

XCA160_AU All Terrain Crane

Technical specifications



160 t



62 m



78 m



97 m

XCA160_AU

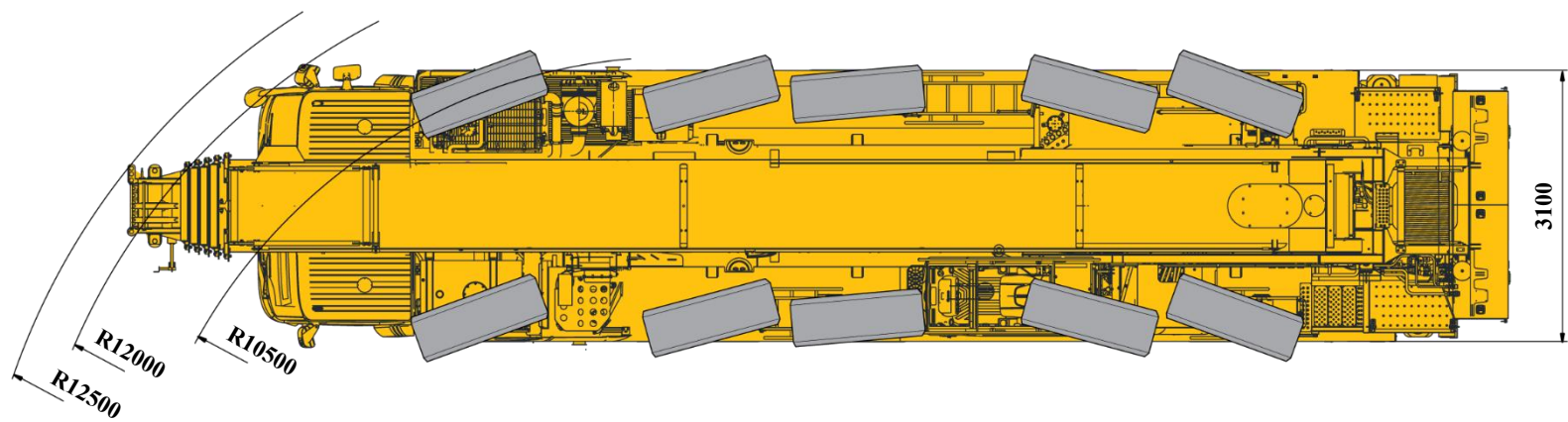
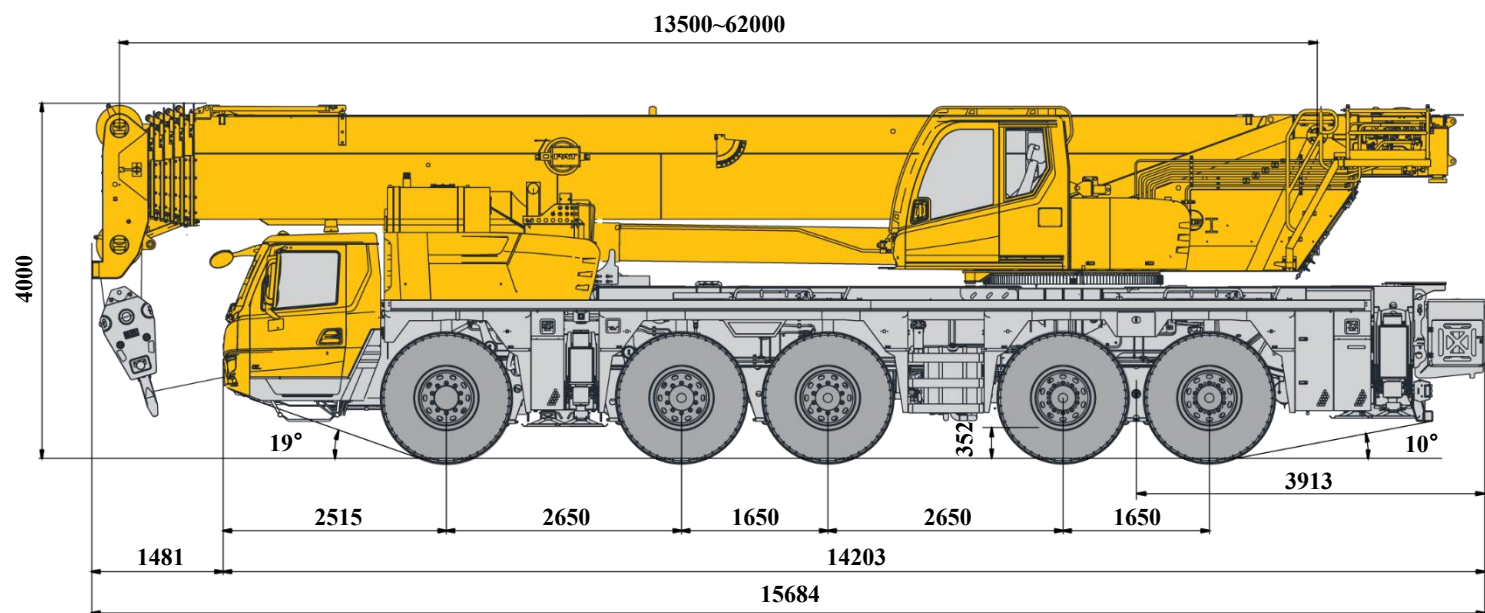
XCMG ALL TERRAIN CRANE

160t LIFTING CAPACITY

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Dimensions



R: All-wheel steering mode



4

Technical specifications



Chassis

Frame	Designed and manufactured by XCMG, anti-torsion box structure, made of high-strength steel.
Outrigger	Four outriggers arranged in H-shape are hydraulically controlled by control levers. Double-stage outrigger beam is adopted. There is an outrigger control station located at each side of the chassis, and there is a level gauge, an illuminator and two 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.
Engine	6 cylinders, diesel, Daimler AG OM471LA, Maximum net power/RPM: 390 kw/1600 rpm; Maximum output torque/RPM: 2600 N.m; Emission standard: EU Stage V/EPA Tier 4F. Fuel tank capacity: 485 L; AdBlue/DEF tank capacity: 40 L; engine displacement: 12.8 L.
Hydraulic system	The pump set, connected to the PTO port of the engine, controls the outriggers, steering system, suspension and independent hydraulic cooling system.
Transmission	ZF Germany automatic transmission with retarder brake; 12 forward gears and 2 reverse gears available.
Transfer case	Mechanical transfer gear with high/low speed, is equipped with emergency steering pump.
Safety devices	Backup camera, ABS, outrigger pressure detection and axle load detection are standard.
Axles	High-strength KESSLER axles with pneumatic disc brake. Axles 2, 3, 4 and 5 for driving, and all axles for steering. Drive/steer mode: 10×10×8
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.
Tires	10 tires and 1 spare tire, each axle is equipped with single tire, with large bearing capacity. Tire specifications: 525/80R25 (20.5R25).
Braking system	Service brake: dual-circuit air pressure brake, acting on all wheels. Parking brake: spring applied brake, acting on the wheels of axles 2-5. Auxiliary brake: engine retarder brake, transmission retarder brake; safe and reliable, with longer service life of brake lining.
Steering	All-axle steering, advanced technology of electro-hydraulic proportional steering control is suitable for various demands of operation modes and several steering modes can be realized.
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-function 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, two batteries in series.

Technical specifications



Superstructure

Structure	Designed and manufactured by XCMG, made of high strength steel.
Hydraulic system	Electric proportional variable pump is used for lifting, luffing and telescoping operations. A closed pump is used to drive slewing operation. The proportional solenoid directional control valve and air-cooled hydraulic oil cooler are also equipped. Volume of hydraulic oil tank: 874 L.
Control mechanism	The pilot electric proportional control system is equipped with two levers at left and right sides controlling the main movements of the crane, and stepless speed regulation is available.
Main winch system	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 counterbalance valve and a grooved drum equipped.
Slewing system	A single-row, four-point contact-ball external slewing bearing; the system is driven by a hydraulic motor through a planetary gear reducer with constant-closed brake equipped, and can continuously slew 360°. Power control and free slewing function as well as stepless speed regulation are available.
Luffing system	Single luffing cylinder and the luffing counterbalance valve with the load compensation function. Counterbalance valve-controlled boom gravity combined with power for lowering boom is used for boom luffing down.
Operator's cab	Steel enclosed operator's cab tiltable up to 20°. Spacious interiors, expansive visibility, and abundant storage space. The cab features safety glass with no blind spots, an openable front window, and a 20 mm thickened, transparent roof window. Push-pull sliding door with remote controlled locks, protective grilles, remote control electric pull-out side pedal (with 3 control modes). Dual-motor wipers are fitted for the front and roof windows. 2.5 L kettle is also available. Stylish interior design. Sun screens for front, 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 belt. Dual LED interior light. HMI control panel, 10.1-inch display, armrest, engine accelerator pedal, electric proportional slewing brake pedal, and engine ignition switch. Heating & air conditioning are available.
Safety devices	Hydraulic counterbalance valve, hydraulic relief valve, double-way hydraulic lock, LMI, lowering limiter, anti-two block, anemometer, winch monitoring device.
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	55 t in total; 5 counterweight combinations: 55 t, 35 t, 25 t, 15 t and 0 t.
Hook block	75 t, 35 t and 11 t hook blocks are standard.
Boom	6-section boom with U-shaped cross-section, welded structure with single-plate boom head and compact boom tail. Single-cylinder pinning telescoping system. Boom length: 13.5 m ~ 62 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 could not exceed 10.3 t.

The product components are listed above. For specifics, see the product quotation sheet.

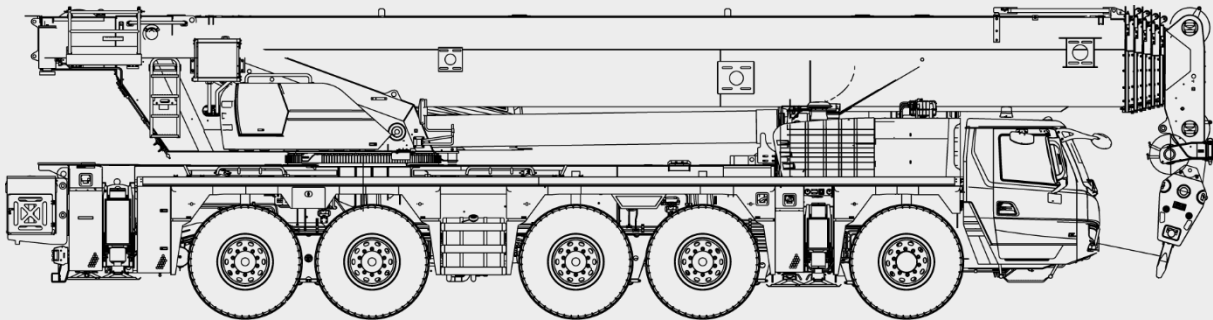
Optional equipment

 Optional equipment	Component description
Auxiliary winch system	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 counterbalance valve and a grooved drum equipped.
Fixed jib	The jib consists of a connecting bracket and two lattice sections. Three offset angles of 0°, 15° and 30° are available. It is stowed along the side of the boom. Jib length: 10.5 m and 17.5 m
Boom extension	Lattice welding structure, attached to boom head. Length of boom extension: 3×7.5 m.
Independent jib head	Lattice welding structure, attached to boom head. Length of independent jib head: 2.9 m.
Hook block	130 t hook block.
Hydraulic luffing	Three working angles of 0°, 15° and 30°.
Boom head camera	Monitor the area below the boom.
Operator's cab monitoring system	Monitor the interior area of the operator's cab.

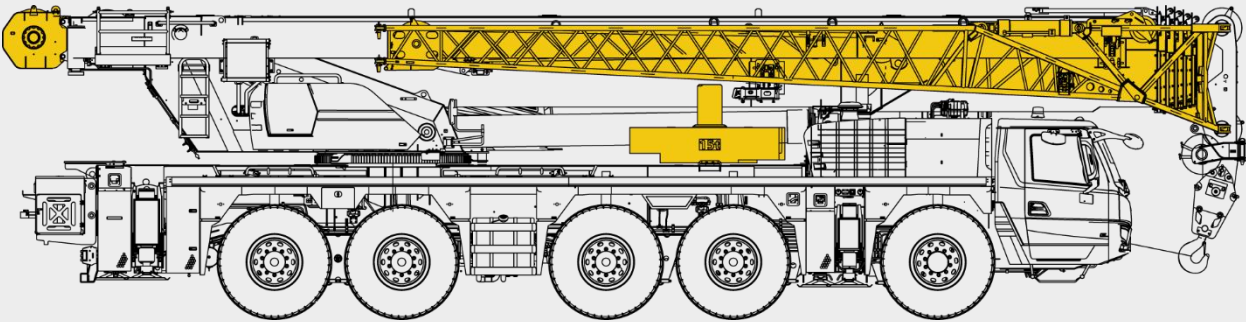
Weight

	1	2	3	4	5	Total weight
t	12	12	12	12	12	60 ⁽¹⁾
t	16.5	16.5	16.5	14	14	77.5 ⁽²⁾
t	14.5	14.5	14.5	22	22	87.5 ⁽³⁾

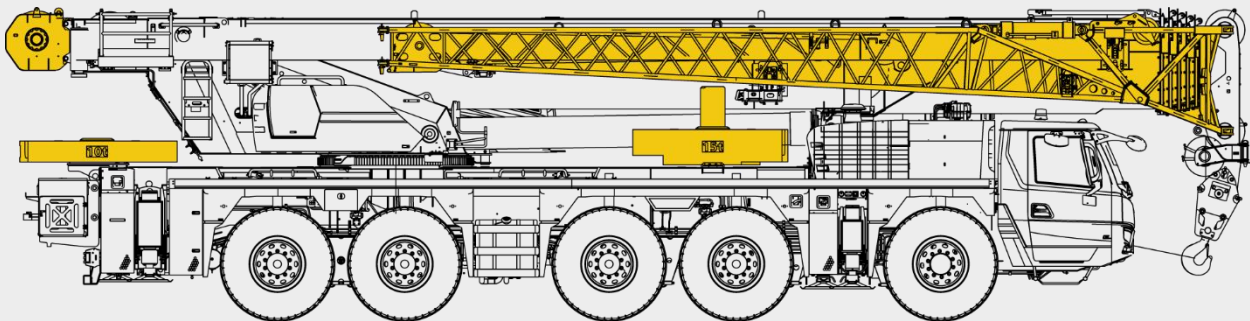
(1) Road travel configuration
 Superstructure: 75 t hook block, auxiliary sheave and jib bracket are carried; auxiliary winch, jib and counterweight are not carried.
 Chassis: toolbox on the tail (400 kg) and counterweight bracket are carried; spare tire is not carried.
 Maximum travel speed: 80 km/h; overall dimensions: 15684×3100×4000 mm.



(2) Heavy load jobsite transfer configuration
 Superstructure: With the parts carried on board in road travel configuration, auxiliary winch, jib and 15 t counterweight (placed in the front section of the frame) are also carried.
 Chassis: The same as the road travel configuration.
 Maximum travel speed: 30 km/h; overall dimensions: 16123×3100×4000 mm.



(3) Heavy load jobsite transfer configuration
 Superstructure: With the parts carried on board in road travel configuration, auxiliary winch, jib and 25 t counterweight (15 t placed in the front section of the frame, and 10 t placed in the rear) are also carried.
 Chassis: The same as the road travel configuration.
 Maximum travel speed: 15 km/h; overall dimensions: 16123×3100×4000 mm.



Weight

	Parts of line	Hook block weight (kg)	Dimensions (mm)	Remark
130 t	12	1085	640×640×1749	Dual hook
75 t	7	864	457×590×1500	Dual hook
35 t	3	417	329×554×1439	Single hook
11 t	1	370	475×475×811	Single hook

Working speed



525/80R25
(20.5R25)

80 km/h

60%



0-135 m/min, single line, no load

10.3 t

22 mm

320 m



0-100 m/min, single line, no load

10.3 t

22 mm

210 m



0-1.5 r/min

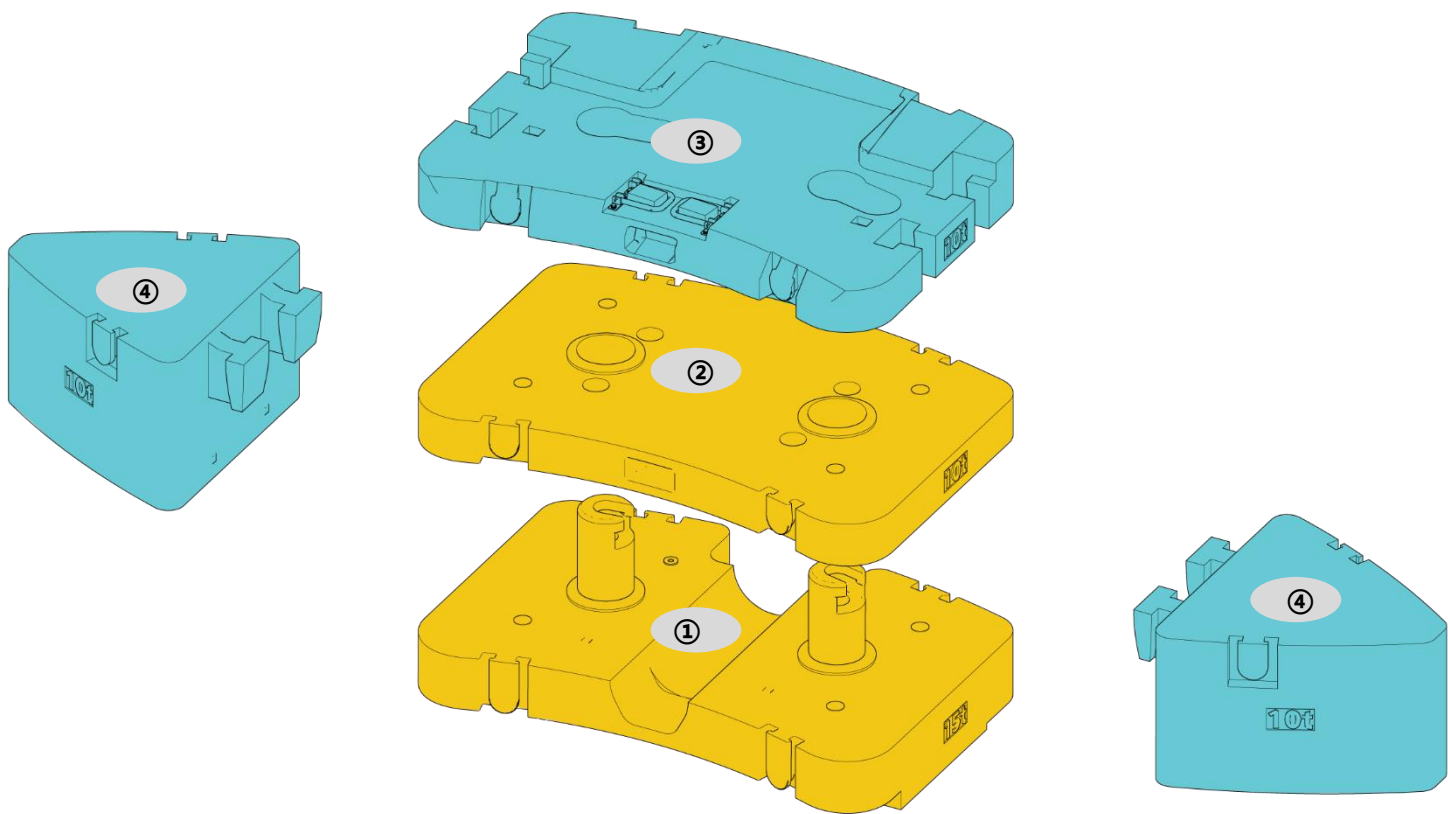


Approx. 65 s for boom luffing up from 0° to 81°



Approx. 420 s for boom extending from 13.5 m to 62 m

Counterweight

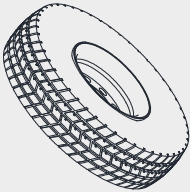
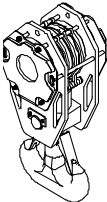
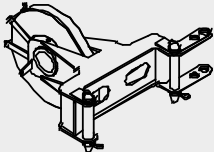
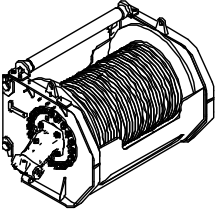
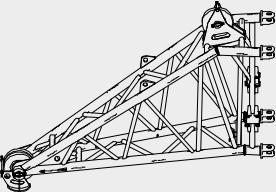


	①	②	③	④
Dimensions (L×W×H) (mm)	2995×2041×1016	2995×2041×307	2995×2041×387	1710×1614×966
Weight (t)	15	10	10	10

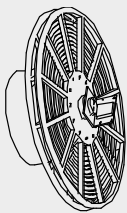
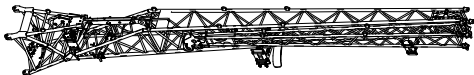
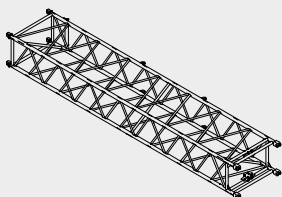
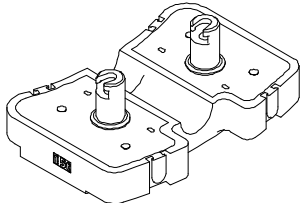
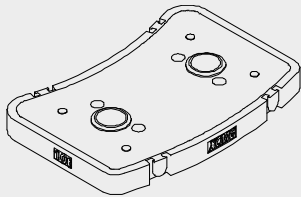
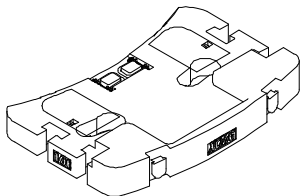
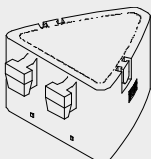
Operation modes	55 t	35 t	25 t	15 t	0 t
Combinations	①+②+③+2×④	①+②+③	①+②	①	—

Note: Counterweight ① and ② can be carried during heavy load jobsite transfer and counterweight ③ and ④ cannot be carried during heavy load jobsite transfer.

Dimensions of parts to be transported

Name	Illustration	Single weight (kg)	Qty	Dimensions (mm)
Spare tire		378	1	1500×1500×550
130 t hook block		1085	1	640×640×1749
35 t hook block		417	1	329×554×1439
11 t hook block		370	1	475×475×811
Auxiliary sheave		83	1	576×865×520
Auxiliary winch system (With wire ropes)		1467	1	1335×836×800
Independent jib head		475	1	2900×1310×800

Dimensions of parts to be transported

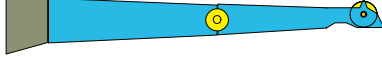
Name	Illustration	Single weight (kg)	Qty	Dimensions (mm)
Hydraulic luffing drum		280	1	1300×1300×600
Fixed jib		1505	1	11081×1310×850
Boom extension		590	3	7500×1310×800
Counterweight slab ①		15000	1	2995×2041×1016
Counterweight slab ②		10000	1	2995×2041×307
Counterweight slab ③		10000	1	2995×2041×387
Counterweight slab ④		10000	2	1710×1614×966

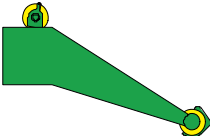
Boom / Jib combinations

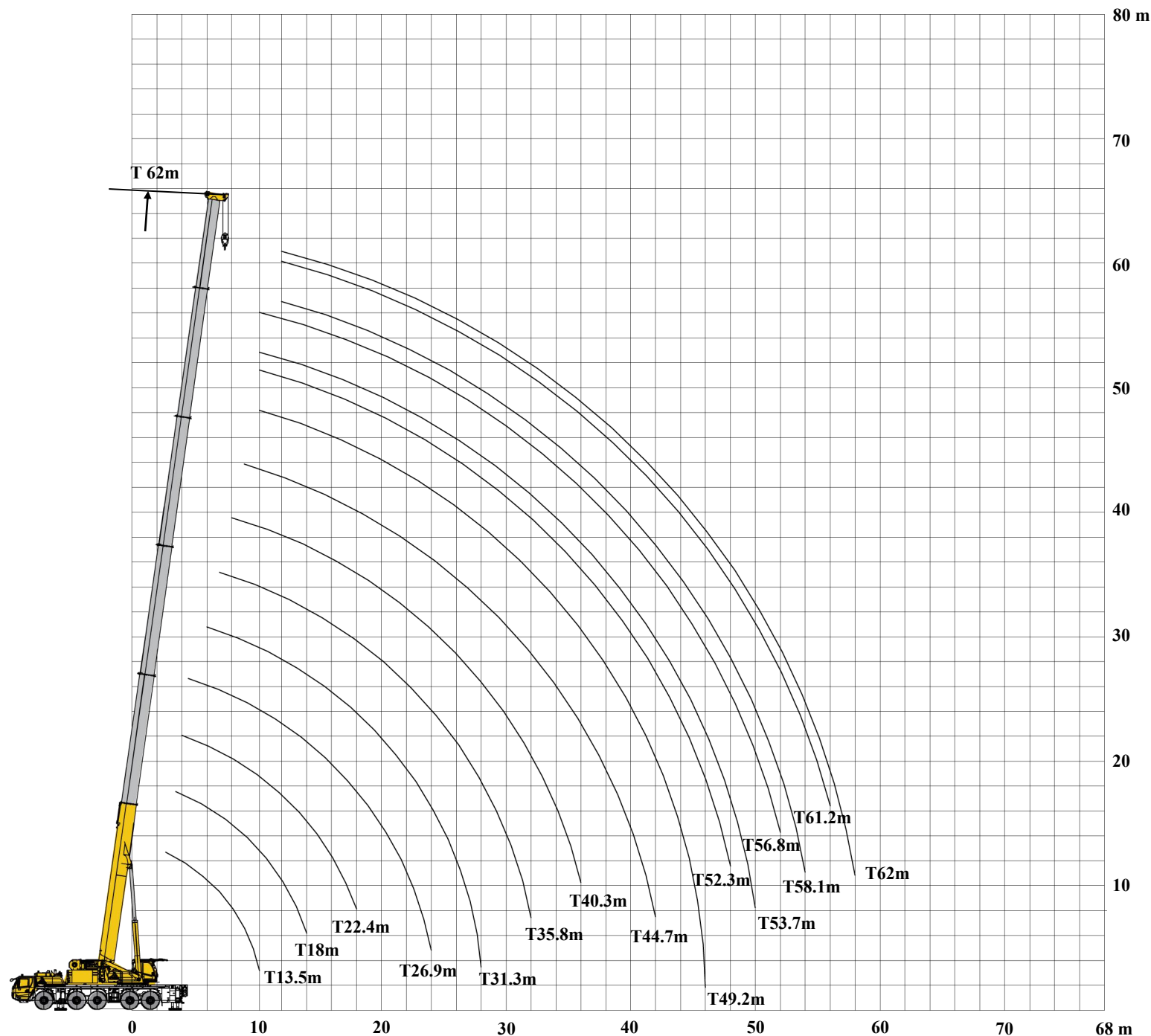


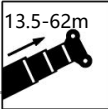
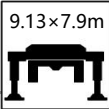
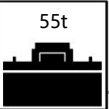
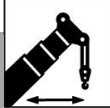
Boom	Fixed jib	Boom extension	Independent jib head
T:13.5-62 m	T:13.5-62 m J: 10.5 - 17.5 m	T:13.5-62 m J: 10.5 - 17.5 m	T:13.5-62 m I: 2.9 m

Boom / Jib combinations

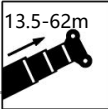
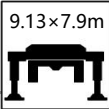
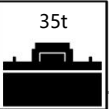
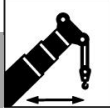
Fixed jib	
Jib – 10.5 m	
Jib – 17.5 m	
Boom extension + jib – 25 m	
Boom extension + jib – 32.5 m	
Boom extension + jib – 40 m	

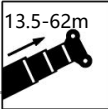
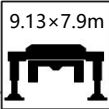
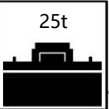
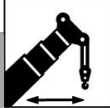
Components	Structure	Length (m)
Connecting bracket + 1st jib section		10.5
2nd jib section		7
Boom extension		7.5
Independent jib head		2.9

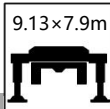
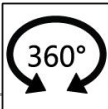
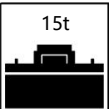


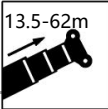
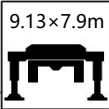
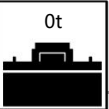
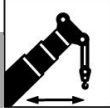
																
	13.5	18	22.4	26.9	31.3	35.8	40.3	44.7	49.2	52.3	53.7	56.8	58.1	61.2	62	
2.5	160*															2.5
3	96															3
3.5	96	96														3.5
4	96	96	96													4
4.5	92	95	96	96												4.5
5	87	88	86	88												5
6	84.2	83	82	83	81											6
7	75	73.5	74	74	73	61.6										7
8	64.6	65.5	65	66.5	65.6	58.9	49.8									8
9	57	58	58	58	58	56.1	46.9	35.7								9
10	50.2	52.3	52.3	52.3	51.4	52.3	44.1	33.9	31.2	22.2	26.7	19.8				10
12		41.8	42.8	43.7	42.8	42.8	37.7	30.9	27.6	19.6	23.9	18.9	18.8	15.9	15.5	12
14		35.2	36.1	37.1	36.1	36.1	33.5	28.4	24.6	17.5	21.2	18	17.4	15.8	15.2	14
16			31.4	31.4	31.4	30.4	29.6	25.5	22	15.5	19	16.1	16.7	15.1	13.9	16
18			27.6	27.6	27.6	26.6	26.6	23	19.7	13.9	17.1	14.4	15	13.7	13.6	18
20				24.7	23.8	23.8	22.8	20.6	17.9	12.7	15.3	13	13.5	12.2	12.4	20
22				21.9	21.9	20.9	20.9	19	16.3	11.7	13.9	11.8	12.3	11.2	11.3	22
24				14.1	19	18.9	19	17.6	14.9	10.7	12.8	10.9	11.4	10.3	10.4	24
26					17.1	17.3	16.9	16.1	13.7	9.9	11.8	10.2	10.4	9.3	9.4	26
28					14.3	15.6	15.1	14.9	12.8	9.1	10.8	9.3	9.5	8.5	8.6	28
30						14.3	14	13.6	11.8	8.5	10	8.7	8.9	7.9	8	30
32						12.9	12.7	12.2	11	7.9	9.4	8.1	8.2	7.5	7.5	32
34							11.5	11.1	10.3	7.3	8.7	7.6	7.7	6.9	6.9	34
36							10.7	10.1	9.5	6.9	8.2	7	7.2	6.4	6.4	36
38								9.2	8.8	6.4	7.7	6.6	6.7	5.9	6	38
40								8.4	8.2	6.2	7.1	6.2	6.2	5.6	5.5	40
42								2.6	7.7	5.8	6.6	5.8	5.9	5.2	5.3	42
44									7	5.4	6.4	5.5	5.5	4.9	4.9	44
46									5.6	5.2	5.9	5.2	5.2	4.6	4.6	46
48										4.8	5.6	4.9	4.9	4.3	4.3	48
50											5.2	4.6	4.6	4.1	4	50
52												4.4	4.4	3.8	3.8	52
54													4.1	3.6	3.6	54
56														3.4	3.3	56
58															3.2	58

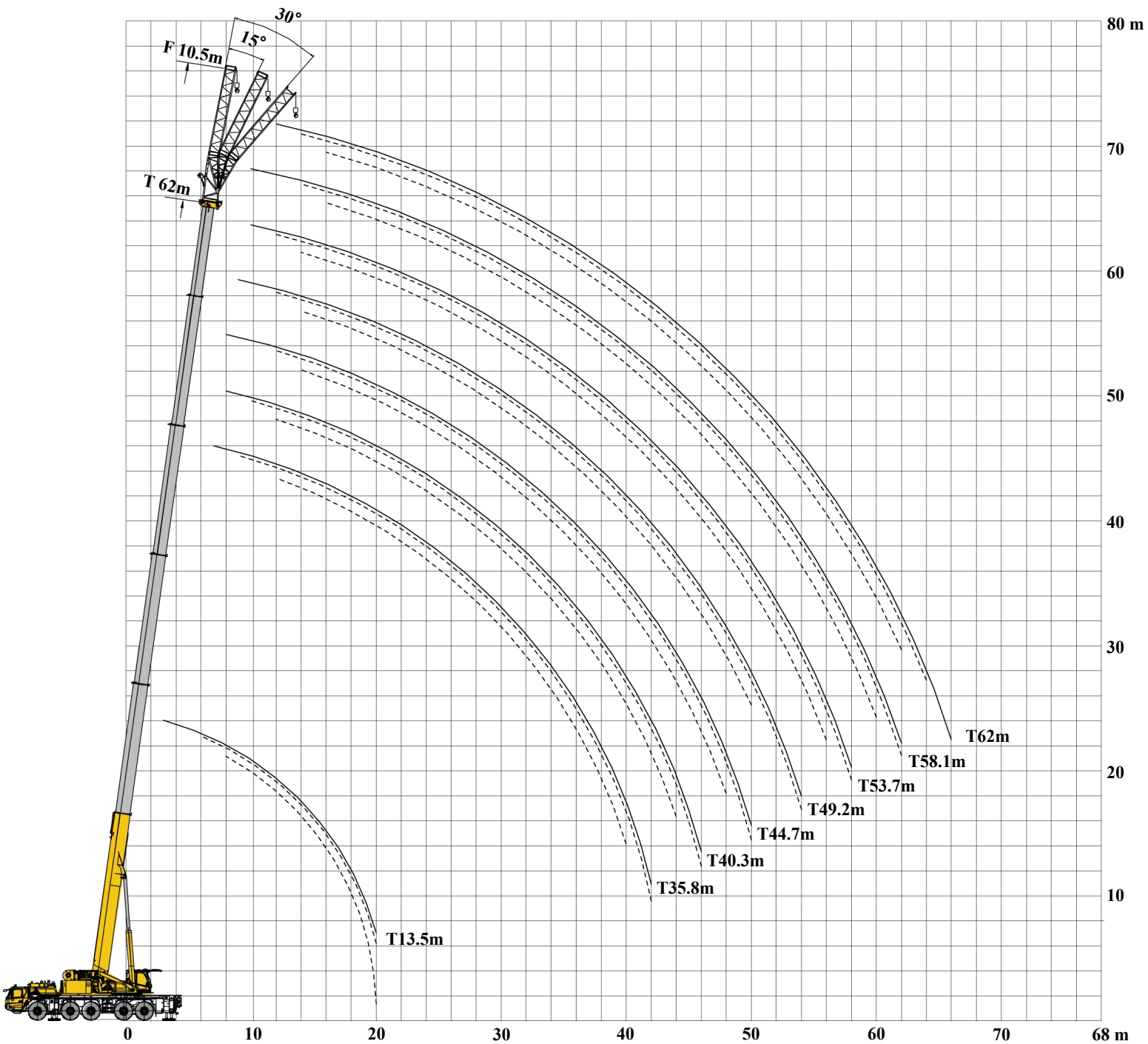
Note: * Capacity class

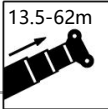
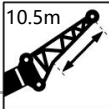
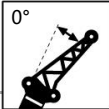
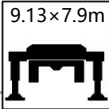
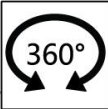
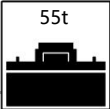
																
	13.5	18	22.4	26.9	31.3	35.8	40.3	44.7	49.2	52.3	53.7	56.8	58.1	61.2	62	
3	88.3															3
3.5	88.3	88.3														3.5
4	88.3	88.3	88.3													4
4.5	84.6	87.4	88.2	86.4												4.5
5	80.0	81.0	79.1	81.0												5
6	73.8	73.8	72.9	71.1	70.2											6
7	62.1	63.9	63.9	63.9	62.1	56.7										7
8	54.0	54.9	55.8	54.9	54.9	54.1	45.8									8
9	46.8	48.6	48.6	48.6	49.2	48.6	43.2	32.8								9
10	41.4	43.2	43.2	44.1	44.1	43.2	40.6	31.2	28.7	20.5	24.5	18.2				10
12		35.1	36.0	36.0	36.0	35.1	34.7	28.4	25.4	18.0	22.0	17.4	17.3	14.3	13.9	12
14		29.1	29.9	30.1	29.7	29.2	28.7	26.1	22.6	16.1	19.5	16.5	16.0	14.1	13.5	14
16			24.4	24.6	24.3	23.7	24.1	23.4	20.3	14.3	17.4	14.8	15.4	13.5	12.4	16
18			20.4	20.5	20.3	20.6	20.4	20.1	18.2	12.8	15.7	13.3	13.8	12.2	12.1	18
20				17.4	17.7	17.7	17.4	17.0	16.4	11.7	14.0	12.0	12.5	10.9	11.0	20
22				15.2	15.5	15.3	15.3	14.5	14.1	10.7	12.8	10.9	11.4	9.9	10.0	22
24				13.0	13.5	13.5	13.3	12.9	12.6	9.8	11.8	10.0	10.5	9.0	9.2	24
26					11.9	11.9	11.7	11.4	11.0	9.1	10.7	9.4	9.6	8.2	8.2	26
28					10.6	10.6	10.5	10.1	9.7	8.4	9.5	8.5	8.7	7.5	7.5	28
30						9.6	9.4	9.3	8.7	7.8	8.8	8.0	8.1	6.9	6.9	30
32						8.7	8.6	8.4	8.2	7.3	7.8	7.5	7.5	6.5	6.5	32
34							7.8	7.5	7.3	6.7	7.0	7.0	6.6	5.9	5.9	34
36							7.0	6.8	6.6	6.4	6.2	6.3	5.9	5.5	5.5	36
38								6.1	5.9	5.9	5.6	5.6	5.2	4.9	4.9	38
40								5.5	5.3	5.4	5.0	5.1	4.3	4.4	4.3	40
42								2.4	4.8	4.9	4.5	4.5	3.7	3.8	3.8	42
44									4.4	4.4	4.0	4.1	3.3	3.4	3.3	44
46									3.9	4.0	3.6	3.6	2.9	2.9	2.9	46
48										3.6	3.2	3.3	2.5	2.6	2.5	48
50											2.8	2.9	2.1	2.2	2.2	50
52												2.6	1.8	1.9	1.8	52

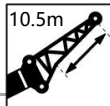
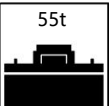
																
	13.5	18	22.4	26.9	31.3	35.8	40.3	44.7	49.2	52.3	53.7	56.8	58.1	61.2	62	
3	88.3															3
3.5	88.3	88.3														3.5
4	88.3	88.3	88.3													4
4.5	84.6	87.4	86.4	84.6												4.5
5	80.0	81.0	79.1	79.2												5
6	68.4	70.2	70.2	69.3	68.4											6
7	58.5	59.4	59.4	59.4	59.4	56.7										7
8	50.4	51.3	51.3	51.3	51.9	51.3	45.8									8
9	44.1	45.0	45.0	45.9	45.9	45.9	43.2	32.8								9
10	37.7	39.4	40.8	40.9	40.5	40.0	39.4	31.2	28.7	20.5	24.5	18.2				10
12		29.5	30.3	30.4	30.1	29.5	29.1	28.4	25.4	18.0	22.0	17.4	17.3	14.3	13.9	12
14		22.8	23.6	23.7	23.4	24.0	23.8	23.3	22.6	16.1	19.5	16.5	16.0	14.1	13.5	14
16			18.9	19.3	19.7	19.7	19.4	18.8	18.7	14.3	17.4	14.8	15.4	13.5	12.4	16
18			15.5	16.3	16.3	16.3	16.0	15.8	15.4	12.8	15.0	13.3	13.8	12.2	12.1	18
20				13.7	13.7	13.7	13.7	13.7	13.0	11.7	13.1	12.0	12.5	10.9	11.0	20
22				11.8	11.8	12.0	12.0	11.7	11.5	10.7	11.1	10.9	10.8	9.9	10.0	22
24				10.2	10.4	10.4	10.4	10.1	9.9	9.8	9.5	9.6	9.2	8.9	8.9	24
26					9.1	9.1	9.1	8.8	8.6	8.7	8.3	8.3	7.9	7.6	7.6	26
28					8.1	8.0	8.0	7.8	7.6	7.6	7.2	7.3	6.9	6.6	6.5	28
30						7.1	7.1	6.8	6.6	6.7	6.3	6.4	6.0	5.7	5.6	30
32						6.3	6.3	6.1	5.9	5.9	5.5	5.6	5.2	4.9	4.8	32
34							5.6	5.4	5.2	5.2	4.8	4.9	4.5	4.2	4.2	34
36							5.0	4.8	4.6	4.6	4.2	4.3	3.9	3.6	3.6	36
38								4.3	4.1	4.1	3.7	3.8	3.4	3.1	3.1	38
40								3.8	3.6	3.7	3.3	3.3	2.6	2.6	2.6	40
42								2.4	3.2	3.2	2.8	2.9	2.1	2.2	2.2	42
44									2.8	2.9	2.5	2.5	1.8	1.9	1.8	44
46									2.5	2.5	2.1	2.2				46
48										2.2						48

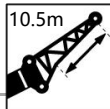
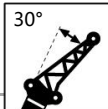
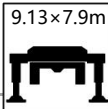
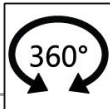
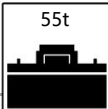
																
	13.5	18	22.4	26.9	31.3	35.8	40.3	44.7	49.2	52.3	53.7	56.8	58.1	61.2	62	
3	88.3															3
3.5	88.3	88.3														3.5
4	88.3	88.3	88.3													4
4.5	84.6	85.5	84.6	82.8												4.5
5	77.4	79.2	78.3	77.4												5
6	63.9	64.8	65.7	64.8	64.8											6
7	54.0	54.9	55.8	54.9	55.4	55.8										7
8	45.9	47.7	47.7	48.6	48.6	47.7	45.8									8
9	37.1	39.1	40.4	40.6	40.2	39.5	39.0	31.8								9
10	30.4	32.7	33.6	33.8	33.5	32.8	32.3	30.2	27.7	19.5	23.5	17.2				10
12		23.3	24.2	24.3	24.7	25.1	24.8	22.9	22.9	17.0	21.0	16.4	16.8	14.2	13.8	12
14		17.6	18.6	19.3	19.3	19.3	19.2	17.7	17.3	15.1	17.1	15.5	15.5	14.0	13.4	14
16			14.9	15.4	15.4	15.6	15.6	14.3	14.1	13.3	13.7	13.8	13.8	13.4	12.3	16
18			12.2	12.6	12.9	12.9	12.8	11.6	11.3	11.4	10.9	11.0	11.1	11.2	11.1	18
20				10.5	10.8	10.8	10.7	9.5	9.3	9.3	8.9	8.9	9.0	9.1	9.1	20
22				8.9	9.2	9.1	9.1	7.9	7.6	7.7	7.3	7.3	7.4	7.5	7.5	22
24				7.6	7.9	7.8	7.8	6.6	6.4	6.4	6.0	6.1	6.2	6.2	6.2	24
26					6.8	6.8	6.7	5.5	5.3	5.4	4.9	5.0	5.1	5.2	5.1	26
28					5.9	5.9	5.8	4.6	4.4	4.5	4.0	4.1	4.2	4.3	4.3	28
30						5.1	5.1	3.9	3.7	3.7	3.3	3.4	3.5	3.6	3.5	30
32						4.5	4.4	3.4	3.2	3.1	2.7	2.9	2.9	2.9	2.9	32
34							3.9	3.2	3.0	3.0	2.6	2.7	2.3	2.4	2.3	34
36							3.4	2.7	2.5	2.5	2.1	2.2				36
38								2.2	2.1	2.1						38
40								1.9								40

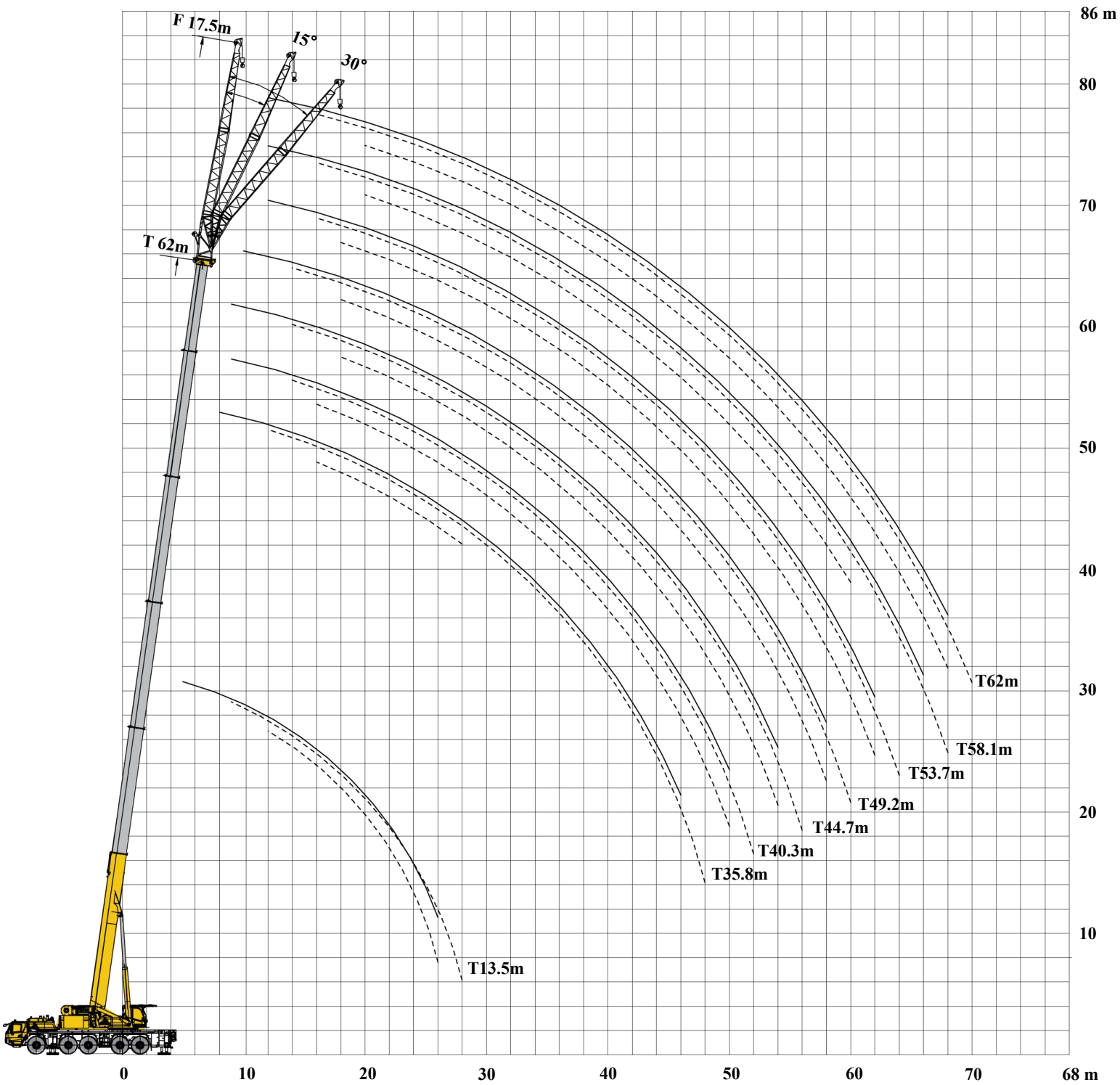
																
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3	76.8															3
3.5	76.3	74.9														3.5
4	70.7	69.3	67.9													4
4.5	65.1	64.4	63.0	61.6												4.5
5	60.2	59.5	58.1	56.7												5
6	49.0	48.3	47.6	46.9	46.2											6
7	40.6	40.6	40.6	39.9	39.2	37.8										7
8	29.6	32.4	33.6	33.8	33.4	32.5	25.8									8
9	22.4	25.0	26.0	26.2	26.6	26.7	20.0	20.3								9
10	17.6	20.0	20.9	21.9	21.9	21.9	16.2	16.4	16.2	16.3	15.8	15.2				10
12		13.7	15.0	15.5	15.8	15.8	11.4	11.6	11.4	11.4	11.0	10.5	10.1	10.2	10.1	12
14		9.9	11.1	11.6	11.9	11.8	8.5	8.6	8.5	8.5	8.1	7.6	7.2	7.3	7.3	14
16			8.5	9.0	9.3	9.2	6.5	6.7	6.5	6.6	6.2	5.7	5.3	5.4	5.4	16
18			6.7	7.1	7.4	7.3	5.1	5.3	5.1	5.2	4.8	4.3	4.0	4.0	4.0	18
20				5.7	6.0	5.9	4.1	4.2	4.1	4.1	3.8	3.2	2.9	3.0	3.0	20
22				4.6	4.9	4.8	3.3	3.4	3.3	3.3	3.0	2.4	2.1	2.2	2.0	22
24				3.8	4.0	4.0	2.6	2.8	2.6	2.7	2.3					24
26					3.3	3.3	2.1	2.2	2.1	2.1						26
28					2.7	2.7										28
30						2.2										30

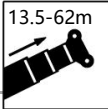
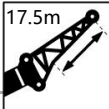
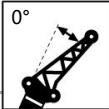
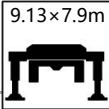
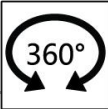
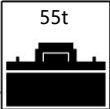


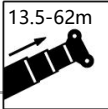
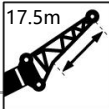
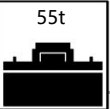
	 13.5-62m	 10.5m	 0°	 9.13x7.9m	 360°	 55t	 EN										
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62									
	10.5																
	0°																
3	13.6																3
3.5	13.2																3.5
4	12.8																4
4.5	12																4.5
5	11.3																5
6	10.6																6
7	9.7	12.1															7
8	9.3	11.6	11.2	10.8													8
9	8.6	11.2	10.9	10.5	9.8												9
10	8	10.8	10.6	10.2	9.6	8.8	8.2										10
12	7.2	9.9	10	9.6	9.1	8.5	7.9	7.3									12
14	6.5	9.2	9.3	9.1	8.7	8.2	7.7	7.1									14
16	5.9	8.6	8.7	8.5	8.3	7.9	7.4	6.9									16
18	5.3	8	8.2	8.1	7.9	7.6	7.2	6.8									18
20	4.9	7.5	7.7	7.6	7.5	7.2	7	6.6									20
22		7	7.3	7.3	7.2	6.9	6.8	6.5									22
24		6.6	6.8	6.9	6.8	6.8	6.4	6.2									24
26		6.3	6.4	6.5	6.6	6.4	6.2	6									26
28		6	6.2	6.2	6.3	6.3	6.1	5.9									28
30		5.8	5.9	5.9	6	6	5.8	5.7									30
32		5.5	5.6	5.7	5.7	5.7	5.7	5.5									32
34		5.3	5.4	5.6	5.6	5.5	5.6	5.4									34
36		5.1	5.3	5.4	5.4	5.4	5.3	5.1									36
38		4.8	5.1	5.2	5.2	5.3	5.1	4.7									38
40		4.6	4.9	5	5.1	5.1	4.9	4.3									40
42		4.4	4.7	4.9	5	4.9	4.5	4									42
44			4.5	4.8	4.9	4.8	4.2	3.7									44
46			4.4	4.5	4.7	4.5	3.9	3.4									46
48				4.4	4.6	4.2	3.6	3.2									48
50				4.3	4.5	3.9	3.4	2.9									50
52					4.3	3.6	3.1	2.7									52
54					4.1	3.5	3	2.5									54
56						3.2	2.7	2.4									56
58						3	2.6	2.1									58
60							2.4	2									60
62							2.2	1.9									62
64								1.7									64
66								1.6									66

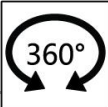
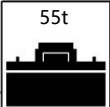
	 13.5-62m	 10.5m	 15°	 9.13×7.9m	 360°	 55t	 EN									
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62								
	10.5															
	15°															
6	7.8															6
7	7.3															7
8	6.9															8
9	6.5	8														9
10	6.2	7.6	7.5													10
12	5.6	7.1	7.1	7.1	6.9	6.8										12
14	5.2	6.7	6.7	6.7	6.6	6.5	6.2	6.1								14
16	4.7	6.3	6.4	6.3	6.3	6.2	6	6								16
18	4.5	5.9	6.1	6	6	5.9	5.8	5.8								18
20	4.2	5.6	5.7	5.8	5.8	5.7	5.6	5.6								20
22		5.3	5.4	5.6	5.5	5.5	5.4	5.4								22
24		5.1	5.2	5.3	5.3	5.3	5.3	5.2								24
26		4.9	5	5.1	5.2	5.2	5.1	5.1								26
28		4.7	4.8	4.9	4.9	5	5	5								28
30		4.5	4.7	4.8	4.8	4.9	4.8	4.8								30
32		4.4	4.5	4.6	4.7	4.7	4.7	4.7								32
34		4.3	4.4	4.5	4.6	4.6	4.6	4.6								34
36		4.1	4.2	4.4	4.4	4.4	4.5	2.3								36
38		4	4.1	4.2	4.3	4.3	4.3	3.5								38
40		3.9	4	4.1	4.2	4.2	4.2	4.2								40
42		3.9	3.9	4	4.1	4.1	4.1	4								42
44			3.9	3.9	4	4	4.1	3.7								44
46			3.9	3.9	3.9	4	3.8	3.5								46
48				3.8	3.8	3.9	3.6	3.2								48
50				3.8	3.8	3.9	3.3	3								50
52					3.7	3.7	3.2	2.7								52
54					3.8	3.4	2.9	2.6								54
56						3.3	2.7	2.3								56
58						3	2.5	2.2								58
60							2.4	2.1								60
62							2.2	1.8								62
64								1.7								64

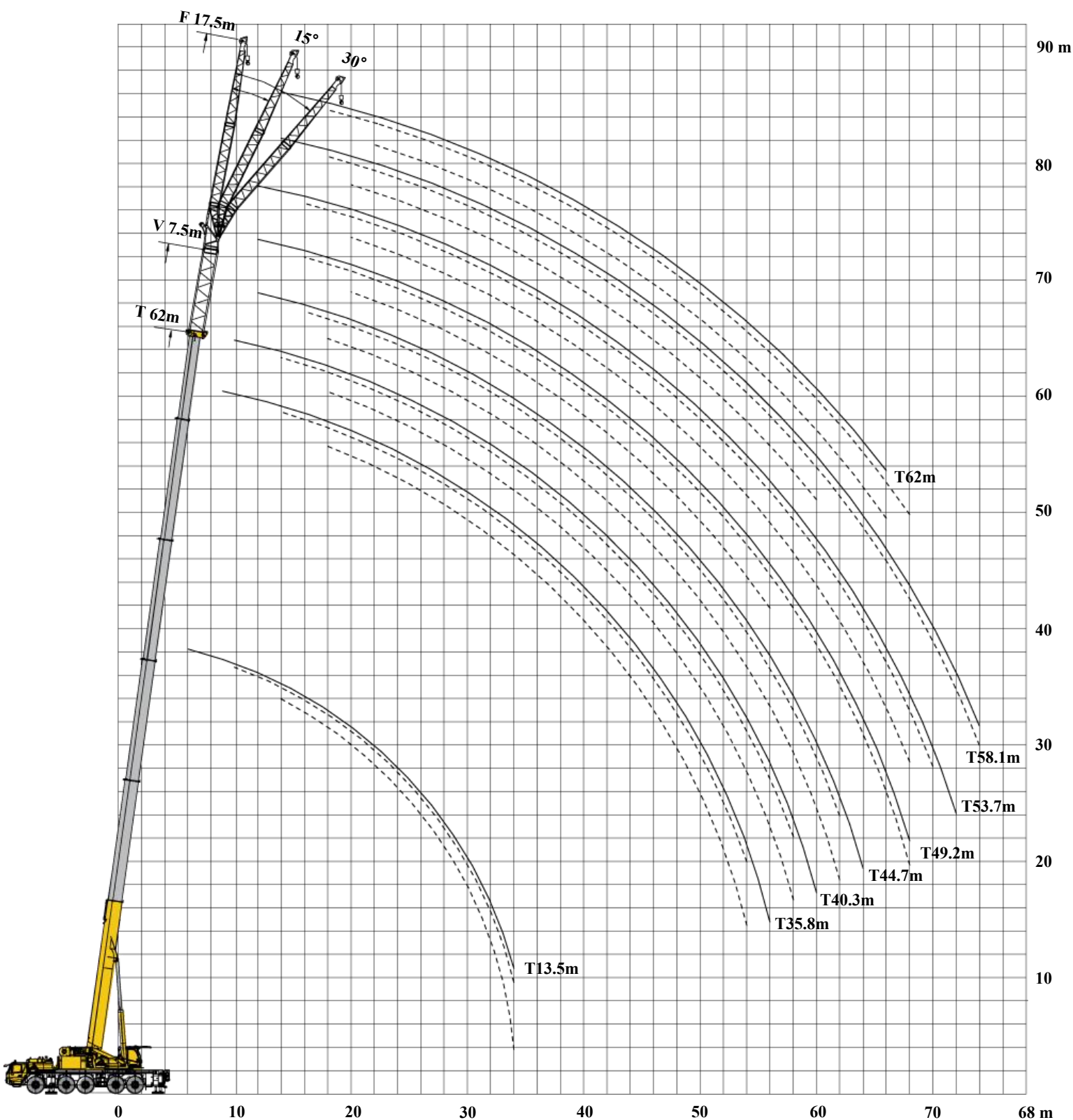
										
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62		
	10.5									
	30°									
8	5.5								8	
9	5.3								9	
10	5.1								10	
12	4.7	5.4	5.3						12	
14	4.4	5.1	5.1	5.1	5.1	4.9			14	
16	4.2	4.9	4.9	4.9	4.8	4.8	4.7	4.3	16	
18	4.1	4.7	4.7	4.7	4.7	4.7	4.6	4.3	18	
20	4.1	4.5	4.6	4.6	4.5	4.5	4.5	4.3	20	
22		4.4	4.5	4.5	4.4	4.4	4.4	4.3	22	
24		4.2	4.3	4.4	4.3	4.3	4.3	4.3	24	
26		4.1	4.2	4.2	4.2	4.2	4.2	4.1	26	
28		4	4.1	4.1	4.1	4.1	4.1	4	28	
30		3.9	4	4	4	4	3.9	3.9	30	
32		3.9	3.9	3.9	3.9	3.9	3.9	3.9	32	
34		3.8	3.8	3.8	3.9	3.8	3.8	3.8	34	
36		3.7	3.8	3.8	3.7	3.8	3.8	3.8	36	
38		3.8	3.7	3.7	3.7	3.7	3.7	3.7	38	
40		3.8	3.7	3.7	3.7	3.7	3.7	3.7	40	
42			3.7	3.6	3.7	3.6	3.6	3.7	42	
44			3.8	3.7	3.6	3.6	3.6	3.6	44	
46				3.6	3.6	3.6	3.6	3.5	46	
48				3.8	3.6	3.6	3.5	3.2	48	
50					3.6	3.6	3.3	3	50	
52					3.7	3.6	3.1	2.7	52	
54						3.4	2.9	2.6	54	
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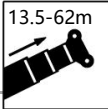
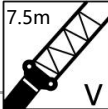
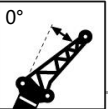
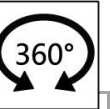
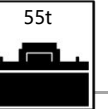


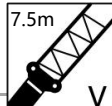
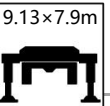
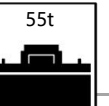
	 13.5	 35.8	 40.3	 44.7	 49.2	 53.7	58.1	62	
	17.5								
	0°								
5	5								5
6	5								6
7	4.8								7
8	4.3	4.7							8
9	4	4.6	4.5	4.3					9
10	3.6	4.6	4.4	4.2	3.8				10
12	3	4.6	4.5	4.2	3.9	3.7	3.4	3.2	12
14	2.6	4.5	4.4	4.2	4	3.7	3.4	3.2	14
16	2.2	4.1	4.4	4.2	4	3.7	3.4	3.2	16
18	2	3.6	4	4.2	4	3.8	3.4	3.2	18
20	1.8	3.3	3.6	3.9	4	3.7	3.5	3.2	20
22	1.6	3	3.2	3.5	3.7	3.7	3.5	3.3	22
24	1.5	2.7	2.9	3.2	3.3	3.6	3.5	3.2	24
26	1.3	2.5	2.7	2.9	3.2	3.3	3.6	3.3	26
28		2.3	2.6	2.7	2.9	3.1	3.2	3.3	28
30		2.2	2.3	2.6	2.7	2.9	3.1	3.2	30
32		2.1	2.2	2.4	2.6	2.7	2.9	3	32
34		2	2.1	2.2	2.4	2.5	2.7	2.9	34
36		1.8	2	2.1	2.2	2.4	2.5	2.7	36
38		1.7	1.9	2	2.1	2.3	2.4	2.6	38
40		1.6	1.7	1.9	2	2.2	2.3	2.4	40
42		1.5	1.6	1.8	1.9	2	2.1	2.3	42
44		1.3	1.5	1.7	1.7	1.9	2	2.2	44
46		1.4	1.4	1.5	1.6	1.8	1.9	2.1	46
48			1.3	1.5	1.6	1.7	1.8	2	48
50			1.3	1.4	1.5	1.6	1.8	1.8	50
52				1.4	1.3	1.6	1.7	1.8	52
54				1.3	1.4	1.5	1.6	1.7	54
56					1.3	1.5	1.7	1.6	56
58					1.3	1.4	1.6	1.6	58
60						1.4	1.4	1.6	60
62						1.3	1.3	1.5	62
64							1.3	1.3	64
66							1.3	1.4	66
68								1.3	68

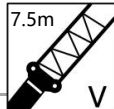
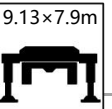
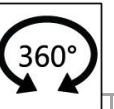
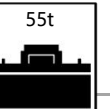
	 13.5-62m	 17.5m	 15°	 9.13×7.9m	 360°	 55t	 EN						
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62					
	17.5												
	15°												
9	2.8												9
10	2.6												10
12	2.2	3.1											12
14	2	2.7	2.8	3	3.3								14
16	1.8	2.5	2.7	2.8	2.9	2.9	2.9	2.9					16
18	1.7	2.4	2.5	2.6	2.7	2.7	2.8	2.8	2.8				18
20	1.5	2.2	2.3	2.5	2.5	2.6	2.7	2.7	2.7				20
22	1.3	2.1	2.2	2.3	2.4	2.4	2.5	2.6	2.6				22
24	1.3	1.9	2.1	2.1	2.3	2.3	2.4	2.5	2.5				24
26	1.1	1.8	2	2	2.1	2.2	2.2	2.4	2.4				26
28	1.1	1.7	1.9	1.9	2	2.1	2.1	2.2	2.2				28
30		1.6	1.7	1.8	1.9	1.9	2	2.1	2.1				30
32		1.5	1.6	1.7	1.8	1.8	1.9	2	2				32
34		1.3	1.5	1.6	1.7	1.7	1.8	1.9	1.9				34
36		1.3	1.5	1.6	1.6	1.7	1.7	1.8	1.8				36
38		1.3	1.4	1.5	1.6	1.6	1.7	1.7	1.7				38
40		1.3	1.3	1.4	1.5	1.6	1.6	1.7	1.7				40
42		1.2	1.3	1.3	1.5	1.5	1.5	1.6	1.6				42
44		1.2	1.3	1.4	1.3	1.5	1.5	1.6	1.6				44
46		1.2	1.3	1.3	1.3	1.3	1.5	1.5	1.5				46
48		1.2	1.3	1.3	1.2	1.3	1.4	1.5	1.5				48
50			1.2	1.2	1.2	1.3	1.3	1.3	1.3				50
52			1.2	1.2	1.2	1.3	1.3	1.3	1.3				52
54				1.2	1.2	1.2	1.3	1.2	1.2				54
56				1.2	1.2	1.2	1.3	1.2	1.2				56
58					1.2	1.2	1.2	1.2	1.2				58
60					1.2	1.2	1.2	1.2	1.2				60
62						1.1	1.2	1.1	1.1				62
64						1.1	1.2	1.1	1.1				64
66							1.2	1.1	1.1				66
68							1.1	1.1	1.1				68
70								1.1	1.1				70

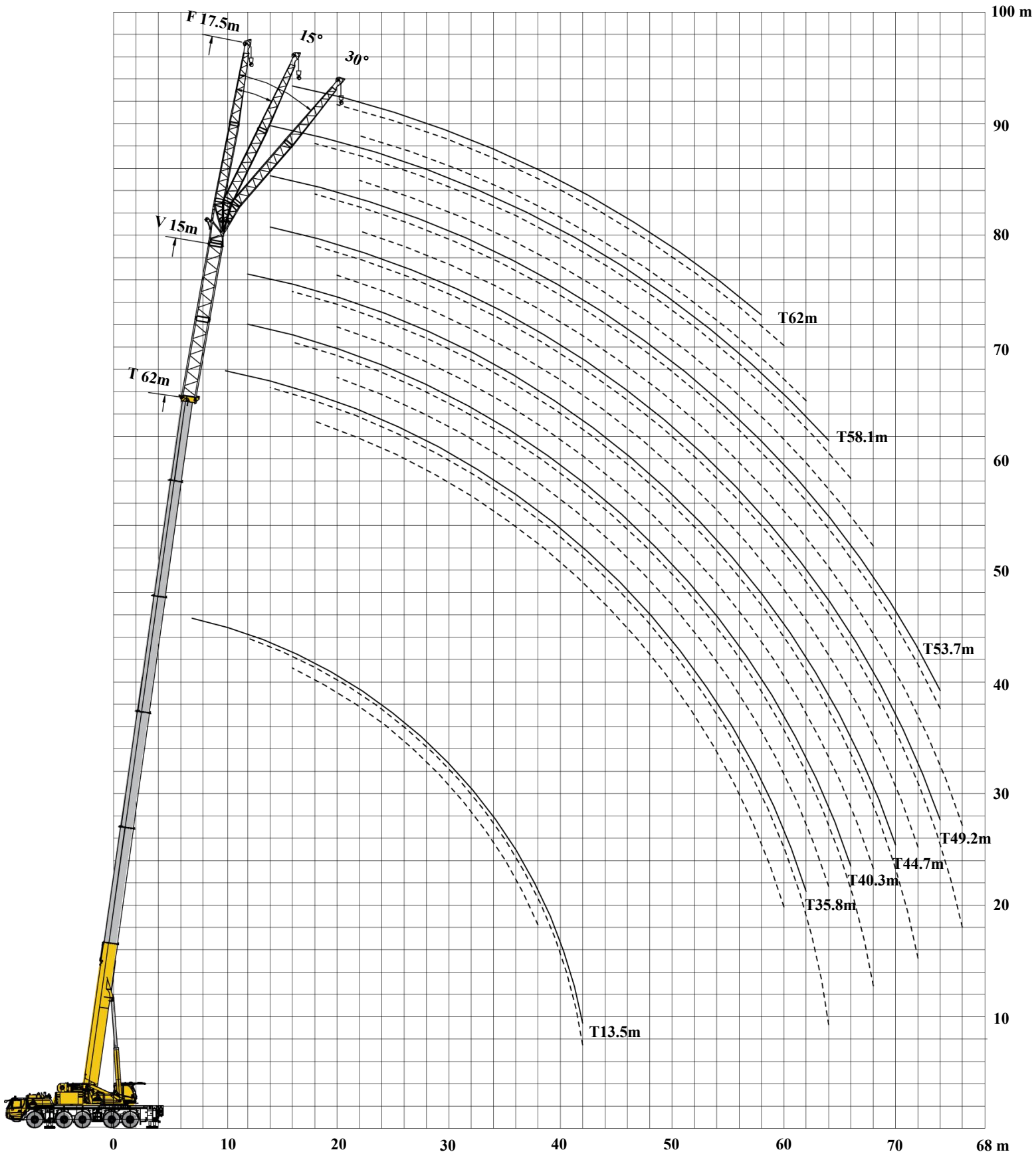
	 13.5-62m	 17.5m	 30°	 9.13x7.9m	 360°	 55t	 EN										
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62									
	17.5																
	30°																
12	1.8																12
14	1.7																14
16	1.6	1.8	1.8														16
18	1.5	1.7	1.7	1.8	1.9	1.9											18
20	1.3	1.6	1.7	1.7	1.7	1.8	1.9	1.9									20
22	1.1	1.6	1.6	1.6	1.6	1.7	1.8	1.8									22
24	1.1	1.5	1.5	1.6	1.6	1.7	1.7	1.7									24
26	1.1	1.3	1.5	1.5	1.6	1.6	1.6	1.6									26
28		1.3	1.4	1.4	1.6	1.5	1.6	1.6									28
30			1.3	1.3	1.4	1.5	1.5	1.5									30
32			1.3	1.3	1.3	1.5	1.5	1.5									32
34			1.3	1.3	1.3	1.3	1.4	1.4									34
36			1.3	1.3	1.3	1.3	1.4	1.3									36
38			1.2	1.2	1.3	1.3	1.3	1.3									38
40			1.2	1.2	1.2	1.3	1.3	1.3									40
42			1.2	1.2	1.3	1.2	1.3	1.3									42
44			1.2	1.2	1.2	1.2	1.2	1.2									44
46			1.2	1.1	1.2	1.2	1.2	1.2									46
48			1.1	1.1	1.1	1.2	1.2	1.2									48
50			1.1	1.1	1.1	1.1	1.2	1.2									50
52				1.1	1.1	1.1	1.2	1.1									52
54				1.1	1.1	1.1	1.1	1.1									54
56					1.1	1.1	1.1	1.1									56
58					1.1	1.1	1.1	1.1									58
60						1.1	1.1	1.1									60
62						1.1		1.1									62
64								1.1									64
66								1.1									66
68								1.1									68

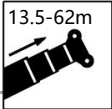
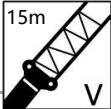
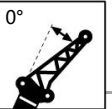
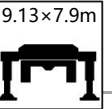
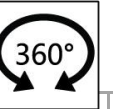
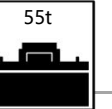


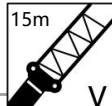
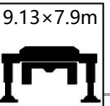
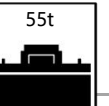
									
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62	
	7.5								
	17.5								
	0°								
6	4.6								6
7	4.6								7
8	4.6								8
9	4.6	4.2							9
10	4.4	4.2	3.8						10
12	3.7	4.2	3.8	4	3.6	3.2			12
14	3.1	4.2	3.8	3.8	3.5	3.2	2.8	2.6	14
16	2.7	4.2	3.8	3.7	3.5	3.2	2.8	2.7	16
18	2.4	4.1	3.8	3.7	3.5	3.2	2.8	2.7	18
20	2.1	3.7	3.8	3.7	3.5	3.2	2.8	2.8	20
22	1.9	3.3	3.6	3.7	3.5	3.2	2.8	2.8	22
24	1.8	3	3.3	3.5	3.5	3.2	2.8	2.8	24
26	1.7	2.8	2.9	3.2	3.4	3.2	2.8	2.9	26
28	1.5	2.6	2.8	3	3.2	3.2	2.8	2.9	28
30	1.3	2.4	2.6	2.8	3	3	2.8	3	30
32	1.1	2.2	2.4	2.6	2.8	2.9	2.8	2.9	32
34	1.1	2.1	2.3	2.4	2.6	2.8	2.8	2.9	34
36		2	2.1	2.3	2.4	2.6	2.6	2.8	36
38		1.9	2	2.1	2.3	2.4	2.5	2.7	38
40		1.7	1.9	2	2.2	2.3	2.4	2.6	40
42		1.6	1.7	1.9	2.1	2.2	2.2	2.4	42
44		1.5	1.6	1.8	1.9	2.1	2.1	2.3	44
46		1.4	1.5	1.7	1.8	1.9	2	2.2	46
48		1.3	1.5	1.6	1.7	1.8	1.9	2.1	48
50		1.3	1.3	1.5	1.6	1.7	1.9	2	50
52		1.2	1.3	1.4	1.6	1.8	1.8	1.8	52
54		1.1	1.3	1.4	1.4	1.7	1.7	1.8	54
56		1.1	1.2	1.3	1.4	1.6	1.7	1.9	56
58			1.2	1.3	1.4	1.5	1.7	1.7	58
60			1.1	1.2	1.3	1.3	1.5	1.6	60
62				1.2	1.3	1.4	1.5	1.5	62
64				1.1	1.3	1.3	1.4	1.3	64
66					1.2	1.3	1.4	1.1	66
68					1.2	1.2	1.3		68
70						1.2	1.3		70
72						1.2	1.2		72
74							1		74

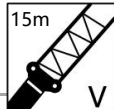
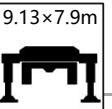
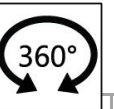
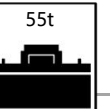
	 13.5-62m	 7.5m	 17.5m	 15°	 9.13×7.9m	 360°	 55t	 EN		
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62		
	7.5									
	17.5									
	15°									
10	2.8								10	
12	2.5								12	
14	2.3	3	3.2						14	
16	2.2	2.7	2.9	3	2.9	2.9			16	
18	1.9	2.6	2.7	2.8	2.8	2.8	2.8	2.9	18	
20	1.7	2.4	2.5	2.6	2.6	2.7	2.7	2.7	20	
22	1.6	2.3	2.3	2.4	2.5	2.6	2.6	2.6	22	
24	1.5	2.1	2.2	2.3	2.4	2.5	2.5	2.5	24	
26	1.3	2	2.1	2.2	2.3	2.3	2.4	2.4	26	
28	1.4	1.9	2	2	2.2	2.2	2.3	2.3	28	
30	1.3	1.7	1.9	1.9	2.1	2.1	2.2	2.2	30	
32	1.1	1.6	1.8	1.8	2	2	2	2.1	32	
34	1.1	1.6	1.7	1.7	1.8	1.9	1.9	2	34	
36		1.5	1.6	1.7	1.7	1.8	1.8	1.9	36	
38		1.5	1.6	1.6	1.7	1.7	1.8	1.8	38	
40		1.4	1.5	1.6	1.6	1.7	1.7	1.8	40	
42		1.3	1.4	1.5	1.5	1.7	1.7	1.7	42	
44		1.3	1.4	1.5	1.5	1.6	1.6	1.7	44	
46		1.3	1.3	1.3	1.5	1.5	1.6	1.6	46	
48		1.3	1.3	1.3	1.4	1.5	1.5	1.6	48	
50		1.2	1.3	1.3	1.4	1.3	1.5	1.5	50	
52		1.2	1.2	1.3	1.3	1.3	1.4	1.5	52	
54		1.2	1.2	1.2	1.3	1.2	1.3	1.5	54	
56			1.2	1.3	1.3	1.2	1.3	1.3	56	
58			1.2	1.2	1.3	1.2	1.3	1.3	58	
60				1.2	1.2	1.2	1.2	1.2	60	
62				1.1	1.2	1.2	1.2	1.2	62	
64					1.1	1.2	1.2	1.2	64	
66					1.1	1.2	1.2	1.1	66	
68					1.1	1.1	1.1	1.1	68	
70						1.1	1.1		70	
72							1.1		72	
74							1.1		74	

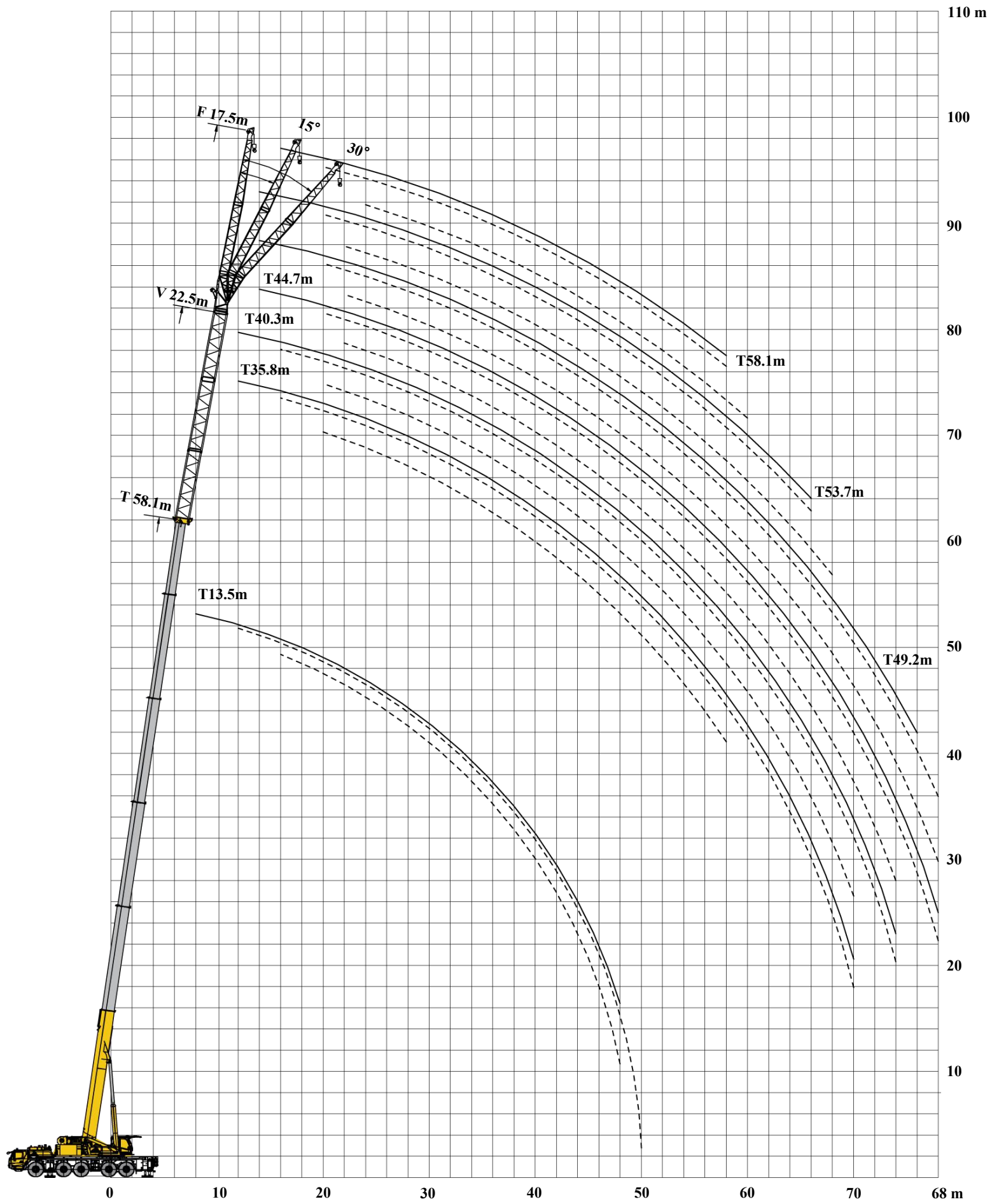
	 13.5-62m	 7.5m	 17.5m	 30°	 9.13×7.9m	 360°	 55t	 EN		
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62		
	7.5									
	17.5									
	30°									
14	1.8								14	
16	1.7								16	
18	1.6	1.8	1.9	1.9					18	
20	1.5	1.7	1.7	1.8	1.9	1.9	1.9		20	
22	1.3	1.6	1.7	1.7	1.8	1.8	1.8	2	22	
24	1.3	1.6	1.6	1.7	1.7	1.7	1.7	1.9	24	
26	1.1	1.5	1.5	1.6	1.6	1.6	1.6	1.8	26	
28	1.1	1.4	1.5	1.6	1.6	1.6	1.6	1.7	28	
30	1.1	1.3	1.4	1.6	1.5	1.5	1.5	1.6	30	
32	1.1	1.3	1.3	1.5	1.5	1.5	1.5	1.5	32	
34	1.1	1.3	1.4	1.3	1.3	1.4	1.6	1.5	34	
36		1.3	1.3	1.3	1.4	1.3	1.5	1.3	36	
38		1.2	1.3	1.3	1.3	1.3	1.3	1.4	38	
40		1.2	1.2	1.3	1.3	1.3	1.4	1.3	40	
42		1.2	1.3	1.2	1.2	1.3	1.2	1.3	42	
44		1.2	1.2	1.2	1.2	1.2	1.3	1.3	44	
46		1.2	1.2	1.2	1.2	1.2	1.2	1.2	46	
48		1.1	1.1	1.2	1.2	1.2	1.3	1.2	48	
50		1.1	1.1	1.1	1.1	1.2	1.2	1.2	50	
52		1.1	1.1	1.1	1.1	1.1	1.2	1.2	52	
54		1.1	1.1	1.1	1.1	1.1	1.1	1.1	54	
56			1.1	1.1	1.1	1.1	1.1	1.1	56	
58			1.1	1.1		1.1	1.1	1.1	58	
60				1.1		1.1	1.1	1.1	60	
62				1.1		1.1		1.1	62	
64						1.1		1.1	64	
66						1.1		1.1	66	
68						1.1			68	

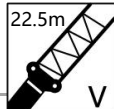
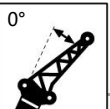
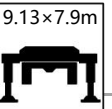
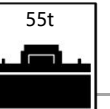


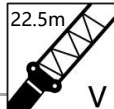
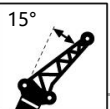
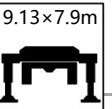
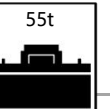
	 13.5	 35.8	 40.3	 44.7	 49.2	 53.7	 58.1	 62	
7.5+7.5									
17.5									
0°									
7	4.3								7
8	4.3								8
9	4.3								9
10	4.3	3.9							10
12	4.2	3.8	3.6	3.2					12
14	3.8	3.7	3.5	3.2	3.1	2.7	2.6		14
16	3.4	3.8	3.6	3.3	3.1	2.8	2.6	2.8	16
18	3	3.9	3.6	3.3	3.1	2.9	2.6	2.7	18
20	2.6	3.7	3.5	3.3	3.1	3	2.6	2.6	20
22	2.4	3.6	3.6	3.4	3.2	2.9	2.7	2.5	22
24	2.2	3.4	3.6	3.4	3.1	2.9	2.7	2.4	24
26	1.9	3.1	3.3	3.3	3.2	2.9	2.6	2.5	26
28	1.8	2.9	3.1	3.2	3.2	3	2.7	2.5	28
30	1.7	2.7	2.9	3.1	3.1	3	2.7	2.5	30
32	1.6	2.6	2.7	2.8	3	3.1	2.8	2.6	32
34	1.5	2.3	2.5	2.7	2.8	3	2.8	2.5	34
36	1.3	2.2	2.4	2.5	2.7	2.8	2.7	2.6	36
38	1.3	2.1	2.3	2.4	2.5	2.7	2.7	2.5	38
40	1.2	2	2.2	2.3	2.3	2.5	2.6	2.6	40
42	1.2	1.9	2.1	2.2	2.2	2.4	2.5	2.5	42
44		1.7	1.9	2.1	2.1	2.3	2.4	2.4	44
46		1.6	1.8	1.9	2	2.2	2.3	2.4	46
48		1.5	1.7	1.8	1.9	2.1	2.1	2.2	48
50		1.5	1.6	1.7	1.8	1.9	2	2.1	50
52		1.3	1.6	1.7	1.9	1.8	1.9	2	52
54		1.4	1.4	1.6	1.7	1.8	2	1.8	54
56		1.3	1.4	1.5	1.6	1.7	1.9	1.6	56
58		1.3	1.3	1.6	1.6	1.7	1.8	1.5	58
60		1.2	1.4	1.4	1.5	1.6	1.7		60
62		1.1	1.2	1.4	1.5	1.6	1.5		62
64			1.3	1.3	1.4	1.5	1.3		64
66			1.2	1.3	1.4	1.5			66
68				1.2	1.3	1.3			68
70				1.2	1.4	1.4			70
72					1.2	1.1			72
74					1.2	1.1			74
76					1.2				76

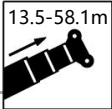
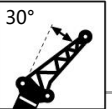
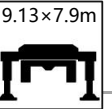
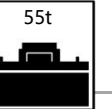
	 13.5-62m	 15m	 17.5m	 15°	 9.13×7.9m	 360°	 55t	 EN			
	13.5	35.8	40.3		44.7	49.2	53.7	58.1		62	
	7.5+7.5										
	17.5										
	15°										
12	2.8									12	
14	2.6	3.1								14	
16	2.3	2.9	2.9	2.9						16	
18	2.2	2.7	2.8	2.8	3.1	3.2	2.7			18	
20	2.1	2.6	2.6	2.7	2.9	3	2.7	2.8		20	
22	1.9	2.4	2.5	2.6	2.7	2.8	2.7	2.7		22	
24	1.8	2.2	2.4	2.5	2.5	2.5	2.6	2.6		24	
26	1.7	2.1	2.3	2.3	2.4	2.4	2.5	2.5		26	
28	1.6	2	2.2	2.2	2.3	2.3	2.4	2.4		28	
30	1.5	1.9	2	2.1	2.1	2.2	2.2	2.3		30	
32	1.3	1.8	1.9	2	2	2.1	2.1	2.2		32	
34	1.4	1.7	1.8	1.9	1.9	2	2	2.1		34	
36	1.3	1.7	1.7	1.8	1.8	1.9	1.9	2		36	
38	1.1	1.6	1.7	1.7	1.8	1.9	1.9	1.9		38	
40	1.1	1.6	1.6	1.7	1.7	1.9	1.8	1.9		40	
42	1.1	1.5	1.6	1.6	1.7	1.8	1.8	1.8		42	
44		1.3	1.5	1.6	1.6	1.8	1.7	1.8		44	
46		1.4	1.4	1.5	1.6	1.7	1.7	1.7		46	
48		1.2	1.4	1.5	1.5	1.6	1.6	1.7		48	
50		1.3	1.3	1.3	1.5	1.5	1.6	1.6		50	
52		1.2	1.3	1.4	1.3	1.6	1.5	1.6		52	
54		1.3	1.2	1.3	1.4	1.5	1.5	1.6		54	
56		1.2	1.3	1.3	1.3	1.3	1.6	1.5		56	
58		1.2	1.2	1.2	1.3	1.4	1.4	1.5		58	
60		1.2	1.3	1.2	1.2	1.3	1.4	1.3		60	
62		1.1	1.1	1.2	1.3	1.3	1.3			62	
64		1.1	1.1	1.2	1.1	1.2	1.3			64	
66			1.1	1.2	1.2	1.3	1.3			66	
68			1.1	1.1	1.1	1.2				68	
70				1.1	1.1	1.2				70	
72				1.1	1.1	1.2				72	
74					1.1	1.1				74	
76					1.1					76	

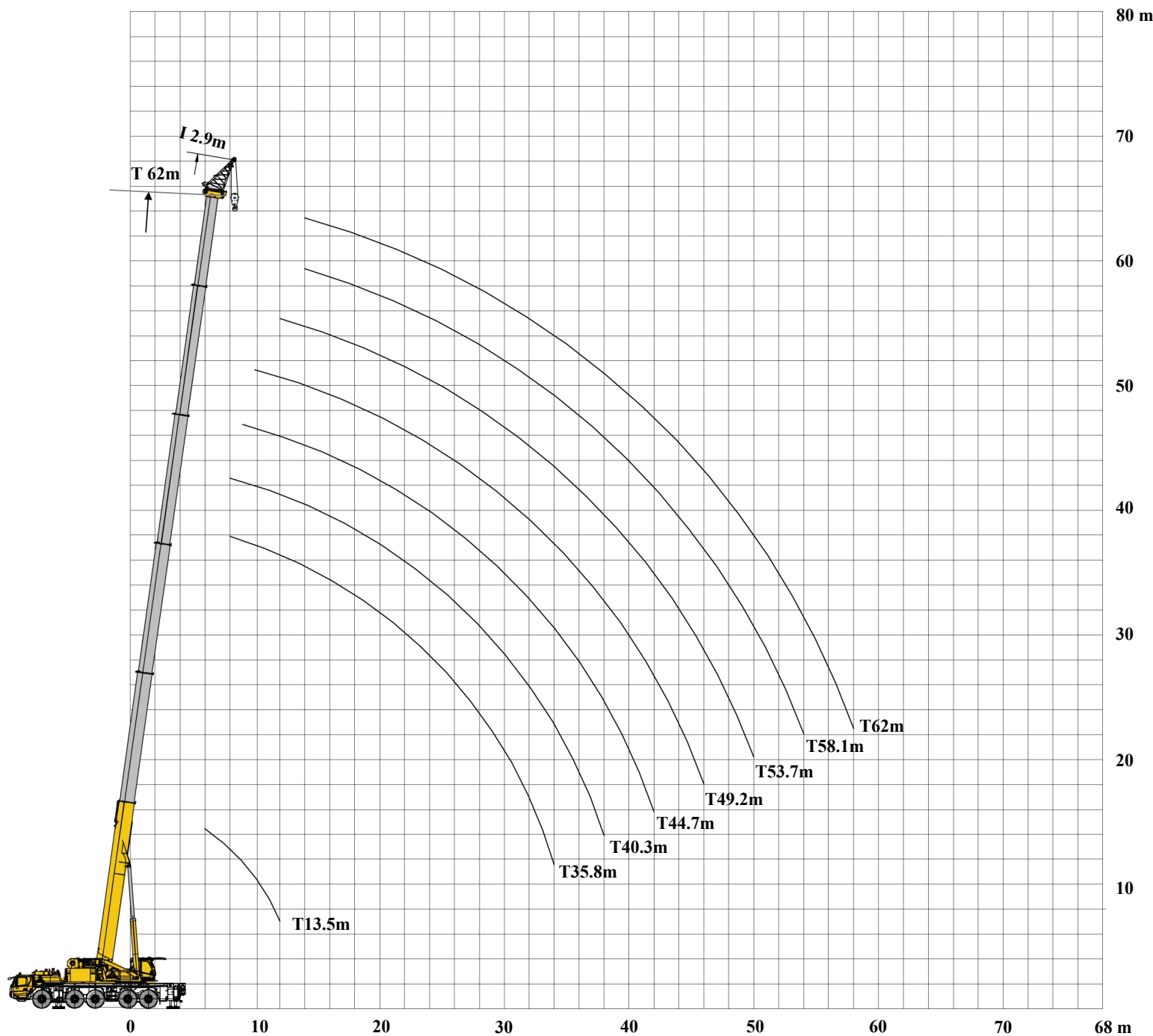
	 13.5-62m	 15m	 17.5m	 30°	 9.13×7.9m	 360°	 55t	 EN		
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62		
	7.5+7.5									
	17.5									
	30°									
16	1.8								16	
18	1.7	1.9							18	
20	1.6	1.7	1.9	1.9	1.9				20	
22	1.5	1.7	1.8	1.8	1.8	2	2	2	22	
24	1.3	1.6	1.7	1.7	1.7	1.9	1.9	1.9	24	
26	1.3	1.6	1.6	1.6	1.7	1.8	1.8	1.8	26	
28	1.3	1.5	1.6	1.7	1.6	1.7	1.7	1.7	28	
30	1.3	1.5	1.6	1.6	1.6	1.6	1.6	1.6	30	
32	1.2	1.4	1.5	1.5	1.5	1.6	1.6	1.5	32	
34	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5	34	
36	1.1	1.3	1.3	1.3	1.4	1.5	1.5	1.6	36	
38	1.1	1.3	1.3	1.3	1.3	1.3	1.4	1.5	38	
40		1.3	1.3	1.3	1.3	1.3	1.3	1.3	40	
42		1.2	1.2	1.3	1.3	1.3	1.3	1.3	42	
44		1.2	1.2	1.3	1.3	1.3	1.3	1.3	44	
46		1.2	1.2	1.2	1.2	1.3	1.3	1.3	46	
48		1.2	1.2	1.2	1.2	1.3	1.2	1.3	48	
50		1.1	1.1	1.2	1.2	1.2	1.2	1.2	50	
52		1.1	1.1	1.2	1.2	1.2	1.1	1.2	52	
54		1.1	1.1	1.1	1.1	1.2	1.1	1.2	54	
56		1.1	1.1	1.1	1.1	1.2	1.1	1.2	56	
58		1.1	1.1	1.1	1.1	1.1	1.1	1.1	58	
60		1.1	1.1	1.1	1.1	1.1	1.1	1.1	60	
62			1.1	1.1	1.1	1.1	1.1	1.1	62	
64			1.1	1.1	1.1	1.1	1.1		64	
66				1.1	1.1	1.1	1.1		66	
68				1.1	1.1	1.1	1.1		68	
70					1.1	1.1			70	
72					1.1	1.1			72	
74						1.1			74	
76						1			76	



									
	13.5	35.8	40.3	44.7	49.2	53.7	58.1		
	7.5+7.5+7.5								
	17.5								
0°									
8	4								8
9	3.8								9
10	3.8								10
12	3.8	3.1	3.3						12
14	3.8	3.1	3.2	2.9	2.9	2.7			14
16	3.8	3.1	3.1	2.9	2.8	2.6	2.3		16
18	3.5	3.1	3.1	2.9	2.7	2.5	2.3		18
20	3.2	3.1	3.1	2.9	2.6	2.4	2.3		20
22	2.8	3.1	3.1	2.9	2.6	2.4	2.3		22
24	2.6	3.1	3.1	2.9	2.6	2.4	2.3		24
26	2.4	3.1	3.1	2.9	2.6	2.4	2.3		26
28	2.2	3.1	3.1	2.9	2.6	2.4	2.3		28
30	2	2.9	3.1	2.9	2.6	2.4	2.3		30
32	1.9	2.8	3	2.8	2.6	2.4	2.3		32
34	1.8	2.6	2.8	2.7	2.6	2.4	2.3		34
36	1.7	2.5	2.6	2.6	2.5	2.3	2.3		36
38	1.6	2.3	2.5	2.5	2.4	2.3	2.3		38
40	1.4	2.2	2.4	2.3	2.3	2.3	2.2		40
42	1.4	2.1	2.3	2.2	2.2	2.1	2.1		42
44	1.4	2	2.2	2.2	2.2	2.1	1.9		44
46	1.2	1.9	2	2.1	2.1	2	2		46
48	1.2	1.7	1.9	2	2	2	2		48
50		1.7	1.8	1.9	2	1.9	1.9		50
52		1.6	1.7	1.8	1.8	1.8	1.8		52
54		1.5	1.7	1.7	1.9	1.8	1.8		54
56		1.5	1.6	1.6	1.7	1.7	1.6		56
58		1.4	1.5	1.6	1.7	1.7	1.5		58
60		1.4	1.5	1.6	1.6	1.6			60
62		1.3	1.5	1.5	1.6	1.6			62
64		1.3	1.3	1.4	1.5	1.4			64
66		1.2	1.3	1.4	1.4	1.2			66
68		1.2	1.3	1.3	1.4				68
70		1.1	1.3	1.3	1.3				70
72			1.2	1.2	1.3				72
74			1.2	1.2	1.2				74
76				1.2	1.2				76
78				1.2					78

									
	13.5	35.8	40.3	44.7	49.2	53.7	58.1		
	7.5+7.5+7.5								
	17.5								
	15°								
12	3.2								12
14	2.8								14
16	2.6	3	3						16
18	2.4	2.9	2.9						18
20	2.2	2.8	2.8	2.8	3.1	2.5	2.4		20
22	2.1	2.5	2.7	2.7	2.8	2.5	2.4		22
24	2	2.4	2.5	2.6	2.6	2.5	2.4		24
26	1.9	2.3	2.4	2.4	2.5	2.5	2.4		26
28	1.7	2.2	2.3	2.3	2.3	2.4	2.4		28
30	1.6	2.1	2.1	2.2	2.2	2.3	2.4		30
32	1.5	1.9	2	2.1	2.1	2.2	2.2		32
34	1.4	1.8	1.9	2	2	2.1	2.1		34
36	1.3	1.8	1.9	1.9	1.9	2	2		36
38	1.3	1.7	1.8	1.8	1.9	2	1.9		38
40	1.3	1.6	1.7	1.7	1.8	1.9	1.9		40
42	1.3	1.6	1.6	1.7	1.8	1.8	1.9		42
44	1.2	1.5	1.6	1.7	1.7	1.8	1.8		44
46	1.2	1.5	1.6	1.6	1.7	1.7	1.7		46
48	1.2	1.3	1.5	1.5	1.6	1.7	1.7		48
50	1.1	1.3	1.4	1.5	1.6	1.6	1.8		50
52		1.3	1.3	1.5	1.5	1.7	1.7		52
54		1.3	1.3	1.5	1.5	1.6	1.6		54
56		1.2	1.3	1.4	1.5	1.5	1.6		56
58		1.2	1.3	1.3	1.3	1.5	1.6		58
60		1.2	1.2	1.3	1.3	1.3			60
62		1.2	1.2	1.3	1.3	1.3			62
64		1.1	1.2	1.2	1.3	1.3			64
66		1.1	1.2	1.2	1.2	1.2			66
68		1.1	1.2	1.2	1.2				68
70		1.1	1.1	1.1	1.2				70
72			1.1	1.1	1.2				72
74			1.1	1.1	1.2				74
76				1.1	1.2				76
78				1	1.1				78

	 13.5	 35.8	 40.3	 44.7	 49.2	 53.7	 58.1		
7.5+7.5+7.5									
17.5									
30°									
16	1.8								16
18	1.7								18
20	1.6	1.9	1.9						20
22	1.6	1.8	1.8	2	2	2			22
24	1.5	1.7	1.7	1.9	1.9	1.9	1.7		24
26	1.4	1.7	1.7	1.8	1.8	1.8	1.7		26
28	1.3	1.6	1.6	1.7	1.7	1.7	1.7		28
30	1.3	1.6	1.6	1.6	1.6	1.6	1.7		30
32	1.3	1.5	1.5	1.6	1.6	1.6	1.6		32
34	1.3	1.5	1.5	1.5	1.5	1.6	1.6		34
36	1.2	1.3	1.4	1.5	1.5	1.5	1.5		36
38	1.2	1.4	1.3	1.5	1.5	1.5	1.5		38
40	1.2	1.3	1.3	1.3	1.4	1.5	1.5		40
42	1.2	1.3	1.3	1.3	1.4	1.3	1.4		42
44	1.2	1.2	1.3	1.3	1.4	1.3	1.3		44
46	1.1	1.3	1.2	1.2	1.3	1.3	1.3		46
48	1.1	1.2	1.3	1.3	1.3	1.3	1.3		48
50		1.2	1.2	1.2	1.2	1.2	1.3		50
52		1.1	1.2	1.2	1.3	1.2	1.2		52
54		1.1	1.2	1.2	1.2	1.2	1.2		54
56		1.1	1.2	1.2	1.2	1.2	1.2		56
58		1.1	1.1	1.1	1.1	1.2	1.2		58
60			1.1	1.1	1.1	1.2	1.2		60
62			1.1	1.1	1.1	1.2			62
64			1.2	1.1	1.1	1.2			64
66			1.2	1.1	1.1	1.2			66
68			1.2	1.1	1.1	1.1			68
70			1.2	1.1	1.1				70
72				1.1	1.1				72
74				1.1	1.1				74
76					1.1				76
78					1.1				78



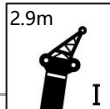
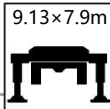
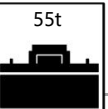
										
	13.5	35.8	40.3	44.7	49.2	53.7	58.1	62		
	2.9									
6	34.6								6	
7	30.8								7	
8	28.2	37.5	37.9						8	
9	26.3	35.4	35.6	28					9	
10	24.4	33.3	33.8	26.4	25.8				10	
12	21	30.2	29	24.8	24.1	20			12	
14		28.8	28	23	22.3	20	15.7	12.8	14	
16		25.6	24.8	21	20.5	17.8	15.3	12.8	16	
18		22.4	21.6	19.3	18.6	16.1	14.2	12.5	18	
20		20	19.2	18.2	16.7	14.3	12.8	11.7	20	
22		17.6	17.6	17.3	15.2	13.2	11.5	10.6	22	
24		16	15.5	15.2	14	12	10.5	9.7	24	
26		14.4	14.5	14.4	12.8	10.9	9.7	8.7	26	
28		12.8	13.6	12.8	11.9	10.1	9	8.1	28	
30		11.7	12.3	11.6	11	9.3	8.3	7.5	30	
32		10.5	11.2	10.4	10.3	8.6	7.6	6.9	32	
34		9.5	10.1	9.4	9.4	8	7.1	6.4	34	
36			9.2	8.6	8.6	7.5	6.6	5.9	36	
38			8.4	8.1	8	7	6.1	5.4	38	
40				7.5	7.4	6.5	5.6	5	40	
42				7	6.7	6.1	5.3	4.8	42	
44					6.2	5.6	4.9	4.4	44	
46					5.6	5.3	4.7	4.1	46	
48						4.9	4.4	3.8	48	
50						4.7	4.1	3.5	50	
52							3.8	3.3	52	
54							3.5	3	54	
56								2.9	56	
58								2.7	58	

Table of main technical parameters

Category	Item		Unit	Parameter
Dimensions	Dimensions (L×W×H)		mm	15684×3100×4000
	Axle spacing		mm	2650+1650+2650+1650
	Track (front/rear)		mm	2562
	Front overhang / rear overhang		mm	2515/3913
	Front extension / rear extension		mm	1481/0
Weight	Maximum permissible total weight		kg	60000
	Axle load	Axle 1	kg	12000
		Axle 2	kg	12000
		Axle 3	kg	12000
		Axle 4	kg	12000
		Axle 5	kg	12000
Power	Engine model		——	OM471LA
	Maximum net power / RPM		kW/(r/min)	390/1600
	Maximum output torque / RPM		N.m/(r/min)	2600/1300
Travel	Maximum travel speed		km/h	≥80
	Minimum stable travel speed		km/h	≤3
	Minimum turning diameter		m	≤21 (all-wheel steering)
	Minimum turning diameter of boom head		m	≤25 (all-wheel steering)
	Minimum ground clearance		mm	352
	Approach angle		°	19
	Departure angle		°	10
	Braking distance (initial speed at 30km/h)		m	≤10
	Maximum grade ability		%	≥60
	Fuel consumption per 100 km		L	75
Noise	Exterior noise level when accelerating		dB(A)	≤83

Table of main technical parameters

Category	Item			Unit	Parameter
Main performance	Maximum rated total lifting capacity			t	160
	Minimum rated working radius			m	2.5
	Turning radius at turntable tail	At counterweight		mm	5110
		At auxiliary winch		mm	4960
	Maximum load moment	Base boom		kN.m	5145
		Fully-extended boom		kN.m	2446
		Fully-extended boom + jib		kN.m	952
	Outrigger span	Longitudinal		m	9.13
		Lateral		m	7.9
	Lifting height	Base boom		m	13.1
		Fully-extended boom		m	61
		Fully-extended boom + jib		m	97
	Boom length	Base boom		m	13.5
		Fully-extended boom		m	62
		Fully-extended boom + jib		m	98.1
	Jib offset angle			°	0, 15, 30
Working speed	Time for raising boom			s	≤65
	Time for fully extending boom			s	≤420
	Maximum slewing speed			r/min	1.5
	Time for extending and retracting outriggers	Outrigger beams	Retracting	s	≤40
			Extending	s	≤40
		Outrigger jacks	Retracting	s	≤60
			Extending	s	≤90
	Lifting speed (Single line, no load)	Main winch system		m/min	≥135
Auxiliary winch system		m/min	≥100		
Noise	Exterior noise level			dB(A)	≤110
	At driver position			dB(A)	≤85

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



Breaking force of wire rope



Maximum working speed



Main winch



Auxiliary winch



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 lifting height



Maximum working radius



Super lift



Wind power jib

Description of symbols

	Chassis
	Outrigger span
	Tire
	Axle load
	Grade ability
	Travel speed
	EN 13000 standard

	Luffing
	Telescoping
	Slewing
	360° slewing
	360° slewing with the fifth jack down
	Side and rear operation
	Operation over front
	Operation over rear

Notes

1. 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.
2. The total rated loads given in the load charts are the maximum lifting capacity (in tonne) under corresponding boom length and radius when the crane is set up on firm and level ground, which includes the weight of the hook block and slings. The weight of above-mentioned devices should be deducted from the rated lifting load.
3. The working radius shown in the load charts is the horizontal distance between the load and slewing axis of crane when the load is lifted off the ground.
4. 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.
5. A lifting operation is permissible only when the wind force is below grade 5 (instantaneous wind speed is 14.1 m/s, wind pressure is 125 N/m²).



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