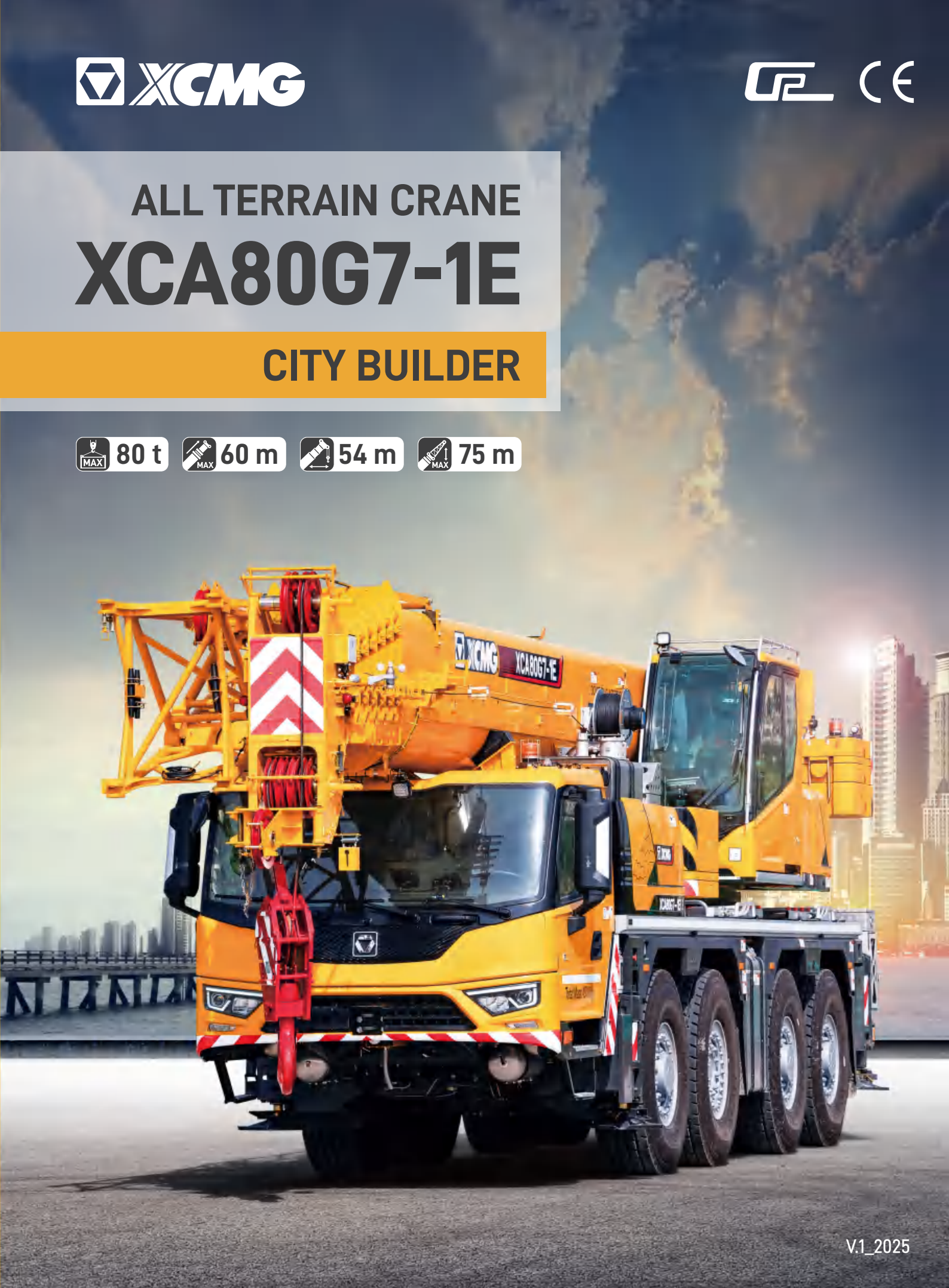
XCMG

ALL TERRAIN CRANE

XCA80G7-1E

CITY BUILDER

80 t | 60 m | 54 m | 75 m



V.1_2025

80 t all terrain crane with brand new G2 technology platform, is compact and flexible, and efficient in jobsite transfer. It can be operated by one operator, and is widely used in urban construction, municipal engineering, emergency rescue, and other construction fields.

Economic operation and efficient jobsite transfer

Capable of carrying 9 t counterweight for road travel, covering 80% of operation modes;

Able to transport all components during heavy load jobsite transfer without a trailer, bringing low operating costs.

Super boom, versatile in construction

With 60 m boom plus 0° lifting operation, telescoping with load, and variable support functions, a wider range of operation modes can be covered.

One operator, one machine, smart and efficient

Equipped with 12 intelligent configurations such as single control for counterweight erection, 360° panoramic images, and wireless remote control, making it easy for one person to operate the crane.

Innovative power, quiet and energy efficient

Equipped with a movable power unit that offers zero emissions, low noise levels, and 70% energy savings.

CONTENTS

ECONOMICAL OPERATION

G-ECO full-life cycle high efficiency and energy conservation

COMPACT AND FLEXIBLE

- The crane has a compact design, with the dimensions of 12.73 m×2.55 m×3.89 m and the min. turning radius of 7.75 m. It is compact and maneuverable, making it suitable for traveling on narrow urban roads.

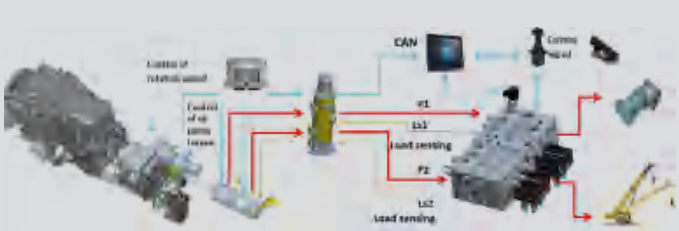
ONE OPERATOR, ONE MACHINE

- The crane is equipped with the wireless remote control, one-button counterweight erection, 360° panoramic imaging, intelligent boom and jib system, jib assist device, vibration levers, full-scenario monitoring system, full-scenario lighting system, portable independent jib head, automatic leveling function of outriggers, moving up and down of independent suspension, and HMI system. These 12 configurations allow one operator to easily operate the vehicle, achieving high operation efficiency.

NEW GENERATION ELECTRO-HYDRAULIC ENERGY-SAVING CONTROL

- Hydraulic system - engine intelligent cooperation allows the engine to always work in the best state of power output, and average oil consumption is reduced for superstructure operation.

Exclusive large-displacement piston pump intelligently matches the engine's economic operation area, with low rotation speed, high torque, and more energy saving.



Adaptive control of pressure and flow under all OMs
Zero loss and no waste of pressure and flow under all OMs

WIRELESS REMOTE CONTROL FOR ALL OPERATIONS

- It can be used to perform main operations (telescoping, luffing, winch, slewing), auxiliary operations (operator's cab, counterweight cylinders), chassis outrigger operation, suspension operation, engine operation and lighting control.

ONE-BUTTON ERECTION TECHNOLOGY OF COUNTERWEIGHT

- It can automatically detect the slewing angle and counterweight position, allowing the operator to always be aware of the vehicle's status. The counterweight erection can be completed with a single button inside the operator's cab, with multi-directional detection and control working together, making it safer and more efficient than manual operations.

EFFICIENT JOBSITE TRANSFER

- Without a trailer, 20 t full counterweight, 42 t hook block, jib, auxiliary winch mechanism and auxiliary sheave can be carried on board in 62 t heavy load jobsite transfer configuration, allowing for single-person operation and reducing operating costs.
- The space at the rear of the vehicle is reserved to place timbers, outrigger float pads and lifting auxiliary equipment, making operation more convenient and economic.
- 2.9 m portable independent jib head with lattice welded structure can be stowed on the side of the boom and carried on board during jobsite transfer. Without the use of trailers, operating costs can be reduced.

MATCHED MOVABLE POWER UNIT (OPTIONAL)

- With the unit, the traditional wheeled cranes can have electric operation capabilities, achieving zero emissions, low noise, and 70% energy savings, making them suitable for urban residential areas and nighttime construction.

HIGHLY INTEGRATED AND EASY TO INSTALL.
PLUG AND PLAY, SAFE AND RELIABLE.

EFFICIENT LIFTING OPERATION

G-ICON full-scenario intelligent control

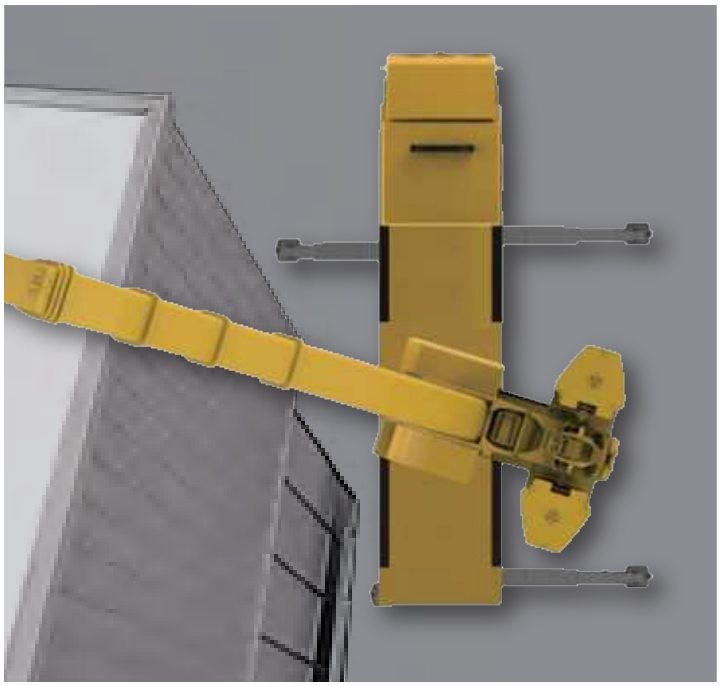
WITH 60 M BOOM, THE CRANE BOASTS EXCELLENT LIFTING PERFORMANCE

- With 60 m ultra-long 7-section boom, the crane is equipped with the functions of 0° lifting operation and dual-hook operation, providing excellent lifting performance.

TELESCOPING WITH A LOAD

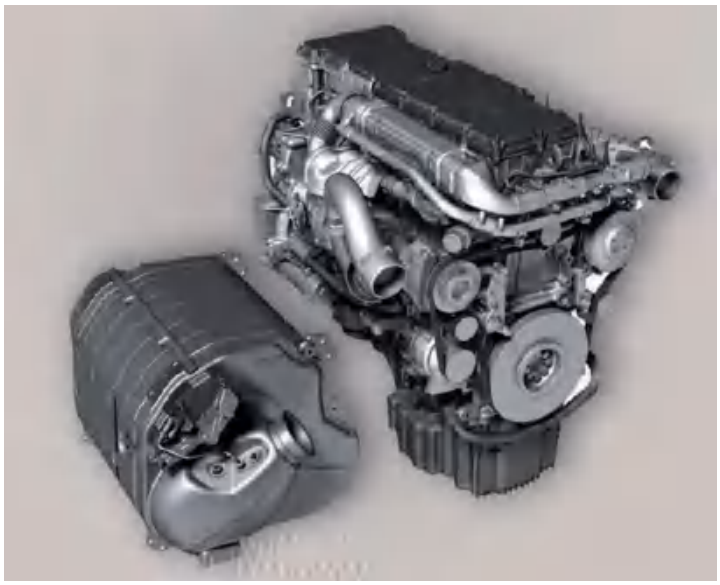
- The boom can safely telescope with a load at any point within the OM range and the comprehensive performance is not less than 40% of the rated load. Construction range is wider, efficiency is increased by 30%-50%, and lifting operation is safe and reliable.

The OMs of telescoping with a load are available for scenarios with space limited in height.



VARIABLE SUPPORT TECHNOLOGY

- Every outrigger can be telescoped to different lengths (fully retracted, half extended or fully extended) based on different jobsites, making the crane suitable for more OMs, especially in construction sites limited in width.



STRONG POWER

- The crane is equipped with a Mercedes-Benz 360kW high-power engine, with the max. travel speed of 80 Km/h and the max. grade ability of 60%. It features a large bearing capacity and strong pass ability, making it particularly suitable for rough, muddy, and other harsh road conditions.

ELECTRIC CONTROL PANELS

- Various functions such as automatic leveling, power take-off, locked suspension, system settings, digital display of inclination angles and fault diagnosis are available to improve comfort and convenience in operation.

PRECISE CONTROL

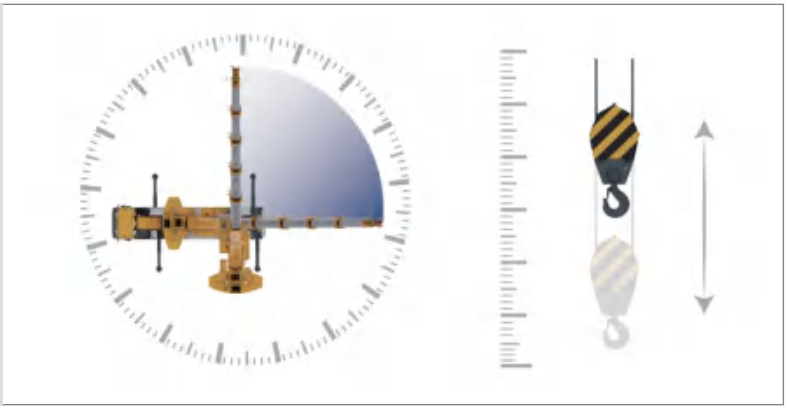
G-Master full-OM precise control

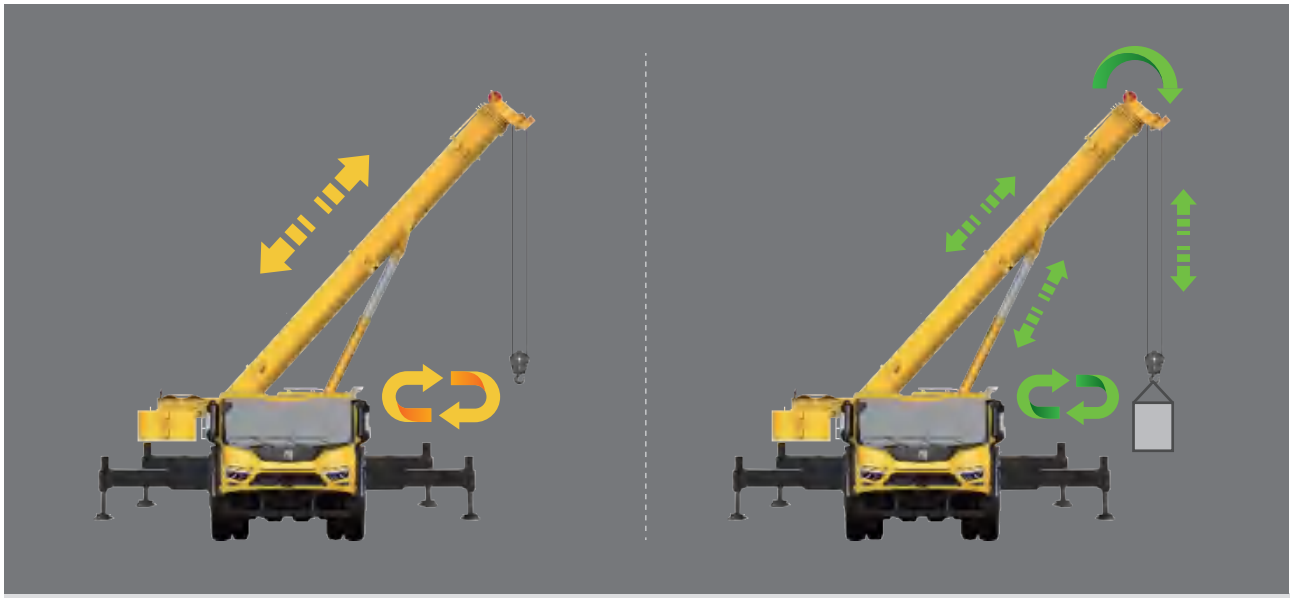
FULL-OM PRECISE AND SMOOTH CONTROL

- A new-generation pump-valve intelligent composite control system integrates high-precision winch with a 9-piston motor, multi-level pressure slewing buffer and electro-hydraulic proportional intelligent telescoping technology, contributing to accurate and smooth overall maneuverability.

PRECISE FINE CONTROL

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





SMOOTH AND STEADY CONTROL

Fast response, smooth engine start, stop, and acceleration without impact.

Smooth slewing and telescoping movements.

MULTIPLE MOVEMENTS CAN BE COMBINED ARBITRARILY

Slewing, telescoping, luffing and main and auxiliary winch movements can be combined arbitrarily.

CLASSIFIED OPERATION SPEED CONTROL

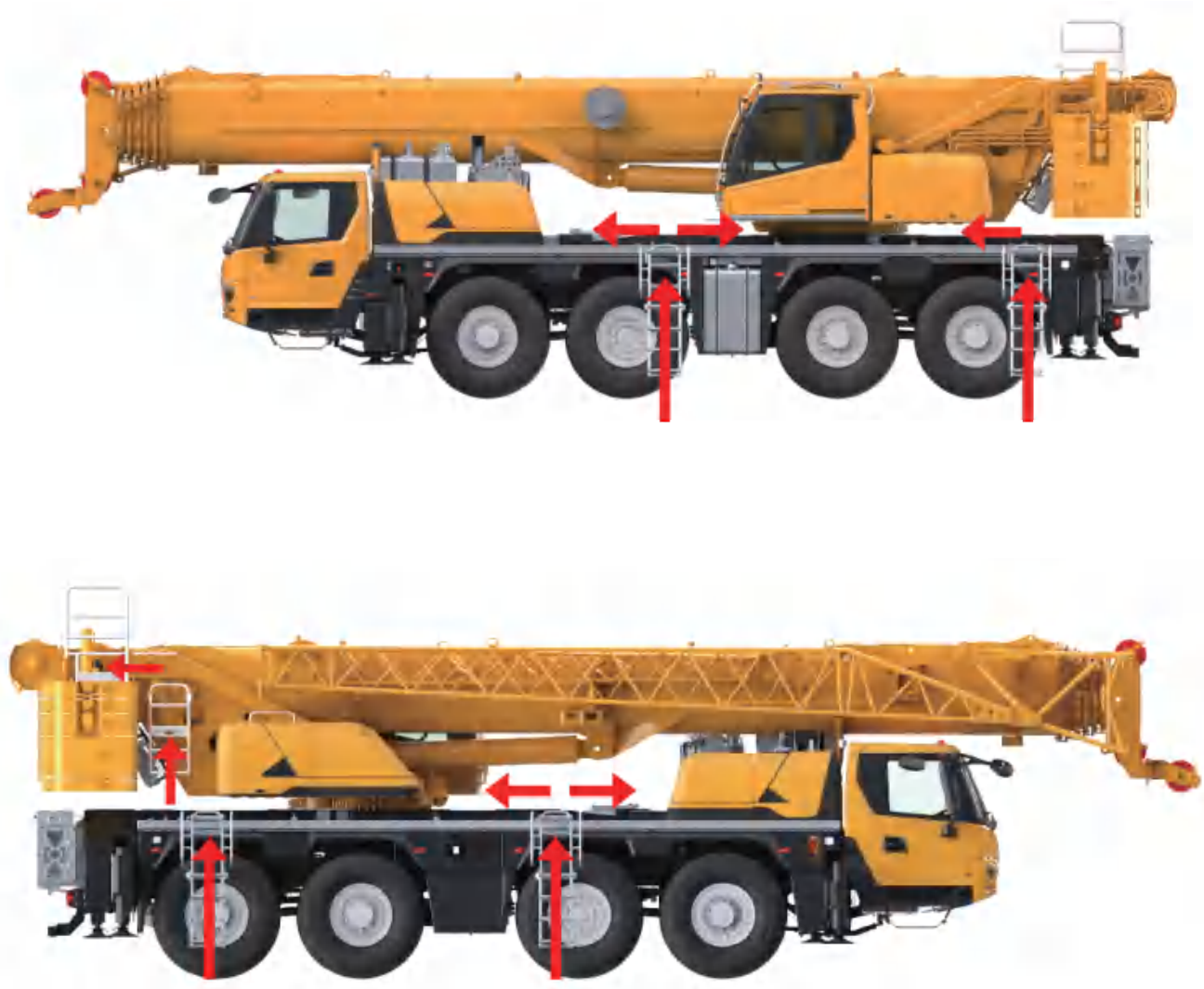
- Intelligently recognize light-duty and heavy-duty status, and automatically match optimal luffing and slewing operation speeds with higher safety.

MULTI-AXLE COLLABORATIVE STEERING PRECISION CONTROL

- Steering precision control is improved by 65%, with higher precision and faster response. Tire wear is reduced, and tire life can be extended by one year.

MACHINE MAINTENANCE AND SERVICE AND USER-FRIENDLY DESIGNS

- Maintenance and inspection points are centrally located for convenient operation; daily operations such as refilling, lubrication, and inspection can be completed on the deck or ground; the entire machine's access is scientifically designed, making climbing more convenient and ensuring safety and reliability.



Access is reasonably planned for safe and convenient climbing during operation.

INTELLIGENT AND ENJOYABLE

G-Comfort enjoy yourself wholeheartedly

G-star cabs: New styling, extra-large space, large field of view, generous storage space, rich and diverse configurations, providing delicate craft, intelligent technology and comfortable driving.

DRIVER'S CAB

①	Large windshield	Reduce blind spots for improved safety during driving.
②	Multi-functional air-suspension seats for driver and co-driver	Various functions of electric ventilation, electric heating and lumbar air inflation support are available; the seats can be adjusted and provide comfortable seating.
③	Newly developed combined instrument panel	12-inch central control touch screen, 12.3-inch full LCD display and new UI HMI, simple and easy to operate.
④	Multi-function steering wheel	It can be adjusted up, down, left and right; by integrating cruise control and multi-media control functions, it is easy to operate.
⑤	High-power HVAC with integrated air outlets	It has face and foot blowing, defrosting and defogging functions, making the indoor temperature more even and improving cooling and heating efficiency.
⑥	Storage space in several positions	More than ten common items such as kettles, mobile phones and receipts can be stored in the cab.
⑦	Other user-friendly configurations	Equipped with electric adjustable and heating rearview mirrors, phone holder, wireless unlocking key, etc., for a more comfortable driving experience.

OPERATOR'S CAB

①	Openable windshield and safety glass with ultra large field of view	Comprehensively enhance the upper and lower field of view.
②	Mechanical shock-absorbing adjustable seat	Leather + breathable mesh material, adjustable, comfortable for seating.
③	High-power horizontal HVAC	It has face and foot blowing, defrosting and defogging functions, making the indoor temperature more even and improving cooling and heating efficiency.
④	Brand new HMI system	The main and auxiliary control panels arranged separately; equipped with a 12.1-inch true color touch screen with adjustable viewing angle and a 7-inch winch monitoring display, with functions such as automatic load planning and fault self diagnosis, making it more convenient to use.
⑤	Vibration lever	Developed based on ergonomic principles, the lever is easy and convenient to operate, ensuring more precise operation.
⑥	Other user-friendly configurations	Equipped with sliding door and electric side step and wireless unlocking key to enhance convenience when getting in and out of the cab.

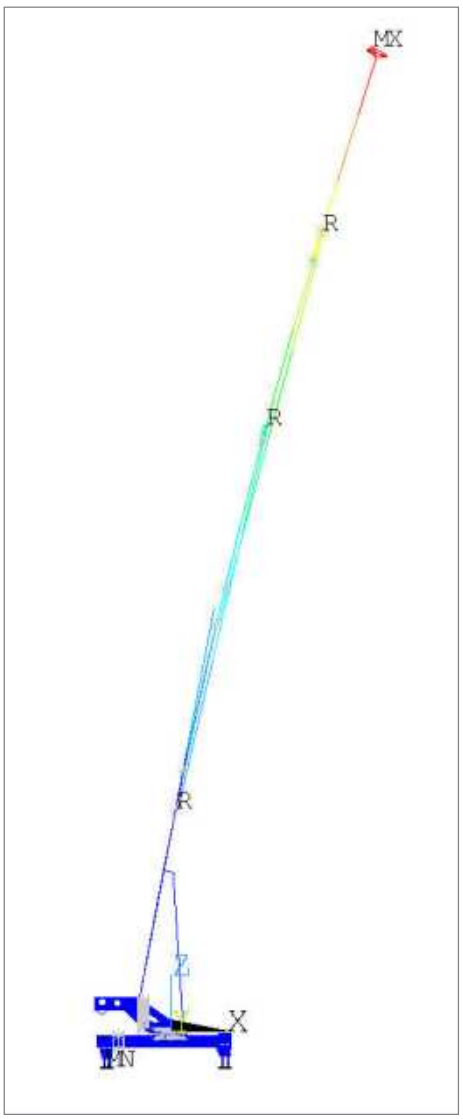
SAFE AND RELIABLE

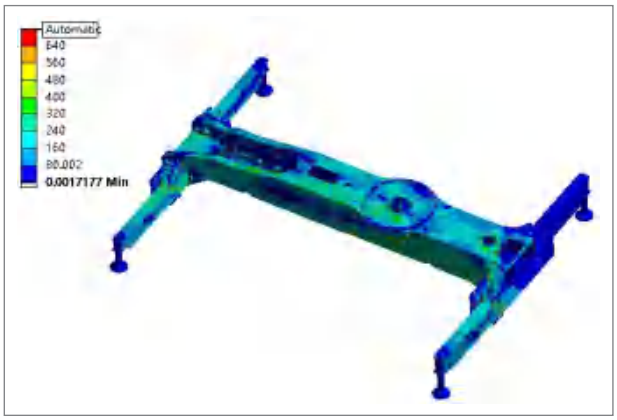
G-Safe life-cycle safe and quality manufacturing

FULL-SERVICE LIFE STRUCTURAL SAFETY DESIGN

COMPLETE MACHINE DEFORMATION CONTROL

Structural layout is more reasonable, deformation is reduced by more than 30%, and operation is safer.





EVENLY-DISTRIBUTED STRESS CONTROL FOR STRUCTURAL PARTS

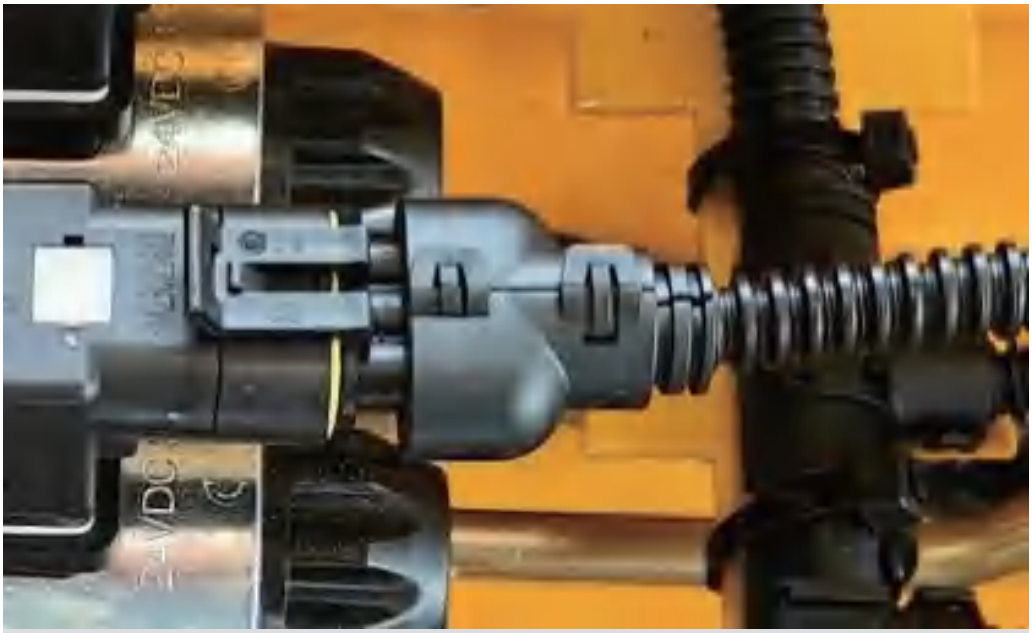
Structural parts are evenly stressed, with stronger load bearing capacity, and a service life more than 1.6 times higher than the benchmark.

GEC (G-ELECTRICAL SYSTEM)

- The core electrical control components have been certified through CNAS-level laboratory testing, ensuring long service life of parts and reliable circuit connections, meeting safety operation requirements and personalized function expansion under various OMs.

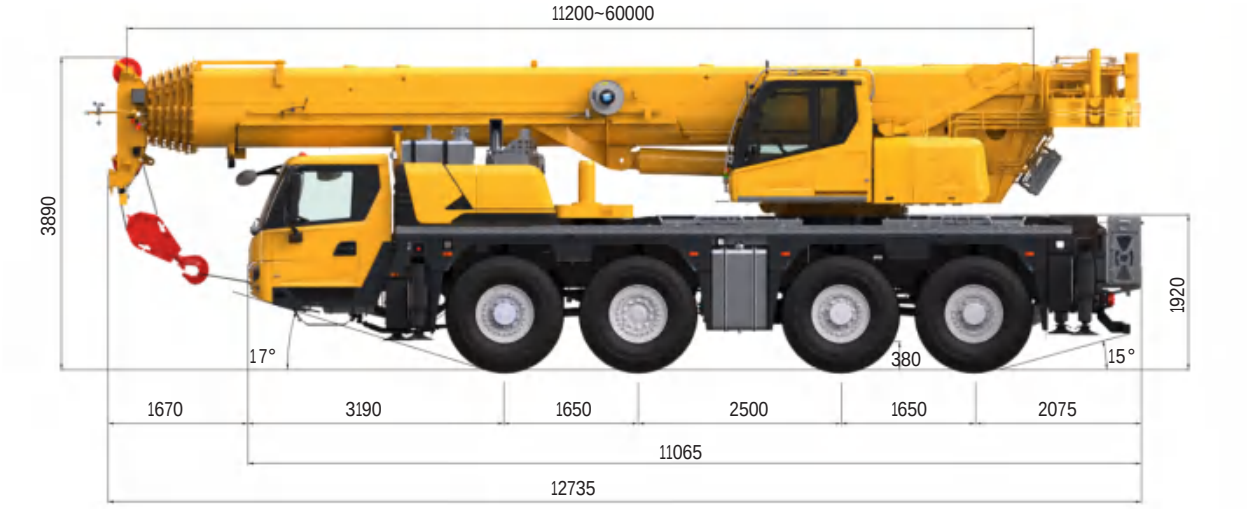
High-precision LMI system, safe and reliable

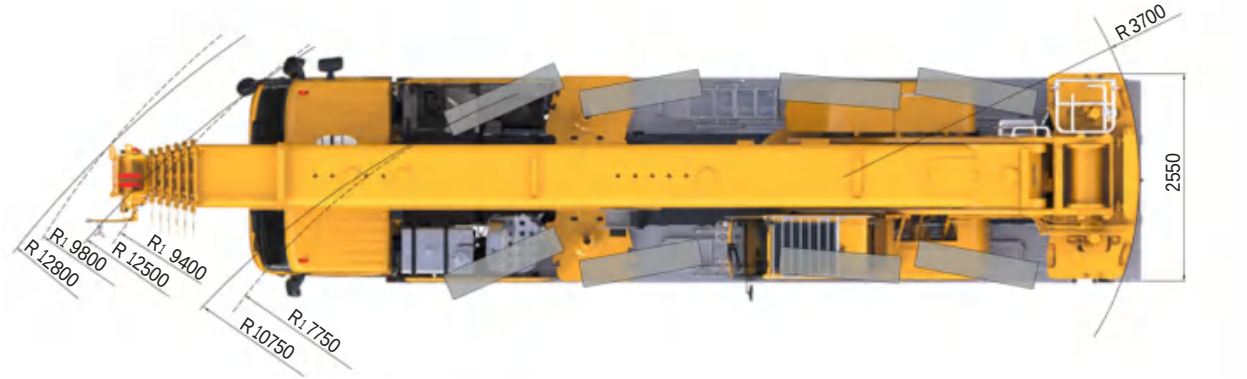
New-generation integrated injection molded wiring harness
The wiring harness connection is reliable and maintenance-free.



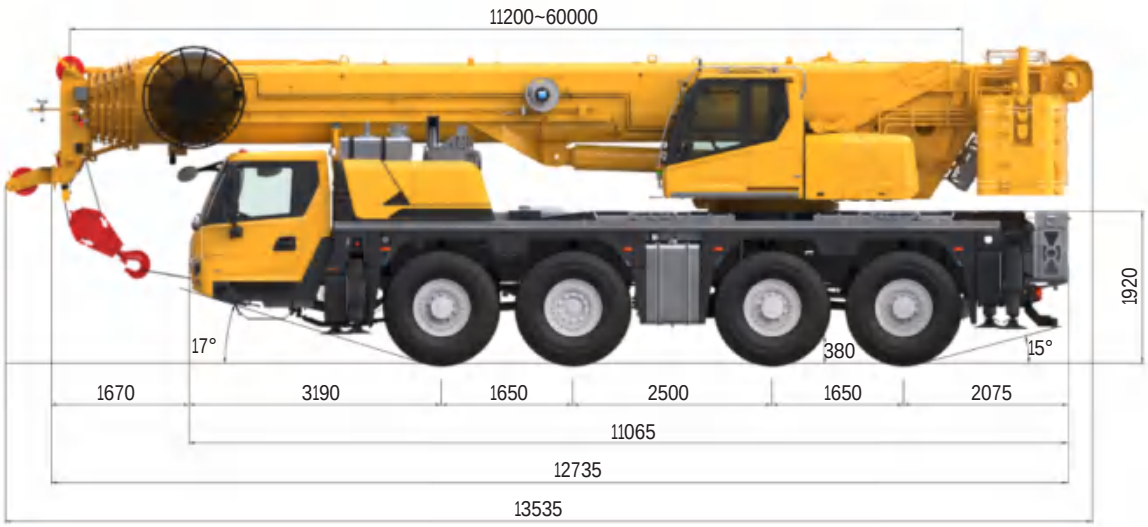
Open process wiring harness
Highly reliable, easy to maintain, neat and beautiful.

DIMENSIONS





R: turning radius in the road steering mode; R1: turning radius in the all-wheel steering mode.


11200~60000
1920
17°
380
15°
1670
3190
1650
2500
1650
2075
11065
12735
13535


R3700
2550
6470/4500/2320
R4104
8220

TECHNICAL SPECIFICATIONS

	CHASSIS
Frame	Designed and manufactured by XCMG, made of high strength steel with rectangular cross-section and fully covered deck.
Outriggers	Four single-stage outriggers arranged in H-shape. Front outriggers, located in front of axle 1, are controlled by the wireless remote control, and remote control is available. The outriggers are equipped with push-pull outrigger floats and outrigger pressure/length detection and protection devices, with three working positions (fully retracted, half extended and fully extended). There is an electric control panel fitted at each side of the chassis with luminous level gauge, light and speed regulation buttons. Outrigger float dimensions: 450mm×450mm. Reaction force of outrigger at max. lifting load: front outrigger: 352.8kN; rear outrigger: 519.4kN.
Engine	OM471LA.E5-2, in-line, 6-cylinder, electric control diesel engine (HVO fuel can be applied) manufactured by Benz, with max. net power of 360 kw/1600 rpm and max. torque of 2400 Nm /1300 rpm, compliant with EU Stage V emission standard. Fuel tank capacity: 350 L; AdBlue/DEF tank capacity: 40 L; engine displacement: 12.8 L.
Hydraulic system	Variable piston pump is connected to the PTO port of the engine to take power through the drive shaft, which is used for controlling the cooling hydraulic system, steering, outriggers and suspension hydraulic system.
Transmission	ZF Germany AMT transmission with hydraulic retarder brake; 12 forward gears and 2 reverse gears available.
Transfer case	German KESSLER mechanical transfer case is equipped with emergency steering pump.
Safety devices	Night lighting system, backup camera, 360° full-view camera, ABS, outrigger pressure detector, outrigger length detector, axle load detector, emergency switching of hydraulic power sources and emergency stop device.
Axle	German KESSLER disconnected axles with independent suspension technology and pneumatic disc brake. All axles for steering. Axles 1, 3 and 4 are for driving; Drive/steer mode: 8×6×8.
Suspension	Hydro-pneumatic suspension system has good shock-absorbing effect. Various functions such as automatic leveling, moving up and down of suspension, and switching over of locked and unlocked suspension are available. The stroke of suspension cylinder is -110mm~+110mm.
Tire	8 tires and 1 spare tire, each axle is equipped with single tire, with large bearing capacity. Tire specifications: 445/95R25.
Brake system	Service brake: dual-circuit air pressure brake, acting on all wheels. Parking brake: spring-loaded brake, acting on axles 2-4. Auxiliary brake: engine brake and transmission retarder brake.
Steering system	All-axle steering; axles 1 and 2 are mechanically steered + hydraulic power assistance; axles 3 and 4 adopt electro-hydraulic proportional steering control. Various steering modes are available to meet the requirements under different operation modes.
Driver's cab	New full dimension steel structure cab is equipped with safety glass, electrically operated door window lifter, electric heating rearview mirrors, remote control unlocking function, pneumatic adjustable steering column, multi-functional steering wheel, multi-functional air suspension seats for both driver and co-driver, LED headlights, new combined central control panel, 12.3-inch LCD display, 12-inch central control display, fire extinguisher and integrated HVAC system.
Electrical system	DC 24 V, with 2 sets of 12 V batteries in series.

CHASSIS

Structure	Designed and manufactured by XCMG, made of high strength steel.
Hydraulic system	Variable pump driven by chassis engine, used for lifting, luffing, telescoping and slewing operation. Imported electro-hydraulic change valve, matching perfectly and stably with variable piston pump. Large power air-cooled hydraulic oil cooler can effectively reduce the oil temperature in the system. Hydraulic oil tank capacity: 580 L.
Operating method	The electric-proportional pilot control, stepless speed regulation, all movements of the crane are controlled by two levers at left and right sides and virtual buttons on the display screen.
Main winch system	Hydraulic control is used for speed regulation. The system is driven by a hydraulic variable motor through a planetary gear reducer, with a normally closed brake, a balance valve and a grooved drum equipped. The main and auxiliary winches can be operated independently. Wire rope has a rope head, which is directly installed in pouch socket.
Slewing system	A single-row, four-point contact-ball external slewing bearing is driven by hydraulic motor, with built-in planetary gear reducer and normally closed brake equipped, and can continuously slew 360°. Power control and free slewing function as well as stepless speed regulation are available.
Operator's cab	Fully-enclosed steel cab can tilt 20°. It features a spacious, panoramic, and multi storage layout. All-round view safety glass with an openable front window, push-pull sliding door, protective grilles, pull-out steps, Wipers for the windshield and roof window, 2.5 L kettle. luxurious interior parts and 2 kg fire extinguisher; sun screens for front, rear and side windows, and double-layer sun screen for the roof window. Mechanical shock absorber seat with leather + breathable mesh is adjustable. Dual LED interior lights and electric fan are equipped. HMI control panel, display, armrests and suspended electronic foot accelerator are equipped. HVAC system is available.
Safety devices	Emergency brake switch, hydraulic balance valve, hydraulic relief valve, hydraulic double-way valve, load moment indicator (LMI), angle sensor, winch monitoring camera, slewing buzzer, lowering limiter to prevent rope over-releasing, anti-two block on the boom head to prevent rope over-winding and anemometer to detect the wind speed.
Electrical system	Adopt wireless remote control with display; safe control and electrical systems can meet the requirements of function safety certifications. DC 24 V, with 2 sets of 12 V batteries in series.
LMI	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	Total weight is 20 t. Seven counterweight combinations of 2.6 t, 6.0 t, 8.0 t, 9.0 t, 13.0 t, 16.0 t and 20.0 t are available. Counterweight slabs of 7 t, 4 t, 2.5 t, 2 t, 1.85 t, 1 t, 0.9 t and 0.75 t.
Hook block	6 t hook block; 18 t hook block; 42 t hook block.
Wireless remote control device	Full-function wireless remote control device can be used to perform main operations (telescoping, luffing, winch, slewing), auxiliary operations (operator's cab, counterweight cylinder), chassis outrigger operation, engine operation and light control, improving the convenience and safety of crane operations.
Auxiliary sheave	Installed at the boom top, used for single line operation. Its lifting performance is the same as that for boom, but the max. lifting load could not exceed 6 t.
Boom	7-section boom with U-shaped cross-section, welding structure. Single cylinder pinning telescoping system is adopted. One double-acting cylinder with safety valve is used for controlling the telescoping movements of all boom sections with 46%, 92% and fully-extended telescoping patterns available. Boom length: 11.2 m~60 m.

CONFIGURATION AND OPTIONAL EQUIPMENT

CONFIGURATION	FUNCTION DESCRIPTION
Standard	Seven-section boom of 60 m

Note: only standard configuration is available for this model.

OPTIONAL EQUIPMENT

Hook block	54 t hook block
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, a balance valve and a grooved drum equipped.
Fixed jib	Lattice jib, welded structure, stepless luffing, three offset angles of 0°, 20° and 40°. Two options of hydraulic luffing fixed jib and mechanical luffing fixed jib. Fixed jib length: 9.5 m/16 m.
Independent jib head	Lattice welded structure, attached to boom head Length of independent jib head: 2.9 m.
Electric eddy-current retarder brake	Help reduce friction during braking operation, increase braking efficiency and prolong the service life of braking system.
Heating system	Raise the cab temperature by heating the air, with timing heating function.
Rear towing device	Installed at the rare of the crane for towing.
Wheel chock	Provide additional safety guarantee when the crane is parked.
Spark arrestor	Mounted at the tail pipe of silencer to prevent sparks from coming out.

TRAVEL CONFIGURATION ON ROAD

9 t
48 t
80 km/h
18 t

8 t
48 t
80 km/h
18 t

CONFIGURATION FOR HEAVY LOAD JOBSITE TRANSFER

20 t
61 t
30 km/h
42 t

WORKING SPEED

445/95R25	2~80 km/h	60%

	Max	F	Φ	
0-125 m/min, single line, no load		59.1 kN	16 mm	215 m
0-125 m/min, single line, no load		59.1 kN	16 mm	165 m
0-1.5 r/min				
Approx. 45 s for boom luffing up from 0° to 84°, and 80 s for boom luffing down from 84° to 0°				
Approx. 500 s for boom extending from 11.2 m to 60 m and 500 s for boom retracting from 60 m to 11.2 m				

WEIGHT

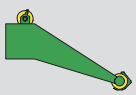
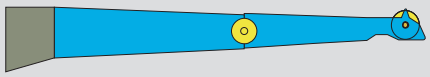
	PARTS OF LINE	WEIGHT (KG)	REMARK
6 t	1	175	Single-hook
18 t	3	200	Single-hook
42 t	7	359	Dual-hook
54 t	9	692	Dual-hook

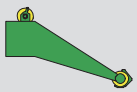
	①	②	③	④	⑤	⑥	⑦	⑧
Dimensions (L×W×H) (mm)	2540×1100 ×709	2540×1140 ×95	2540×1140 ×95	2540×1140 ×298	2540×1140 ×232	2540×1140 ×149	1100×595 ×287	2540×1140 ×65
Weight (t)	2	1	7	4	2.5	1.85	0.75	0.9

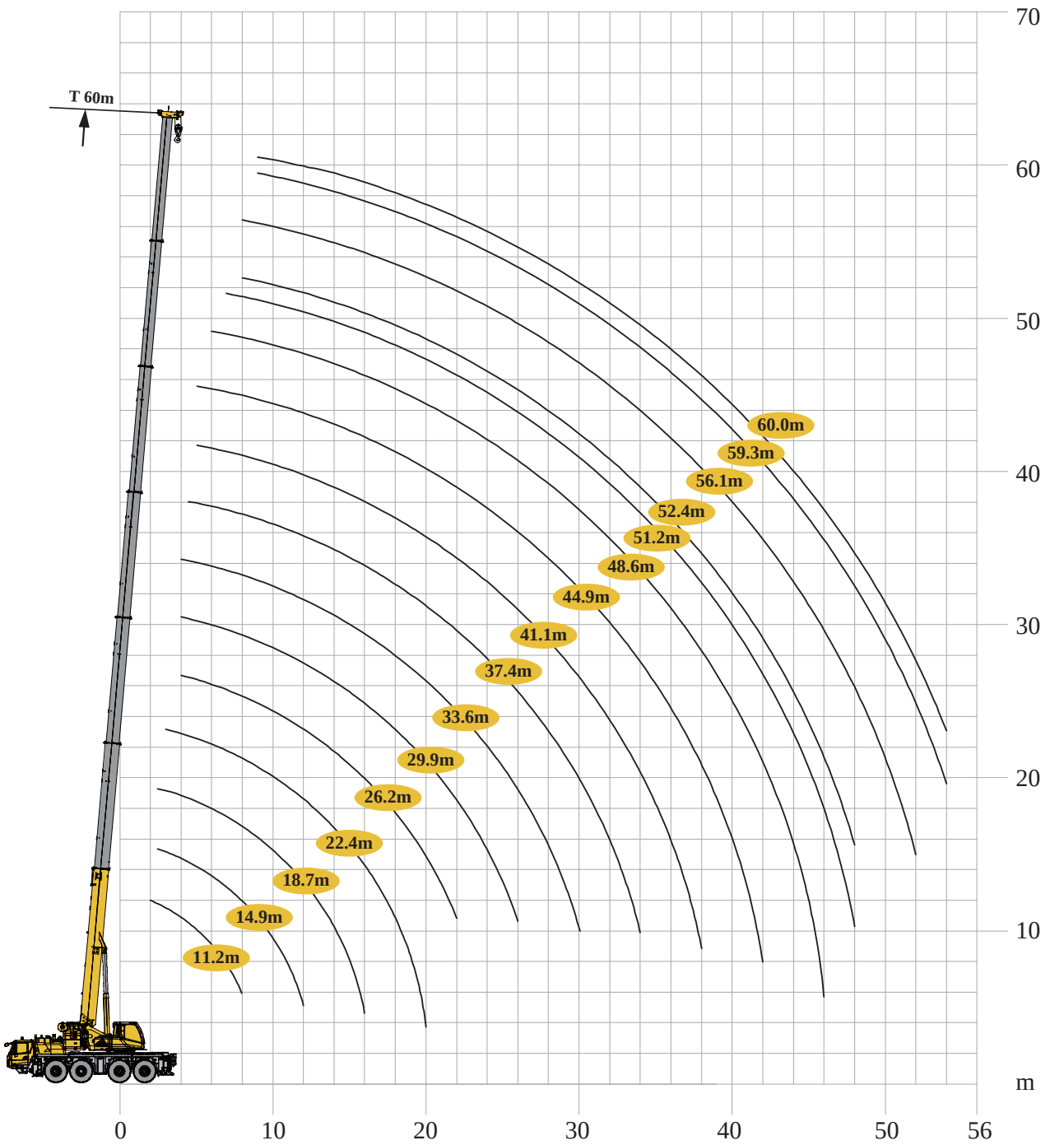
OPERATION MODE	20 T	16 T	13 T	9 T	8 T	6 T	2.6 T
Combination	①+②+③+④+⑤+⑥+⑦+⑧	①+②+③+⑤+⑥+⑦+⑧	①+②+④+⑤+⑥+⑦+⑧	①+②+⑤+⑥+⑦+⑧	①+⑤+⑥+⑦+⑧	⑤+⑥+⑦+⑧	⑥+⑦

BOOM /JIB COMBINATIONS

BOOM	INDEPENDENT JIB HEAD	FIXED JIB
T: 11.2-60 m	T: 11.2-60 m I : 2.9 m	T: 11.2-59.3 m F: 9.5 m/16 m

Independent jib head – 2.9 m	
Fixed jib – 9.5 m	
Fixed jib– 16 m	

COMPONENTS	STRUCTURE	LENGTH (M)
Connecting bracket		1.16
Independent jib head		2.9
1st jib section		8.34
2nd jib section		6.5



LOAD CHARTS

T 11.2~60M

	11.2*	11.2	14.9	18.7	22.4	26.2	29.9	33.6	37.4	41.1	44.9	48.6	51.2	52.4	56.1	59.3	60	
2	80**	45.0																2
2.5	80**	45.0	45.0	45.0														2.5
3	45.0	45.0	45.0	45.0	44.9													3
3.5	45.0	44.9	43.4	42.2	40.0													3.5
4	44.3	41.8	40.0	39.0	37.0	36.0	34.3	28.8										4
4.5	41.3	37.0	37.0	36.0	35.0	34.0	33.0	28.8	23.2									4.5
5	38.7	35.0	34.0	33.0	32.0	32.0	31.0	28.8	23.2	19.2	14.7							5
6	34.2	30.0	30.0	29.0	29.0	28.0	27.0	26.0	23.2	19.2	14.7	11.3						6
7	30.1	27.0	26.0	26.0	26.0	25.0	24.0	23.0	21.8	18.6	14.7	11.3	7.8					7
8	25.1	23.7	24.0	23.0	23.0	22.0	22.0	21.0	20.0	17.6	14.7	11.3	7.8	8.4	6.8			8
9			21.0	21.0	21.0	20.0	20.0	19.0	18.0	16.5	14.2	11.3	7.8	8.4	6.8	5.5	5.4	9
10			19.3	19.0	19.0	19.0	18.0	17.0	17.0	15.5	13.7	11.3	7.8	8.3	6.8	5.5	5.4	10
12			15.5	16.0	16.0	16.0	15.0	15.0	14.0	13.9	12.4	10.6	7.8	8.3	6.8	5.4	5.3	12
14				14.0	14.0	14.0	13.0	13.0	12.0	12.0	11.1	9.7	7.4	8.3	6.8	5.3	5.3	14
16				10.5	12.0	12.0	11.0	11.0	11.0	10.0	9.9	8.9	6.8	7.8	6.8	5.2	5.2	16
18					10.4	10.3	10.0	9.8	9.0	9.0	8.7	7.9	6.3	7.2	6.6	5.1	5.1	18
20					6.9	8.7	8.5	8.4	8.0	8.0	7.8	7.0	5.6	6.5	6.0	5.1	5.0	20
22						7.4	7.5	7.2	7.2	6.7	6.8	6.2	5.0	5.8	5.3	4.9	4.8	22
24							6.5	6.2	6.3	5.9	5.9	5.6	4.6	5.2	4.9	4.6	4.5	24
26							5.6	5.5	5.4	5.3	5.0	5.1	4.2	4.7	4.5	4.2	4.1	26
28								4.9	4.7	4.8	4.6	4.7	3.8	4.3	4.1	3.8	3.7	28
30								4.5	4.1	4.3	4.1	4.2	3.5	3.9	3.7	3.4	3.4	30
32									3.8	3.8	3.6	3.7	3.2	3.6	3.4	3.2	3.0	32
34									3.5	3.3	3.3	3.3	3.0	3.1	2.9	2.8	2.8	34
36										2.9	3.1	3.0	2.8	2.7	2.5	2.6	2.6	36
38										2.7	2.8	2.6	2.6	2.4	2.2	2.2	2.2	38
40											2.5	2.3	2.3	2.1	1.9	1.9	1.9	40
42											2.2	2.0	2.1	1.8	1.6	1.6	1.6	42
44												1.8	1.8	1.5	1.3	1.4	1.4	44
46												1.5	1.6	1.3	1.1	1.2	1.1	46
48													1.4	1.1	0.9	1.0	0.9	48
50															0.7	0.8	0.7	50
52															0.5	0.6	0.6	52
54																0.4	0.4	54

* Over rear; ** Capacity class.

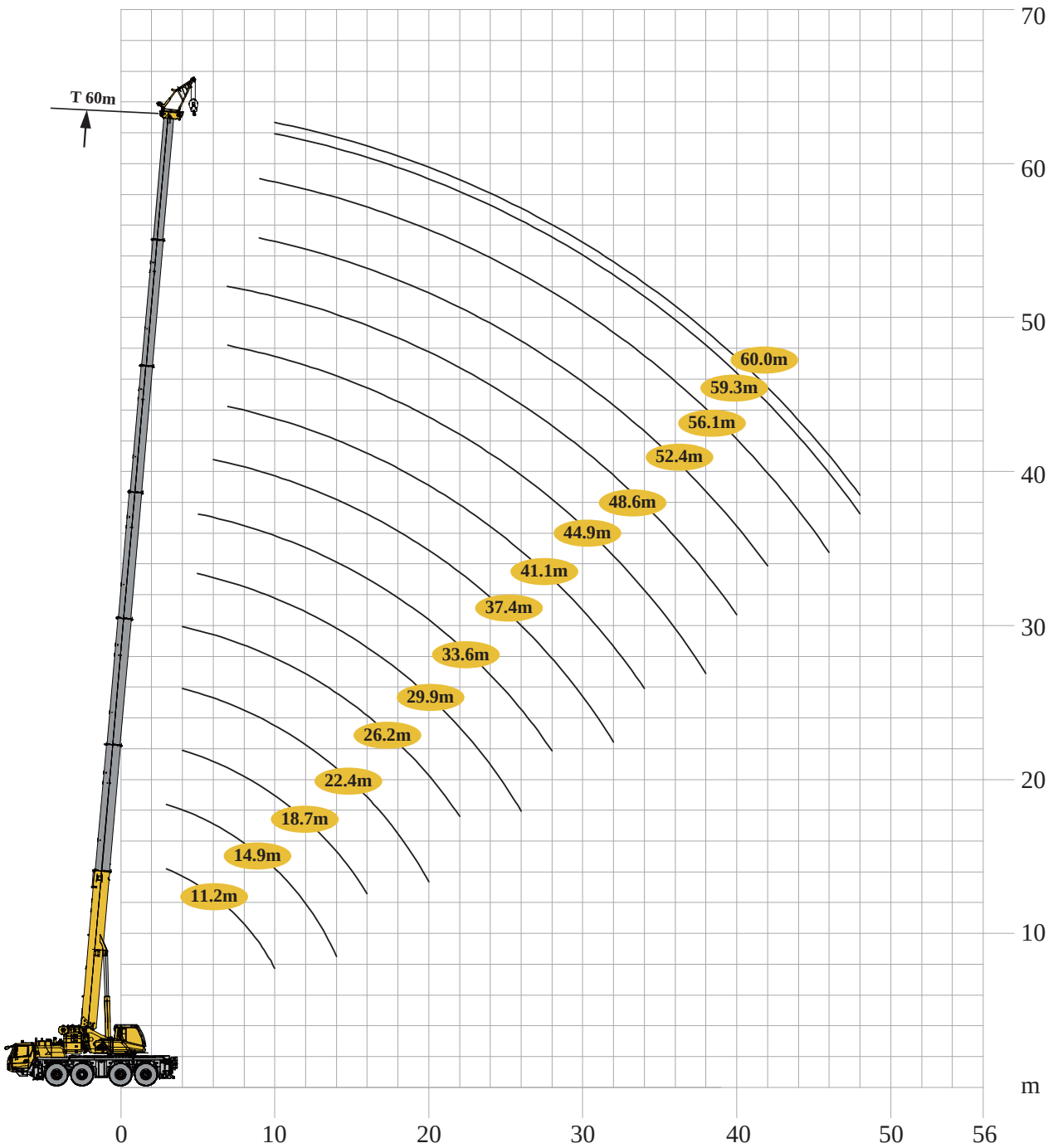
T 11.2~37.4M

	11.2	14.9	18.7	19.3	22.4	23.1	26.2	26.8	27.5	29.9	31.2	33.6	34.9	35.6	37.4	
2	45.0															2
2.5	45.0	45.0	45.0													2.5
3	45.0	44.6	43.6	23.4	42.7	23.5										3
3.5	41.8	40.9	38.0	22.0	36.1	22.1										3.5
4	36.1	36.1	35.2	20.6	34.2	20.8	33.3	17.8	17.4	31.4	17.2	28.8	14.0			4
4.5	33.3	33.3	32.3	19.4	31.4	19.6	30.4	16.9	16.4	29.5	16.4	28.5	14.0	13.2	23.2	4.5
5	31.4	30.4	30.3	18.5	29.5	18.5	28.5	16.0	15.6	27.6	15.7	26.6	14.0	13.2	23.2	5
6	26.6	26.6	26.6	16.7	25.7	16.7	24.7	14.5	14.1	24.7	14.4	23.8	13.5	13.1	22.8	6
7	23.8	23.8	23.8	15.1	22.8	15.2	21.9	13.1	12.8	21.9	13.3	20.9	12.3	12.1	20.0	7
8	20.9	20.9	20.9	13.8	20.9	13.9	20.0	11.9	11.7	19.0	12.0	19.0	11.2	11.0	18.1	8
9		19.0	19.0	12.8	19.0	12.8	18.1	11.1	10.8	18.1	11.1	17.1	10.3	10.0	16.2	9
10		16.8	17.1	11.9	17.1	11.8	16.2	10.2	10.0	16.2	10.2	15.2	9.5	9.3	14.3	10
12		12.2	12.8	10.5	13.0	10.4	12.9	8.9	8.7	12.9	8.9	12.4	8.3	8.1	12.4	12
14			9.9	9.4	10.0	9.1	10.2	7.8	7.6	10.1	7.7	10.0	7.2	7.0	9.8	14
16			8.0	8.1	8.4	8.2	8.3	6.9	6.8	8.0	6.9	8.2	6.4	6.2	7.8	16
18					6.9	6.9	6.8	6.2	6.1	6.8	6.2	6.8	5.7	5.6	6.7	18
20					5.7	5.8	5.8	5.7	5.5	6.0	5.6	5.6	5.1	5.0	5.7	20
22							5.0	5.1	5.0	5.1	5.1	4.9	4.7	4.4	5.0	22
24								4.4	4.4	4.3	4.4	4.3	4.3	4.1	4.2	24
26										3.7	3.8	3.8	3.8	3.7	3.7	26
28											3.3	3.3	3.3	3.3	3.2	28
30												2.8	2.9	2.9	2.7	30
32													2.5	2.5	2.4	32
34															2.0	34

LOAD CHARTS

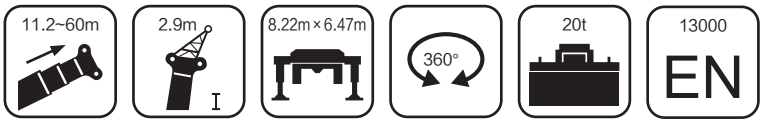
T 39.3~60M

	39.3	41.1	43.1	43.7	44.9	47.5	48.6	51.2	51.9	52.4	55.6	56.1	59.3	60	
4.5	12.0														4.5
5	12.0	18.2	9.9	9.8	14.0										5
6	12.0	18.2	9.9	9.6	14.0	8.9	10.7								6
7	12.0	18.3	9.9	9.6	14.0	8.9	10.7	7.4	7.1						7
8	11.5	17.6	10.0	9.6	14.0	8.9	10.7	7.4	7.1	8.0	6.2	6.5			8
9	10.6	16.2	10.0	9.6	14.0	8.9	10.7	7.4	7.1	8.0	6.2	6.5	5.2	5.1	9
10	9.7	14.3	9.5	9.4	13.7	8.9	10.7	7.3	7.1	7.9	6.2	6.5	5.2	5.1	10
12	8.4	11.4	8.2	8.1	11.4	8.5	10.6	7.3	7.1	7.9	6.2	6.5	5.1	5.0	12
14	7.3	9.6	7.2	7.1	9.4	7.5	9.1	7.3	7.1	7.9	6.2	6.5	5.0	5.0	14
16	6.5	8.0	6.3	6.3	7.8	6.7	7.8	6.7	6.6	7.3	6.2	6.5	4.9	4.9	16
18	5.8	6.5	5.6	5.6	6.5	5.9	6.5	6.0	5.9	6.3	6.1	6.1	4.8	4.8	18
20	5.2	5.5	5.0	5.0	5.6	5.3	5.4	5.3	5.2	5.2	5.2	5.0	4.9	4.8	20
22	4.8	4.9	4.6	4.6	4.7	4.8	4.6	4.6	4.6	4.3	4.4	4.1	4.2	4.1	22
24	4.3	4.2	4.2	4.1	4.0	4.0	3.8	3.9	3.9	3.6	3.6	3.4	3.4	3.4	24
26	3.7	3.6	3.6	3.6	3.4	3.4	3.2	3.3	3.3	3.0	3.1	2.8	2.9	2.8	26
28	3.2	3.1	3.1	3.1	2.9	2.9	2.7	2.8	2.8	2.5	2.6	2.3	2.4	2.3	28
30	2.8	2.6	2.7	2.7	2.5	2.5	2.3	2.4	2.4	2.1	2.1	1.9	2.0	1.9	30
32	2.4	2.3	2.3	2.3	2.1	2.2	2.0	2.0	2.0	1.7	1.8	1.5	1.6	1.6	32
34	2.1	2.0	2.0	2.0	1.8	1.8	1.6	1.7	1.7	1.4	1.5	1.2	1.3	1.3	34
36	1.8	1.7	1.7	1.7	1.5	1.6	1.4	1.4	1.4	1.2	1.2	1.0	1.0	1.0	36
38		1.4	1.5	1.5	1.3	1.3	1.1	1.2	1.2	0.9	0.9	0.7	0.8	0.7	38
40			1.3	1.3	1.0	1.1	0.9	1.0	0.9	0.7	0.7	0.5	0.5	0.5	40
42					0.9	0.9	0.7	0.8	0.7	0.5	0.5				42
44						0.7	0.5	0.6	0.6						44

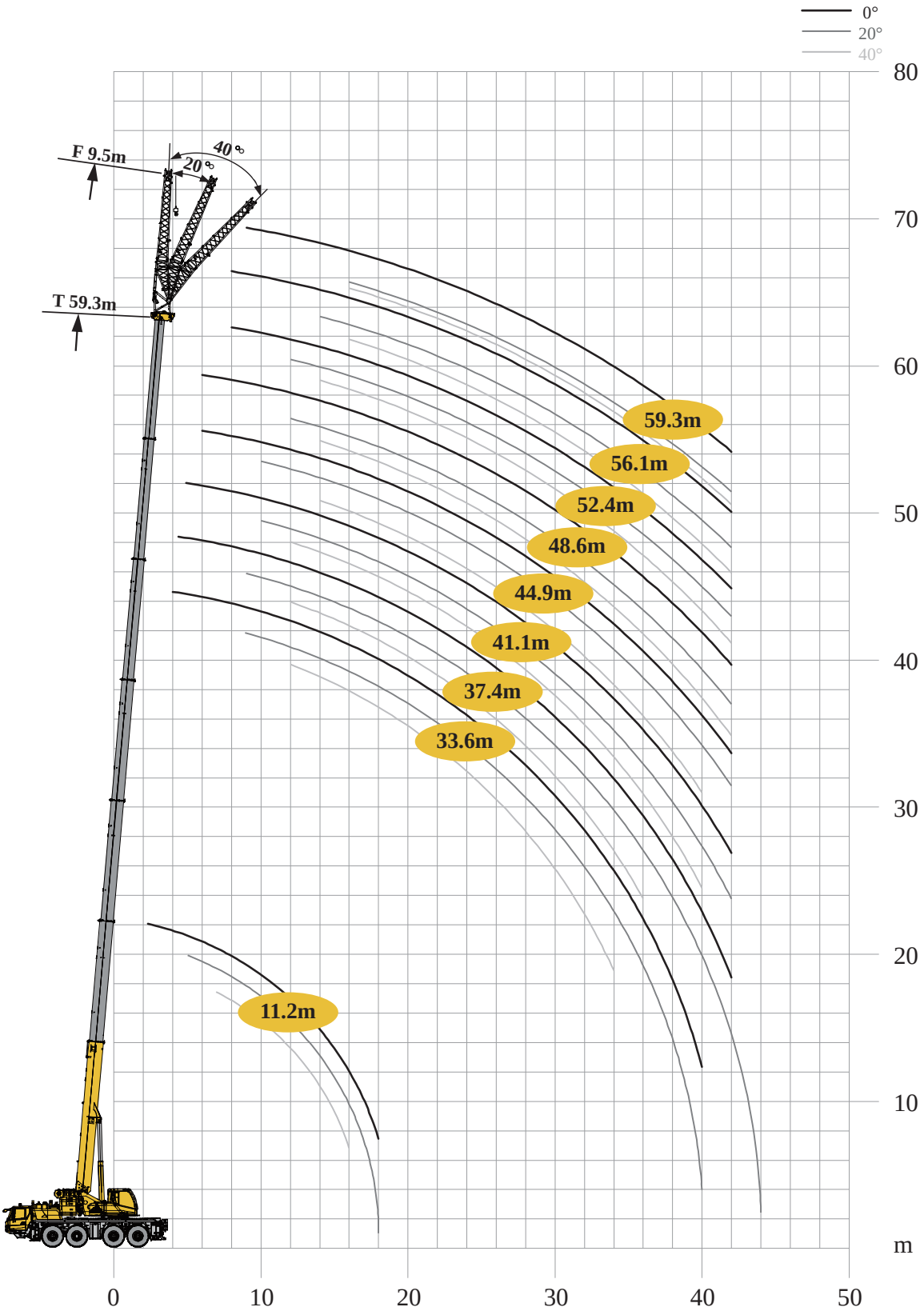

T 60m
60.0m
59.3m
56.1m
52.4m
48.6m
44.9m
41.1m
37.4m
33.6m
29.9m
26.2m
22.4m
18.7m
14.9m
11.2m
70
60
50
40
30
20
10
m
0
10
20
30
40
50
56

LOAD CHARTS

T 11.2~60M



	11.2	14.9	18.7	22.4	26.2	29.9	33.6	37.4	41.1	44.9	48.6	52.4	56.1	59.3	60	
3	23.3	23.3														3
3.5	23.3	23.3														3.5
4	23.3	23.3	23.3	23.3	23.3											4
4.5	23.3	22.3	23.3	23.3	23.3											4.5
5	23.3	21.3	22.8	23.3	23.3	23.3	23.3									5
6	23.3	19.3	21.1	21.3	21.9	23.0	23.3	19.5								6
7	23.3	17.7	19.4	19.2	19.7	20.7	21.0	17.7	15.2	11.0	8.8					7
8	22.7	16.4	18.0	17.5	17.8	18.8	18.9	16.0	13.8	11.0	8.8					8
9	19.9	15.2	16.8	16.1	16.4	17.4	17.3	14.4	12.4	11.0	8.8	6.8	5.2			9
10	18.0	14.2	15.5	14.8	15.1	16.0	15.9	13.2	11.4	10.6	8.8	6.8	5.2	4.2	4.1	10
12		12.6	13.4	12.8	13.0	13.7	13.2	11.2	9.6	8.9	8.4	6.8	5.2	4.2	4.1	12
14		11.5	11.9	11.3	11.4	12.1	11.3	9.5	8.2	7.6	7.2	6.6	5.2	4.2	4.1	14
16			10.5	10.0	10.1	10.4	10.4	8.2	6.9	6.5	6.3	6.1	5.2	4.2	4.1	16
18				8.9	9.0	9.4	9.2	7.3	6.1	5.8	5.5	5.4	5.2	4.2	4.1	18
20				8.0	8.2	8.1	7.5	6.4	5.4	5.1	4.8	4.8	4.6	4.2	4.1	20
22					7.1	6.8	6.5	5.8	4.8	4.4	4.3	4.3	4.2	4.1	4.0	22
24						5.8	5.5	5.2	4.2	3.9	3.8	3.9	3.8	3.7	3.7	24
26						5.0	4.7	4.4	3.7	3.5	3.3	3.4	3.4	3.3	3.3	26
28							4.0	3.8	3.3	3.1	3.0	3.0	3.0	3.1	3.0	28
30								3.2	2.9	2.7	2.7	2.8	2.9	2.8	2.8	30
32								2.7	2.5	2.4	2.5	2.5	2.5	2.6	2.5	32
34									2.2	2.2	2.2	2.3	2.4	2.4	2.4	34
36										1.8	1.9	2.1	2.2	2.2	2.2	36
38										1.6	1.8	1.7	1.9	1.9	1.9	38
40											1.7	1.4	1.6	1.6	1.6	40
42												1.2	1.3	1.4	1.3	42
44													1.1	1.1	1.1	44
46													0.9	0.9	0.9	46
48														0.7	0.7	48



LOAD CHARTS

T 11.2~59.3M

	11.2	33.6	37.4	41.1	44.9	48.6	52.4	56.1	59.3	
2.5	11.3									2.5
3	11.3									3
3.5	11.0									3.5
4	10.5	11.3								4
4.5	10.0	11.3	10.0							4.5
5	9.5	11.0	9.8	8.8						5
6	8.6	10.4	9.4	8.6	7.6	6.0				6
7	7.9	9.9	9.2	8.5	7.6	6.0				7
8	7.3	9.6	8.9	8.2	7.4	6.0	4.3	3.5		8
9	6.8	9.1	8.5	8.0	7.2	6.0	4.3	3.4	3.0	9
10	6.4	8.7	8.2	7.7	7.1	6.0	4.3	3.4	2.9	10
12	5.6	8.1	7.7	7.4	6.8	6.0	4.4	3.4	2.9	12
14	5.0	7.6	7.1	6.9	6.5	5.9	4.4	3.5	2.8	14
16	4.4	6.9	6.8	6.1	5.6	5.3	4.5	3.5	2.8	16
18	4.1	6.5	6.2	5.2	4.8	4.5	4.3	3.6	2.8	18
20		6.0	5.5	4.5	4.2	3.9	3.7	3.5	2.8	20
22		5.7	4.8	3.8	3.6	3.5	3.4	3.3	2.8	22
24		5.3	4.2	3.4	3.1	3.1	3.0	3.0	2.8	24
26		5.0	3.7	3.0	2.8	2.6	2.6	2.6	2.4	26
28		4.3	3.4	2.6	2.4	2.3	2.2	2.3	2.3	28
30		3.7	3.0	2.2	2.0	2.0	2.0	2.1	2.0	30
32		3.2	2.6	1.9	1.8	1.7	1.9	1.8	1.8	32
34		2.8	2.3	1.7	1.5	1.5	1.5	1.6	1.5	34
36		2.4	2.1	1.5	1.3	1.3	1.4	1.5	1.3	36
38		2.1	1.7	1.3	1.2	1.2	1.2	1.4	1.2	38
40		1.8	1.4	1.1	1.0	1.0	1.1	1.1	1.1	40
42			1.2	0.9	0.8	0.8	0.9	1.0	1.0	42

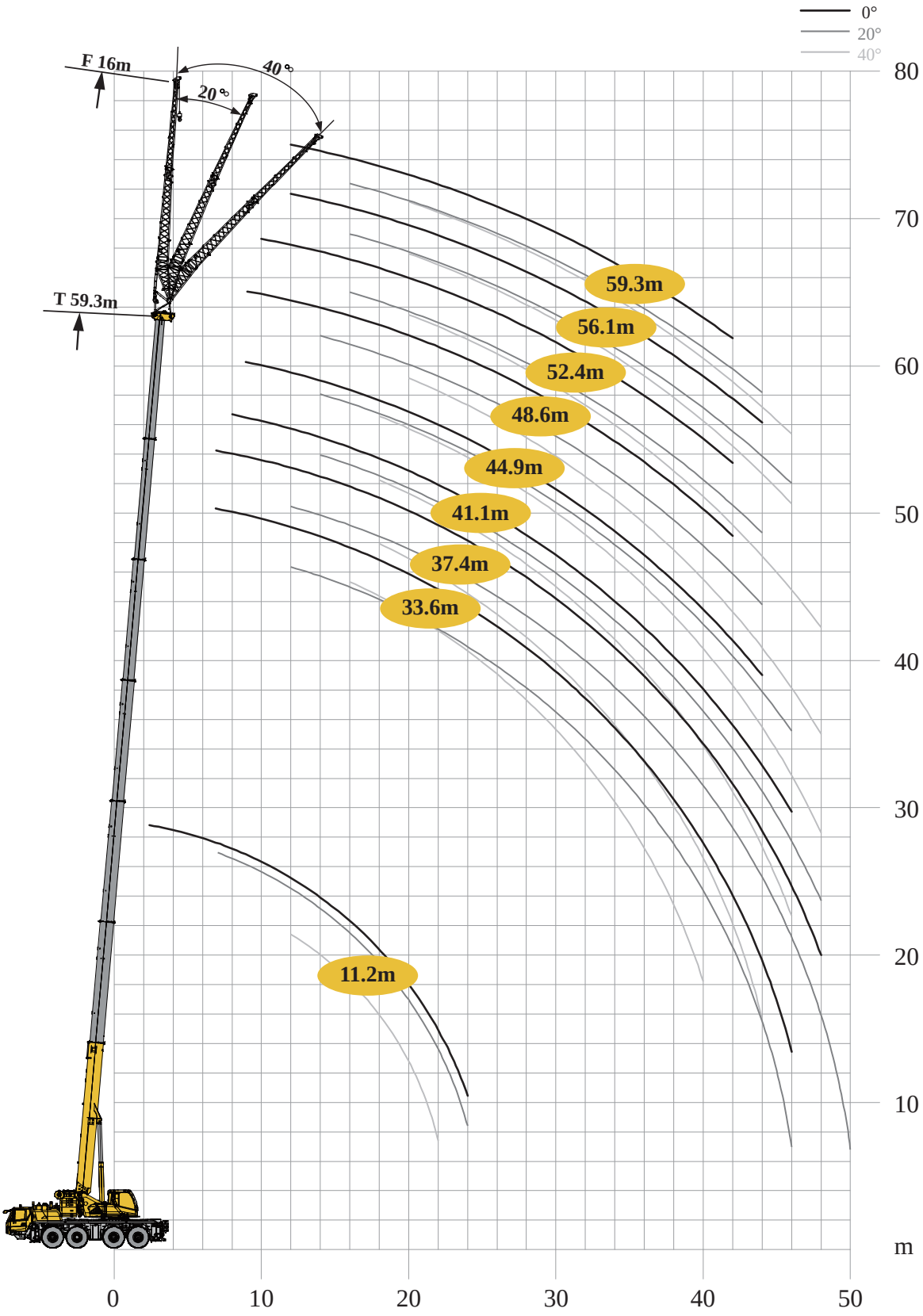
T 11.2~59.3M

	11.2	33.6	37.4	41.1	44.9	48.6	52.4	56.1	59.3	
5	7.7									5
6	7.2									6
7	6.5									7
8	5.9									8
9	5.5	7.0	6.6							9
10	5.6	6.7	6.5	6.3	5.8					10
12	5.1	6.4	6.3	6.1	5.7	5.3	4.5			12
14	4.5	5.9	6.0	5.8	5.5	5.1	4.5	3.6		14
16	3.9	5.5	5.6	5.6	5.4	5.0	4.5	3.6	2.9	16
18	3.8	5.4	5.5	5.0	4.8	4.4	4.2	3.5	2.9	18
20		5.3	5.2	4.4	4.1	3.9	3.7	3.4	2.9	20
22		4.9	4.7	3.8	3.6	3.5	3.4	3.2	2.9	22
24		4.6	4.1	3.5	3.2	3.0	3.0	2.8	2.8	24
26		4.4	3.7	3.0	2.8	2.6	2.6	2.6	2.4	26
28		4.1	3.3	2.6	2.4	2.3	2.2	2.3	2.3	28
30		4.0	3.0	2.2	2.0	2.1	2.1	2.1	2.0	30
32		3.4	2.6	2.1	1.9	1.8	1.7	1.8	1.8	32
34		2.9	2.3	1.7	1.6	1.6	1.6	1.6	1.7	34
36		2.5	2.0	1.6	1.5	1.4	1.5	1.5	1.3	36
38		2.1	1.9	1.2	1.1	1.2	1.2	1.4	1.2	38
40		1.8	1.5	1.1	1.0	1.1	1.1	1.2	1.1	40
42			1.2	0.9	0.8	0.9	1.0	1.1	1.0	42
44			0.9							44

LOAD CHARTS

T 11.2~59.3M

	11.2	33.6	37.4	41.1	44.9	48.6	52.4	56.1	59.3	
7	4.1									7
8	4.0									8
9	3.7									9
10	3.6									10
12	3.5	3.7	3.6	3.5						12
14	3.2	3.5	3.5	3.4	3.3	3.2	3.1			14
16	3.0	3.4	3.3	3.3	3.2	3.1	3.0	2.8	2.8	16
18		3.3	3.2	3.2	3.1	3.0	2.9	2.8	2.7	18
20		3.2	3.2	3.2	3.1	3.0	2.9	2.7	2.6	20
22		3.1	3.1	3.0	3.0	2.9	2.8	2.7	2.5	22
24		3.0	3.0	3.0	3.0	2.9	2.8	2.7	2.6	24
26		3.0	3.0	2.9	2.8	2.6	2.6	2.6	2.4	26
28		3.0	2.9	2.6	2.4	2.4	2.5	2.3	2.3	28
30		2.9	2.8	2.3	2.2	2.1	2.1	2.2	2.1	30
32		2.9	2.7	2.0	1.9	1.9	1.9	1.9	1.9	32
34		2.8	2.3	1.8	1.8	1.7	1.6	1.7	1.7	34
36			2.1	1.6	1.4	1.5	1.5	1.6	1.6	36
38				1.3	1.3	1.3	1.3	1.4	1.5	38
40				1.1	1.1	1.1	1.2	1.3	1.3	40
42						1.0	1.1	1.2	1.2	42


0°
20°
40°
F 16m
40°
20°
T 59.3m
59.3m
56.1m
52.4m
48.6m
44.9m
41.1m
37.4m
33.6m
11.2m
80
70
60
50
40
30
20
10
m
0
10
20
30
40
50

LOAD CHARTS

T 11.2~59.3M

	11.2	33.6	37.4	41.1	44.9	48.6	52.4	56.1	59.3	
2.5	6.6									2.5
3	6.2									3
3.5	5.9									3.5
4	5.7									4
4.5	5.5									4.5
5	5.4									5
6	4.9									6
7	4.6	5.2	5.0							7
8	4.3	5.1	4.8	4.6						8
9	4.0	4.9	4.6	4.5	4.2	3.9				9
10	3.8	4.8	4.5	4.4	4.1	3.9	3.3			10
12	3.5	4.4	4.3	4.2	3.9	3.7	3.3	2.7	2.2	12
14	3.2	4.1	4.0	4.0	3.8	3.5	3.3	2.7	2.2	14
16	2.8	3.8	3.8	3.8	3.7	3.4	3.2	2.7	2.2	16
18	2.6	3.7	3.6	3.6	3.5	3.3	3.1	2.6	2.1	18
20	2.4	3.4	3.4	3.3	3.4	3.2	3.0	2.6	2.1	20
22	2.3	3.2	3.2	3.2	3.3	3.1	2.9	2.6	2.1	22
24	2.2	3.1	3.1	3.1	3.1	2.9	2.8	2.5	2.1	24
26		2.9	3.0	2.8	2.6	2.4	2.4	2.4	2.1	26
28		2.8	2.9	2.5	2.2	2.2	2.1	2.1	2.1	28
30		2.7	2.8	2.2	2.0	1.8	1.9	1.9	1.9	30
32		2.6	2.5	1.9	1.7	1.7	1.6	1.8	1.6	32
34		2.5	2.3	1.7	1.5	1.6	1.5	1.5	1.4	34
36		2.3	1.9	1.4	1.4	1.2	1.3	1.4	1.2	36
38		2.2	1.8	1.2	1.2	1.1	1.1	1.3	1.1	38
40		2.1	1.7	1.1	1.0	0.9	1.0	1.1	1.0	40
42		1.8	1.4	1.0	0.9	0.7	0.8	1.0	0.8	42
44		1.6	1.3	0.8	0.7			0.8		44
46		1.3	1.0	0.6						46
48			0.8							48

T 11.2~59.3M

	11.2	33.6	37.4	41.1	44.9	48.6	52.4	56.1	59.3	
7	3.5									7
8	3.4									8
9	3.3									9
10	3.2									10
12	2.9	3.2	3.1							12
14	2.6	3.1	3.0	2.9	2.8	2.9				14
16	2.2	3.0	2.9	2.8	2.8	2.8	2.3	2.3	2.2	16
18	2.0	2.8	2.8	2.7	2.7	2.7	2.4	2.2	2.1	18
20	1.9	2.6	2.7	2.6	2.6	2.6	2.4	2.1	2.1	20
22	1.8	2.4	2.6	2.5	2.5	2.5	2.3	2.1	2.0	22
24	1.7	2.3	2.3	2.4	2.4	2.4	2.2	2.1	2.0	24
26		2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.0	26
28		2.1	2.1	2.1	2.2	2.1	2.1	2.1	1.9	28
30		2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8	30
32		1.8	1.9	1.9	1.9	1.8	1.7	1.7	1.6	32
34		1.7	1.8	1.8	1.7	1.7	1.5	1.6	1.5	34
36		1.7	1.8	1.5	1.4	1.3	1.4	1.5	1.4	36
38		1.7	1.7	1.3	1.2	1.1	1.2	1.2	1.2	38
40		1.6	1.6	1.2	1.0	1.0	1.1	1.1	1.1	40
42		1.6	1.5	1.1	0.9	0.9	1.0	1.0	1.0	42
44		1.6	1.4	0.9	0.7	0.6	0.8	0.8	0.9	44
46		1.4	1.2	0.7	0.5			0.7		46
48			0.9	0.5						48
50			0.7							50

LOAD CHARTS

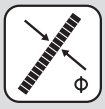
T 11.2~59.3M

	11.2	33.6	37.4	41.1	44.9	48.6	52.4	56.1	59.3	
12	1.7									12
14	1.6									14
16	1.5	1.6								16
18	1.4	1.5	1.5	1.6	1.6					18
20	1.2	1.5	1.4	1.5	1.5	1.4	1.4	1.2	1.2	20
22	1.2	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.2	22
24		1.4	1.4	1.5	1.4	1.4	1.3	1.3	1.2	24
26		1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.2	26
28		1.3	1.3	1.3	1.3	1.3	1.2	1.3	1.2	28
30		1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.1	30
32		1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	32
34		1.2	1.2	1.1	1.2	1.2	1.1	1.2	1.1	34
36		1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	36
38		1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	38
40		1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.1	40
42			1.2	1.1	1.1	1.1	1.0	1.1	1.1	42
44			1.2	1.0	0.8	1.0	0.8	0.9	0.9	44
46				0.7	0.7	0.8	0.7	0.8	0.8	46
48					0.5	0.7	0.6			48

Type	Item		Unit	Parameter
Dimensions	Dimensions (L×W×H)		mm	12735×2550×3890
	Axle spacing		mm	1650+2500+1650
	Track (front/rear)		mm	2076
	Front overhang/rear overhang		mm	3190/2075
	Front extension/rear extension		mm	1670/-
Weight	Maximum permissible weight		kg	48000
	Axle load	Axle 1	kg	12000
		Axle 2	kg	12000
		Axle 3	kg	12000
		Axle 4	kg	12000
Power	Engine model		——	OM471LA.E5-2
	Maximum net power / RPM		kW/(r/min)	360/1600
	Maximum output torque / RPM		N.m/(r/min)	2400/1300
Travel	Maximum travel speed		km/h	80
	Minimum stable travel speed		km/h	2
	Minimum turning diameter		m	15.5
	Minimum ground clearance		mm	380
	Approach angle		°	17
	Departure angle		°	15
	Braking distance (initial speed at 30 km/h)		m	10
	Maximum grade ability		%	60
	Fuel consumption per 100 km		L	60
Noise	Exterior noise level when accelerating		dB(A)	83

MAIN TECHNICAL PARAMETERS

Type	Item			Unit	Parameter
Main performance	Max. rated lifting capacity			t	80
	Min. rated working radius			m	2.0
	Turning radius at turntable tail	At counterweight		mm	3700
		At auxiliary winch		mm	4104
	Max. load moment	Base boom		kN.m	2075
		Fully-extended boom		kN.m	1057
		Fully-extended boom + jib		kN.m	589
	Outrigger span	Longitudinal		m	8.22
		Lateral		m	6.47
	Lifting height	Base boom		m	12
		Fully-extended boom		m	60.5
		Fully-extended boom + jib		m	75
	Boom length	Base boom		m	11.2
		Fully-extended boom		m	60
		Fully-extended boom + jib		m	75.3
	Jib offset angle			°	0, 20, 40
Working speed	Time for raising boom			s	45
	Time for fully extending boom			s	500
	Max. slewing speed			r/min	1.5
	Time for extending / retracting the outriggers	Outrigger beams	Retracting	s	30
			Extending	s	25
		Outrigger jacks	Retracting	s	40
			Extending	s	40
	Lifting speed (single line, no load)	Main winch		m/min	125
		Auxiliary winch		m/min	125
Noise	Exterior noise level			dB(A)	108
	Noise level at seated position			dB(A)	80

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

	Boom
	Boom length
	Boom 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

DESCRIPTION OF SYMBOLS

	Breaking load of rope
	Max. working speed
	Main winch
	Auxiliary winch
	Chassis
	Outrigger span
	Tire
	Axle load
	Grade ability
	Travel speed
	Luffing

	Max. lifting height
	Max. working radius
	Super lift
	Wind power jib
	Telescoping
	Slewing
	360° operation of the boom
	With the 5th jack down, 360° operation of the boom
	Side and rear slewing
	Boom over front or over rear
	Standard

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- 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

SAFE AND RELIABLE

G-SAFE LIFE CYCLE SAFE QUALITY

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

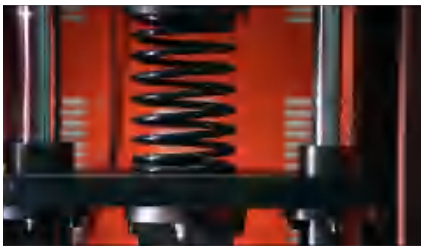
HMI display
Low-temperature performance test under -40℃

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