

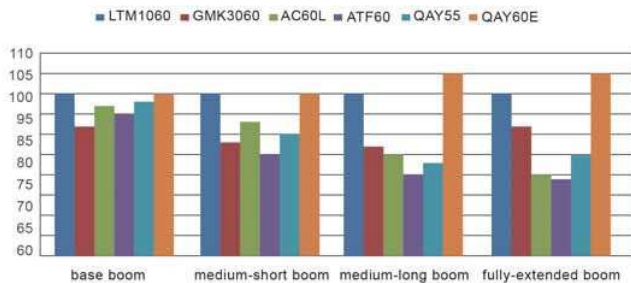
XCA60E

ALL-TERRAIN CRANE

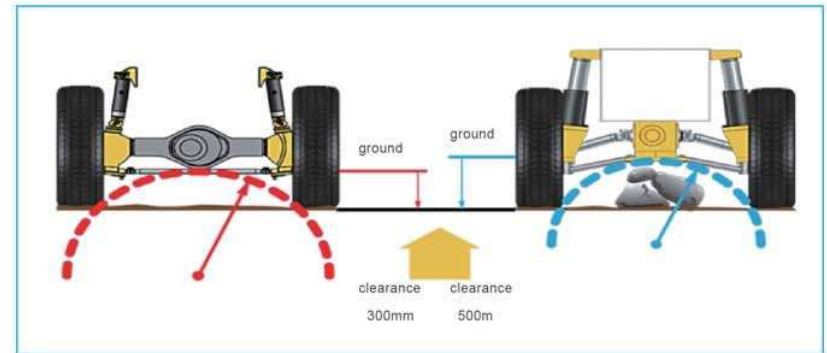
Product advantages

With three axles, this perfect all terrain crane is the best in class in boom length and lifting performance.

With new optimized matching technology of the whole crane, XCA60_E has an all terrain chassis of 3 axles and 6-section high strength U-shaped boom of 10.3-48m. The short boom has the same performance with Liebherr LTM1060 and the medium-long and the full extended booms are 5% higher than Liebherr LTM1060. Meanwhile the performances exceed other main cranes in the industry.



Advanced technologies such as low-speed and large torque driveline system platform, large speed ratio and automatic transmission, independent suspension axle with strong bearing torque result in low energy consumption and strong power. With independent suspension system, the right and left wheel can be acted independently and self-adjust to road conditions with cross-country capacity improved by 60% and stronger passing ability. The control system is improved by 15% when cranes are turning at high speed.

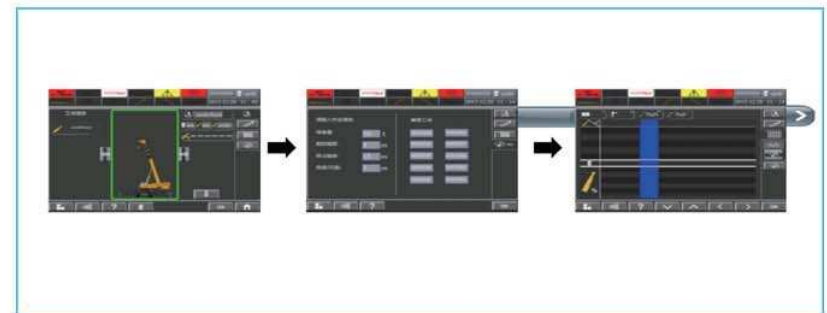


Intelligent control system with more friendly man-machine interaction

The latest control technology platform is adopted to update the system with the realization of intelligent crane operations and travel control, such as automatic planning of working conditions, winch servo control technology, lifting elevating compensation control technology, etc. With breakthrough of traditional crane control idea, the in-house design of the intelligent crane boom technology can realize the online planning of hoisting route according to hoisting demand and crane's current conditions. Automatic elevating compensation is realized in the hoisting process, when the hook height above the ground and the clearance between the hook and boom head is not changed. These features contribute to the improvement of boom control automation, hoisting efficiency and safety.

Intelligent crane boom technology: With breakthrough of traditional crane control idea, the in-house design of the intelligent crane boom technology provides you with comfortable intelligent control experience.

Automatic planning function of working conditions supplies users with the most efficient hoisting plans. If users enter the information about lifting load, working radius and lifting height, the system will automatically recommend 10 properest working conditions, which may meet lifting demands. With the planning software used, user's operating practices will become standard, the operation safety will be improved, the most effective hoisting plans will be provided and the working efficiency will be increased.



Automatic elevating compensation function makes more convenient operation and safer hoisting



Prepare to carry out lifting operation → Boom deformation while the load is clearing off the ground → Vertical load lifting due to automatic elevating compensation

With automatic spooling in and out of winch rope, the working efficiency is improved by 40%



Winch rope servo action mode while elevating the boom: the hook height above the ground is not changed

Winch rope servo action mode while telescoping the boom: the hook height above the ground is not changed

telescoping the boom: the clearance between the hook and boom head is not changed

New energy-saving hydraulic system contributes to high working efficiency and more perfect manipulation feeling.

Advanced technologies such as new electric-proportion pump control system matched with low speed and large torque slewing system, constant motor hoist system, and automatic regulation of the displacement with the open change of main valve contribute to reduced energy consumption more than 15% on average and the smoothness and fine control improved by 15% as well as the more perfect manipulation.

Taking power and economy into consideration, low-speed and large torque system in chassis contribute to perfect combination of best power and optimized economy with oil consumption reduced by 12% on travel, power performance improved by 15% and general oil consumption in operation reduced by 5%. Compared to competitors, XCA60_E saves 400L oil every 10000 km in each year.

New appearance and humanized design bring more comfortable driving operation

First launched in the industry, XCMG man-machine interactive system with the level of car brings easier and more convenient operation.



▶ Three areas for safety protection, hoisting operation and operating environment brings convenient control

▶ Single 10.4 in. color touch screen displays



▶ 13 items of interactive technology with intelligentization and informatization are integrated, which brings friendlier man-machine conversation

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▶ A new generation of appearance design and humanized design bring more comfortable driving operation

▶ A new generation of appearance design makes the whole vehicle powerful and vigorous; Fashionable outlines of driver's and operator's cab bring perfect combination of sense of lays and sense of physical strength; ergonomics analysis and humanized details make inherent quality of easy driving, comfortable operation and convenient maintenance.



Brand new humanized design contributes to more convenient manipulation and safer operation.

□ The max. tilting angle of the operator's cab is 20°. The operation is safer with wider visual field. More accurate locking of the hydraulic controlled turntable reduces exterior manipulation of the operator's cab with safer operation. Centralized lubrication system is used in superstructure with 12 lubricating points contributing to better lubrication effect and longer service life of key parts. Installed on the boom, the 360°revolving light with wider illuminating range on boom makes night operation safer.

Technical parameters

Main Technical Data Table of XCA60_E in Travel Configuration

Category	Item	Unit	Parameter
Outline Dimensions	Overall length	mm	11880
	Overall width	mm	2550
	Overall height	mm	3755
	Wheel base	mm	2950
Weight	1st and 2nd Axles	mm	2950
	2nd and 3rd Axles	mm	1650
	Track	mm	2150
	Dead weight in travel configuration	kg	36000
Power	1st axle	kg	12000
	Axle load	kg	12000
	2nd axle	kg	12000
	3rd axle	kg	12000
Travel	Engine model	/	OM470 MC11.36-50
	Rated power of engine	kW/(r/min)	280/1900 268/1900
	Max. travel speed	km/h	85
	Min. stable travel speed	km/h	3
Travel	Min. turning diameter	m	14.2/ (three axles steering)
	Min. ground clearance	mm	330
	Approach angle	°	19
	Departure angle	°	21
Travel	Braking distance (at 30 km/h)	m	≤ 10
	Max. grade ability	%	65
	Oil consumption per 100 km	l	55

Main Technical Data Table for Lifting Operation

(Subject to technical improvement)

Category	Item		Unit	Parameter	
Main performance	Max. total rated lifting capacity		t	60	
	Min. rated working radius		m	2.1	
	Turning radius at turntable tail (counterweight)		mm	3815	
	Max. load moment	Base boom	kN.m	1858	
		Fully-extended boom	kN.m	894	
	Outrigger span	Longitudinal	m	7.32	
		Lateral	m	6.5	
	Hoist height	Base boom	m	10.2	
		Fully-extended boom	m	48	
		Fully-extended boom + Jib	m	62.2	
	Boom length	Base boom	m	10.3	
		Fully-extended boom	m	48	
		Fully-extended boom + Jib	m	64	
	Jib offset angle		°	0、15、30	
Boom elevating time Boom raising		s	38		
Boom telescoping time Fully extended		s	310		
Max. slewing speed		r/min	2.0		
Working speed	Outrigger extending and retracting time	Outrigger beam	Extending simultaneously at one side	s	25
			Retracting simultaneously at one side	s	20
		Outrigger jack	Extending simultaneously	s	60
			Retracting simultaneously	s	30
	Single line hoisting speed	Main winch (4 layer)	Full load	m/min	90
			No load	m/min	135
		Auxiliary winch (4 layer)	Full load	m/min	90
			No load	m/min	135
	Exterior noise level		dB (A)	≤122	
	Interior noise in operator's cab		dB (A)	≤90	

Rated load charts of XCA60E

Rated lifting load tables for boom (Lifting load in t, boom length and radius in m)

Rated lifting load tables for boom of XCA60_E, outrigger 6.5m, counterweight 12t

R/L	10.3*	10.3	13.8	17.2	20.7	24.2	27.6
2.1	60*						
2.5	58.2*						
3	54.6*	42.5	42.3	41.5	40.5	41.5	40.5
3.5	49.9	42.5	42.2	41.0	40.0	41.0	40.0
4	44.5	40.7	41.4	40.2	39.0	38.5	37.9
4.5	39.8	37.5	38.0	36.9	35.0	34.9	33.4
5	36.4	34.5	35.0	35.2	33.0	33.0	33.3
6	31.6	29.0	29.8	30.0	29.0	29.8	29.8
7	26.5	24.3	24.5	24.8	25.3	26.0	25.5
8			20.5	21.0	21.5	21.6	22.5
9			17.5	18.0	18.3	17.7	18.5
10			15.0	15.4	15.7	14.7	15.8
12					10.8	11.5	12.1
14						8.5	8.9
16						6.7	7.1
18							5.5
20							
22							
24							
Telescoping code of boom section	00000	01000	00100	00010	11000	01100	00110
Boom angle	30-65	31-72	38-76	32-79	37-80	32-81	
Parts of line			10		8	7	6
Hook			Hook of 60t			Hook of 35t	

Rated lifting load tables for boom of XCA60_E, outrigger 6.5m, counterweight 12t

R/L	13.1			34.6			38			41.5			45	48
4.5	21.0	20.0	15.0											
5	21.6	20.0	14.7	18.2	16.4	13.1								
6	19.9	18.4	13.5	17.0	15.5	12.5								
7	18.7	17.0	12.5	15.8	14.4	11.8	12.8	12.2	11.5					
8	17.7	15.8	11.6	14.8	13.4	11.1	12.6	11.6	10.9	10.8	10.0	8.7		
9	15.9	14.7	10.8	14.2	12.6	10.3	12.2	10.9	10.4	10.4	9.4	8.7	7.1	
10	14.6	13.7	10.1	13.3	11.8	9.4	11.5	10.3	9.8	9.8	9.0	8.5	7.1	
12	11.7	11.9	8.9	11.1	10.4	8.1	10.2	9.0	8.8	9.0	8.0	7.6	6.9	
14	9.1	9.4	7.9	9.0	9.3	7.0	8.8	7.7	7.8	7.8	6.8	6.7	5.9	
16	7.3	7.7	7.1	7.2	7.6	6.2	7.6	6.7	6.8	6.8	5.9	6.3	5.7	
18	5.9	6.1	6.6	5.9	6.5	5.6	6.0	5.9	6.0	6.2	5.4	5.5	5.0	
20	4.9	5.1	5.9	4.8	5.5	5.0	4.9	5.3	5.5	5.4	4.7	5.0	4.4	
22	4.0	4.3	5.1	4.0	4.3	4.9	4.1	4.5	4.8	4.6	4.2	4.4	4.0	
24	3.4	3.6	4.4	3.4	3.7	4.2	3.4	3.8	4.1	3.6	3.9	3.6	3.6	
26				2.8	3.1	3.7	2.9	3.3	3.5	3.0	3.5	3.2	3.0	
28				2.3	2.6	3.3	2.4	2.8	3.0	2.6	3.0	2.7	2.6	
30							2.0	2.4	2.6	2.2	2.6	2.4	2.2	
32							1.7	2.0	2.3	1.8	2.2	2.0	2.0	
34										1.5	1.9	1.7	1.7	
36												1.5	1.5	
38												1.2	1.2	
40													1.0	
Telescoping code of boom section	21111	12111	01122	22111	12211	01222	22211	12221	11222	22221	12222	22222	33333	
Boom angle	36-81			33-82			30-80			33-80			31-81	33-81
Parts of line	5			4			3			2				
Hook	Hook of 35t													

Total Rated Lifting Load Tables for Jib (Lifting load in t, boom length and radius in m)

Total rated lifting load tables for jib, outrigger 6.5t, counterweight 12t

Boom length	41.5			45			48			41.5			45			48		
Jib length	9.2m									16m								
Radius	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30	0	15	30
10	5																	
12	5	4.8		3.9	3.6		3.4			3			2.6			2.3		
14	4.8	4.6	4.2	3.8	3.5		3.3	3.4		2.8			2.6			2.2		
16	4.3	4.2	4	3.7	3.3	3.2	3.3	3.3	3	2.8	2.6		2.5	2.4		2.2		
18	3.8	3.6	3.5	3.2	3.1	2.9	3	2.9	2.7	2.8	2.5		2.4	2.3		2.2	2.2	
20	3.3	3.2	3.2	2.8	2.7	2.6	2.7	2.5	2.4	2.6	2.5	2.2	2.3	2.2	2	2.1	2.1	
22	2.8	2.8	2.7	2.6	2.5	2.3	2.2	2.2	2.1	2.4	2.4	2.2	2.2	2.2	2	2	2.1	2
24	2.6	2.4	2.4	2.3	2.2	2.1	2	1.9	1.8	2.3	2.3	2.1	1.9	2	1.9	1.7	1.7	1.7
26	2.2	2.1	2.1	2	2	2	1.7	1.6	1.5	2.1	1.9	1.9	1.7	1.7	1.7	1.5	1.5	1.4
28	2	2	1.9	1.7	1.6	1.5	1.5	1.4	1.4	1.8	1.8	1.8	1.5	1.5	1.5	1.4	1.4	1.3
30	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.5	1.5	1.5	1.4	1.4	1.4	1.1	1.1	1.1
32	1.5	1.5	1.5	1.4	1.3	1.2	1	1	1	1.4	1.4	1.3	1.2	1.2	1.3		1	1
34	1.4	1.3	1.3	1.1	1.1	1.1				1.2	1.2		1.1	1.1	1.1			
36	1.1	1.1	1.1	1	1	1				1.1	1.1							
38										1								
Boom angle	45°-80°	47°-80°	48°-79°	49°-79°	51°-81°	52°-78°	57°-79°	59°-79°	61°-79°	57°-79°	53°-79°	58°-78°	57°-80	61°-80°	64°-79°	64°-81°	65°-79°	68°-78°
Telescoping code of boom section	22221			22222			33333			22221			22222			33333		

Explanations

- ▶ The performance of first line is operated in the rear, the working conditions with "*" is axle load in name.
- ▶ 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.
- ▶ The total rated loads given in the rated load charts include the weight of the hook block and slings; Unit: t
- ▶ The working radius shown in the rated load charts is the actual value including loaded boom deflection; Unit: m
- ▶ The boom length given in the rated load charts should accord with the telescoping requirements of every boom, and telescoping way is operated in sequence; '0' stands for 0% of the boom extending length, '1' for 46%, '2' for 92%, '3' for 100%. For example, when the telescoping way is 21100, the telescoping sequence is 2nd boom, 92%; 3rd boom, 46%; 4th boom, 46%; 5th boom, 0% and 6th boom, 0%.
- ▶ The total rated load for single top is the same as that for jib (9.2m) 0° offset angle.
- ▶ Wind force of grade 5, i.e. wind speed 14.1m/s, is taken into consideration in loading when tilting.
- ▶ Boom angle should not beyond the scope of the rated load charts.