# Rough terrain crane XCR60 U

U.S.EPA TIER 4F

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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.

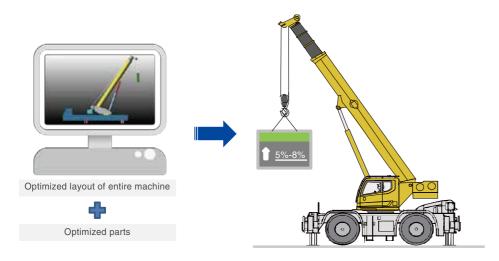
XCMG's research and development groups have accumulated more than 9000 patents in China and 130 international patents. There are R&D centers and manufacturing facilitates in 10 countries including Germany, the United States, Brazil and India. The manufacturing facility in Brazil has become a model of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





#### — Wide working range, industry leading lifting capacity

Using the latest multi-body dynamic optimization tools, XCMG engineers were able to reduce the formed boom's deflection and increase the rigidity while giving it 5-8% more capacity.



#### High mobility and efficiency

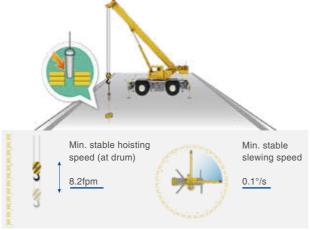
- The XCR60\_U has 2 and 4 wheel drive modes, 4 steering modes, and the ability to drive with the boom over the rear. It has the smallest turning radius of any 60ton Rough Terrain Crane;
- High power engine combined with torque converter power shift transmission gives the XCR60\_U up to 10% better acceleration and fast job-site transfer;
- 4 wheel drive with differential locks along with deep lugged off road tires enable worry free driving on almost any terrain.





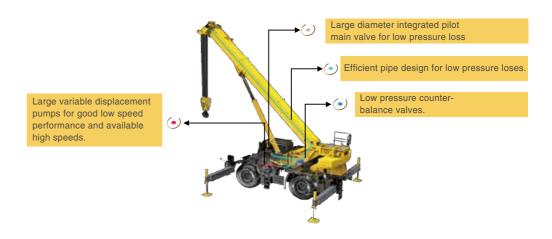
#### High working efficiency, better stability

- Independent pumps for winch and boom functions give completely independent operation between functions and when needed, the flow can be combined for maximum speed;
- Oversized hydraulic cooler with automatic control along with optional oil heaters allow operation in the most extreme environments:
- Precise and smooth controls contribute to higher operator efficiency.



#### Three major energy-saving measures lead to lower use cost

 A duel variable displacement load sense hydraulic system along with gravity assisted boom lowering contribute to a 10-15% reduction in fuel use under varied working conditions.



#### Three major energy-saving measures lead to lower use cost

- ECO energy-saving control function lead to 5%~9% reduction in fuel consumption under various working conditions.
- The torque converter with lockup function features large torque at low speeds and high efficiency at high speeds, leading to 20% reduction in fuel consumption.



#### Fault self-diagnosis

- Faults are automatically detected and in most cases, a diagnoses can be displayed from the built in monitor.
- Fault can be inquired at the touch of a button.



#### More intelligent

#### Automatic planning of working conditions

After entering information about the load to be lifted and the details of the lift, the LMI will list out possible crane
configurations that can be selected to complete the job.



#### Steering mode is selected only by one key

 All steering movements are controlled by the steering wheel. Any steering mode can be selected at any time and the rear wheels will automatically align to the correct angles.



XCMG exclusive one knob steering mode selection makes for quick mode changes.

Response time < 500ms Accuracy < 0.5°

#### Active safety protection

- With European, North American, GCC and Chinese standards complied, maximum active protection is ensured;
- For increased transportation safety, the XCR60\_U includes automatic fault warnings,automatic braking, automatic shifting and speed limiting depending on the driving modes and crane configuration.



#### XCMG human-machine interaction system

Controls designed around the operator include buttons grouped into functional areas, full display of of crane
information, ingratiated fault diagnosis, lift planning, crane set up and active load monitoring.



#### People-oriented design, comfortable to drive

 Complete climbing/maintenance access, dedicated human-machine engineering simulation analysis and user-oriented detail design contribute to perfect combination of functionality and aesthetics.



Boom	5 section, with 3 telescoping modes. Formed U-shaped cross section from ultra high strength steel. 6 lower boom head sheaves. Boom length:37.1ft~143.0ft.
Jib	Two-section lattice structure. Three offset angles of 0°, 15° and 30° are available. It is stowed along the side of the boom.  Jib length: 30.2ft~52.5ft.
Engine	QSB6.7,in line, six-cylinder water-cooled compression ignition diesel engine, manufactured by Cummins, with rated power of 260/2200(bhp/rpm), max. torque of 730/1500(lb-ft/rpm), U.S. EPA Tier 4F emission standard compliant Fuel tank capacity: approx. 80.6gal
Axles	High strength axles with front and rear steering and driving.
Transmission	6WG210, automatic transmission from ZF Germany, with 6 forward and 3 reverse gears
Tires	4 specialized off-road tires, large load capacity.  Tire specifications: 23.5R25.
Steering	Front axle independent steering, tight turning radius steering, crab walk steering and rear axle independent steering modes are available. The steering angle can be self-adjusted when changing mode.
Brakes	Service brake: double-circuit hydraulic disc brake, acting on all wheels. Automatically braking and alarm are available when the pressure in braking system is too low.  Parking brake: Spring applied, hydraulic released disk brake on front axle.

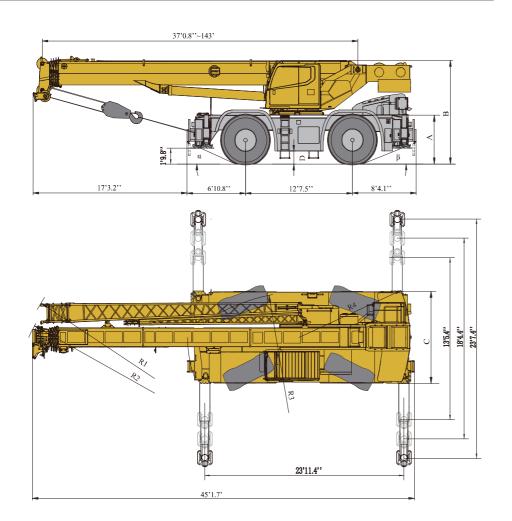
Hydraulic A draw a group oil of Tan Main and auxiliary The winch system closs  Slewing system gear Operator's cab Tilta prof Heat Safety devices Hydron Low	V DC, two sets of 12 V battery in series. It is equipped with LMI, headlights, turning lights, versing lights, turntable working light, boom working light, slewing warning light, etc.
system a g projoil of Tan  Main and auxiliary The winch system clos  Slewing system gear  Operator's cab Tilta projoil Hear  Safety devices Hyc Low	
Slewing Sing system  Operator's cab  Tilta profites  Safety devices  Low	dual-variable displacement pump, used for hoisting, elevating and telescoping operations, and gear pump, used for slewing, outrigger, steering and braking operations; a load sensitive oportional multi-way directional valve is used as main valve; includes an independent hydraulic I cooler.  ank capacity: approx. 228gal.
Operator's cab Tilta proi Hea	ne system is driven by a hydraulic motor through a planetary gear reducer, with a normally osed brake and equipped with counter balance valve.
Safety devices Hyc	ngle-row four-point ball contact slewing ring, driven by a hydraulic motor through planetary par reducer, and with a normally closed brake fitted.
Low	Itable cab, with sliding door and adjustable seat. It is equipped with safety glass and roof otective grille. Sun shade is installed on for windshield and roof window. eater and air conditioner, radio, 12 V and 24 V DC outlets are standard configuration.
	ydraulic balance valve, hydraulic relief valve, hydraulic double-way valve and LMI. owering limiter is equipped in winch to prevent rope over-releasing. Anti-two block is fitted on e boom head to prevent rope over-winding.
Counterweight The	ne counterweight weight is 16535lb
Hook Block 60L	OUSt hook, 5.5USt hook block

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.

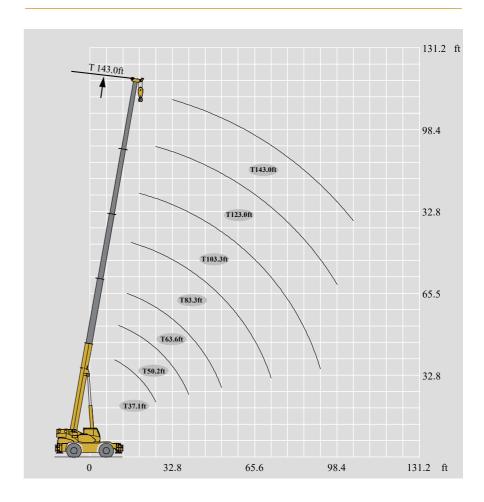
# TECHNICAL SPECIFICATIONS

#### Dimensions



0	α	β	А	В	С	D	R1	R2	R3	R4
23.5R25	26°	20.5°	5'3.4"	11'9.3"	9'10.1"	1'5.5"	35'5.9"	34'11.1"	19'8.2"	13'7.7"

#### Lifting heights



#### Lifting capacities (T 37.1~143.0ft)

# ft









AS	M	Ε
		b

+	<b>→</b> ;									<b>40</b> )		-			ID
	37.1ft	50.2ft	63.6ft	83.3ft	103.3ft	123.0ft	143.0ft	57.1ft	76.8ft	96.8ft	116.5ft	70.2ft	90.2ft	109.9ft	129.9ft
9.8	120000														
11.5	113537	99207						52910							
13.1	104719	94798						52910				52910			
14.8	94798	88184	72752					52910	55115			52910			
16.4	91491	82673	69445	49604				52910	55115			52910	54013		
19.7	68343	72752	55115	49604	38581			52910	51147	36376		52910	54013		
23.0	60847	59524	49604	41887	38581			52910	47619	33951	27117	52910	51147	35053	
26.2	47399	51147	45194	36596	36376	26455		52910	44533	31305	25794	50706	48060	33069	
29.5		39903	39021	32408	29762	24692		44533	41446	29101	24251	42990	44753	31085	24471
32.8		31967	31305	27778	23148	19180	19841	36376	37919	26896	22928	35053	36596	29101	22928
39.4		21826	21164	23810	20944	18078	16314	25794	27117	23369	20723	24692	26014	27117	21385
45.9			14991	17416	18739	16094	14330	19180	20503	21385	18298	18078	19621	20503	20944
52.5			10582	13007	14330	14550	13007		16094	16755	17416	13669	14991	15873	16314
59.1				9921	11023	11905	12566		12787	13448	14109	10582	11905	12566	13007
65.6				7496	8598	9480	10141		10362	11023	11684		9480	10141	10582
72.2				5512	6834	7496	8157			9039	9700		7496	8157	8598
78.7					5291	5952	6614			7496	8157		5952	6614	7055
85.3					3968	4630	5291			6173	6834			5512	5732
91.9					2866	3748	4189				5732			4409	4630
98.4						2866	3307				4850			3307	3748
105.0							2425				3968				3086
111.5															2425
2nd	0	50%	100%	100%	100%	100%	100%	0%	0%	0%	0%	50%	50%	50%	50%
3rd	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%
4th	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%
5th	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%

#### Table of main technical parameters

Category	Item		Unit	Parameter	
	Outline size (len	gth×width×height)	ft	45.1×9.8×11.8	
	Wheel base		ft	12.6	
Dimensions	Track (Front/ Re	ear)	ft	7.6/7.6	
	Front/ Rear overl	nang	ft	6.9/8.3	
	Front/ Rear exter	nsion	ft	17.3/0	
	Total vehicle mas	ss in travel configuration	lb	92152	
Weight	Axle load ===	1st axle	lb	46746	
	Axie loau	2nd axle	lb	45406	
	Engine model			QSB6.7	
Power	Engine rated pov	ver/rpm	bhp/(rpm)	260/2000	
	Engine rated tord	que/rpm	lb.ft/(rpm)	730/1500	
	Max. travel speed	d	mph	21.7	
	Min. travel speed	I	mph	1.1	
	Min. turning diam	neter	ft	≤39.4	
Travel	Min. ground clea	rance	ft	1.5	
	Approach angle		۰	26	
	Departure angle		0	20.5	
	Braking distance	(at 14.91 mph)	ft	29.5	
	Max. grade abilit	у	%	86	

Category	Item		Unit	Parameter
	Max. total rated lifting capacity	1	USt	60
	Min. rated working radius		ft	9.8
	Tail swing at turntable tail	Counterweight	ft	13.6
	Max. load moment	Base boom	lb-ft	1499832
Main	Wax. load moment	Fully-extended boom	lb-ft	689546
performa-	Outrigger span	Longitudinal	ft	23.9
nce	Outrigger spari	Lateral	ft	23.6
	Hoist height	Base boom	ft	39.0
	Tioist fieight	Fully-extended boom	ft	143.3
	Doom longth	Base boom	ft	37.1
	Boom length	Fully-extended boom	ft	143.0
	Jib offset angle		٥	0、15、30
Working speed	Boom raising time		s	45
	Boom fully extending time		s	80
	Max. slewing speed		rpm	1.5

## **OPTIMUM SERVICES**, XCMG GUARANTEED



XCMG approved attachments



Genuine parts



Financial solutions



Maintenance contract



#### Professional Integrated Complete Solutions

XCMG group has built a strong reputation based on the quality, reliability and durability of its construction machinery. What's more, XCMG has gradually established a service network to constantly provide its local integrated and highly efficient complete solutions for all customers.

#### Full Range of Services Ready for you

In order to respond to your needs as fast as possible, XCMG experts are on their way to your job site from one of our facilities near you. Full range of services are available in order to reduce your total cost of ownership and increase your revenue.

#### XCMG Global Spare parts System











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