















### **COMPANY PROFILE**

XCMG's Hoisting machinery division is the leader in China's lifting industry focusing on the research, development and the production of mobile cranes. At XCMG's core is a commitment to technological innovation while utilizing the latest digital technologies to push the boundaries of product development and production while following our principles of social responsibility, building a sustainable and better future, and to create value for our customers.



### **PRODUCT RANGE**

XCMG's Hoisting machinery division boasts a complete product range. Our cranes are sold and serviced in more than 190 countries and regions worldwide, with export shares consistently leading the market.



### **WHEELED CRANE**

**⋄** 5 t-300 t Truck Crane
 **⋄** 40 t-4000 t All Terrain Crane
 **⋄** 13 t-150 t Rough Terrain Crane
 **o** 13 t-150 t Rough Terrain Crane
 **o** 13 t-150 t Rough Terrain Crane
 **o** 15 t-150 t Rough Terrain Crane
 **o** 1

### **CRAWLER CRANE**

**□** 45 t-4000 t Lattice Crawler Crane

 **□** 30 t-220 t Telescopic Crawler Crane





#### **Economical operation**

New electro-hydraulic energy-saving control technology: significant reduction in average oil consumption for superstructure operations.

Low-speed large-torque drivetrain technology 2.0: Fuel consumption during travel is reduced; Power performance is improved dramatically; Acceleration is strong; And grade ability is improved by 45%.



#### **Efficient lifting**

Four-section U-shaped boom of 36 m, fixed jib of 8.3 m, with excellent boom performance, and boom has a 0° lifting operation mode, covering a wide range of operation modes. It is highly adaptable to high-frequency construction scenarios such as infrastructure construction, housing construction, forestry, and factory loading and unloading, with high operational efficiency.



#### Precise control

Full operation modes, precise and smooth control technology: improved, smooth and precise control.



#### Intelligence-powered premium experience

Exquisite appearance design: Provide ultimate visual experience and delicate craftsmanship.

G-star cab: Brand-new two cabs grant full comfort.

User-friendly design for maintenance and service: Maintenance and service is time-saving and energy-saving.



#### Safe and reliable

Full life cycle structural safety technology: More reasonable structural layout and safe

G-Electrical System (GEC): Safe handling, reliable circuit connection, and stable functions. Smart and quality manufacturing: 30 years of welding craftsmanship; Top-notch painting process.

178 tests: 178 full-scale limit test standard including performance, function, environment and service life, which are far above the industry level.





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\*Cr30GAETALS

Meet road registration requirements across Australia.

### **ECONOMICAL OPERATION**

G-ECO efficient and energy-saving in full life cycle

#### **NEW ELECTRO-HYDRAULIC ENERGY-SAVING CONTROL TECHNOLOGY**

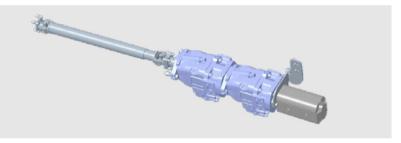
- Hydraulic system-engine intelligent cooperation allows the engine to always work in the best state of power output, and average oil
  consumption is significantly reduced for superstructure operations.
- Equipped with high-power hydraulic oil radiators, continuous operation without shutdown in a high-temperature environment of 50°C, more comfortable operation.

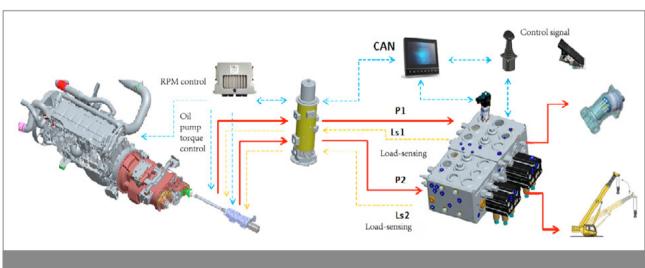




Exclusive large-displacement plunger pump, smartly matching the economical operation zone of the engine.

Low-speed, high-torque, better fuel-saving.





Self-adaptive control of pressure and flow under all operation modes.

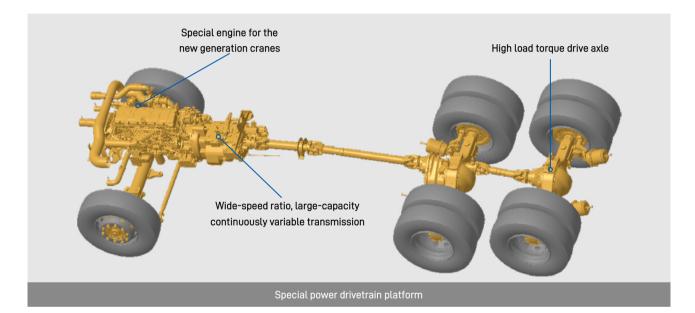
Zero-loss & zero-waste of pressure and flow under all operation modes.

#### TRAVEL WITHOUT LIMITS

#### **LOW-SPEED LARGE-TORQUE DRIVETRAIN TECHNOLOGY 2.0**

• The integrated power platform equipped with an efficient intake and boost system achieves a perfect combination of power and economy, easily handling various working conditions, reduced fuel consumption, improved power, starting quickly, and increasing grade ability by 45%.





#### **SUPERB LIFTING PERFORMANCE**

- Four-section U-shaped boom of 36 m, fixed jib of 8.3 m, with excellent boom performance, and boom has a 0° lifting operation mode, covering a wide range of operation modes. It is highly adaptable to high-frequency construction scenarios such as infrastructure construction, housing construction, forestry, and factory loading and unloading, with high operational efficiency.
- Innovative single-plate boom head and compact boom tail structure, best overlapping ratio in its class and stronger boom load-bearing capacity.

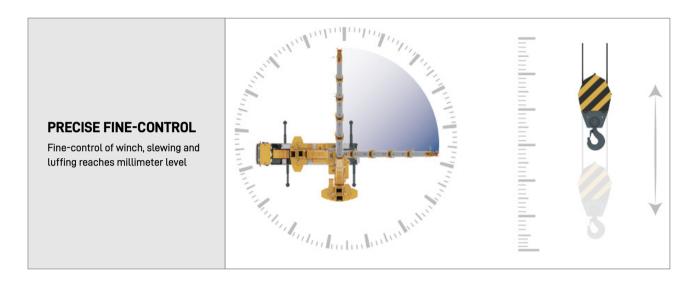


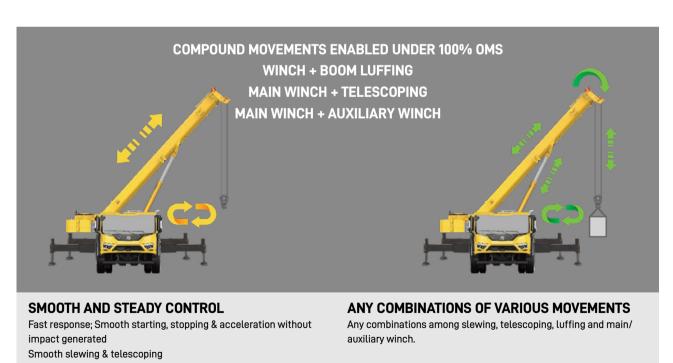
### PRECISE CONTROL

G-Master precise control in all operation modes

#### PRECISE AND SMOOTH CONTROL UNDER ALL OMS

• The new-generation control system of smart pump-valve combination is integrated with multi-stage pressure slewing buffer, and electrohydraulic proportional smart telescoping technology. Its handling performance is improved by 20% with precise fine and smooth control.







Brand-new styling; super-large internal space; super-wide filed of view; super-abundant storage space; plentiful configuration; delicate process; high intelligence; comfortable operation.

#### **G-STAR CAB: DRIVER'S CABS GRANT FULL COMFORT**

1	Large windshield	The upward and downward field of views of the windshield are increased by 50% and 8% respectively; the downward field of view of the side window is increased by 10%. It offers a wider field of view with improved driving safety.
2	Multi-storage space	Multiple storage locations for water bottles, cups, mobile phones, manuals and receipts, etc, meet diverse storage needs.
3	Integrated air outlet	Streamlined and throughout design offers a clean and elegant appearance.
4	HVAC	Integrated auxiliary heating control with multiple independently controlled air vents provide both face-level and foot-level airflow, effectively supporting defrosting and demisting functions, with fast heating and cooling performance.
(5)	New central control panel	12.1-inch true color display with large screen offers higher definition. The central control area integrates various functions such as combined design of switch and touch, audio and video entertainment, navigation system and reversing camera. Reliable and durable, and easy to control.
6	Air-suspension shock absorber seat for the main driver	More attention is paid to ergonomics. Adjustable seat with electric heating function reduces fatigue and improve operation precision and safety.
7	Multi-functional steering wheel	Integrated cruise control and entertainment controls, everything is under control.
8	Combined instrument panel	Platform-based instrument UI screen presents all key information and functions clearly at a glance, delivering a completely upgraded interactive experience.
9	Remote control door lock	Using the remote control key to control the driver's door lock/unlock and window lifters enhances convenience and intelligent operation.
10	Electric adjusting and heating rearview mirrors	Provides clear visibility in harsh weather, enhancing driving safety.
11)	Other user-friendly designs	User-friendly design include LED combined light, 12 V charging ports+24 V charging ports +USB interface and door speaker.

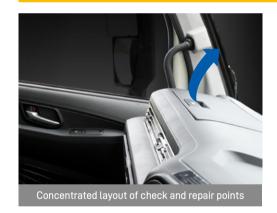


TRAVEL WITHOUT LIMITS

#### **USER-FRIENDLY DESIGN FOR MAINTENANCE AND SERVICE**



#### LARGE MAINTENANCE SPACE WITHOUT OPERATION INTERFERENCE





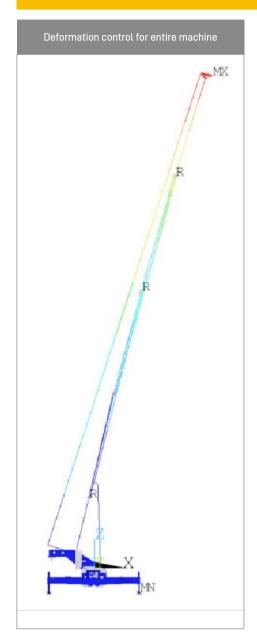
### **VISIBLE OIL LEVEL**



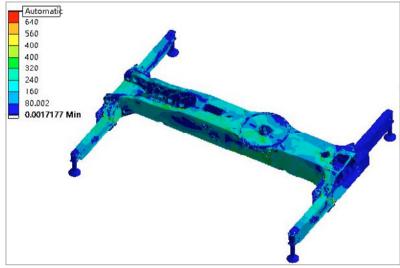
### **SAFE AND RELIABLE**

G-Safe safe and quality manufacturing for full service life

#### **FULL-SERVICE LIFE STRUCTURAL SAFETY DESIGN**







More appropriate structural arrangement; Deformation decreased by 30%; Safer operation Stress of structural parts is evenly distributed, enabling stronger load-bearing capacity, Service life is over 1.6 times longer than benchmark

#### **G-ELECTRICAL SYSTEM (GEC)**

- Requirements of safe operation and specific functional extension can be met under all operation modes
- Essential electrical components have passed CNAS-level laboratory testing and certification. The electrical system is very stable.



#### **High-precision LMI system**

Optimize hardware in terms of improved computing power, high-resolution display, port protection and communication improvement, combined with high-precision algorithm models to improve the overall working radius and weight calculation accuracy, ensuring safety and reliability.



#### New-generation integrated injection molded wire harness

The integrated bus connection design elevates the protection rating to IP67, enabling reliable and maintenance-free wire harness performance in various extreme conditions.



#### Cable reel

Hermetically sealed with a brand-new structural design, offering enhanced protection effectiveness and high reliability.



#### **Lowering limiter**

High-precision encoder integrates winch speed measurement, safety diagnostics, and intelligent calibration.



#### **CAN bus module**

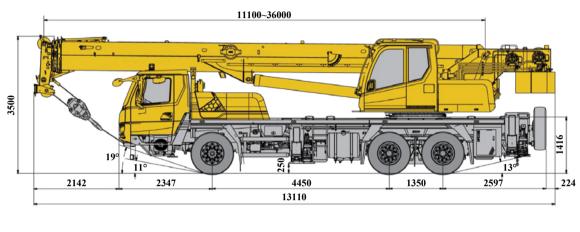
Longer service life of components, and more reliable circuit connection.

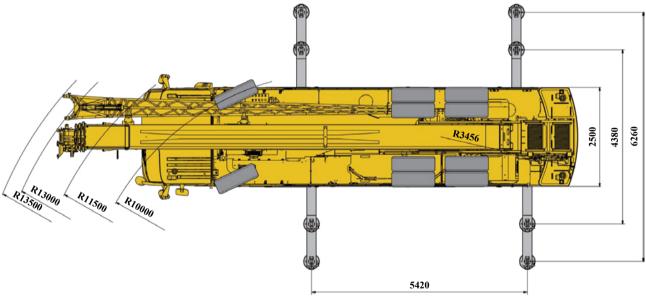


#### Anti-two block

Micro switch + resettable spring-type pull rod, offering extended service life and high reliability.

### **DIMENSIONS**





	CHASSIS
Frame	Designed and manufactured by XCMG, the frame is made of high strength steel with fully covered deck and anti-torsion box-typed structure.
Outriggers	Four outriggers arranged in H-shaped are hydraulically controlled by control levers. There is an outrigger control station located at each side of the chassis, and there is a level gauge, an illuminator and speed buttons on each control station. There is a check valve fitted in each outrigger cylinder, and a double-way hydraulic lock fitted in each jack cylinder. Fifth jack is equipped.  Outrigger float dimension: φ400 mm; float dimension for the 5th jack: φ260 mm.  Reaction force of outrigger at maximum lifting load: front outrigger: 326 kN; rear outrigger: 275 kN.
Engine	WP7H300E62, in-line, 6-cylinder, supercharged, intercooled diesel engine, made by Weichai Power, with rated power of 221 kw /2100 rpm, maximum torque of 1200 N.m, compliant with Euro VI emission standard.  Fuel tank capacity: 240 L; AdBlue/DEF tank capacity: 35 L; engine displacement: 6.8 L.
Transmission	Mechanical transmission, made by Shaanxi Fast Gear Co., Ltd., 8-forward speed and 1-reverse speed.
Safety devices	Backup camera and ABS are standard.
Axles	High strength axles, 2nd and 3rd axles for driving, 1st axle for steering. Drive/steer mode: 6×2×4.
Suspension	Front suspensions: vertically mounted leaf springs, telescopic shock absorbers.  Rear suspensions: rubber suspension with V-type control arm, light dead weight, better positioning effect, and maintenance-free.
Tires	10 tires and 1 spare tire, 1st axle is equipped with single tire, 2nd and 3rd axles are equipped with dual-tire.  Tire specifications: 315/80 R22.5.
Braking system	Service brake: foot pedal operated dual-circuit air pressure brake.  Parking brake: spring applied brake, acting on the wheels of axles 2 and 3.  Auxiliary brake: engine in-cylinder brake; safe and reliable; the service life of brake lining prolonged.
Steering	Mechanically steering mechanism with a hydraulic booster.
Driver's cab	New full dimension steel structure cab features a spacious, panoramic, and multi storage layout. Equipped with electric window lifters, electrically heated rearview mirrors, remote unlocking function, multi-functional steering wheel, air-suspension seats for driver and co-driver, LED headlight, new combined central control panel, 12.3-inch LCD screen display, 12-inch central control screen and HVAC.
Electrical system	DC 24 V, with 2 sets of 12 V batteries in series.

### **TECHNICAL SPECIFICATIONS**

4	SUPERSTRUCTURE
Structure	Designed and manufactured by XCMG, made of high strength steel.
Hydraulic system	The chassis engine drives a load-sensing plunger pump and gear pump in series through the transmission, which are used to control hoisting of main and auxiliary winches, luffing, telescoping, slewing and auxiliary system. Load-sensing electro-hydraulic multi-way valve is equipped for smooth operation. Air-cooled hydraulic oil cooler is fitted.  Hydraulic oil tank capacity: 440 L
Operating method	Pilot electric proportional control is operated through two control levers at left and right sides. Stepless speed regulation is available.
Main winch and auxiliary winch	Hydraulic control is used for speed regulation. The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake and a counterbalance valve and a grooved drum equipped.
Slewing system	Single-row, contact ball, external tooth slewing ring with a single slewing mechanism at right side is driven by the planetary gear reducer of slewing mechanism, which is driven by a hydraulic motor, and it may continuously slew 360°. Power control or free slewing function is available, and stepless slewing speed regulation is available.
Luffing system	Single cylinder luffing, with counterbalance valve featuring the load compensation function.
Operator's cab	Steel enclosed operator's cab tiltable up to 20°. The cab features spacious, panoramic, and multi-storage layout, safety glass with no blind spots, an openable windshield, and a 20 mm thickened, transparent roof window. Pushpull sliding door with remote controlled locks, protective grilles, and remote control electric telescoping side pedal (with 3 control modes) are in place. Dual-motor wipers are fitted for the windshield and roof window. 2.5 L kettle is also available. Stylish interior design. Sun screens for windshield and rear and side windows; double-layer sun screen for the roof window. Shock absorber and adjustable seat with leather + breathable mesh is equipped with seat belts. Dual LED interior light, HMI control panel, 10.1-inch display, armrest, engine accelerator pedal, electric proportional slewing brake pedal, engine ignition switch, and HVAC are available.
Safety devices	The safety devices include load moment indicator system, counterbalance valve, relief valve, hydraulic lock and turntable locking pin, etc. The load moment indicator system consists of the indicator, length/angle sensor, lowering limiter, anti-two block, oil pressure sensor, emergency stop switch and level gauge.
Load moment indicator	When the actual load moment is approaching the overloading value, audible and visual warning will be sent out, and the dangerous operation will be automatically cut off before overloading occurs. Overload memory function (black box) and fault diagnosis function are available.
Counterweight	Fixed counterweight is 4.55 t.
Hook block	25 t, 5 t hook block
Boom	Four-section boom with U-shaped profile is made of high strength steel, with special anti-deformation design. Single cylinder plus ropes is used to telescope the boom.  Boom length: 11.1 m~36 m.
Fixed jib	The jib consists of a connecting bracket, an offsetting bracket and a foldable lattice jib. Three offset angles of 0°, 15° and 30° are available. It is stowed along the side of the boom.  Fixed jib length: 8.3 m
Auxiliary sheave	Installed at the boom top, used for single line operation. Its lifting performance is the same as that for boom, but the maximum lifting load does not exceed 3.9 t.

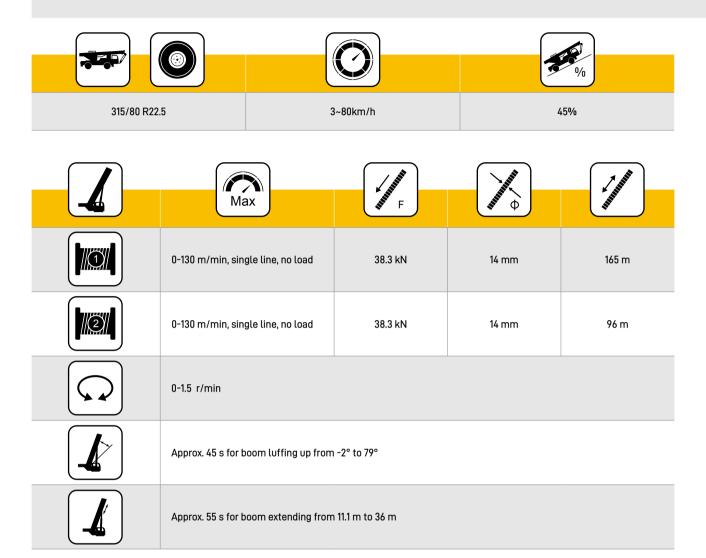
Other items of equipment available on request.

OPTIONAL EQUIPMENT	COMPONENT DESCRIPTION
Overseas GPS terminal	

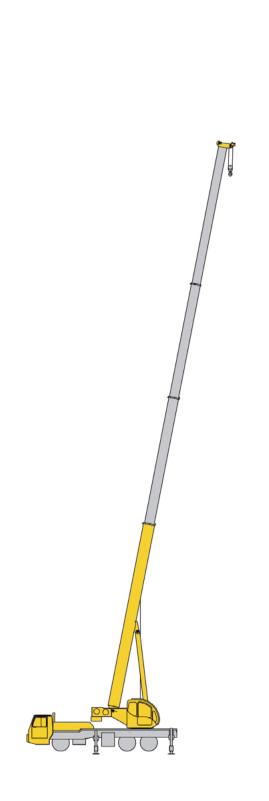
AXLE	1	2	3	TOTAL WEIGHT
t	7	11.5	11.5	30

Š	PARTS OF LINE	HOOK BLOCK WEIGHT (kg)	HOOK BLOCK DIMENSION (mm)	NOTES
25 t	7	200	347×404×1137	Single-hook
5 t	1	62	236×236×531	Single-hook

### **WORKING SPEEDS**



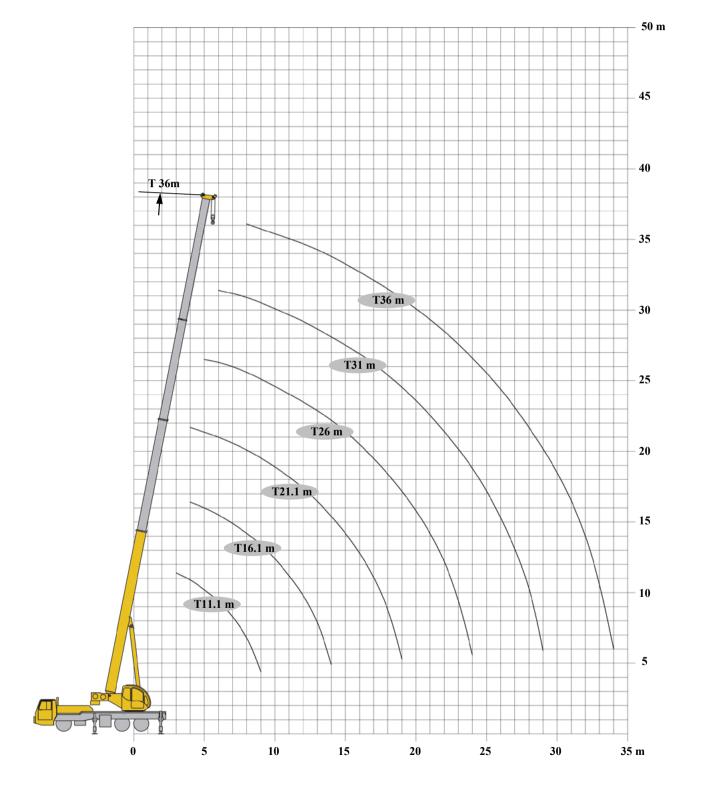
воом	FIXED JIB
T: 11.1-36 m	T: 36 m F: 8.3 m





### **WORKING RANGE DIAGRAM**

### **B00M**



### TRAVEL WITHOUT LIMITS











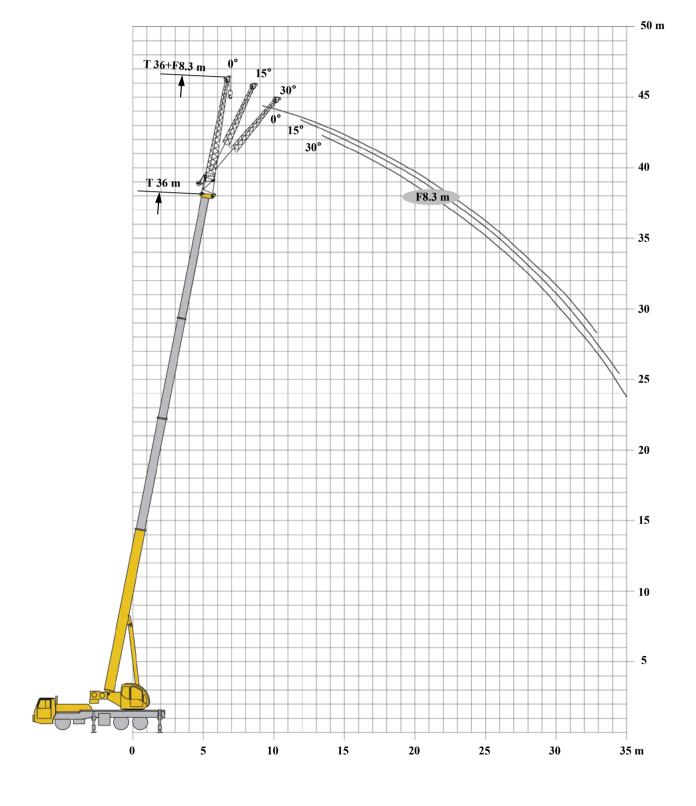


	11.1	16.1	21.1	26	31	36	
3	30*						3
3.5	25						3.5
4	24.5	21.5	20.4				4
4.5	23.2	19.5	18.9				4.5
5	22	18.6	18	14.6			5
5.5	19.5	18.6	17	14.0			5.5
6	17.5	17.4	16	13.5	10.9		6
6.5	15.9	15.9	15.5	12.9	10.5		6.5
7	14.6	14.6	14.2	12.4	10.2		7
8	11.5	12.3	12.3	11.5	9.4	7.6	8
9	10	10.1	10.3	10.4	8.7	7.2	9
10		8.5	8.6	8.7	7.9	6.8	10
11		7.6	7.8	8	7.1	6.1	11
12		6.4	6.7	6.9	6.5	5.8	12
13		5.5	5.8	6	6	5.3	13
14		4.8	5	5.2	5.3	5	14
15			4.4	4.5	4.6	4.4	15
16			3.9	4	4.1	4.1	16
17			3.4	3.6	3.7	3.7	17
18			3.1	3.2	3.3	3.3	18
19			2.7	2.9	2.9	3	19
20				2.6	2.6	2.7	20
21				2.3	2.4	2.4	21
22				2.1	2.1	2.2	22
23				1.8	1.9	2	23
24				1.6	1.7	1.8	24
25					1.6	1.6	25
26					1.4	1.5	26
27					1.2	1.3	27
28					1.1	1.2	28
29					1	1	29
30						0.9	30
31						0.8	31
32						0.7	32
33						0.6	33
34						0.5	34

Note: \* means special devices are necessary.

### **WORKING RANGE DIAGRAM**

### JIB

















		36		
<b>✓</b>		8.3		<b>—</b>
	0°	15°	30°	-
78	3	2.5	1.6	78
75	2.8	2.3	1.5	75
72	2.8	2.2	1.4	72
70	2.5	2	1.3	70
65	2.3	1.7	1.2	65
60	2	1	1	60
55	1.5	0.5	0.5	55
50	1.1			50

### **MAIN TECHNICAL PARAMETERS**

TYPE	ITEM		UNIT	PARAMETERS
	Dimensions (L×W×H)		mm	13110×2500×3500
	Axle spacing		mm	4450+1350
Dimensions	Track (front/rear)		mm	2036/1838
	Front/rear overha	ang	mm	2347/2597
	Front/rear extens	sion	mm	2142/224
	Maximum permis	sible total weight	kg	30000
Weighte		Axle 1	kg	7000
Weights	Axle load	Axle 2	kg	11500
		Axle 3	kg	11500
	Engine model			WP7H300E62
Dower	Rated power/rpm		kW/(r/min)	221/2100
Power	Maximum net power/rpm		kW/(r/min)	216/2100
	Maximum output torque/rpm		N.m/(r/min)	1200/1300-1700
	Maximum travel speed		km/h	80
	Minimum stable travel speed		km/h	3
	Minimum turning diameter		m	20
	Minimum turning diameter at boom tip		m	27
Troval	Minimum ground clearance		mm	244
Travel	Approach angle		o	11
	Departure angle		o	13
	Braking distance	(initial speed at 60 km/h)	m	≤31
	Maximum grade a	ability	%	45
	Fuel consumption	n per 100 km	L	35
Noise	Exterior noise lev	el when accelerating	dB(A)	≤79
Noise	Noise level at seated position		dB(A)	≤90

TYPE	ı	UNIT	PARAMETERS		
	Maximum rated total lifting capacity	t	30		
	Minimum rated working radius	m	3		
	Turning radius at turntable tail	At counterweight		mm	3456
		Base boom section		kN.m	1078
	Maximum load moment	Fully-extended boom		kN.m	686
		Fully-extended boom	+jib	kN.m	445
	Outrigger ener	Longitudinal		m	5.42
Main performance	Outrigger span	Lateral		m	6.26
		Base boom section		m	11.5
	Lifting height	Fully-extended boom		m	36.2
		Fully-extended boom+jib		m	44.4
		Base boom section		m	11.1
	Boom length	Fully-extended boom		m	36
		Fully-extended boom+jib		m	44.3
	Jib offset angle	۰	0, 15, 30		
	Time for raising boom			s	≤45
	Time for fully extending the boom			s	≤55
	Maximum slewing speed			r/min	≥1.5
		Outringer become	Retracting	s	≤20
Working speeds	Time for extending/retracting	Outrigger beams	Extending	s	≤20
	outriggers		Retracting	s	≤20
		Outrigger jacks	Extending	S	≤35
	Lifting speed	Main winch system		m/min	≥130
	(single line, no load)  Auxiliary winch system		m/min	≥130	
Noise	At driver position			dB(A)	≤85

### **DESCRIPTION OF SYMBOLS**

1	Superstructure		T	Boom
Max	Rated lifting load			Boom length
	Counterweight			Working radius
-	Slewing radius of variable-position counterweight			Lifting height with boom
8	Hook block			Boom angle
<b>2000</b>	Parts of line		V	Extension
9/0	Boom length combination	_		Independent jib head
	Wind speed			Simple jib head
	Configuration		F	Fixed jib
	Optional equipment			Fixed jib length
Z de de la companya della companya della companya de la companya della companya d	Wire rope length			Fixed jib offset angle
	Wire rope diameter		Z	Luffing jib

/ diff	Maximum single line pull		Maximum lifting height
Max	Maximum working speed		Maximum working radius
	Main winch	<b>₹</b>	Super lift
	Auxiliary winch	w	Wind power jib
	Luffing winch		Telescoping
	Chassis		Slewing
	Outrigger span	360°	360° slewing
	Tire	360°	360° slewing with the 5th jack down
<b> </b>	Axle load		Side and rear operation
9/0	Grade ability	180°	Operation over front
	Travel speed	(a)	Operation over rear
	Luffing	EN	EN 13000 standard

### **SAFE AND RELIABLE**

#### G-SAFE LIFE CYCLE SAFE QUALITY

#### **INTELLIGENT QUALITY MANUFACTURING**

 Driven by digital models, we have implemented leading intelligent quality manufacturing technologies, integrating process simulation and simulation technology, creating a high-end manufacturing platform that combines manufacturing and process.



**INTELLIGENT ASSEMBLING** 



**SPRAYING PROCESS OF ROBOTS** 



DIGITIZED CORE COMPONENTS
WORKSHOP



**UNMANNED AUTOMATIC WELDING** 



**DIGITIZED STRUCTURE WORKSHOP** 

#### PARTS AND COMPLETE MACHINE TESTING

- Each technology and component is restructured to meet the most stringent quality inspection standards.
- Each complete machine undergoes rigorous testing and a large number of experiments to ensure reliable operation in various complex environments.

#### **OVER 2,000 COMPONENTS OF 123 KINDS UNDER 5 CATEGORIES**



HMI display
Low-temperature performance test under -40



Length measurement sensor 48-hour rain-proof test



Panel buttons
1.2 million times reliability test



Hydraulic oil pump Low-temperature performance test under -40



Telescoping mechanism Smoothness test



Telescoping mechanism Smoothness test

### 178 FULL-SCALE LIMIT TESTS ON THE COMPLETE MACHINE





Passability





Climbing & Hill holding



Dynamic & Static lifting



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