

ROUGH TERRAIN CRANE **XCR90_AU**

MINING PIONEER

 **90 t**  **48 m**  **38 m**  **63.1 m**





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

CRAWLER CRANE

45 t-4000 t Lattice Crawler Crane 30 t-220 t Telescopic Crawler Crane



Unparalleled off-road performance, effortless lifting mastery

Meet mine safety standards and harsh environment requirements, with strong adaptability to driving and hoisting demands; extra large and comfortable cab + intelligent auxiliary system brings economical operation and worry-free hoisting.

Spacious cab for comfortable driving

1.1 m wide super large cab equipped with fresh air system, armrest box pilot, pull-out steps, high-power air conditioning and other functions, meeting mine safety standards and harsh environmental requirements; the sedan-level human-machine interaction system makes it easy to control the vehicle, bringing more comfortable and convenient operation.

Mobile and flexible, convenient for jobsite transfer

Equipped with all-wheel driving system, 4 steering modes, and forward and backward driving function, the minimum turning radius is only 6.5 m, ensuring high maneuverability; with a maximum grade ability of 64.6% and specialized off-road patterned tires, it can travel across various terrains effortlessly.

Superior capacity for excellent lifting performance

The 5-section 48 m boom has the 0 ° OM, ensuring worry-free hoisting in height-limited spaces. The maximum boom length can reach 63.1 m with jib installed, covering wide range of OM; The optional jib has power-assisted folding/unfolding function, allowing one person to complete the installation of the jib within 15 minutes; the auxiliary winch and counterweight can conduct self-disassembly and assembly quickly for complete machine transportation, so the transportation plan can be flexibly adjusted to reduce transportation costs.

Intelligent control with highly efficient operations

Variable support and telescoping with load technology allow customers to conduct hoisting work in places densely packed with goods with ease; with steering angle auto-adjustment multi-mode steering technology, the rear wheels can return to neutral automatically. The steering mode can be switched with one button, making steering fast and convenient.

Industry-leading in energy conservation

Integrated new generation of energy-efficient hydraulic system, hydraulic torque converter with locking function, and ECO energy-saving technologies. Thus, fuel consumption is greatly reduced.

Exquisite craftsmanship for upgraded quality

Complete access for climbing & maintenance, professional human-machine engineering simulation analysis, and user-friendly detailed designs create an intrinsic quality that is comfortable to operate and easy to maintain.



CONTENTS

Product advantages and highlights	01-11
Dimensions	12
Technical specifications	13-14
Weights/working speeds	15
Counterweight	16
Boom/jib combinations	17-18
Load charts	19-24
Table of main technical parameters	25-26
Description of symbols	27-28



SPACIOUS CAB FOR COMFORTABLE DRIVING

1.1 m SUPER LARGE CAB, MORE SUITABLE FOR USERS WITH TALL AND LARGE PHYSIQUES

- Dust-proof, noise-canceling, highly-sealed cab, with extra-space design, meets the tall user's demand for free movement of head, elbows and legs; wide seat for more space and comfort.



The sedan-class human-machine interaction system enables friendly dialog between operator and the crane.

①	Large windshield	Reduce blind spots for improved driving safety.
②	Instrument panel	Well-bedded and streamlined design for convenient operation.
③	HVAC	Adjustable air outlet, T3 HVAC and fresh air system for comfortable driving.
④	Emergency stop switch	Accessible for safe operation.
⑤	Operation display	The 10.4-inch true color touch screen with adjustable angle provides friendly screens and rich information at a glance.
⑥	Monitor	It is equipped with winch monitor, backup camera, right-sided blind-spot camera; all-round field of view for operation and driving with safer use.
⑦	Control lever	Vibration lever is equipped to perceive the lifting operation speed easily.
⑧	Other humanized configurations	12/24 V power interface, Bluetooth audio system, cup holder, double-layer storage box, etc.

FLEXIBLE AND MANEUVERABLE

- It has crab steering mode, tight-turning radius mode, independent front-axle and rear-axle steering modes, all of which are controlled by steering wheel, which is more in line with driving habits.
- With forward and backward driving function, and a minimum turning radius of only 6.5 m, it is flexible with strong adaptability in narrow spaces.



POWER

- It features a high-power engine and a low-speed, high-torque hydraulic torque converter drivetrain. With full-axle drive and specialized off-road treaded tires, it shows strong pass ability of 64.6% for potholed, muddy and other harsh terrains.



PRECISE CONTROL

G-Master precise control in all operation modes

SUPERB LIFTING PERFORMANCE

- The 5-section 48 m wire-rope-type telescopic boom has 0° OM with short boom length, easy to conduct lifting operations in height-limited OM. With jib assembled, the maximum boom length can reach 63.1 m, covering a wide range of OMs.



ONE-MAN OPERATION, LOW OPERATING COST

- The optional jib has power-assisted folding/unfolding function, allowing one person to complete the installation of the jib within 15 minutes; the auxiliary winch and counterweight can conduct self-disassembly and assembly quickly for complete machine transportation, so the transportation plan can be flexibly adjusted to reduce transportation costs.

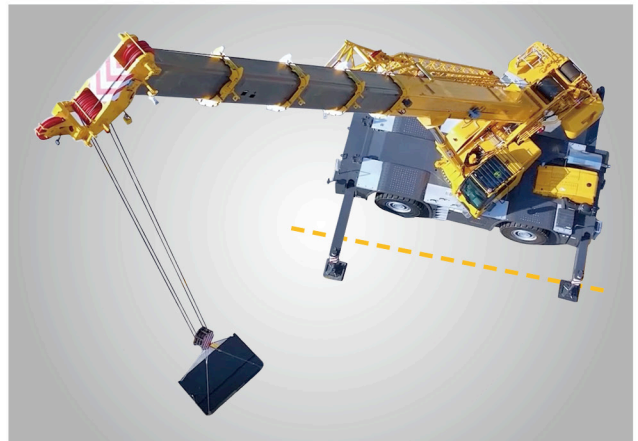


BOOM TELESCOPING WITH LOAD TECHNOLOGY

- The boom can safely perform the telescoping operation with load at any point within the given OM range; the construction range is wide, and the working efficiency is improved by 30%-50% for safe and reliable lifting operations.

**VARIABLE SUPPORT TECHNOLOGY (OPTIONAL)**

- Multiple outrigger telescoping length combinations are available, with more applicable OM scenarios. The crane can operate smoothly in narrow spaces, with high operating efficiency.



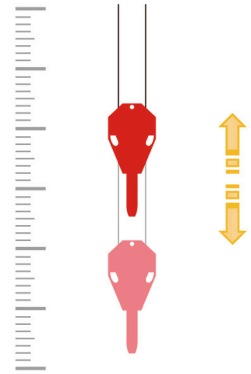
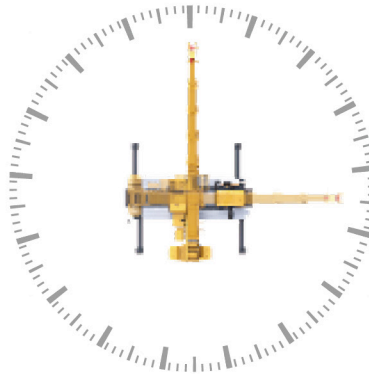
INTELLIGENT CONTROL WITH HIGHLY EFFICIENT OPERATIONS

DUAL-PUMP VALVE CONTROLLED LOAD-SENSING SYSTEM

- Dedicated dual-pump confluence control technology is available; double-pump confluence for single movement with quick operation; independent subsystem oil supply for combined movements; the movements are accurate and controllable for high operation efficiency. High-power hydraulic oil cooler with automatic temperature control for sustainable operation in high or low temperature environment.

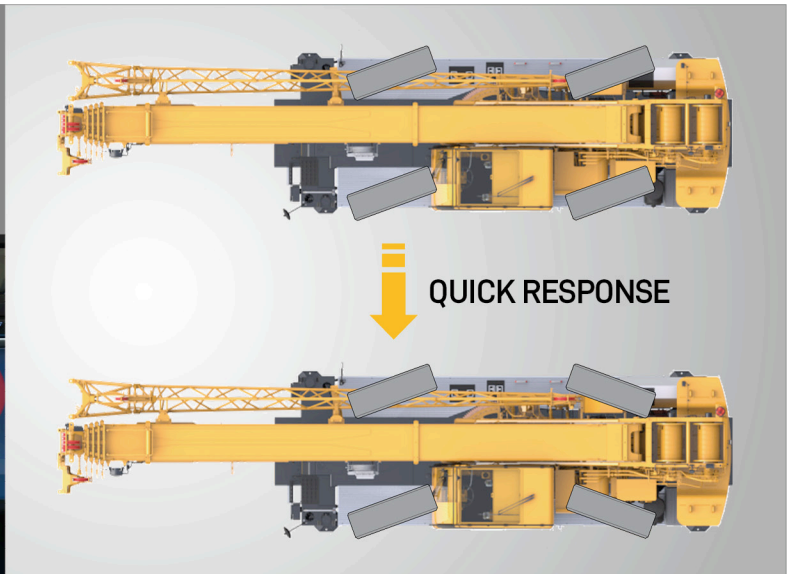
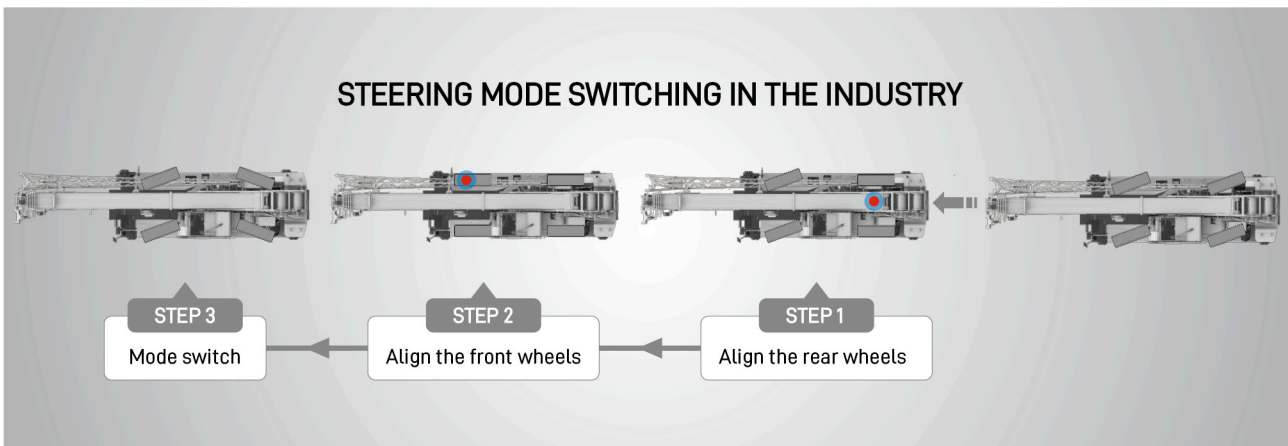
FINE CONTROL

Winch, slewing and luffing operations all reach millimeter-level fine control.



EXCLUSIVE STEERING ANGLE AUTO-ADJUSTMENT MULTI-MODE STEERING TECHNOLOGY

- The steering mode can be switched in any state with single control and without manual intervention for the alignment of wheels, making it easier to operate.

XCMG MULTI-MODE STEERING TECHNOLOGY WITH REAR WHEEL AUTO CENTERING**STEERING MODE SWITCHING IN THE INDUSTRY**

INDUSTRY-LEADING IN ENERGY CONSERVATION

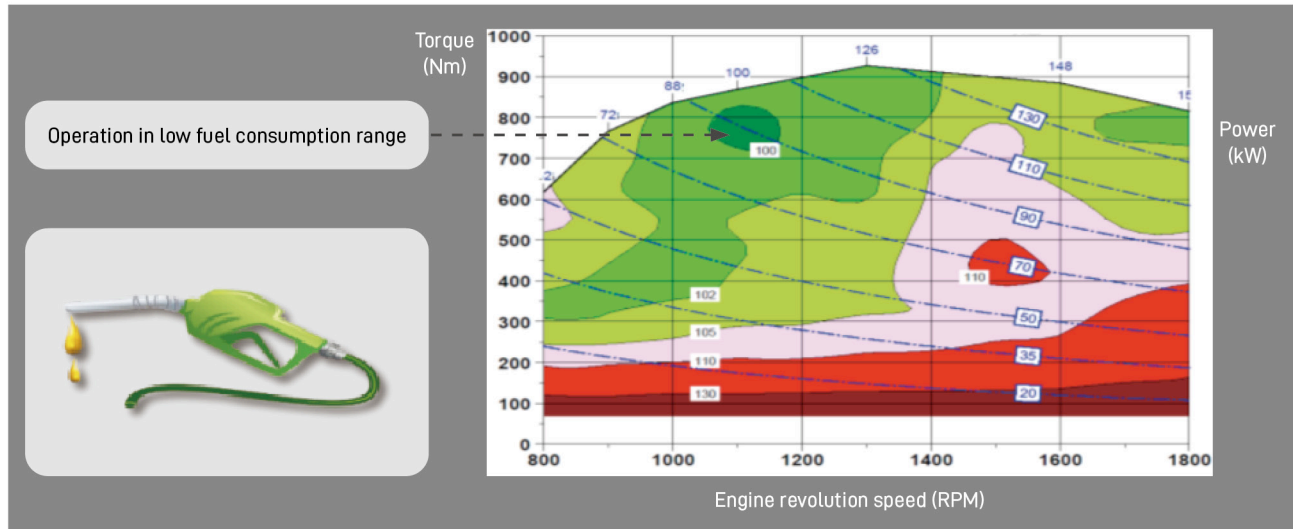
ENERGY-SAVING HYDRAULIC SYSTEM

- New-type energy-saving hydraulic system with double-variable pump, using gravity assistance for luffing down, make fuel consumption greatly reduced under various OMs.

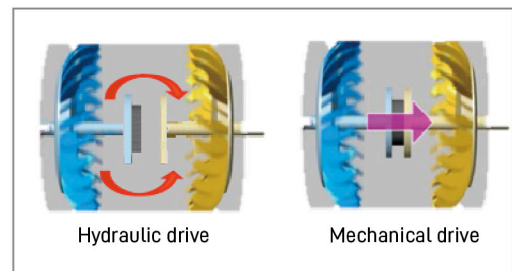


ECO ENERGY-SAVING MODE

- Under different OM, engine speed stays in a low fuel consumption zone at all times, resulting in less fuel consumption for lifting operations under the same OM.

**EFFICIENT HYDRAULIC TORQUE CONVERTER DRIVETRAIN**

- The torque converter with a locking function features high torque at low speeds and high efficiency at high speeds.
- At low speeds, it adopts hydraulic transmission, providing high torque and excellent power performance.
- At high speeds, it adopts mechanical transmission, boasting high efficiency and low fuel consumption.



EXQUISITE CRAFTSMANSHIP FOR UPGRADED QUALITY

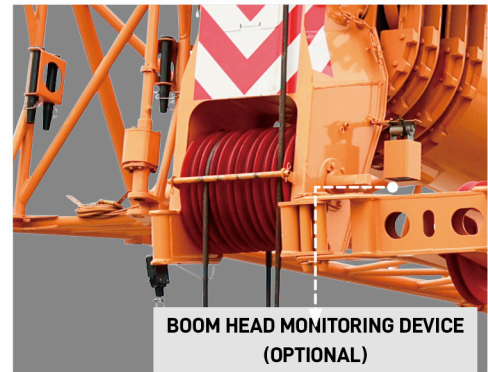
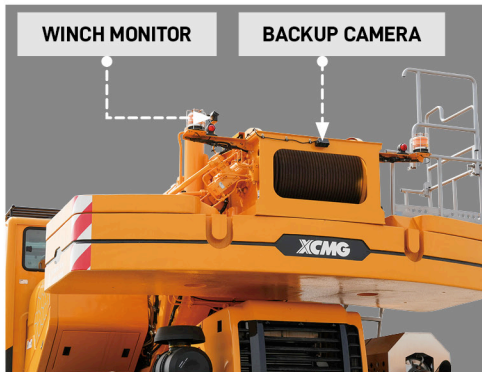
WELL-PLANNED ACCESS

- With complete climbing and maintenance access, the operator can get on the vehicle from all four directions (front, rear, left and right).



MULTI-DIRECTIONAL MONITORING FOR SAFER DRIVING AND LIFTING OPERATIONS

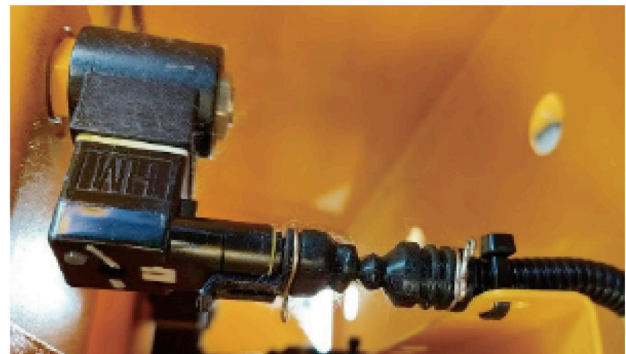
- The standard backup camera, winch monitor, and right side monitor together with the optional boom head monitor provide a comprehensive coverage of field of view for both lifting and driving operations, ensuring better safety.

**THREE DIMENSIONAL AIR VENTS, COMFORTABLE DRIVING**

- High-power air conditioning is equipped with three dimensional air vents for more uniform and delicate flow velocity.

**HIGH-GRADE ELECTRICAL PROTECTION, MORE RELIABLE OPERATION**

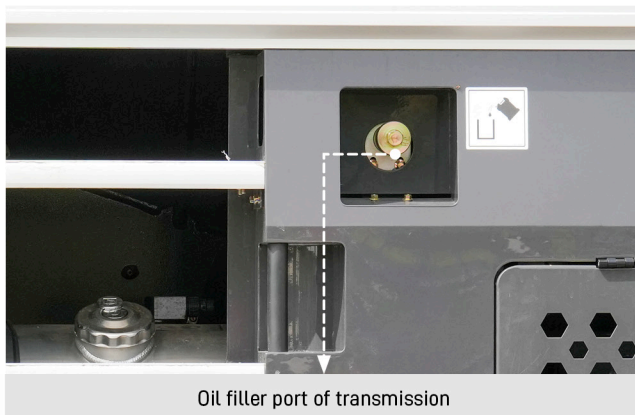
- The circuit connection is reliable, with high rate of connector fixation, tail protection and waterproof rating.



EXQUISITE CRAFTSMANSHIP FOR UPGRADED QUALITY

CONVENIENT MAINTENANCE

- XCMG's unique external transmission oil filler port ensures convenient maintenance.



Oil filler port of transmission

SAFETY CONFIGURATIONS

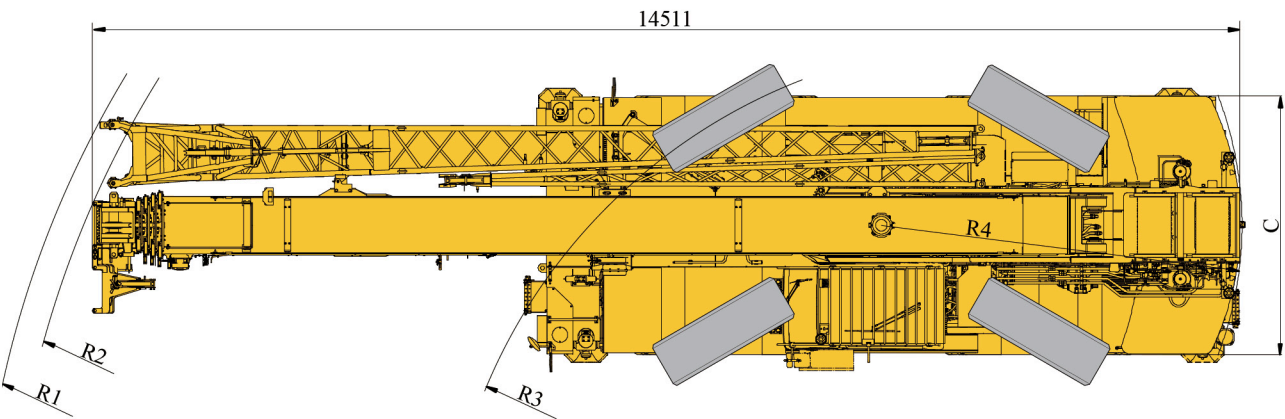
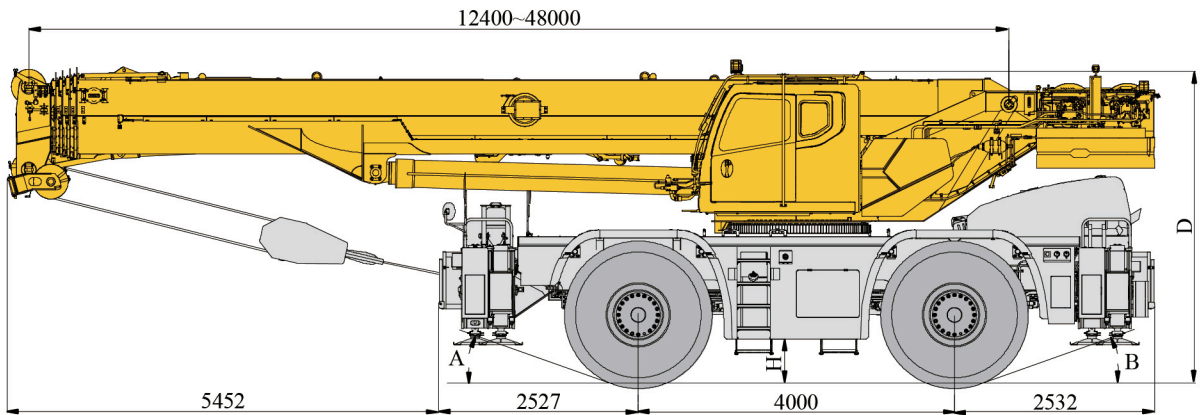
- Equipped with chassis motor lock and emergency stop switch to prevent personnel injury caused by crane accidental startup.



Chassis motor lock and emergency stop switch



Superstructure emergency stop switch



	A	B	C	D	H	R1	R2	R3	R4
29.5R25	20.1°	20.1°	3280	3898	550	11589	11264	6500	4544

TECHNICAL SPECIFICATIONS



Boom	The boom consists of one base boom section and four telescopic sections with U-shaped cross-section. Dual-cylinder wire-rope-type telescoping mechanism is adopted. 6 sheaves on boom head are standard. Boom length: 12.4 m~48 m.	●
Jib	2-section, lattice structure, with 0°, 15° and 30° jib offset angles available, stowed at the side of the boom. The jib is also equipped with cylinder assisted unfolding and stowing function. Jib length: 10.5 m~17.5 m.	○
Frame	Made of high strength fine grained steel, welded torsion-resistant frame type construction with large cross-section, high load-bearing capacity.	●
Outriggers	4 outriggers are arranged in H shape, located at both sides of chassis frame, controlled by hydraulic valves and the cylinders are controlled by electric signals.	●
Engine	B6.7, in-line, six-cylinder, water-cooled compression ignition diesel engine, manufactured by American Cummins, with rated power of 209/2000 (kW/rpm) and maximum output torque of 1152 N.m, compliant with EU Stage V emission standards. Effective capacity of fuel tank: 300 L.	●
Transmission	6WG210, German ZF automatic transmission, with 6 forward and 3 reverse gears.	●
Axles	Both front and rear axles for driving and steering, with large load-bearing capacity.	●
Suspension	Front axle is connected to the frame in the locked state. The rear axle is attached to the swing-type hydraulic suspension. During highway driving operation, shock absorption function is activated, which buffers the road shock. When driving with a suspended load, rear suspension cylinder is locked to locked state to enhance operation stability.	●
Tires	4 tires exclusive for rough terrain cranes. Each axle is equipped with a single tire, with large load-bearing capacity. Tire specification: 29.5R25	●
Steering system	Four steering modes include front-axle independent steering mode, tight-turning radius steering mode, crab steering mode and rear-axle independent steering mode. The steering angle can be self-adjusted when changing mode.	●
Brakes	Service brake: dual-circuit full-hydraulic disc brake, acting on all wheels. Automatic alarm or self-braking will be activated when the pressure in the braking system becomes too low. Parking brake: spring-applied brake, hydraulic-released independent disc brake, acting on the front axle.	●
Hydraulic system	The dual-variable piston pump is used for lifting, luffing and telescoping operations. The gear pump is used for slewing, outrigger, steering and braking operations. The main valve is adopted a load-sensing proportional multi-way change valve. Independent hydraulic oil cooler is fitted. Hydraulic oil tank capacity: about 1057 L.	●
Control system	Hydraulic controlled pilot operation system is equipped with two control levers with vibration function to control the main movements of the crane.	●



Electrical system	24 V DC, two sets of 12 V battery in series. LMI, head lights, steering lights, backup lights, turntable lights, boom lights and slewing beacon lights are equipped.	●
Main winch	The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake and a counterbalance valve equipped.	●
Auxiliary winch	The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake and a counterbalance valve equipped.	●
Slewing system	Single-row four-point ball contact slewing bearing, driven by a hydraulic motor, with built-in planetary gear reducer and constant closed brake equipped.	●
Cab	The tilting cab is equipped with a sliding door and an adjustable seat. Safety glass, roof protective grilles and sun screens for windshield and roof window are also available. Blue-tooth radio, 12 and 24 V power ports, T3 HVAC and fresh air system are configured.	●
Safety devices	Hydraulic counterbalance valve, relief valve, double-way lock, LMI and anti-static drag chain. Lowering limiter is equipped in winch to prevent rope over-releasing. Anti-two block is fitted on the boom head to prevent rope over-winding. The lever function will be deactivated after lifting the armrest.	●
Counterweight	10 t counterweight slab A	●
	0.75 t counterweight slab B and 0.75 t counterweight slab C.	○
Hook blocks	55 t hook block, 7 t hook block.	●
Others	Toolbox	○
	Monitor on boom head	○
	Outrigger pressure detection	○
	Spark arrestor	○
	Chassis motor lock and emergency stop switch specialized for mining areas	●
	Proportional slewing brake pedal	●
	Pull-out steps for boom	●
	Bubble level gauge	●
	Monitoring camera on the right side	●
	Outrigger length measurement	●

Other items of equipment available on request.

● — Standard configuration;

○ — Optional configuration.

WEIGHTS



AXLE

	1	2	TOTAL WEIGHT OF CRANE
t	27.265	25.875	53.140 (excluding the optional configurations)
	28.260	28.240	56.500 (including the optional configurations)



HOOK BLOCK

PARTS OF LINE

WEIGHT (kg)

REMARKS

55 t	9	570	Single-hook
7 t	1	210	Single-hook

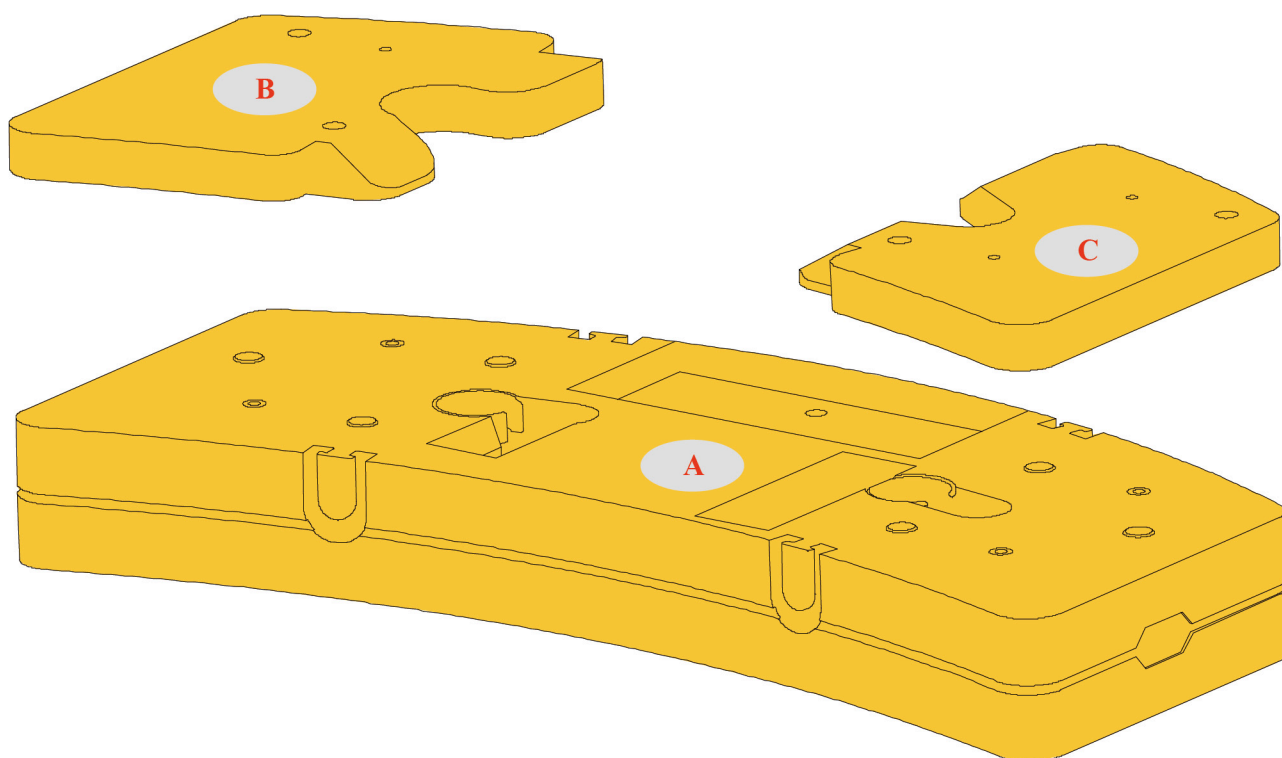
WORKING SPEEDS



29.5 R 25	34.8	64.6%
-----------	------	-------



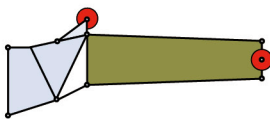
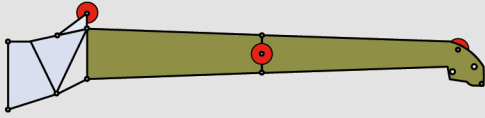
	0-145 m/min, no load, 4th layer	69 kN	20 mm	240 m
	0-90 m/min, no load, 4th layer	69 kN	20 mm	150 m
	0-1.5 r/min			
	Approx. 55 s for boom luffing up from -1.5° to 80°			
	Approx. 110 s for boom extending from 12.4 m to 48 m			

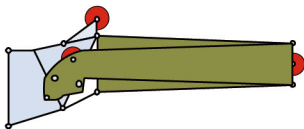


	A	B	C
Dimensions (L×W×H) (mm)	3260×1539×550	1372×980×124	1372×980×124
Weight (t)	10	0.75	0.75

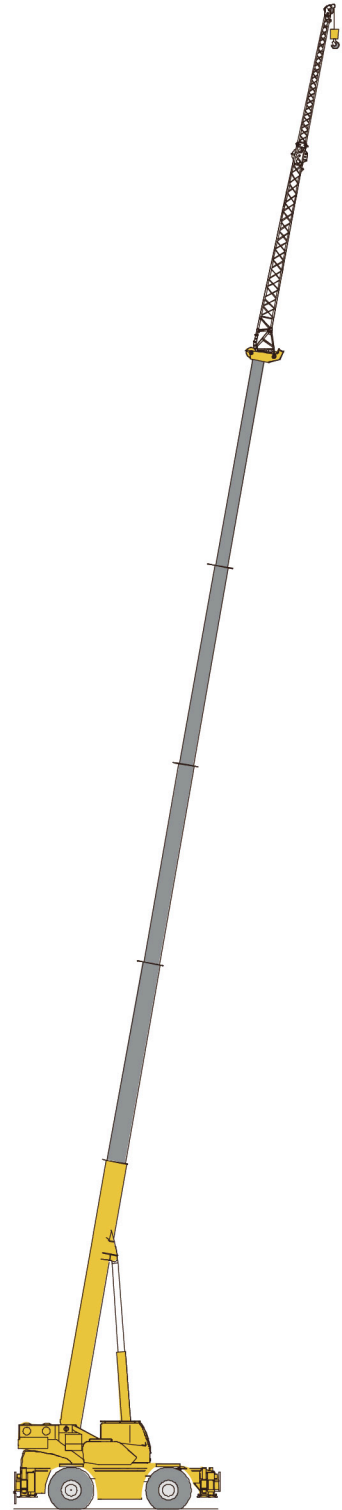
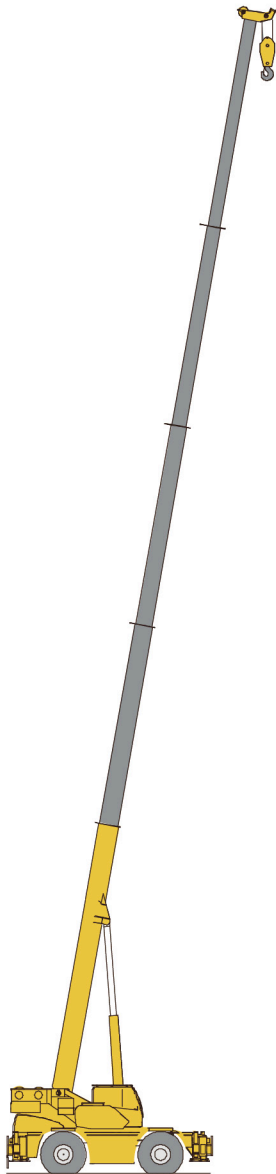
OPERATION MODE	0 T	10 T	10 T+1.5 T
Combination	—	A	A+B+C

BOOM/JIB COMBINATIONS

Jib - 10.5 m	
Jib - 17.5 m	

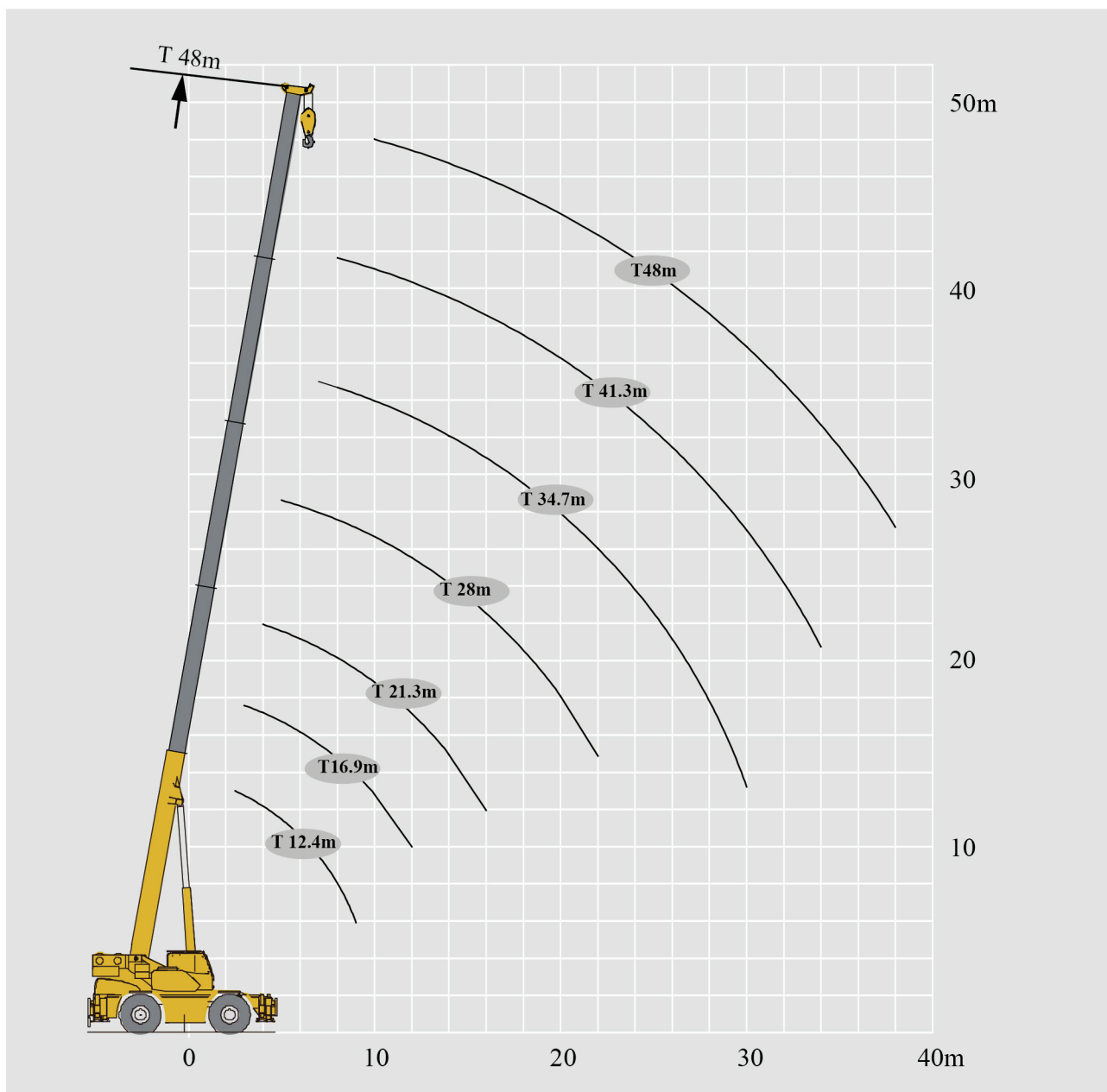
COMPONENTS	STRUCTURE	DIMENSIONS (L×W×H) (mm)	WEIGHT (kg)
1st and 2nd jib section assembly + connecting bracket		Folding: 11100×900×1350	1436

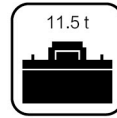
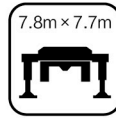
BOOM	BOOM + 1ST JIB SECTION	BOOM + TWO JIB SECTIONS
12.4~48 m	48 m+10.5 m	48 m+17.5 m



WORKING RANGE DIAGRAM

BOOM



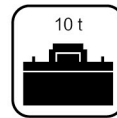
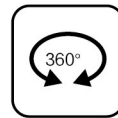
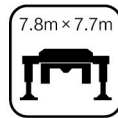
T 12.4~48 m

	12.4m	16.9m	21.3m	28m	34.7m	41.3m	48m	19.1m	25.8m	32.4m	39.1m	23.5m	30.2m	36.9m	43.6m	
2.5	90.0*															2.5
3	80.0	63.3														3
3.5	75.0	63.3														3.5
4	72.4	63.3	46.0					35.1								4
5	57.9	57.9	45.0	33.5				35.0	35.3			34.8				5
6	48.3	48.3	40.0	33.5				35.0	33.9	23.3		34.8	32.4			6
7	41.4	41.0	38.0	31.9	25.4			35.0	31.6	21.9		34.8	29.7			7
8	35.0	35.0	36.4	29.5	23.3	17.3		35.0	29.7	20.7	16.1	34.8	27.9	21.0		8
9	28.8	28.0	29.5	27.5	21.9	17.3		33.2	27.9	19.5	15.4	32.3	26.7	20.1	13.1	9
10		24.0	23.7	25.3	20.5	17.2	11.4	26.7	26.4	18.4	14.8	26.2	25.3	19.2	13.0	10
12		16.6	16.1	17.7	18.3	16.6	11.4	18.9	20.1	16.7	13.6	18.4	19.2	17.6	12.5	12
14			11.8	13.1	14.0	14.4	11.4	14.2	14.9	15.1	12.1	13.7	14.5	15.1	12.0	14
16			8.7	9.9	10.8	11.3	10.3		11.7	12.4	10.8	10.5	11.3	11.9	10.6	16
18				7.7	8.6	9.1	9.1		9.4	9.8	9.8	8.3	8.9	9.6	9.5	18
20				6.1	6.7	7.3	7.7		7.6	8.0	8.6		7.3	7.5	8.1	20
22				4.8	5.4	6.0	6.3			6.7	6.9		5.8	6.3	6.7	22
24					4.5	4.9	5.3			5.6	5.8		4.8	5.4	5.6	24
26					3.6	3.8	4.4			4.7	4.9		3.9	4.5	4.8	26
28					2.6	3.2	3.6				4.3			3.7	4.0	28
30					2.0	2.5	3.0				3.6			3.0	3.4	30
32						2.0	2.3				3.1				2.7	32
34						1.6	1.9								2.2	34
36							1.4								1.7	36
38							1.0								1.4	38
2nd	0	50%	100%	100%	100%	100%	100%	0%	0%	0%	0%	50%	50%	50%	50%	2nd
3rd	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	3rd
4th	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	4th
5th	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	5th

* The boom sheave block needs to be used together with the auxiliary sheave and the parts of line is 13.

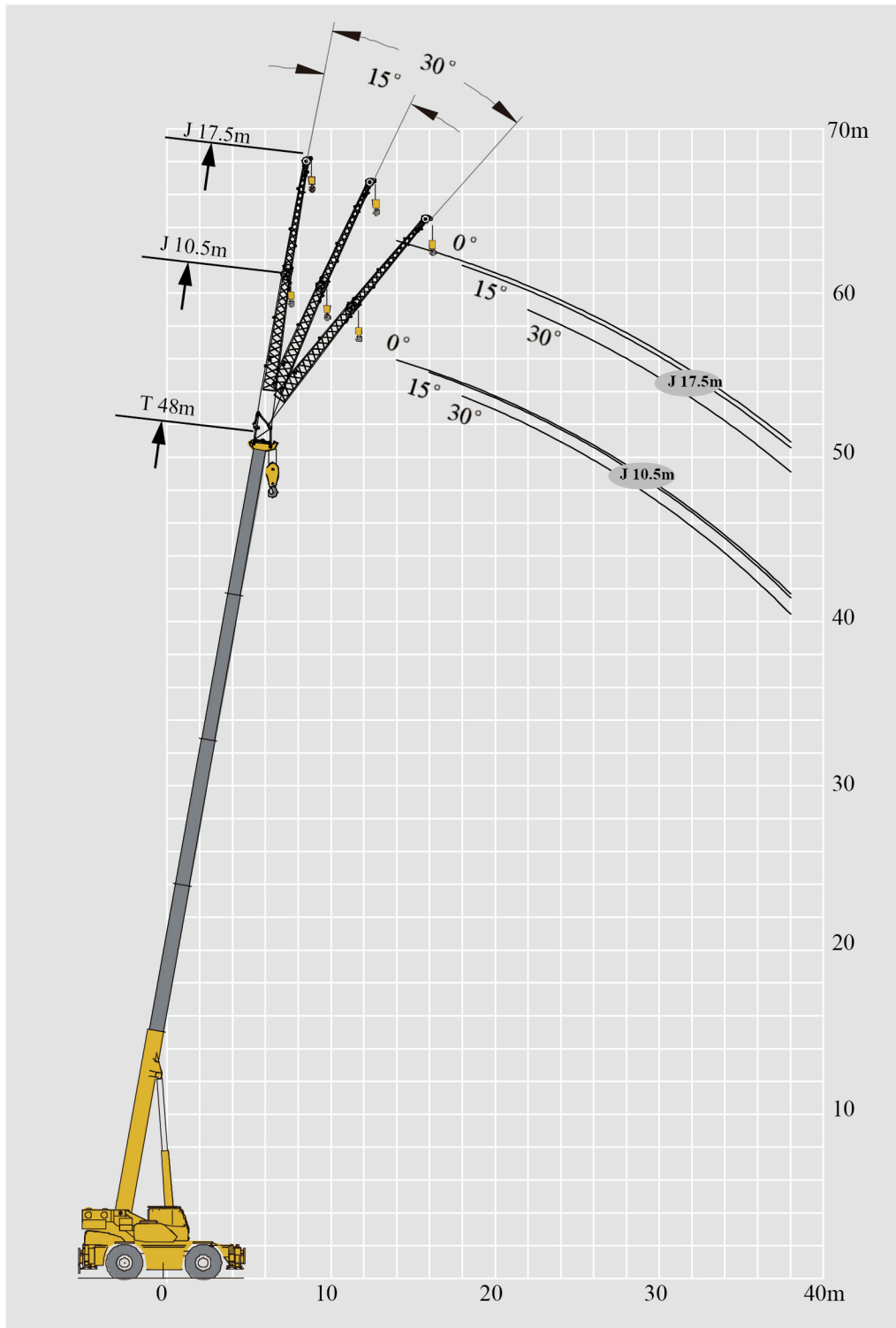
LOAD CHARTS

T 12.4~48 m



	12.4m	16.9m	21.3m	28m	34.7m	41.3m	48m	19.1m	25.8m	32.4m	39.1m	23.5m	30.2m	36.9m	43.6m	
2.5	90.0*															2.5
3	80.0	63.3														3
3.5	75.0	63.3														3.5
4	72.4	63.3	46.0					35.1								4
5	57.9	57.9	45.0	33.5				35.0	35.3			34.8				5
6	48.3	48.3	40.0	33.5				35.0	33.9	23.3		34.8	32.4			6
7	41.4	41.0	38.0	31.9	25.4			35.0	31.6	21.9		34.8	29.7			7
8	35.0	35.0	35.0	29.5	23.3	17.3		35.0	29.7	20.7	16.1	34.8	27.9	21.0		8
9	28.7	28.0	27.9	27.5	21.9	17.3		31.5	27.9	19.5	15.4	30.6	26.7	20.1	13.1	9
10		22.4	22.0	23.9	20.5	17.2	11.4	25.3	26.4	18.4	14.8	24.5	25.3	19.2	13.0	10
12		15.3	14.9	16.7	17.6	16.6	11.4	17.7	19.0	16.7	13.6	16.7	18.1	17.6	12.5	12
14			10.6	12.3	13.1	13.7	11.4	13.2	14.1	14.8	12.1	12.2	13.6	14.2	12.0	14
16			7.7	9.2	10.1	10.6	10.3		11.0	11.7	10.8	9.3	10.6	11.1	10.6	16
18				7.1	7.8	8.4	8.8		8.8	9.2	9.7	7.0	8.2	8.9	9.3	18
20				5.5	6.2	6.8	7.2		7.2	7.5	8.1		6.7	7.0	7.6	20
22				4.2	4.9	5.5	5.9			6.2	6.3		5.3	5.8	6.3	22
24					3.9	4.5	4.8			5.2	5.3		4.3	4.8	5.2	24
26					3.1	3.4	4.0			4.4	4.4		3.5	4.0	4.4	26
28					2.3	2.8	3.3				3.9			3.2	3.6	28
30					1.8	2.2	2.7				3.2			2.6	3.0	30
32						1.8	1.9				2.8				2.3	32
34						1.3	1.7								1.9	34
36							1.2								1.5	36
38							0.9								1.1	38
2nd	0	50%	100%	100%	100%	100%	100%		0%	0%	0%	50%	50%	50%	50%	2nd
3rd	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	3rd
4th	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	4th
5th	0	0	0	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	5th

* The boom sheave block needs to be used together with the auxiliary sheave and the parts of line is 13.

JIB

LOAD CHARTS

J 10.5-17.5 m

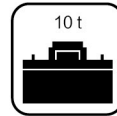


	48 m+10.5m			
	0°	15°	30°	
14	5.5			14
16	5.5	4.5		16
18	5.5	4.5	2.6	18
20	5.5	4.4	2.5	20
22	5.2	4.1	2.4	22
24	4.5	3.8	2.2	24
26	3.8	3.6	2.1	26
28	3.1	3.2	2.0	28
30	2.5	2.6	2.0	30
32	2.2	2.1	1.9	32
34	1.8	1.8	1.8	34
36	1.4	1.5	1.5	36
38	1.0	1.1	1.3	38

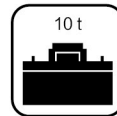
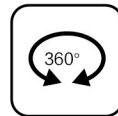
J 10.5-17.5 m



	48 m+17.5m			
	0°	15°	30°	
14	2.8			14
16	2.8			16
18	2.8	2.1		18
20	2.8	2.0		20
22	2.8	1.8	1.1	22
24	2.8	1.7	1.1	24
26	2.7	1.6	0.9	26
28	2.5	1.5	0.9	28
30	2.3	1.3	0.9	30
32	2.1	1.2	0.8	32
34	1.8	1.2	0.8	34
36	1.5	1.1	0.8	36
38	1.2	1.1	0.8	38

J 10.5-17.5 m**48 m+10.5m**

	0°	15°	30°	
14	5.5			14
16	5.5	4.5		16
18	5.5	4.5	2.6	18
20	5.5	4.4	2.5	20
22	5.2	4.1	2.4	22
24	4.5	3.8	2.2	24
26	3.8	3.6	2.1	26
28	3.1	3.2	2.0	28
30	2.5	2.6	2.0	30
32	2.0	2.1	1.8	32
34	1.6	1.6	1.7	34
36	1.2	1.3	1.4	36
38	0.9	1.0	1.2	38

J 10.5-17.5 m**48 m+17.5m**






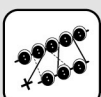




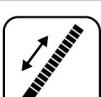

	0°	15°	30°	
14	2.8			14
16	2.8			16
18	2.8	2.1		18
20	2.8	2.0		20
22	2.8	1.8	1.1	22
24	2.8	1.7	1.1	24
26	2.7	1.6	0.9	26
28	2.5	1.5	0.9	28
30	2.3	1.3	0.9	30
32	2.0	1.1	0.7	32
34	1.6	1.1	0.7	34
36	1.3	1.0	0.7	36
38	1.0	1.0	0.7	38








TABLE OF MAIN TECHNICAL PARAMETERS













CATEGORY	ITEM		UNIT	PARAMETER		ALLOWANCE
Dimensions	Dimensions (L×W×H)		mm	14511×3280×3898		±1%
	Axle spacing		mm	4000		±1%
	Track (front/rear)		mm	2520/2520		±1%
	Front/rear overhang		mm	2527/2532		±1%
	Front/rear extension		mm	5452/None		±1%
Weights	GVW		kg	53140 (excluding the optional configurations)	56500 (including the optional configurations)	±3%
	Axle load	Axle 1	kg	27265	28260	±3%
		Axle 2	kg	25875	28240	±3%
Power	Engine model		—	B6.7		—
	Rated power/rpm		kW/(r/min)	209/2000		—
	Maximum output torque/rpm		N.m/(r/min)	1152/1500		—
Travel	Maximum travel speed		km/h	≥34.8		—
	Minimum stable travel speed		km/h	2		—
	Minimum turning diameter		m	≤13		—
	Minimum ground clearance		mm	550		±1%
	Approach angle		°	20.1		±1°
	Departure angle		°	20.1		±1°
	Braking distance (initial speed at 24 km/h)		m	≤9		—
	Maximum grade ability (%)		%	≥64.6		—







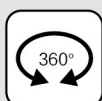
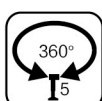




CATEGORY	ITEM		UNIT	PARAMETER	ALLOWANCE
Main performance	Maximum rated lifting capacity		t	90	±5%
	Minimum rated working radius		m	2.5	±1%
	Turning radius at turntable tail	At counterweight	mm	4544	±1%
	Maximum load moment	Base boom section	kN.m	2840	±5%
		Fully-extended boom	kN.m	1615	±5%
	Outrigger span	Longitudinal	m	7.8	±1%
		Lateral	m	7.7	±1%
	Lifting height	Base boom section	m	13	±1%
		Fully-extended boom	m	48	±1%
		Fully-extended boom + jib	m	63.1	±1%
	Boom length	Base boom section	m	12.4	±1%
		Fully-extended boom	m	48	±1%
		Fully-extended boom + jib	m	65.5	±1%
Working speeds	Jib offset angle		°	0°, 15°, 30°	—
	Time for raising boom		s	≤55	—
	Time for fully extending boom		s	≤110	—
	Maximum slewing speed		r/min	≥1.5	—
	Time for extending and retracting outriggers	Outrigger beams	Retracting	s	≤35
			Extending	s	≤40
		Outrigger jacks	Retracting	s	≤40
			Extending	s	≤55
	Lifting speed (single line, 4th layer, no load)	Main winch	m/min	≥145	—
		Auxiliary winch	m/min	≥90	—

DESCRIPTION OF SYMBOLS

	Superstructure
	Rated lifting load
	Counterweight
	Slewing radius of variable-position counterweight
	Hook block
	Parts of line
	Boom length combination
	Wind speed
	Configuration
	Optional equipment
	Wire rope length
	Wire rope diameter

	Boom
	Boom length
	Working radius
	Lifting height with boom
	Boom angle
	Extension
	Independent jib head
	Simple jib head
	Fixed jib
	Fixed jib length
	Fixed jib offset angle
	Luffing jib

	Maximum single line pull
	Maximum working speed
	Main winch
	Auxiliary winch
	Luffing winch
	Chassis
	Outrigger span
	Tire
	Axle load
	Grade ability
	Travel speed
	Luffing

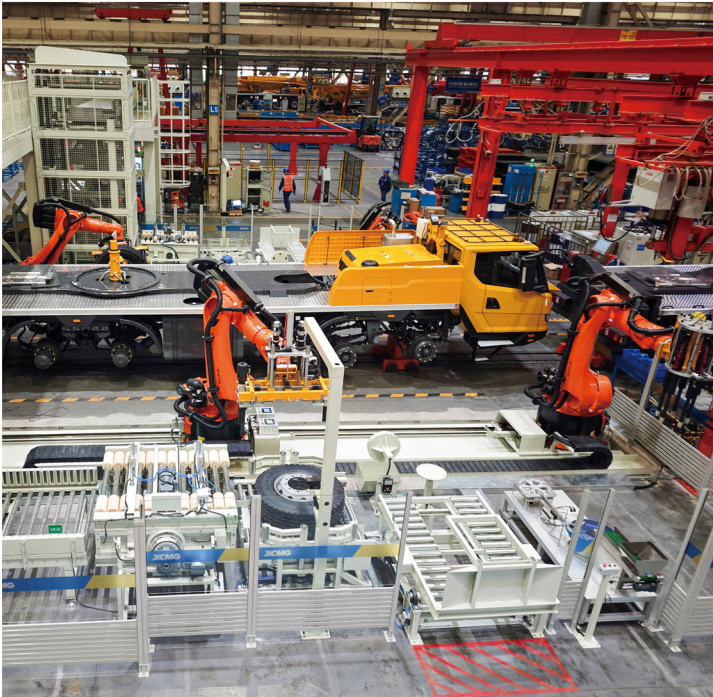
	Maximum lifting height
	Maximum working radius
	Super lift
	Wind power jib
	Telescoping
	Slewing
	360° slewing
	360° slewing with the 5th jack down
	Side and rear operation
	Operation over front
	Operation over rear
	EN 13000 standard

SAFE AND RELIABLE

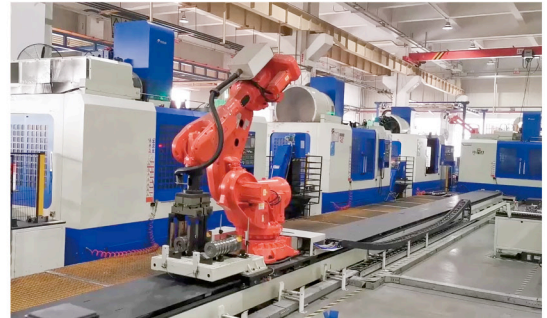
G-SAFE LIFE CYCLE SAFE QUALITY

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



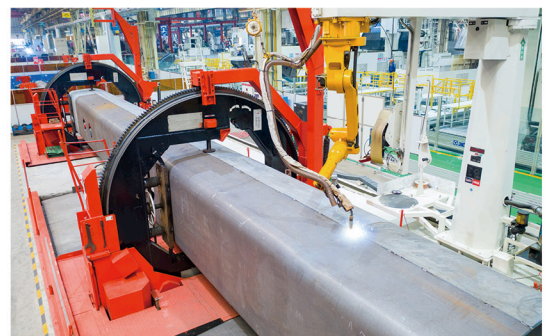
DIGITIZED CORE COMPONENTS WORKSHOP



UNMANNED AUTOMATIC WELDING



SPRAYING PROCESS OF ROBOTS



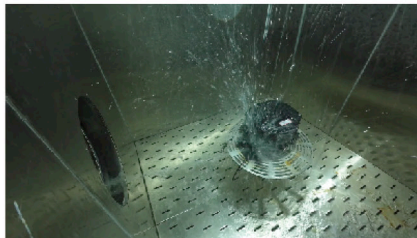
DIGITIZED STRUCTURE WORKSHOP

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

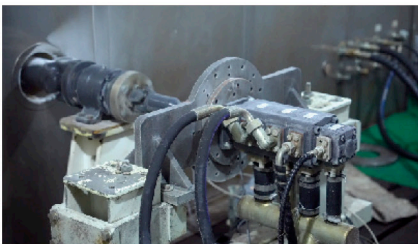
HMI display
Low-temperature performance test under -40°C



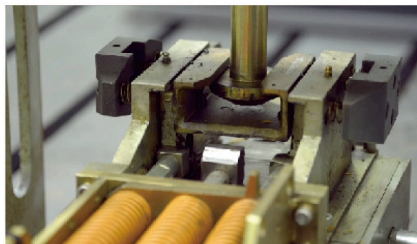
Length measurement sensor
48-hour rain-proof test



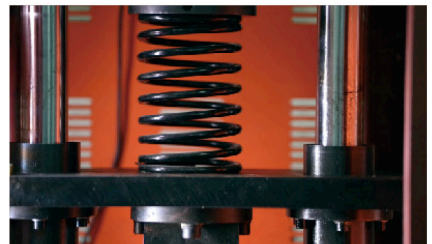
Panel buttons
1.2 million times reliability test



Hydraulic oil pump
Low-temperature performance test under -40°C



Telescoping mechanism
Smoothness test



Telescoping mechanism
Smoothness test

178 FULL-SCALE LIMIT TESTS ON THE COMPLETE MACHINE

Passability



Climbing & Hill holding



Dynamic & Static lifting

NOTES

- ✔ The document is intended as reference only. It is only a guide and should not be used to operate the crane. See product manuals for correct operation instructions.
- ✔ The load capacity values in the tables are stated in t, which are the maximum total load capacity of the crane on a stable and even surface under the current boom length and radius, including the weight of hooks and riggings. The weight of the above devices must be subtracted during lifting operations.
- ✔ The working radius is the horizontal gravity center distance of the load from the rotational axis of the crane superstructure measured at the ground.
- ✔ Observe the boom angle limit. Never operate the crane with the boom angle beyond the recommended limit even if a load is not being carried.
- ✔ A lifting operation is permissible only when the wind force is below grade 5 (instantaneous wind speed of 14.1 m/s, wind pressure of 125 N/m²).



Address: 43 Holbeche Road, Arndell Park,
NSW 2148

Tel: + (02) 9672 1682

Website: www.cranecconnection.com.au