electric-control hydraulic steering.
- The axles 1 and 2 have emergency steering booster system located on the transfer case.
- Easy selection of steering mode by rotary dial.
- Clear arrangement of control elements and displays.



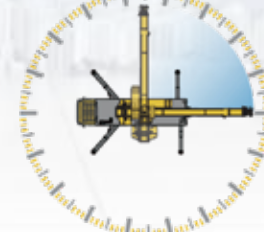
Superb lifting performance

- 6-section pinned boom of 203.4 ft with oval profile is the longest of the same class in the industry; the performance is 5~15% higher than that of the competitors.
- The telescoping mode is updated from sequential telescoping to random telescoping. New single-cylinder pinned telescoping system brings higher telescoping reliability.



New highly efficient energy-saving hydraulic system

- Independent hydraulic systems for lifting and slewing. Stable minimum speeds and high working speeds even with maximum loads.
- Proven variable displacement pumps and motor tuned to give excellent slow speed and smooth starting and stopping performance.
- Min. stable lifting speed (at drum): 8.2 fpm; Min. stable slewing speed: 0.1°/s.



Minimum speed of slewing : 0.1° /s
Minimum speed of winch: 2.6~3.3 ft/min



STRENGTHS AND HIGHLIGHTS

— Luffing mechanism

- Single boom hoist cylinder with gravity down as well as power lowering.
- Direct acting electric proportional boom hoist balance valve with self compensating function is utilized.



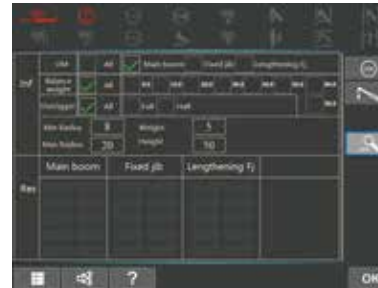
— Slewing mechanism

- Planetary gear reducer, normally closed brake.
- Continuous 360° slewing.
- Slewing speed: 0-1.65 r/min.



— Winch system

- Planetary gear reducer, normally closed brake.
- Max. single line pull: 19570 lb
- Max. hoisting speed (single line, no load): 426 fpm.

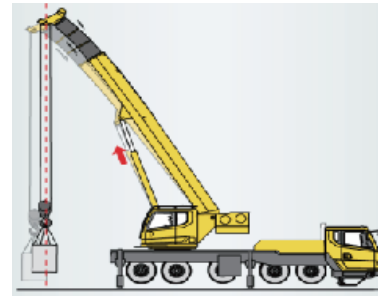


— Automatic working condition planning technology

- Recommend crane configuration based on load, radius and working height.

— Automatic luffing compensation technology

- With luffing compensation technology applied, the boom angle is automatically adjusted as a load is applied or removed to maintain a constant load radius.



— Hook height compensation technology

- With winch servo technology, the winches will automatically pay in or out rope depending on the conditions taking the burden off of the operator to have to stop and start telescope or luffing functions.
- The winches can be set to either maintain the hook height above the ground or to maintain the distance between the boom tip and the hook. This works while telescoping and/or luffing the boom.





TECHNICAL SPECIFICATIONS

Chassis

Frame	High strength torsion resisting box structure designed and manufactured by XCMG.	●
Outrigger	H-shaped outriggers, two-stage telescoping outrigger beam with push-pull outrigger floats. 0, 50, 75, and 100% beam extension settings to meet different requirements. Outrigger control panel is controlled by CAN bus located on the sides of chassis. Outrigger float dimension: ϕ 1.624 ft. Reaction force of outrigger at max. lifting load: 195266.5 lb.	●
Engine	Mercedes-Benz AG OM471LA, 6 cylinders, diesel. Rated power/rpm: 306 kw(482.8 bhp)/1600 rpm; Max. output torque/rpm: 2400 N.m(1769.9 lb-ft)/1300 rpm. Emission standard: EU Stage V /EPA Tier 4F . Fuel tank capacity:121.5 US gal.	●
Transmission	ZF AMT transmission with 12 forward and 2 reverse speeds. Optional retarder can be included	●
Axles	5-axle chassis with disconnected axle; axles 2, 3, 4 and 5 for driving, all wheel steering.	●
Suspension	Advanced independent suspension technology is adopted, and the tires on left and right side move separately to adapt to the road conditions with improved stability; Hydro-pneumatic suspensions have good shock-absorbing effect and automatic leveling function. The height of chassis above the ground may be adjusted. Main reducer is attached to the frame, which can be lifted or lowered with frame, leading to improved pass ability. The stroke of suspension cylinder is -0.5 ft-0.5 ft.	●
Tires	11 tires, each axle is equipped with single tire, large bearing capacity. Tire specifications: 525/80R25(20.5R25).	●
Brakes	Dual circuit air disk brakes on all wheels with parking brake on axles 2, 4, and 5. Includes engine brake, transmission retarder and electric eddy-current retarder (optional).	●
Steering	Axles 1 and 2 are mechanically steering; axles 3, 4, 4, 5 are electric-hydraulic proportional steered.	●

Driver cab

Modern full width driver cab. Fitted with passenger seat, HVAC, DVD navigator, safety glass, electric windows and mirrors, multi-functional steering wheel, back up camera and full suspension system.

Electrical system

24V DC negative ground system.
180 Amp alternator and two 12V batteries.

Toolbox

Supplied spare box.



Superstructure

Frame

Designed and manufactured by XCMG, made of high strength steel.

Hydraulic system

Variable plunger pump and gear pump driven by chassis engine are used for lifting, luffing, telescoping, slewing operations and auxiliary system.
Electric control multi-way valve;
Air-cooled hydraulic oil radiator.

Operating mode

Left and right electronic joy sticks control all crane movements and stepless slewing speed regulation is available.

Portable wireless remote control device is equipped to realize the pre-operational work for setting up the crane.

Winch system

Lebus grooved drum driven by variable displacement piston motor through planetary gearbox with counterbalance valve and integral brake.
Fitted with high strength rotation resistant rope and third wrap indicator.

Main winch

Auxiliary winch

Slewing system	Single row ball slew bearing with external teeth. Driven by a piston hydraulic motor through a planetary gear reducer with internal brake. Continuous rotation and selectable free swing mode.	●
Operator cab	New fully-enclosed steel cab has better sealing and anti-corrosive properties. It is equipped with a full-view front window. Safety glass and sun shield are used for windows. The cab features a new ergonomic seat design with backrest adjustment and armrests with joysticks fitted. A pull-out step is available to make it easy and safe to access and egress the cab. Wipers are fitted for the windshield and roof window. Control panel with human-machine interaction system is used in operator cab. The cab can be tilted up to 20°.	●
Safety devices	Counterbalance valves fitted on all cylinders and winch motors. Relief valves included in all circuits. Anti-two block and third wrap stops on winches. Full function LMI system, anemometer and winch monitoring device.	●
Combined counterweight	92610 lb in total, 9 counterweight combinations of 92610 lb, 67032 lb, 54905 lb, 42557 lb, 33957 lb, 21830 lb, 15656 lb, 9482 lb, 4631 lb	●
Centralized lubrication system	Controlled by computer program; lubrication points are at slewing ring, bearing pedestals of main winch and auxiliary winch, upper and lower pivots of luffing cylinder, pivot of tilt cylinder and rear pivot of boom.	●
Hook block	12.1 USt hook block	○
	27.6 USt hook block	●
	66.1 USt hook block	●
	99.2 USt hook block	●
	150.0 USt hook block	○



Boom and jib system

Boom	6-section boom with oval cross-section, welded structure with single-plate boom head and compact boom tail. Single-cylinder pinned telescoping system. Boom length: 43.0 ft ~ 203.4 ft.	●
Jib	The jib consists of a connecting bracket, a rotating bracket and two lattice sections. Three offset angles of 0°, 20° and 40° are available. It is stowed along the side of the boom. Jib length: 36.1 ft, 60.7 ft stepless luffing.	● ○
Extension	Boom extension of 23 ft	○
	Boom extension of 23 ft	○
Independent jib head	Independent jib head of 9.5 ft.	○
Single top	Pinned at the boom tip and able to be folded to the side when not in use. Single part of line maximum capacity of 7.7 USt.	●

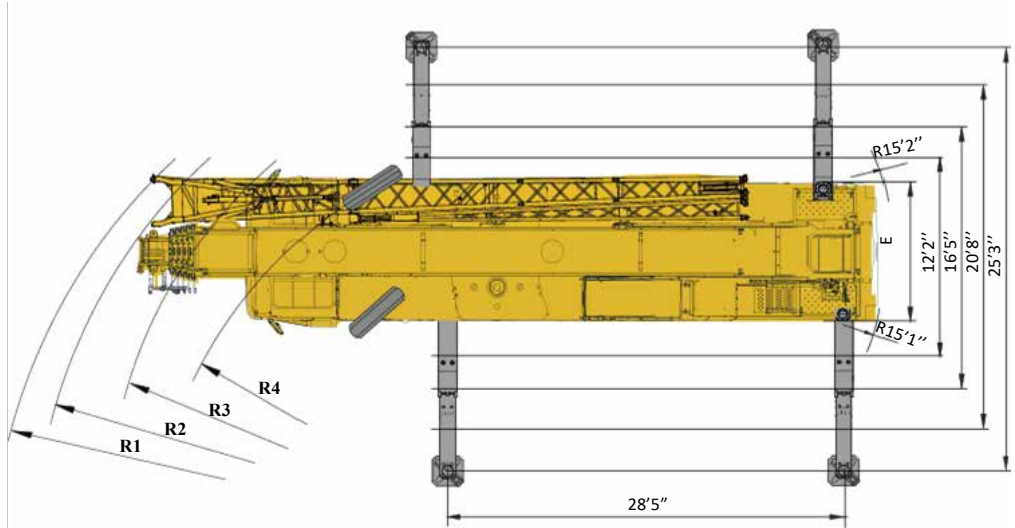
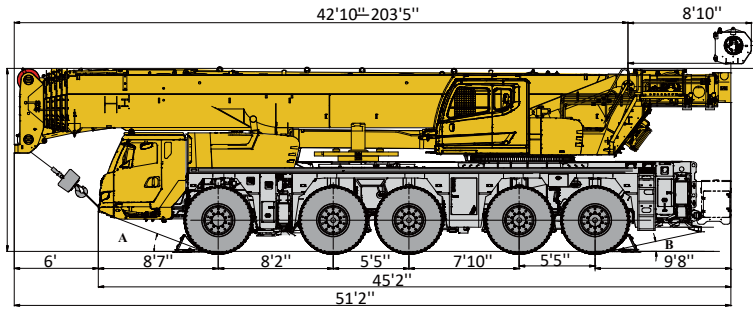
Product parts list is as mentioned above. Please refer to the product quotation for specific parts.

Symbol explanation:

- — it means the standard configuration;
- — it means the optional configuration.

Technical Specifications

Dimensions

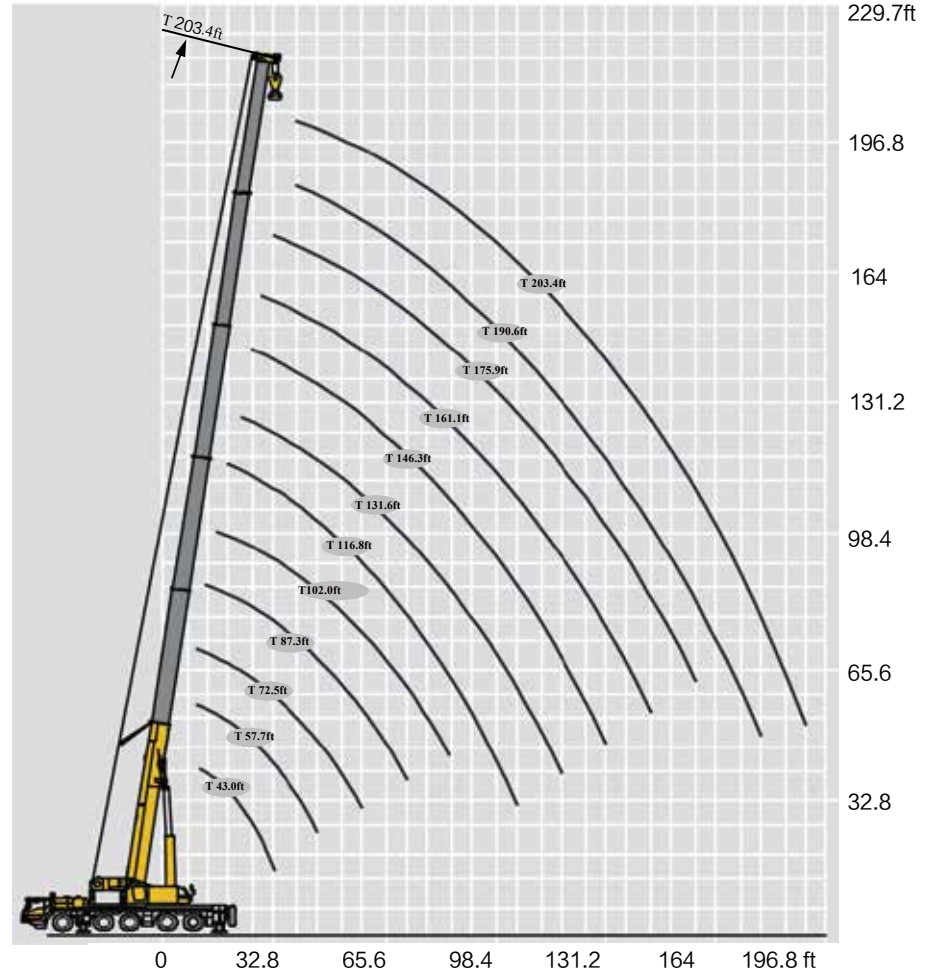


Tight turning steering mode















	A	B	C	D	E	R1	R2	R3	R4	H
525/80R25 (20.5R25)	19°	12°	6.4 ft	13.1 ft	9.8 ft	39.9 ft	38.2 ft	34.8 ft	29.5 ft	1.3 ft







Lifting heights



Lifting capacities (T 43.0-203.4 ft)

	    									
	43.0	57.7	57.7	57.7	72.5	72.5	72.5	87.3	87.3	87.3
9.8	300.0**	183.0	164.7	127.8	183.0	164.7	136.0			
11.5	222.7*	183.0	159.9	120.9	183.0	162.7	130.1			
13.1	205.0*	183.0	157.9	114.6	183.0	161.2	124.2	147.7	133.0	129.8
14.8	189.6*	183.0	156.1	109.3	180.8	160.3	118.5	147.7	133.0	124.9
16.4	178.6	174.2	149.9	104.3	169.8	154.8	113.6	147.7	133.0	120.0
19.7	156.6	152.1	140.9	95.6	149.9	136.9	104.8	145.5	133.0	111.8
23.0	136.7	136.7	125.0	88.2	134.5	123.0	97.8	130.1	121.1	104.5
26.2	121.3	123.5	113.1	82.0	121.3	111.1	91.6	116.9	109.1	98.6
29.5	103.6	110.3	103.2	76.9	110.3	101.2	85.3	105.8	99.2	92.9
32.8	83.8	100.5	93.1	71.9	99.2	93.3	79.1	97.0	91.3	88.0
39.4		81.1	75.8	64.7	81.6	76.4	68.1	80.9	76.0	77.5
45.9		59.5	57.6	59.0	66.6	62.7	60.0	65.7	62.3	69.1
52.5					53.6	51.2	53.7	52.9	50.8	58.2
59.1					44.3	42.9	48.1	43.7	42.5	48.7
65.6								36.4	36.1	41.5
72.2								30.9	31.0	35.7
78.7								22.1	24.3	26.5
Code	00000	00100	00010	00001	01100	00110	00011	11100	01110	00111

	    									
	102.0	102.0	102.0	116.8	116.8	116.8	131.6	131.6	131.6	
16.4	127.9	124.2	105.6							
19.7	127.9	116.6	95.7	110.3	105.4	86.9				
23.0	127.9	109.6	87.2	110.3	97.5	84.5	92.6	92.6	70.6	
26.2	116.9	103.7	79.0	107.5	90.0	79.2	92.6	92.1	66.1	
29.5	105.8	98.8	72.6	102.2	83.3	73.6	92.6	86.2	62.4	
32.8	97.0	93.9	67.4	97.0	77.2	68.7	88.8	77.8	59.1	
39.4	82.5	85.1	58.7	83.8	66.2	64.7	75.0	68.3	52.7	
45.9	67.7	70.8	52.0	69.5	58.6	58.0	65.3	61.2	47.6	
52.5	54.7	57.8	46.3	56.7	52.2	52.0	55.8	55.5	43.6	
59.1	45.4	48.3	41.7	47.2	47.3	47.2	46.3	47.0	39.9	
65.6	38.4	41.0	38.0	39.9	40.8	43.2	39.2	39.9	37.0	
72.2	32.6	35.5	35.0	34.4	35.1	38.1	33.5	34.2	34.3	
78.7	28.2	30.9	31.5	29.8	30.6	33.1	29.1	29.8	31.1	
85.3	24.5	27.1	27.8	26.0	26.9	29.1	25.4	26.0	27.3	
91.9	22.7	25.4	26.0	22.9	23.6	25.8	22.3	22.9	24.3	
98.4				20.3	20.9	22.9	19.4	20.1	21.6	
105.0				17.6	17.6	20.5	17.2	17.9	19.2	
111.6							15.2	15.9	17.2	
118.1							13.5	14.1	15.4	
Code	11110	01111	00211	11111	02111	01211	21111	12111	11112	

	    									
	146.3	146.3	146.3	161.1	161.1	161.1	175.9	175.9	190.6	203.4
26.2	72.1	69.9	52.9							
29.5	72.1	68.1	50.1	55.3	53.4	47.0				
32.8	70.4	64.6	47.4	55.3	53.4	45.2	41.2	39.9		
39.4	61.0	58.4	42.6	55.3	50.5	41.5	39.2	39.9	32.4	25.9
45.9	53.0	52.9	38.6	49.8	46.3	38.4	37.0	39.9	32.2	26.0
52.5	47.3	47.8	35.1	44.3	41.9	35.3	34.7	36.7	32.0	26.0
59.1	42.1	43.8	32.2	39.2	37.4	32.6	32.4	32.9	31.2	25.8
65.6	37.9	39.9	29.5	35.5	34.0	30.2	30.5	30.0	28.4	25.8
72.2	33.5	34.6	27.6	32.1	30.9	28.2	28.2	27.1	25.5	23.4
78.7	29.1	30.2	25.5	29.1	28.2	26.5	25.8	24.8	23.2	21.2
85.3	25.4	26.5	23.9	25.8	25.8	24.7	23.6	22.8	21.2	19.4
91.9	22.1	23.2	22.3	22.5	23.8	23.3	21.6	21.1	19.6	17.9
98.4	19.4	20.5	21.1	19.8	21.2	22.0	19.8	19.6	18.1	16.5
105.0	17.2	18.3	19.8	17.6	19.0	20.1	18.3	18.1	16.7	15.0
111.6	15.2	16.3	17.9	15.7	17.0	18.1	16.3	16.9	15.4	14.1
118.1	13.5	14.6	16.1	13.9	15.2	16.3	14.6	15.7	14.3	13.0
124.7	11.9	13.0	14.6	12.3	13.7	14.8	13.0	14.6	13.3	12.1
131.2	10.4	11.5	13.2	10.8	12.1	13.2	11.7	13.0	12.3	11.2
137.8				9.7	11.0	12.1	10.4	11.9	11.2	10.3
144.4				8.6	9.9	11.0	9.3	10.6	9.9	9.5
150.9							8.2	9.7	9.0	8.8
157.5							7.3	8.6	7.9	8.2
164.1									7.3	7.3
170.6									6.4	6.4
177.2									5.7	5.7
183.7										5.1
190.3										3.5
Code	22111	12211	11122	22211	12221	11222	22221	12222	22222	33333

** Capacity class * with special equipment.

Performance parameter

Category	Item	Unit	Parameter	
Dimensions	Dimension (length × width × height)	ft	50.1 × 9.3 × 13.1 (20.5R25)	
	Wheel base	ft	8.2+5.4+7.9+5.4	
	Track (Front/ Rear)	ft	7.6 (20.5R25)	
	Front/ Rear overhang	ft	8.6/8.9	
	Front/ Rear extension	ft	6/0	
Weight	Max. permissible total weight	lb	132275	
	Axle load	1st axle	lb	26455
		2nd axle	lb	26455
		3rd axle	lb	26455
		4th axle	lb	26455
		5th axle	lb	26455
Engine model	—	OM471LA		
Power	Engine rated power/rpm	bhp/rpm	482.8/1600	
	Max. net power/rpm	bhp/rpm	482.8/1600	
	Engine rated torque/rpm	lb–ft/rpm	1769.9/1300	
	Max. travel speed	mph	49.7(20.5R25)	
	Min. stable travel speed	mph	1.86	
Travel	Min. turning diameter	ft	≤59.0 (Tight–turning radius mode, five–axle steering); ≤72.2 (Normal road mode, five–axle steering)	
	Min. turning diameter at boom tip	ft	≤76.4 (Tight–turning radius mode, five–axle steering); ≤89.2 (Normal road mode, five–axle steering)	
	Min. ground clearance	ft	1.3 (16.0R25/20.5R25)	
	Approach angle	°	19 (16.0R25/20.5R25)	
	Departure angle	°	15 (16.0R25/20.5R25)	

Category	Item	Unit	Parameter		
Performance	Max. total rated lifting capacity	USt	150		
	Min. rated working radius	ft	9.8		
	Tail swing at turntable tail	Counterweight	ft	16.3/14.9	
		Auxiliary winch	ft	16.4	
	Max. load moment	Base boom	lb–ft	3183000	
		Fully–extended boom	lb–ft	1692000	
		Fully–extended boom + Jib	lb–ft	1284000	
	Outrigger span	Longitudinal	ft	28.4	
		Lateral	ft	12.1/16.4/20.7/25.3	
	Hoist height	Base boom	ft	39.7	
		Fully–extended boom	ft	201.7	
	Boom length	Fully–extended boom + Jib	ft	303.5	
		Base boom	ft	43.0	
		Fully–extended boom	ft	203.4	
		Fully–extended boom + Jib	ft	310.1	
Jib offset angle	°	0, 20, 40			
Working speed	Boom raising time	s	≤65		
	Boom fully extended time	s	≤630		
	Slewing speed	rpm	≥1.65		
	Outrigger extending and retracting time	Outrigger beam	Retracting	s	≤25
			Extending	s	≤20
		Outrigger jack	Retracting	s	≤55
			Extending	s	≤45
	Hoisting speed (single line, 4th layer, no load)	Main winch	fpm	≥426	
Auxiliary winch		fpm	≥426		

Optimum Services , XCMG Guaranteed



XCMG approved attachments



Genuine parts



Financial solutions



Maintenance contract



Telematics



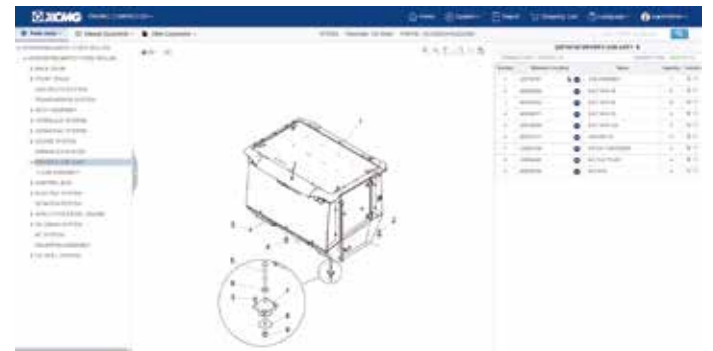
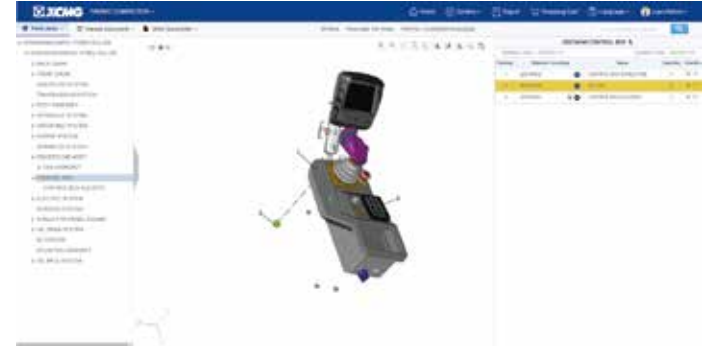
Full Range of Services Ready for you

In order to respond to your needs as fast as possible, XCMG experts can be dispatched to your job site from a facility near you. A full range of services are available to reduce your total cost of ownership and increase your revenue.

Professional Integrated Complete Solutions

XCMG group has built a strong reputation based on the quality, reliability and durability of its construction machinery. XCMG has established a world wide service and parts network to provide support to every customer regardless of location.

XCMG Global Spare parts System



Mobile cranes



Excavators



Aerial work platforms



Wheel loaders



Road machinery





 **XCMG**



