



TC250

Truck Crane



Max. Rated Lifting Load

25 t

Max. Lifting Height

39.5 m

Max. Working Radius

28 m

High Lifting Capacity and Reliable Boom System

- High Capacity, Long Telescopic Boom and Foldable Jib
- High Lifting Capacities Offer a Wide Operational Range
- Arm End Pulley
- Reliable Hydro-Mechanical Telescoping System
- Double Swing Away Jib

See page 3 and 4

Comfort and Safety

- Safety Devices
- Torque Limiter
- Comfortable and Safe Driver's Cab
- Comfortable and Safe Crane Cab

See page 7 and 8

Reliable

- Parts, Service and Attachments to Count On
- Embedded Arm Head
- Reliable Telescopic Device
- High Torsion and Stress Resistance
- Double Sealed O-Rings
- World Class Components

See page 11



First Rate Chassis and Drive Train Technology

- Good Mobility
- Cost Effectiveness
- Drive Train
- Rubber Suspension
- Superior Radial Tires

See page 5 and 6

High-Powered Crane

- Excellent Hydraulic System
- Boom Falling System
- Worktable Swing System
- Oil Cooler
- Control System
- Wire Rope
- Molten Counter Weight
- Hoisting System

See page 9 and 10

Easy to Maintain

- Easy Engine Access
- Fault Diagnostic System
- Convenient Maintenance Ports
- Long Life Components

See page 12

HIGH LIFTING CAPACITY AND RELIABLE BOOM SYSTEM

High Capacity, Long Telescopic Boom and Foldable Jib

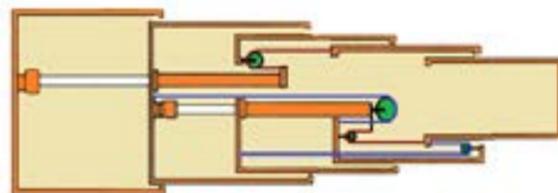
- The telescopic boom is comprised of the base section and four telescopic sections which can be extended in two ways by a hydro-mechanic extension system to any requested length.
- The booms are more lighter and stronger.
- Telescoping of the boom is carried out through double hydraulic cylinders and double wire ropes, booms telescope simultaneously or sequentially.
- The gap between the boom and sliders can be adjusted
- 39.5 m long telescopic boom
- 8.8 m long double swing away jib, attachable at 0°, 20° and 30°

High Lifting Capacities Offer Wide Operational Range

- Double outriggers with wider outrigger span and better stabilization, can be operated simultaneously or individually.
- High lifting capacity due to the oval boom structure, the maximum lifting torque is up to 995.5 kN.m
- Lifting capacity of 5.6 tons at 39.5 m lifting height
- Excellent stability, outrigger transversal span up to 6.0 m
- Maximum hook height: 47.6 m
- Maximum radius: 28 m

Arm End Pulley

- Built with light weight high-strength material that offers good wear resistance
- Arm end pulley contains six pulleys



Reliable Hydro-Mechanical Telescoping System

- Reliable, single rod, double acting hydraulic cylinder
- Low center of gravity due to double sheave blocks for telescopic sections 3 and 4
- Sections 2 and 3 are extended/ retracted by hydraulic cylinder, sections 4 and 5 by ropes
- High telescoping loads

FIRST RATE CHASSIS AND DRIVE TECHNOLOGY

Good Mobility

- A powerful six-cylinder turbo diesel engine with 213 kW/ 290 HP ensures swift driving performance. The FAST-power shift gearbox with mechanical gear changing provides good maneuverability and comfort.
- With power steering, dual-pipe air brakes and a synchronizer in shifting speeds the steering is light and smooth, brakes are reliable, and operation is quick and efficient.

Cost Effectiveness

- Easy to operate outriggers at night, thanks to night vision level and light.
- 6x4, 3 axle lines. Axle line 1 steered, 2 and 3 driven
- 3 km/h minimum crawling speed
- 80 km/h maximum traveling speed
- When driven properly, it will consume just 40 liters of petrol per 100km under normal driving condition
- Chassis length only 12.2 m
- Small turning radius only 10 m
- Chassis width only 2.8m, even with 11.00-20
- Tail swing radius only 3.0 m
- There are two storage containers in the truce, easy to carry hoisting tools

Drive Train

- Cummins ISLE series engine, 213 kW/290 HP, max. torque 1050 Nm.
- Power shift gearbox with automated mechanical transmission FAST type 8JS118TB-B, 8 forward, 1 reverse gear.

Rubber Suspension

- Low stiffness suspension improves vehicle ride comfort, reduces tire wear.
- Lightweight, increase payload capacity.
- Good throughput capacity.
- Simple structure, easy installation, easy to maintain.
- Spring stiffness matches changes in load, and is more comfortable for the driver.

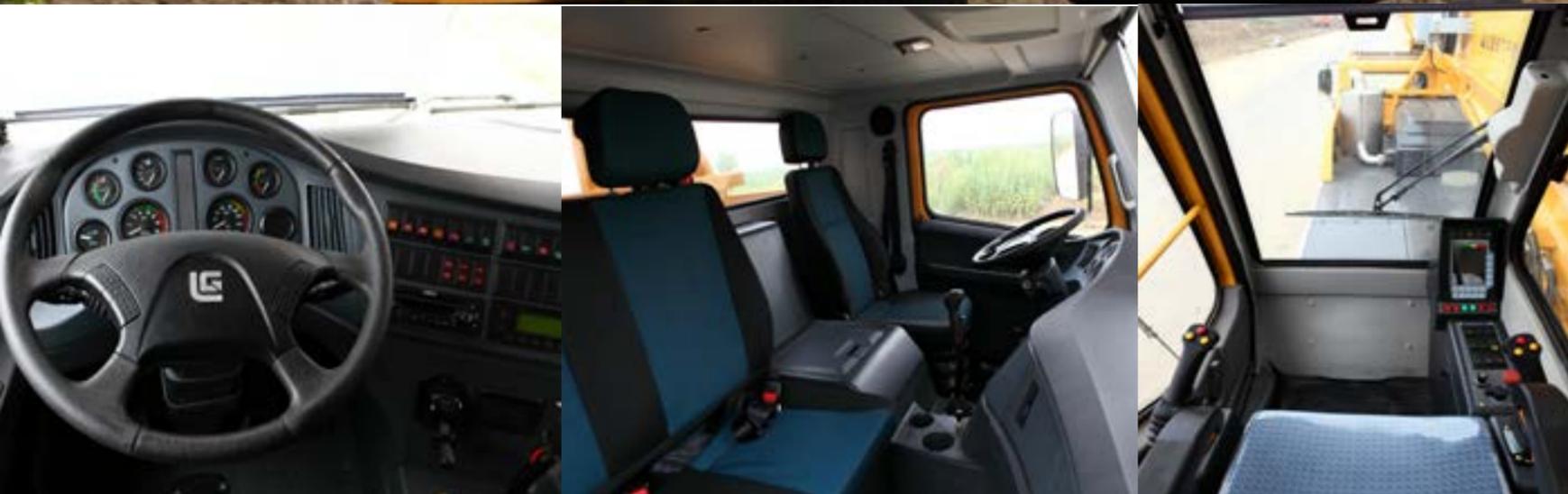


Superior Radial Tires

- Good drivability and turning performance, suitable for high speed
- Good shock absorption, improves ride comfort
- Good wear resistance, prolongs service life
- High ground contact, good load capability, increases rider safety



COMFORT AND SAFETY



Safety Devices

- A side hydraulic lock is installed on the vertical leg cylinder to avoid retraction of the leg piston during operation, prevents crashes.
- Torque limiter provides early warnings for better safety.
- Steel wire wind down protections, ensure there are three circles steel wire rope on the hoisting drum
- Height limit device prevents pulleys on the arm head and hook from damage while lifting
- Cylinder pressure monitoring
- Angle indicator

Comfortable and Safe Crane Cab

- Open field of vision
- Safety glazing on glass and protective fence
- Air-suspension seat with lumbar support and multiple adjustable settings
- Sun blind on skylight
- Push-pull type door
- Heat and noise insulated interior lining
- Cold/warm air conditioner
- Working indicator lights

Torque Limiter

- The TC250 uses torque limiter from the Xuzhou Hirschman HC4900 series.
- A interactive screen shows working parameters such as the percentage of torque, lifting weight, distance, boom reach, angle, and information codes.
- The machine and stops giveson alarm upon detection of abnormal conditions by any one of the signaling systems.
- A black box records working dates. Helps with diagnosis function, shortens downtime.
- New calculation model, The average errors of weight and distance are less than 5%, corrections can be made without the need of a straightening bench, no need for professional on-line debugging.
- Hardware decoding with CPU+DSP to collect codes, this improves performance, and allows quick, real-time signal acquisition and data analysis.
- New power supply ensures reliability.

Comfortable and Safe Driver's Cab

- Corrosion- resistant
- Safety glass on all sides, wide view
- Adjustable outside mirrors
- Sun blind on front window
- Cold/warm air conditioner
- Air-suspension driver's seat with lumbar support, very comfortable
- Unique passenger seat can be folded into sleeper bed; very useful for cross-country trips or long hours.

HIGH-POWER CRANE DRIVE



Excellent Hydraulic System

- Pilot control operation has good performance in low speed.
- Load sensing control system, load independent flow distribution.
- Hydraulic oil tank capacity of 520 liters.

Boom Falling System

- Single cylinder with imported balance valve for front elevation support, low energy consumption and the controls the speed of boom
- The range of boom falling range : -2° - 78°
- Max. boom telescoping time: 110/130 s
- Max. boom elevating time: 50/70 s

Worktable Swing System

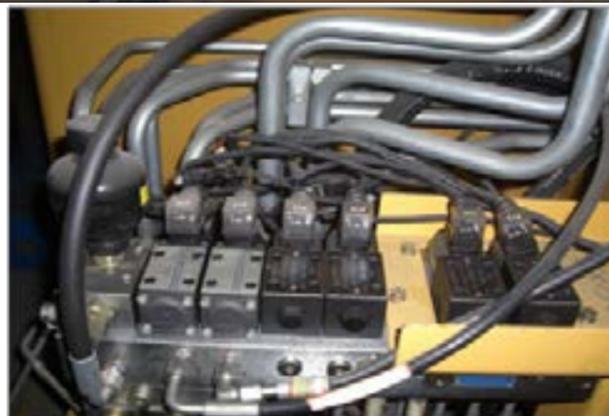
- Large adjustment range, the maximum rotation speed of 2.5 r/min.
- Worktable can turn freely with a switch when pulling under load.
- High performance rotary cushion, epicyclic gear reducer, normally closed hydraulic brake.
- Fully sealed single row ball swing ring with mono-bloc external teeth, grease bathed.

Oil Cooler

- Large radiating surface area with complete aluminium design dissipates heat more efficiently.
- Working time controlled with a switch.

Control System

- Control system is broken down into smaller, single-function modules that can be independently checked.
- Interchangeable solenoid valves
- One pressure tapping points.
- Filtered inlet pipe to protect valves from contaminants.



Wire Rope

- Model of wire: 14NAT4VX39S+5FC
- Length of main hoisting wire: 180m
- Length of vice hoisting wire: 130m

Molten Counter Weight

- Counter balance weight: 5.6 T
- Tail swing: only 3.0 m



Hoisting System

- High pressure motor, epicyclic gear reducer, normally closed hydraulic brake
- The first and second winches run independently of each other
- Second hoist controlled by switch
- Motor model: A6V80HA22FZ1055; Automatic control, high pressure

RELIABLE

Parts, Service and Attachments to Count On

Part of a reliable truck crane is having parts, service and attachments so reliable you can count on them whenever, wherever. LiuGong parts are the perfect match to your investment working over the years and can be counted on when you need. Service is reliable and can be counted on to keep your truck crane up and running. Attachments for the machine have been made in-house and are part of a complete LiuGong system.

Embedded Arm Head

- Good structural strength, guide block has large smoother telescoping.
- This design effectively prevents damage to the suspension arm when torsional is applied.

Reliable Telescopic Device

- Coarse rope for import anti twist wire rope;
- Coarse rope and guide pulley bearing.

High Torsion and Stress Resistance

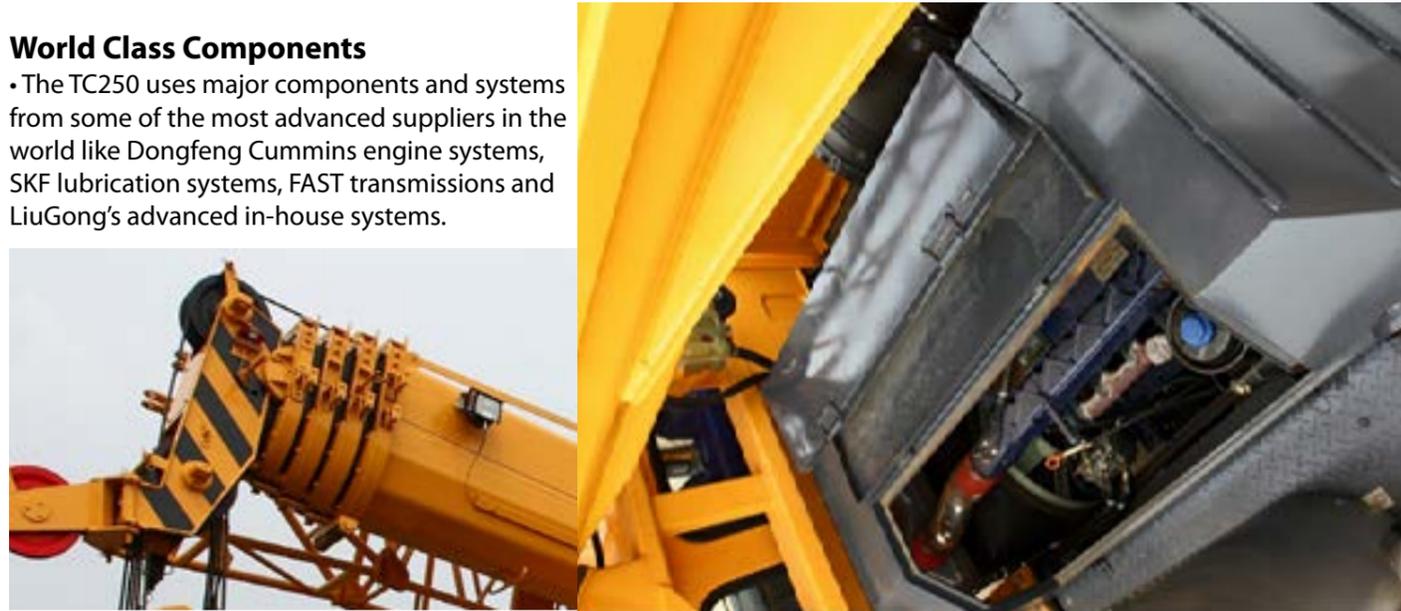
- Excellent structure welding technology, the main structures are welded by manipulator.
- Telescopic booms designs apply CAE and Proe-3D technology, and optimize the stress distribution of plates.
- Stress analysis testing was done to identify and on reduce stress points.
- The high strength steel Q550 frame, uses variable cross section beams, has an excellent design, and improves stress distribution

Double Sealed O-Rings

- The hydraulic system in the TC250 is fully equipped with double sealed O-rings on hose connections to provide the best seals possible and give operators peace of mind.

World Class Components

- The TC250 uses major components and systems from some of the most advanced suppliers in the world like Dongfeng Cummins engine systems, SKF lubrication systems, FAST transmissions and LiuGong's advanced in-house systems.



EASY TO MAINTAIN

Easy Engine Access

The TC250 is designed for convenient maintenance. The engine is conveniently accessible for routine machine and has ample space for working.

Fault Diagnostic System

The on board fault diagnostic system monitors machine functions and performance in real time and will inform the operator of small problems before they grow. The systems error codes can be used by your LiuGong certified service technician to simplify and quicken repairs.

Convenient Maintenance Ports

Maintenance ports and the hydraulic system on the TC250 have been placed in convenient locations for quick inspections so you spend less time working on your machine, and more time having your machine work for you. Circuit adopts modular design, each element generalization degree is high, strong interchangeability, using standard splice pieces.

Long Life Components

Long life components on important systems keep machines working for years. LiuGong uses extra long life axles brakes and multi value systems designed in-house and from well know brands



MAIN TECHNICAL DATA IN TRAVEL STATE

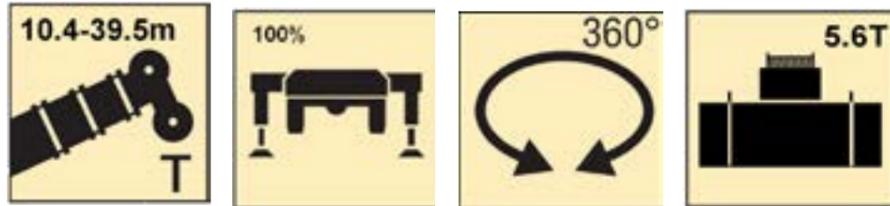
Category	Item		Unit	Parameter
Dimensions	Overall Length		mm	12250
	Overall Width		mm	2490
	Overall Height		mm	3365
	Wheel Base	1st Axle	mm	4535
		2nd Axle	mm	1350
	Track	Front Wheel	mm	2090
Rear wheel		mm	1858	
Weight	Dead weight in Travel Mode		kg	32400
	Axle Load	Front Axle	kg	7200
		Rear Axle	kg	25200
Power	Engine model		DFCM	ISLe290 30
	Engine rated power		kW/rpm	213/ 2100
	Engine rated torque		Nm/rpm	1050 /1400
	Engine rated speed		r/min	2100
	Displacement		L	8.9
Travel Performance	Travel speed	Max. travel speed	km/h	80
		Min. travel speed	km/h	3
	Turning diameter	Min. turning diameter	m	20
		Min. turning diameter at boom tip	m	23.8
	Min. ground clearance		mm	262
	Approach angle		°	19
	Departure angel		°	13
	Braking distance(at 30km/h)		m	≤10
	Max. grade ability		%	35%
	Fuel consumption of 100 km		L	≤40

TECHNICAL DATA FOR LIFTING OPERATION

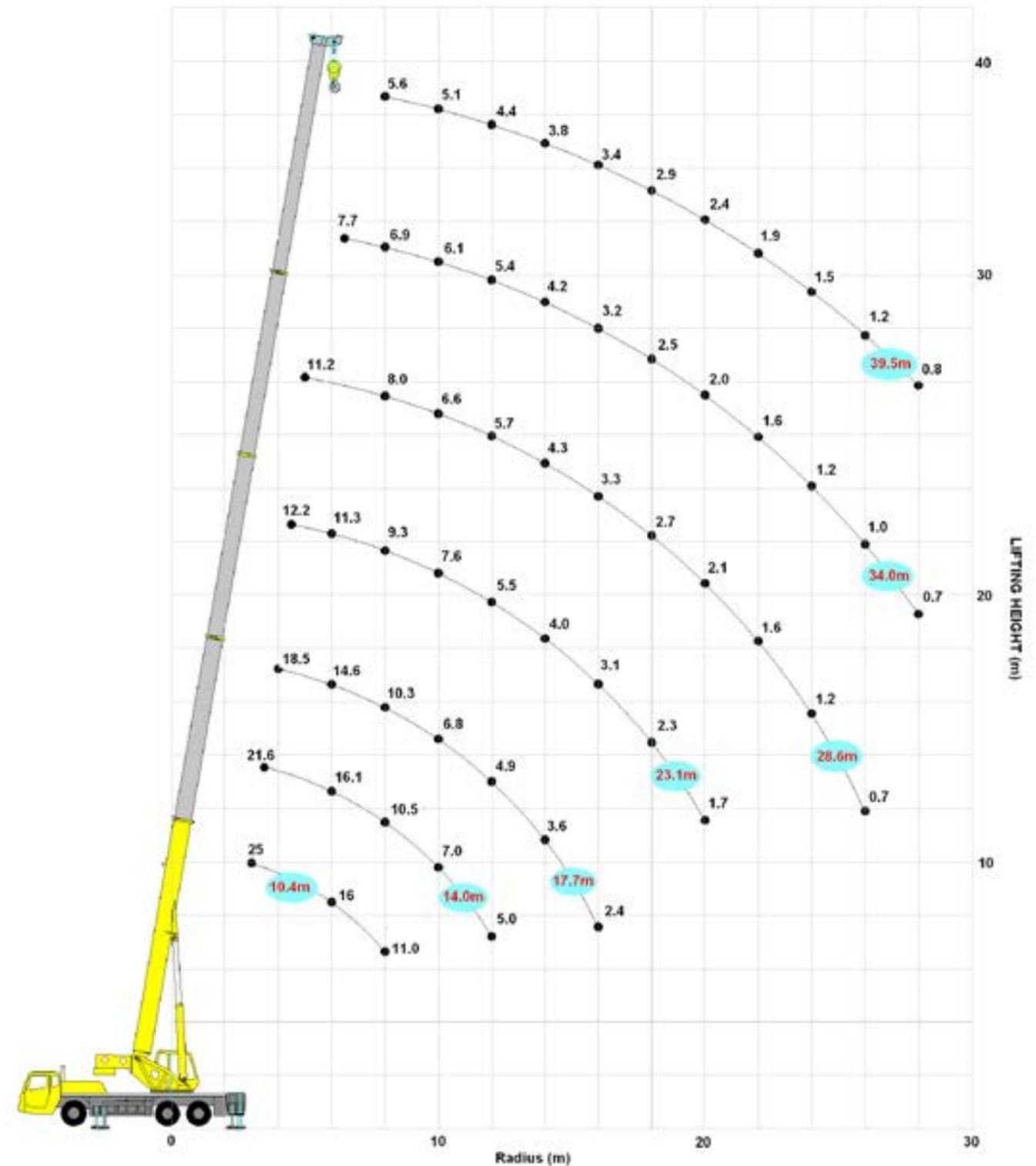
Category	Item		Unit	Parameter	
Lifting Performance	Max. total rated lifting capacity		t	25	
	Min. rated working radius		m	3	
	Turning radius at turntable tail		m	3	
	Max. load moment	Base boom	kNm	995.5	
		Fully-extended boom	kNm	560	
	Outrigger span	Longitudinal distance	m	5250	
		Lateral distance	m	6000	
	Lifting height	Base boom	m	10.5	
		Fully-extended boom	m	39.5	
		Fully-extended boom+Jib	m	47.6	
	Boom length	Base boom	m	10.4	
		Fully-extended boom	m	39.5	
		Fully-extended boom+Jib	m	48.3	
Jib offset angle		°	0, 15, 30		
Working Speed	Elevating time	Boom raising	s	50	
		Boom lowering	s	70	
	Telescoping time	Boom fully extended	s	110	
		Boom fully retracted	s	130	
	Max. swing speed		r/min	2.5	
	Outrigger extending and retracted time	Outrigger beam	Extending	s	30
			Retracting	s	35
		Outrigger jack	Extending	s	60
			Retracting	s	30
	Hoisting speed	Main winch	Full load	m/min	90
No load			m/min	130	
Auxiliary winch		Full load	m/min	90	
		No load	m/min	130	

LIFTING CAPACITIES- MODE 1

- **MODE1 :**
Booms 3,4, and 5 can only extend after boom section 2 is completely extended.

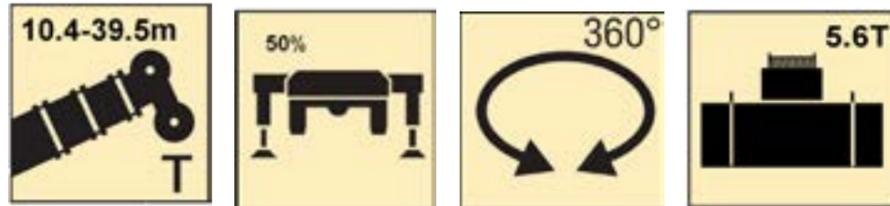


m	10.4	14.0	17.7	23.1	28.6	34.0	39.5
	n=10	n=10	n=6	n=5	n=4	n=3	n=2
3	25.0						
3.5	25.0	21.6					
4	24.2	21.1	18.5				
4.5	21.8	20.7	17.5	12.2			
5	19.7	19.3	16.5	12.1	11.2		
5.5	18.1	18.0	15.3	11.8	10.4		
6	16.0	16.1	14.6	11.3	9.8		
6.5	15.0	15.1	14.0	11.0	9.4	7.7	
7	13.6	13.2	13.0	10.2	8.8	7.5	
8	11.0	10.5	10.3	9.3	8.0	6.9	5.6
9		8.5	8.5	8.5	7.4	6.5	5.5
10		7.0	6.8	7.6	6.6	6.1	5.1
11		5.9	5.7	6.3	6.1	5.7	4.7
12		5.0	4.9	5.5	5.7	5.4	4.4
13			4.2	4.6	5.1	4.7	4.1
14			3.6	4.0	4.3	4.2	3.8
15			2.9	3.6	3.8	3.6	3.7
16			2.4	3.1	3.3	3.2	3.4
18				2.3	2.7	2.5	2.9
20				1.7	2.1	2.0	2.4
22					1.6	1.6	1.9
24					1.2	1.2	1.5
26					0.7	1.0	1.2
28						0.7	0.8
30						0.5	0.6
32							0.5

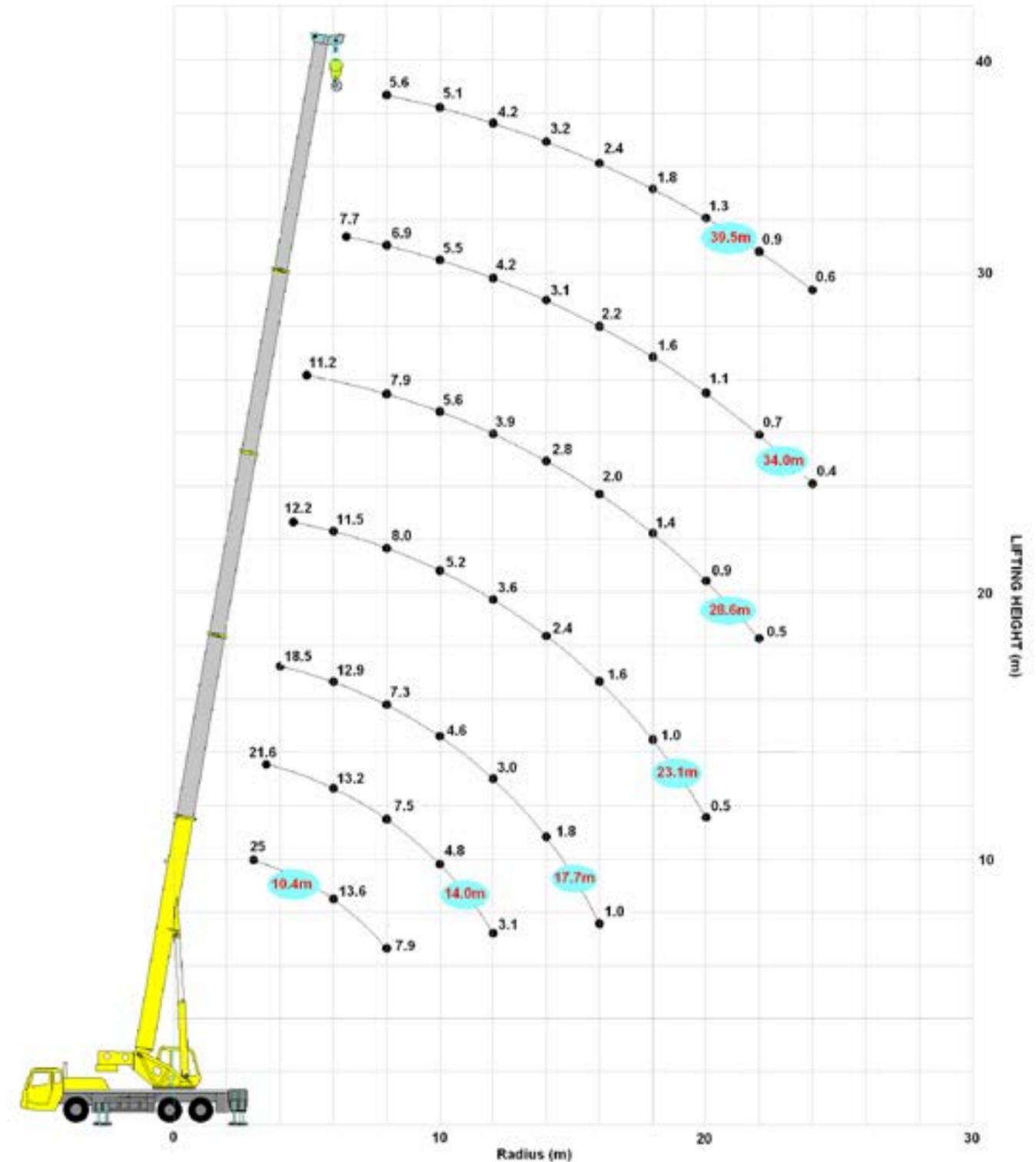


LIFTING CAPACITIES- MODE 1

- **MODE1 :**
Booms 3,4, and 5 can only extend after boom section 2 is completely extended.



m	10.4	14.0	17.7	23.1	28.6	34.0	39.5
	n=10	n=10	n=6	n=5	n=4	n=3	n=2
3	25.0						
3.5	25.0	21.6					
4	23.6	21.1	18.5				
4.5	21.5	20.7	17.5	12.2			
5	19.5	19.1	16.0	12.1	11.2		
5.5	16.1	15.7	15.4	11.8	10.4		
6	13.6	13.2	12.9	11.5	9.8		
6.5	11.6	11.3	11.0	10.9	9.4	7.7	
7	10.1	9.8	9.5	10.3	8.8	7.5	
8	7.9	7.5	7.3	8.0	7.9	6.9	5.6
9		6.0	5.8	6.4	6.8	6.5	5.5
10		4.8	4.6	5.2	5.6	5.5	5.1
11		3.9	3.7	4.3	4.7	4.9	4.7
12		3.1	3.0	3.6	3.9	4.2	4.2
13			2.3	3.0	3.3	3.6	3.7
14			1.8	2.4	2.8	3.1	3.2
15			1.4	2.0	2.4	2.6	2.8
16			1.0	1.6	2.0	2.2	2.4
18				1.0	1.4	1.6	1.8
20				0.5	0.9	1.1	1.3
22					0.5	0.7	0.9
24						0.4	0.6
26							
28							
30							
32							

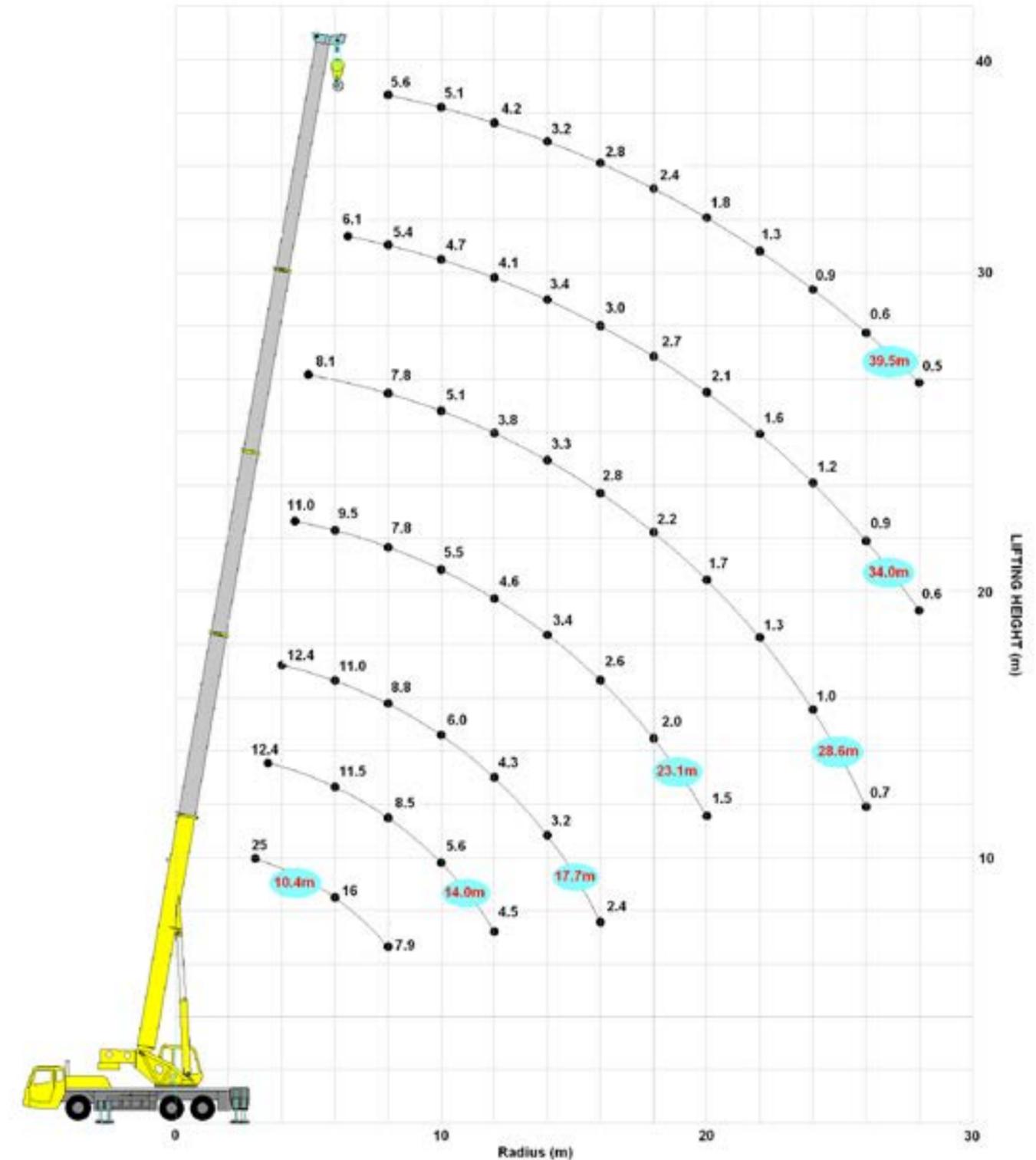


LIFTING CAPACITIES- MODE 2

- MODE 2 :
Booms 3, 4, and 5 may extend before boom section 2 is extended.



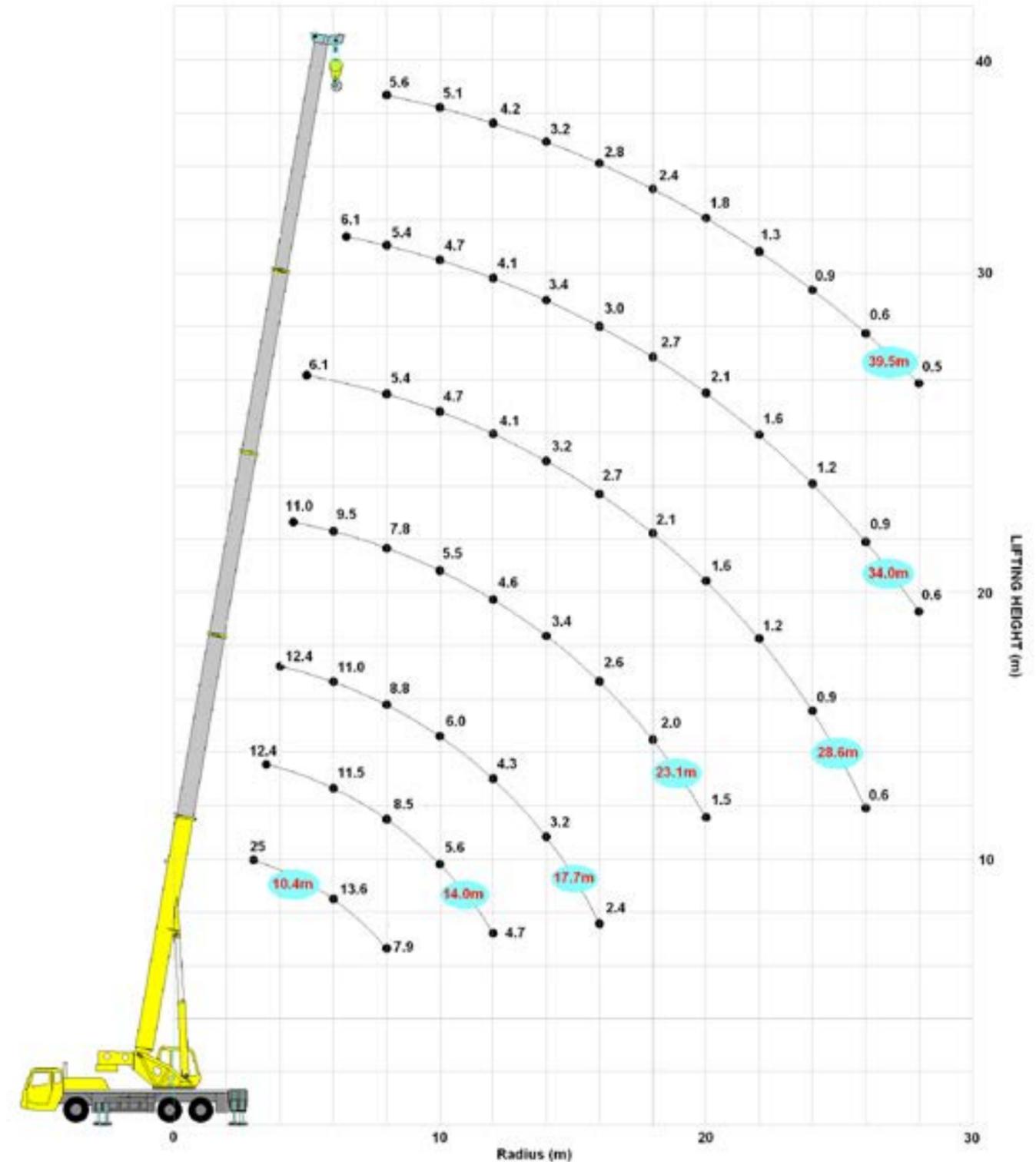
m	10.4	14.0	17.7	23.1	28.6	34.0	39.5
	n=10	n=10	n=6	n=5	n=4	n=3	n=2
3	25.0						
3.5	25.0	12.4					
4	24.2	12.4	12.4				
4.5	21.8	12.4	12.2	11.0			
5	19.7	12.4	12.0	10.6	8.1		
5.5	18.1	12.3	11.8	10.0	7.7		
6	16.0	12.2	11.3	9.5	7.3		
6.5	15.0	12.1	11.0	9.0	7.0	6.1	
7	13.6	12.0	10.0	8.6	6.7	5.9	
8	11.0	11.4	9.5	7.8	6.1	5.4	5.6
9		9.4	9.0	7.1	5.6	5.0	5.5
10		7.9	8.2	6.6	5.1	4.7	5.1
11		6.7	7.0	6.1	4.8	4.4	4.7
12			6.1	5.7	4.4	4.1	4.4
13			5.3	4.4	4.1	3.8	4.1
14			4.7	4.2	3.9	3.6	3.8
15			4.1	3.9	3.6	3.4	3.7
16			3.7	3.7	3.5	3.2	3.4
18				3.2	2.7	2.5	2.9
20				2.6	2.4	2.3	2.4
22					2.2	2.1	1.9
24					1.8	1.8	1.5
26					1.5	1.4	1.2
28						1.1	0.8
30						0.9	0.6
32						0.7	0.5



LIFTING CAPACITIES- MODE 2

- MODE 2 :
Booms 3, 4, and 5 may extend before boom section 2 is extended.

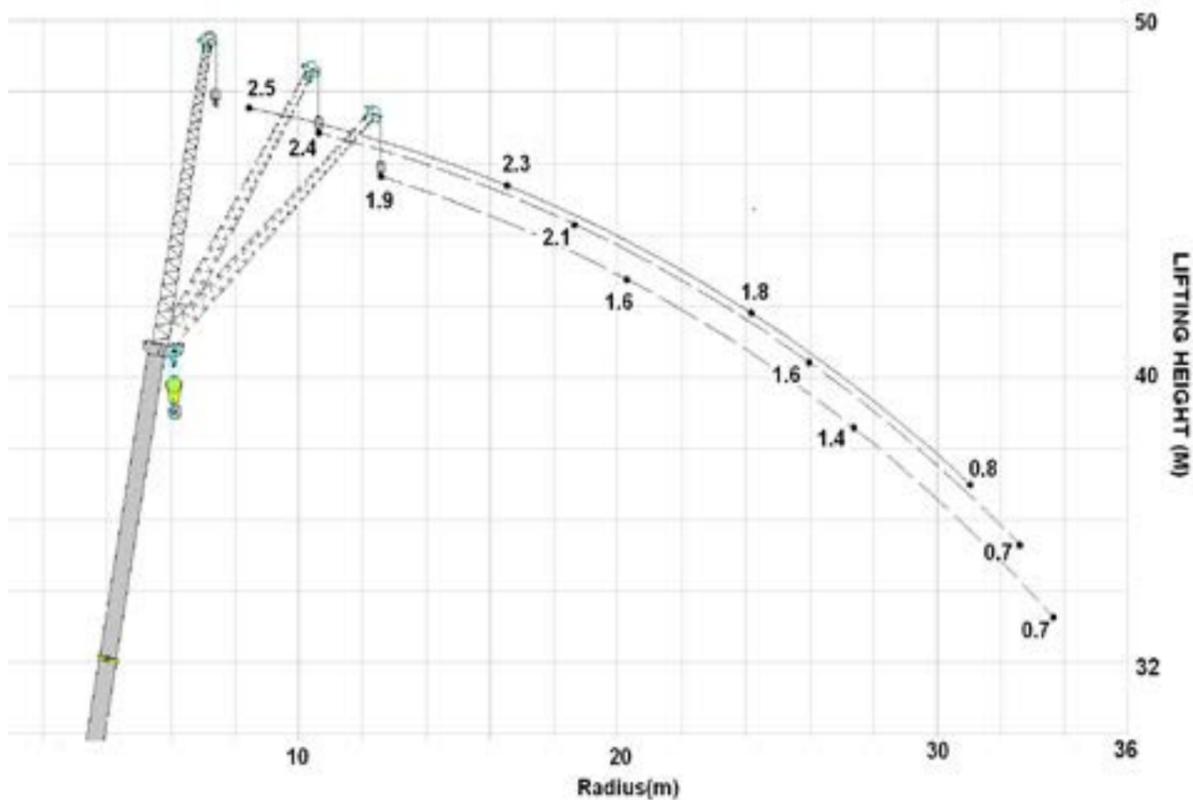
10.4-39.5m		50%		360°		5.6T	
m	10.4	14.0	17.7	23.1	28.6	34.0	39.5
	n=10	n=10	n=6	n=5	n=4	n=3	n=2
3	25.0						
3.5	25.0	12.4					
4	23.6	12.4	12.4				
4.5	21.5	12.4	12.2	11.0			
5	19.5	12.4	12.0	10.6	8.1		
5.5	16.1	11.8	11.8	10.0	7.7		
6	13.6	11.5	11.0	9.5	7.3		
6.5	11.6	11.3	10.5	9.0	7.0	6.1	
7	10.1	10.8	10.0	8.6	6.7	5.9	
8	7.9	8.5	8.8	7.8	6.1	5.4	5.6
9		6.9	7.2	6.0	5.6	5.0	5.5
10		5.6	6.0	5.5	5.1	4.7	5.1
11		4.7	5.0	5.1	4.8	4.4	4.7
12			4.3	4.6	3.8	4.1	4.2
13			3.7	3.9	3.5	3.4	3.7
14			3.2	3.4	3.3	3.2	3.2
15			2.7	3.0	3.1	3.0	2.8
16			2.4	2.6	2.8	2.7	2.4
18				2.0	2.2	2.1	1.8
20				1.5	1.7	1.6	1.3
22					1.3	1.2	0.9
24					1.0	0.9	0.6
26					0.7	0.6	0.5
28							
30							
32							



LIFTING CAPACITIES- JIB



ANGLE	Angle of Jib installaion		
	0°	15°	30°
80°	2.50	2.40	1.90
76°	2.45	2.35	1.75
73°	2.75	2.20	1.70
70°	2.35	2.10	1.60
65°	2.25	1.80	1.50
60°	1.75	1.55	1.35
55°	1.15	1.10	1.00
50°	0.75	0.70	0.65
40°	0.25	0.24	0.22



SERVICE SUPPORT

Exceptional Service Support

The LiuGong Product Support Team provides parts and service solutions for the owning and operating needs of our customers. Be assured that with every machine purchased a dedicated team of LiuGong specialists are ready to provide exceptional support. For all your machine support needs from warranty and service repairs, planned maintenance, training, and getting the right genuine LiuGong part, contact your local LiuGong dealer and experience our service support promise.

Parts Support

Genuine LiuGong Parts are only available through the LiuGong Dealer Network. Keep your machines running at its highest levels by using only Genuine LiuGong Parts. LiuGong maintains an extensive inventory in its 11 Parts Distribution Centers around the world to bring the parts closer to the customer.

Maintenance Support

Your local LiuGong dealer will arrange a factory-trained service expert to perform all maintenance on your equipment to the precise specs and schedules required to keep your machine at top productivity.

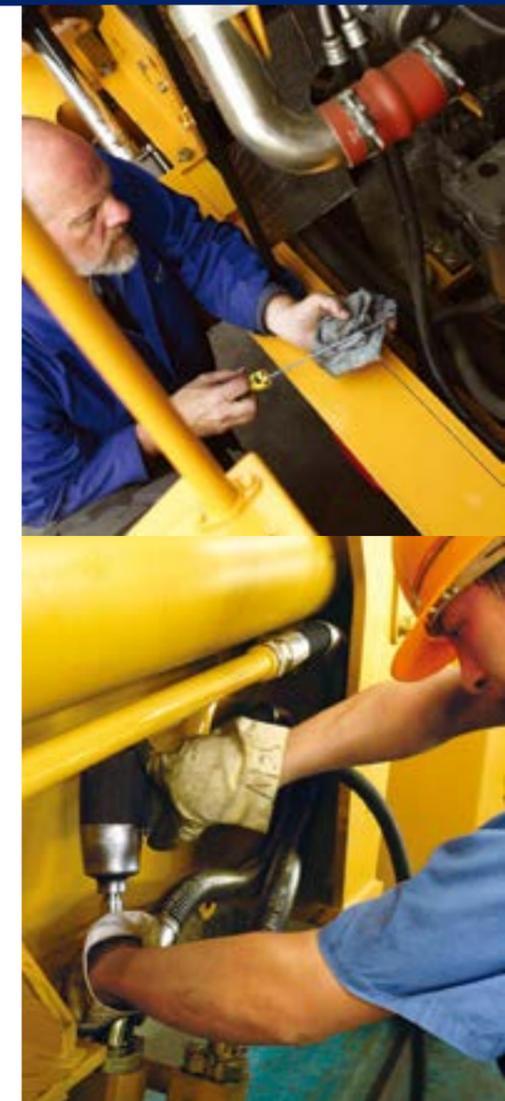
Machine Inspection

Before every busy season, your LiuGong dealer can thoroughly inspect your machines and perform proper maintenance service to make sure every machine will run at top productivity with minimal downtime as well as ensuring the best fuel economy and lower operating costs.

Training

LiuGong dealers provide training to help you efficiently operate your LiuGong equipment for top productivity, long machine life and low maintenance costs.

Contact your local LiuGong dealer for more information.



STANDARD EQUIPMENT

- Cummins ISLe290 30 Turbocharged, 6 Cylinder 4 stroke EURO III Stage air to air inter-cooled, diesel engine
- Air filter
- 520 L Hydraulic oil tank
- 5 spool working valve and 1 spool rotary control valve with multi-purpose piping
- Electric cooling fan
- Car radiator
- Double joysticks, pilot control
- ZF diaphragm spring clutch
- 8 shift FAST mechanical transmission
- DAJIANG monolithic casting rear axle
-Spring carrier (front axle) -Rubber suspension (rear axle)
- Drum brakes
- 11.00-20, Radial tires rims
- LiuGong special chassis
- Double circuit pneumatic brake
-Parking brake
-Exhaust brake
- Adjustable air suspension seat -Adjustable steering wheel
- Transformation interface 24V/12V
- Heater, air conditioning, defroster
- AM/FM radio with Mp3 jack
- Windshield wipers (front & rear)
- 2 external mirrors, 1 internal
- Auto down window
- Safety belt
- Vehicle emergency hammer
- Anti-skid pedal
- Horn
- Lights
- Cup holder
- Storage pocket
- Two tool boxes
- Fire extinguisher
- Cigar lighter, electrical outlet
- 24V electrical system
- Back-up alarm
- 70A Alternator
- Air filter alarm
- 2 sets of working lamps,
- 2 sets of traffic lamps
- Accumulator:2*6-QW-180S
- Counter weights
- Folding engine hood
- Fender (front & rear)
- Width lamp
- Engine coolant temp gauge
- Work hour meter
- Angle indicator
- Balancing valve for free-fall
- Engine oil temperature gauge
- Engine water temp gauge
- Fuel level indicator
- Engine speed/travel speed gauge
- Voltage meter
- Brake air pressure gauge
- Service brake low pressure indicator
- Parking brake low pressure indicator
- Transmission oil temp indicator
- Charging system indicator
- Starting motor working indicator
- Front floodlight high beam indicator
- Hydraulic contamination indicator
- Clutch cut-off indicator
- Warming Indicator
- Parking indicator
- Water in fuel indicator
- Service indicator
- Ready starting indicator
- Engine oil pressure indicator
- English decals
- Standard spare parts
- Standard special accessories
- Main sling hook
- Vice hook
- Torque limiter
- Double hoisting
- Electronic speedometer

OPTIONAL EQUIPMENT

- Flash beacon
- Rearview camera
- Centralized lubrication system
- Centralized lubrication indicator
- Meritor monolithic casting rear axle
- Anemoscope
- Electronics level instrument
- WEICHAI WP7.270 E30

**Shaping the Future
Together.**

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Specifications and designs are subject to change without notice. Machines shown may include optional equipment and may not include all standard equipment.