# E LIUGONG TC700C5 CRANE

**MOBILE CRANES** 



# **RAISING** THE **STANDARD**.



Challenging projects need trusted strength and stability to get the job done. LiuGong has over 70 years' experience making cranes that deliver the most powerful lifting capacity combined with premium safety features and the benchmark for reliability.

We have earned a global reputation for designing the toughest machines and our mobile cranes share this design DNA. They are designed, built and supported by a team you can trust to put your performance first.

WE PUT YOU FIRST

Our customers tell us that they want mobile cranes that are easy to use, easy to maintain and easy to operate. With optimized safety and stability and with proven reliability and quality to work in the most demanding conditions. You can trust our cranes to deliver all this and more. You can choos and conform to

## **LET'S PROVE IT**



MORE THAN 70 YEARS EXPERIENCE MAKING CRANES



10% STRONGER LIFTING CAPACITY THAN COMPETITORS





10,000 HOURS BETWEEN OVERHAULS



2-5 DECIBELS QUIETER THAN COMPETITOR MODELS



## **100% SAFETY COMPLIANT**

You can choose LiuGong with confidence. Our mobile cranes are quiet, clean and conform to the latest environmental legislation standards for emissions.



## **TC700C5 MOBILE CRANE**

# **TAKE A CLOSER LOOK.**



## **YOUR SAFETY IS OUR PRIORITY**

Your safety is paramount to us, so you can trust our mobile cranes to create the safest working environment.

- Stability is a key safety factor. Our high-strength anti-torsion frame provides the highest levels of stability and load bearing capacity no matter how tough the conditions.
- Our ergonomic, high-visibility cab with tempered window glass and anti-corrosion steel provides a 360 degree view of the jobsite, protecting the operator and co-workers from harm. Our cabs are safe and easy to access, have a spacious working environment and provide the highest levels of comfort.

Our machines have been designed to work safely day and night, 24/7. Onboard technology such as LMiliang, three-circle projector, height limiter and night vision level provide all-round safety protection from overload, over-winding, over-discharge and anti-tilt. To further enhance safety our cranes are also equipped with reversing camera imagery and winch monitors.

### EASY TO MAINTAIN

Our aim is to make maintenance as fast and easy as possible to reduce unproductive downtime to a minimum.

- With easy access to maintenance and service Π areas we've made checks and repairs fast and easy.
  - Our mobile cranes are powered by world famous Cummins engines renowned for easy maintenance and low running costs. With up to 10,000 hours between overhauls you can enjoy unmatched productivity.









Ę











With a proven fuel-efficient, low noise and low maintenance Cummins engine combined with FAST gearbox, you can rely on our mobile cranes to travel from site to site with speed, efficiency and comfort.





## **TOTAL RELIABILITY**

Trust is about relying on your mobile crane to deliver optimum performance - every time. We design performance and reliability in from the very start.

LiuGong designed hydraulics set the benchmark for reliability. Benefiting from a variable pump and a load-sensing post compensation valve, we deliver consistently stable operation, smooth compound action and excellent micro-motion performance.

Our intelligent, electronically controlled chassis system protects the lifting operation and reduces power consumption improving uptime and efficiency.

## **UNMATCHED LIFTING** PERFORMANCE

When it comes to lifting performance we deliver the perfect combination of stability, power, hydraulic performance and control.

Our cranes lead the field in both working radius and lifting capacity. LiuGong cranes are 10% stronger than the competition in most boom combinations.

Anti-saturation main valve improves controllability and stability of compound actions and ensures fast hydraulic response.

Our winch employs a variable displacement (70-107cc) motor to ensure high operational efficiency. Maximum single line speeds of main and auxiliary winches are up to 130m/min.

Dead-weight luffing provides more stable luffing operation with low energy loss.

# WE ARE **HERE FOR** YOU.

LiuGong is a global, forward thinking, customer focused solutions provider. We've come a long way in the last 60 years, but at heart, we are a people business. You can trust our sales teams and product experts to work with you to help you find the perfect equipment, maintenance support and financial solution to perfectly match your operational needs.



## **SPECIFICATIONS** TC700C5 MOBILE CRANE

CATEGORY		ITEM		UNIT	PARAMETER
Dimension	AAMAA	Total length	mm	14,675	
	A AMAINTAN	Total Width	mm	2,800	
NA BA	N B IN WALLS	Total height		mm	3,885
Mainht	The tota	al weight during driving	g	kg	46,000
Weight	Axle load	The front			20,000
		The rear		kg	26,000
		Engine model		V	ISLe375 30 ISL9.5-385E51A
Power parameters	The rat	e power of the engine		kW/(r/min)	275/2,100 282/1,900
	The rat	e torque of the engine	9	N∙m/(r/min)	1,550/1,400 1,600/1,300
	The h	ighest driving speed		km/h	85
	The M	In turning diameter	A STANK	/ m	24
Driving	The n	nin ground clearance	mm	290	
parameters		Approach angle	•	18	
Y		Departure angle		14	
	(speed 30k	m/h) The braking dista	m	≤10	
	The Max Rated lifting capacity			t	70
	The Min Rated range			m	3
	Swing radius			mm	4,210
		Basic boom		kN∙m	2,740
	MAX lifting torque	Longest main boom		kN∙m	1,393
	The distance of	widthwise		m	7.8
Main	outtrigger	longitudinal		m	6.275
parameters	N Marine N.	Basic boom		m	12.8
	Lifting hight	Max main boom		m	48.3
		Max main boom+Jib		m	65.7
		Basic boom		m	12.5
	The length of main boom	Max main boom		m	48
	Max main boom+Jib			m	65.5
	Jib offset angle			0	0, 15, 30
Working	Boom luffing time	Fully lifting tim	e of boom	S	65
	Boom extension time	Full extension ti	me of boom	S	105
	Max swing speed			r/min	1.7
speed _ parameters		Main winch	No load	m/min	130
	Max. lifting speed	Auxiliary winch	No load	m/min	130
	Hook block				of 140kg

# **TC700C5 LIFTING CHART**

### UNIT: KG

			i ita				
	Main boom(m)						
Working radius (m)	Counterweight 16T, outrigger fully extended to 7.8m, rear/side operation. With fifth outrigger supported , the machine can fully swing by 360						
	12.5	19.16	25.81	32.47	39.13		
3	*70,000						
3.5	*66,000						
4	*63,000	31,000					
4.5	59,000	31,000					
5	53,000	30,800	25,700				
5.5	49,000	30,500	24,600	18,600			
6	46,000	30,000	23,900	17,800			
6.5	43,000	29,500	23,100	17,100			
7	39,000	29,000	22,200	16,300	13,200		
8	35,000	28,000	20,800	15,200	12,400		
9	29,000	26,500	19,600	14,300	11,600		
10		23,500	18,400	13,100	10,700		
12		19,000	16,600	11,600	9,800		
14		14,600	14,800	10,100	8,800		
16			12,300	8,900	7,800		
18			10,100	8,000	6,900		
20			8,400	7,200	6,200		
22				6,500	5,600		
24				5,900	5,100		
26				5,400	4,600		
28					4,300		
30					3,900		
32					3,600		
34		SAFET	FIRST +	24			
36		Not	2				
38							
	0	0	0	0	0		
	0	25%	50%	75%	100%		
Rate	12	6	6	4	3		

### UNIT: KG

	Main boom(m)						
Working radius (m)	Counterweight 16T, outrigger fully extended to 7.8m, rear/side operation. With fifth outrigger supported , the machine can fully swing by 360						
	14.72	21.38	28.03	34.69	41.34		
3	60,000	the second					
3.5	60,000		11				
4	60,000		1		1		
4.5	56,500	30,500	1 1		T		
5	52,000	30,500	26,500				
5.5	48,000	30,500	25,600	-			
6	44,000	30,000	24,700	18,000			
6.5	41,000	30,000	23,900	17,300			
7	37,500	29,700	23,000	16,500	10		
8	33,000	28,500	21,800	15,500	12,000		
9	28,000	26,700	20,500	14,600	11,400		
10	23,500	23,500	19,200	13,500	10,600		
12		18,700	17,500	12,000	9,700		
14		14,300	15,100	10,700	8,800		
16		11,200	12,000	9,400	8,000		
18			9,800	8,500	7,200		
20			8,100	7,600	6,500		
22			6,700	6,700	5,900		
24				5,900	5,300		
26				5,200	4,900		
28				4,400	4,500		
30					4,000		
32					3,500		
34					3,000		
36							
38	lp_l						
T.	25%	25%	25%	25%	25%		
I	0	25%	50%	75%	100%		
Rate	11	6	6	4	3		

## **TC700C5 LIFTING CHART**

### UNIT: KG

N. M.		M	ain boom(	m)			
Working radius (m)	Counterweight 16T, outrigger fully extended to 7.8m, rear/side operation. With fifth outrigger supported , the machine can fully swing by 360						
	16.94	23.59	30.25	36.91	43.56		
3	60,000		1 second	the last			
3.5	60,000			1 Los			
4	60,000		A A	199783			
4.5	56,000	17 V V		A			
5	51,500	30,000		1 k			
5.5	47,000	30,000	and the		1 Contraction		
6	43,000	29,500	25,300				
6.5	40,000	29,000	24,600	17,400			
7	37,000	28,500	23,500	16,800			
8	33,000	27,500	22,400	15,700			
9	28,500	26,000	21,100	14,800	11,400		
10	23,500	23,000	19,700	13,700	10,700		
12	16,800	18,300	17,500	12,400	9,900		
14		13,900	14,500	11,200	9,100		
16		11,000	11,700	10,000	8,200		
18		8,700	9,500	9,000	7,500		
20			7,800	8,100	6,800		
22			6,500	6,900	6,200		
24			5,400	5,800	5,700		
26				4,900	5,100		
28				4,200	4,500		
30				3,500	3,800		
32		A States			3,300		
34					2,800		
36					2,400		
38							
	50%	50%	50%	50%	50%		
Ш	0	25%	50%	75%	100%		
Rate	11	6	5	4	3		



UNIT: KG							
		Ma	ain boom(	m)			
Working radius (m)	Counterweight 16T, outrigger fully extended to 7.8m, rear/side operation. With fifth outrigger supported , the machine can fully swing by 360						
	19.16	25.81	32.47	39.12	45.78		
3	45,000	400	1				
3.5	45,000		1000				
4	45,000						
4.5	45,000						
5	44,000	30,000					
5.5	42,500	29,500					
6	40,000	28,500	25,000				
6.5	37,800	27,500	23,800				
7	35,000	26,300	22,300	16,500	LA DANA		
8	31,000	25,200	20,600	15,800	A STAN		
9	27,500	23,300	18,900	14,900	11,500		
10	23,000	21,000	17,000	14,000	10,800		
12	16,700	18,000	14,900	12,700	10,000		
14	12,300	13,600	13,000	11,000	9,200		
16		10,700	11,200	9,800	8,500		
18	X FA	8,500	9,100	8,900	7,700		
20		6,800	7,600	7,800	7,000		
22		Salanna	6,200	6,700	6,400		
24	NUME E		5,200	5,600	5,700		
26			4,300	4,700	5,000		
28				4,000	4,300		
30				3,300	3,600		
32				2,800	3,100		
34	Sal A	19 12			2,600		
36	AK			Mart	2,200		
38	y d		No 12	411724			
I	75%	75%	75%	75%	75%		
I	0	25%	50%	75%	100%		
Rate	9	6	5	4	3		

## **TC700C5 LIFTING CHART**

### UNIT: KG

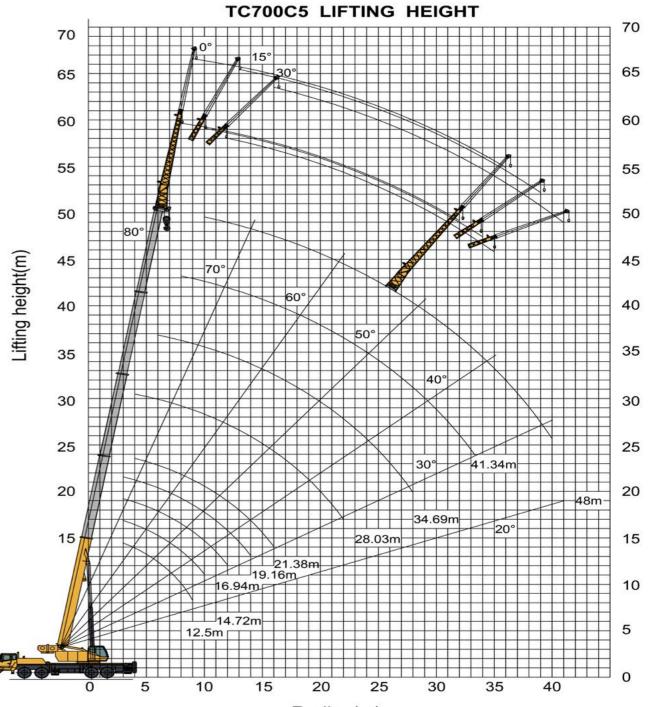
	Main boom(m)						
Working radius (m)	Counterweight 16T, outrigger fully extended to 7.8m, rear/side operation. With fifth outrigger supported , the machine can fully swing by 360						
	21.38	28.03	34.69	41.34	48		
3				14			
3.5							
4	35,000						
4.5	35,000						
5	35,000						
5.5	33,000	28,800					
6	31,000	27,000			- Tall		
6.5	29,000	25,500	3 Hours	1-1-15			
7	26,800	23,700	21,500				
8	24,800	21,600	19,700	16,000			
9	22,400	19,500	17,700	15,400			
10	19,500	17,500	15,800	14,400	11,000		
12	16,100	15,000	13,700	12,800	10,200		
14	12,100	12,600	11,800	11,000	9,300		
16	9,300	10,200	10,100	9,700	8,600		
18		8,300	8,800	8,700	7,900		
20		6,700	7,400	7,600	7,100		
22		5,400	6,000	6,500	6,400		
24			5,000	5,400	5,700		
26			4,100	4,500	4,900		
28			3,300	3,800	4,100		
30		SACET	2,700	3,100	3,500		
32		No.4		2,600	2,900		
34				2,100	2,450		
36				Band	1,900		
38	NEV. E.S.			- Arend	1,500		
40		I THE	1.		1,200		
I	100%	100%	100%	100%	100%		
II	0	25%	50%	75%	100%		
Rate	8	6	4	3	3		

### UNIT: KG

Counterweight 16T, outrigger fully extended to 7.8m, rear/ side operation. With fifth outrigger supported , the machine can fully swing by 360

Ma	ain boom48+	JIB10.5 (m)			
installation angle	0°	15°	30°		
main boom angle of gradient	Lifting Capacity				
80°	4,800	3,200	2,800		
78°	4,500	2,800	2,400		
76°	4,000	2,700	2,300		
74°	3,800	2,500	2,250		
72°	3,500	2,400	2,200		
70°	3,200	2,300	2,100		
68°	3,000	2,200	1,950		
66°	2,700	2,100	1,950		
64°	2,200	1,900	1,800		
62°	2,100	1,700	1,650		
60°	1,800	1,600	1,500		
58°	1,500	1,300	1,200		
56°	1,200	950	1,000		
54°	1,000	700	850		
52°	800	550	550		
Ma	ain boom48+	JIB17.5 (m)			
installation angle	0°	15°	30°		
main boom angle of gradient		_ifting Capacity			
80°	3,000	1,500	1,200		
78°	2,600	1,500	1,100		
76°	2,250	1,350	1,100		
74°	2,200	1,300	1,100		
72°	1,950	1,200	1,100		
70°	1,800	1,150	1,100		
68°	1,600	1,100	1,000		
66°	1,600	1,050	950		
64°	1,500	1,000	900		
62°	1,400	900	850		
60°	1,300	850	800		
58°	1,150	800	750		
56°	950	700	650		
54°	800	600	500		

# **TC700C5 LIFTING HEIGHT CURVE**





Radius(m)



Guangxi LiuGong Machinery Co., Ltd. No. 1 Liutai Road, Liuzhou, Guangxi 545007, PR China T: +86 772 388 6124 E: overseas@liugong.com www.liugong.com

Like and follow us:

### LG-PB-WW-TC700C5-032423-ENG

The LiuGong series of logos herein, including but not limited to word marks, device marks, letter of alphabet marks and combination marks, as the registered trademarks of Guangxi LiuGong Group Co., Ltd. are used by Guangxi LiuGong Machinery Co., Ltd. with legal permission, and shall not be used without permission. Specifications and designs are subject to change without notice. Illustrations and pictures may include optional equipment and may not include all standard equipment. Equipment and options varies by regional availability.