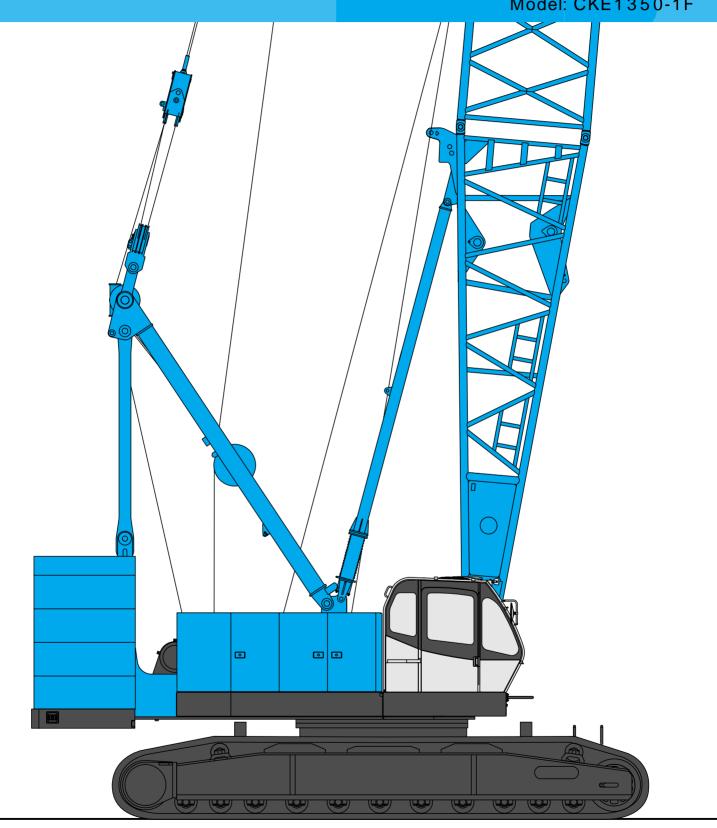
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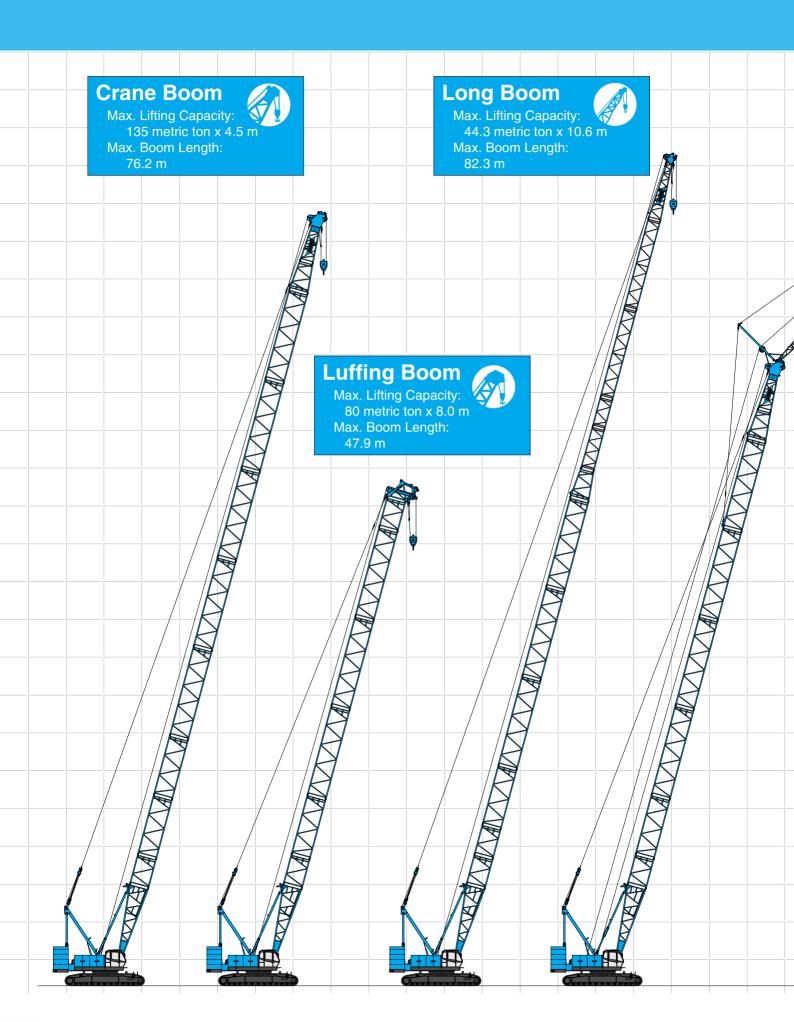
HYDRAULIC CRAWLER CRANE CKE1350

Model: CKE1350-1F



Max. Lifting Capacity: 135 t x 4.5 m Max. Crane Boom Length: 76.2 m Max. Long Boom Length: 82.3 m Max. Fixed Jib Combination: 61.0 m + 30.5 m Max. Luffing Jib Combination: 47.9 + 32.0 m, 44.8 + 53.3 m

CONFIGURATION



Fixed Jib A CONTRACTOR OF THE PARTY OF TH AND THE PARTY OF T 36 metric ton x 12.0 m Max. Combination: 47.9 m + 32.0 m, 44.8 m +53.3 m **Luffing Boom with Luffing Jib** Max. Lifting Capacity: 53.9 metric ton x 8.6 m

CONTENTS Configuration 1 Specifications 3 General Dimensions 5 **Boom and Jib Arrangements** Crane Boom Arrangements 7 Long Boom Arrangements 8 Fixed Jib Arrangements 8 Luffing Boom Arrangements for Luffing 9 Luffing Boom Arrangements for Crane 9 Luffing Jib Arrangements 10 **Working Ranges and** Lifting Capacities Crane Boom Working Ranges 12 Crane Boom Lifting Capacity 13 Auxiliary Sheave Lifting Capacity for Crane Boom 14 Luffing Boom Lifting Capacity15 Auxiliary Sheave Lifting Capacity for Luffing Boom 15 Long Boom Working Ranges 16 Long Boom Lifting Capacity 17 Auxiliary Sheave Lifting Capacity for Long Boom 17 Fixed Jib Working Ranges 18 Fixed Jib Lifting Capacities 19 Luffing Jib Working Ranges 21 Luffing Jib Lifting Capacities 23 Luffing Boom Lifting Capacities with Luffing Jib 27 Transportation Plan 28 Parts and Attachments 29

SPECIFICATIONS



Power Plant

Model: Hino diesel engine P11C-UN

Type:Water-cooled, direct fuel injection, with turbocharger Compiles with NRMM (Europe) Stage IIIA and US EPA Tier III.

Displacement: 10.520 liters

Rated Power:247 kW/2,000 min⁻¹ {rpm} (ISO)

Max. torque: 1,300 N·m/1,500 min-1

Cooling system: Liquid, recirculating bypass

Starter: 24 V/6.0 kW

Radiator: Corrugated type core, thermostatically controlled
Air cleaner: Dry type with replaceable paper element
Throttle: Electric throttle control, twist grip type

Fuel filter: Replaceable paper element

Batteries: Two 12V, 170Ah/20HR capacity batteries, parallel

connected.

Fuel tank capacity: 400 liters



Hydraulic System

Four variable displacement piston pumps are driven by heavyduty pump drive. Two of variable displacement pumps are used in the main hook hoist circuit, auxiliary hook hoist circuit, and each propel circuit. One of the other two pumps is used in the boom hoist circuit and third hoist circuit. The other is used in the swing circuit.

Control: Full-flow hydraulic control system for infinitely variable pressure to front and rear drums, boom hoist brakes and clutches. Controls respond instantly to the touch, delivering smooth function operation.

Cooling: Oil-to-air heat exchanger (plate-fin type)

Filtration: Full-flow and bypass type with replaceable element **Electrical system:** All wiring corded for easy servicing, individ-

ual fused branch circuits.

Max. relief valve pressure:

Load hoist, boom hoist and propel system:

31.9 MPa {325 kgf/cm²}

Swing system: 27.5 MPa {280 kgf/cm²} Control system: 7.0 MPa {71 kgf/cm²}

Reservoir capacity: 535 liters



Boom Hoisting System

Powered by a hydraulic motor through a planetary reducer. **Brake:** A spring-set, hydraulically released multiple-disc brake is mounted on the boom hoist motor and operated through a counter-balance valve.

Drum lock: External ratchet for locking drum.

Drum: Single drum, grooved for 20 mm dia. wire rope.

Line speed: Single line on first drum layer **Hoisting/Lowering:** 48 to 2 m/min

Diameter of wire ropes

Boom guy line: 30 mm

Boom hoist reeving: 12 parts of 20 mm dia.high strength

wire rope

Boom backstops: Telescopic type with spring bumper
Required for all boom lengths



Load Hoist System

Front and rear drums for load hoist powered by a hydraulic variable plunger motors, driven through planetary reducers.

Negative Brake: A spring-set, hydraulically released multipledisc brake is mounted on the hoist motor and operated through a counter-balance valve. (Positive free fall brake is optional

Drum lock: External ratchet for locking drum.

Drums:

Front drum:

666 mm P.C.D. x 672 mm Lg. wide drum, grooved for 26 mm wire rope. Rope capacity is 275 m working length and 350 m storage length.

Rear drum:

666 mm P.C.D. x 672 mm Lg. wide drum, grooved for 26 mm wire rope. Rope capacity is 255 m working length and 350 m storage length.

Note: Rope lengths listed above denote drum capacity and may differ from actual rope lengths supplied when machinery is shipped.

Line speed: Single line on the first drum layer **Hoisting/Lowering:** 120 to 3 m/min

Line Pull:

Rated line pull (Single-line): 132 kN {13.5 tf}



Swing System

Swing unit is powered by hydraulic motor driving spur gear through planetary reducer, the swing system provides 360° rotation.

Swing parking brakes: A spring-set, hydraulically released multiple-disc brake is mounted on swing motor.

Swing circle: Single-row ball bearing with an integral internally cut swing gear.

Swing lock: Manually, four position lock for transportation

Swing speed: 2.1 min⁻¹ {rpm}



Upper Structure

Torsion-free precision machined upper frame. All components are located clearly and service friendly. Engine with low noise level. Complies with EC Directive 2000/14/EC.

Counterweight: 53.0 ton

Note: Lifting capacity setting with 48.0 ton counterweight (without carbody weight) available as option.



Cab & Control

Totally enclosed, full vision cab with safety glass, fully adjustable, high backed seat with a head-rest and armrests, and intermittent wiper and window washer (roof and front window).

Cab fittings:

Air conditioner, convenient compartment (for tool), cup holder, ashtray, cigarette lighter, sun visor, roof blind, tinted glass, floor mat, foot-rest, shoe tray

Controls:

Four adjustable levers for front drum, rear drum, boom drum and swing controls, and boom hoist pedal.



Lower Structure

Steel-welded carbody with axles. Crawler assemblies are designed with quick disconnect feature for individual removal as a unit from axles. Crawler belt tension is maintained by hydraulic jack force on the track-adjusting bearing block.

Carbody weight: 10.0 ton

Crawler drive: Independent hydraulic propel drive is built into each crawler side frame. Each drive consists of a hydraulic motor propelling a driving tumbler through a planetary gear box. Hydraulic motor and gear box are built into the crawler side frame within the shoe width.

Crawler brakes: Spring-set, hydraulically released parking brakes are built into each propel drive.

Steering mechanism: A hydraulic propel system provides both skid steering (driving one track only) and counter-rotating steering (driving each track in opposite directions).

Track rollers: Sealed track rollers for maintenance-free opera-

tion.

Shoes (flat): 60 shoes, 910 mm wide each crawler (Optional 1,220 mm shoe is available)

Max. travel speed: 1.3/0.9 km/h

Max. gradeability: 30%



Weight

Including upper and lower machine, 53.0 ton counterweight and 10.0 ton carbody weight, 15.2 m basic boom (or 32.7 m basic luffing boom + 22.9 m basic luffing jib), hook and other accessories.

SpecificationWeightGround pressureCrane boomApprox. 136 ton, 106 kPa {1.08 kgf/cm²}Luffing jibApprox. 149 ton, 116 kPa {1.18 kgf/cm²}



Attachment

Boom and Jib:

Welded lattice construction using tubular, high-tensile steel chords with pin connections between sections.

Boom and Jib Length

	Min. Length	Max. Length
	(Min. Combination)	(Max. Combination)
Crane Boom	15.2 m	76.2 m
Luffing Boom	14.4 m	47.9 m
Long Boom	51.8 m	82.3 m
Fixed Jib	24.4 m + 12.2 m	61.0 m + 30.5 m
Luffing Jib	32.7 m + 22.9 m	47.9 m + 32.0 m/ 44.8 m + 53.3 m

Main Specifications (Model: CKE1350-1F)

Crane Boom		
Max. Lifting Capacity	135 t/4.5 m	
Max. Length	76.2 m	
Luffing Boom		
Max. Lifting Capacity	80 t/8.0 m	
Max. Length	47.9 m	
Long Boom		
Max. Lifting Capacity	44.3 t/10.6 m	
Max. Length	82.3 m	
Fixed Jib		
Max. Lifting Capacity	26.8 t/16.0 m	
Max. Length	30.5 m	
Max. Combination	61.0 m + 30.5 m	
Luffing Jib		
Max. Lifting Capacity	36 t/12.0 m	
Max. Combination	47.9 m + 32.0 m, 44.8 m + 53.3 m	
Main & Aux. Winch		
Max. Line Speed	120 m/min (1st layer)	
Rated Line Pull (Single Line)	132 kN {13.5 tf}	
Wire Rope Diameter	26 mm	
Wire Rope Length	275 m (Main) 255 m (Aux.)	
Brake Type	Spring-set hydraulically released (Nagative)	
Free-Fall Brake Type	Wet-type multiple disc brake (optional)	

Working Speed	
Swing Speed	2.1 min-1 {rpm}
Travel Speed	1.3/0.9 km/h
Power Plant	
Model	Hino P11C-UN
Engine Output	247 kW/2,000 min-1 {rpm}
Fuel Tank Capacity	400 liters
Hydraulic System	
Main Pumps	4 variable displacement
Max. Pressure	31.9 MPa {325 kgf/cm²}
Hydraulic Tank Capacity	535 liters
Self-Removal Device	Standard counterweight removal
Weight	
Operating Weight*	Approx. 136 t
Ground Pressure*	106 kPa {1.08 kgf/cm²}
Counterweight	53.0 t (Upper), 10.0 t (Lower)
Transport Weight**	Approx. 39.7 t

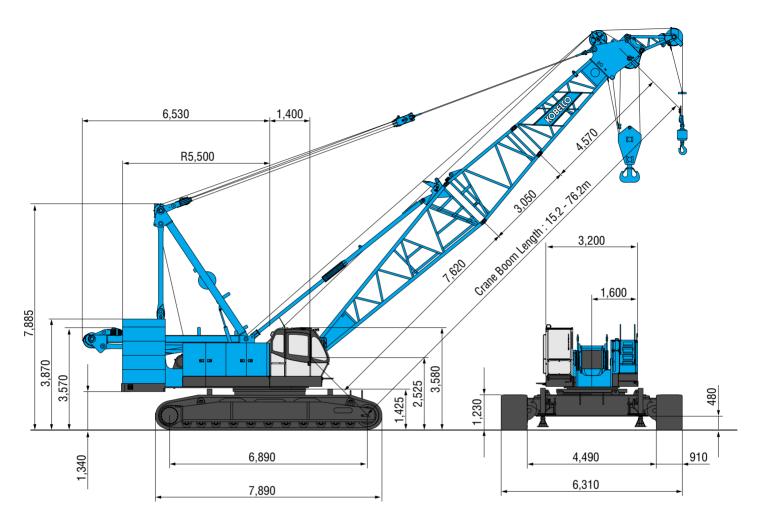
^{*} Including upper and lower machine, 53.0 ton counterweight and 10.0 ton carbody weight, basic boom, hook, and other accessories.

Units are SI units. { } indicates conventional units.

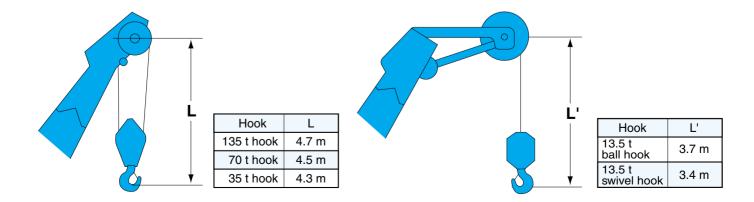
^{**} Base machine with trans-lifter, 70 t hook, main and aux. winches (non-free fall) including wire rope, self removal device.

GENERAL DIMENSIONS

Crane Boom (Unit: mm)



Limit of Hook Lifting



Luffing Jib (Unit: mm) Luffing Boom Length : 32.7 m - 47.9 m Boom Angle (63 °- 88) (7,645)2,525

1,400

BOOM AND JIB ARRANGEMENTS

Crane Boom Arrangements

Boom length m (ft)	Boom arrangement	
15.2 (50)	<u>B∳OTI</u> , T	
18.3 (60)		
21.3 (70)	★ ■ 10 10 10 10 10 10 10 10	
24.4 (80)		
27.4 (90)	# B 10 10 20 10TL 1	
30.5 (100)		
33.5 (110)		
36.6 (120)		
39.6 (130)		
42.7 (140)		
45.7 (150)	B 10 10 20 30 30 10T 10 B 20 20 30 30 10T 30 10T 10T 10T 10T B 10 30 30 30 10T 30 10T 10T 10T 10T 10T	

Symbol	Boom Length	Remarks
В	7.6 m	Boom Base
□\$ ^T	4.6 m	Boom Top
TOT	3.0 m	Tapered Boom
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom

Boom length m (ft)	Boom arrangement
48.8 (160)	
51.8 (170)	
54.9 (180)	
57.9 (190)	
61.0 (200)	
64.0 (210)	
67.1 (220)	
70.1 (230)	
73.2 (240)	
76.2 (250)	★ ■ 10 20 20 30 30 30 30 30 10T □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

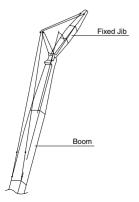
mark shows the guy line installing position when the fixed jib is used.

Long Boom Arrangements

Boom length m (ft)	Boom arrangement
51.8 (170)	B 30A 30 10 30 10T 14A 3JT
54.9 (180)	B 30A 30 20 30 10T 14A 3JT
57.9 (190)	B 30A 30 20 30 10 10T 14A 3JT
61.0 (200)	B 30A 30 10 20 30 10 10T 14A 3JT
64.0 (210)	B 30A 30 10 20 30 10 10T 14A 110 3JT
67.1 (220)	B 30A 30 10 20 30 10 10T 14A 20 3JT
70.1 (230)	B 30A 30 10 20 30 10 10T 14A 110 20 31
73.2 (240)	B 30A 30 10 20 30 10 10T 14A 20 20 35JT
76.2 (250)	■ 30A 30 10 20 30 10 10T 14A 20 30 → 3JT
79.2 (260)	■ 30A 30 10 20 30 10 10T 14A 110 20 30 30 31 31 31 31 31 3
82.3 (270)	■ 30A 30 10 20 30 10 10T 14A 110 30 30 31 31 31 31 3

Long Boom Length	Remarks
7.6 m	Boom Base
6.4 m	Luffing Jib Top
3.0 m	Tapered Boom
3.0 m	Insert Boom
6.1 m	Insert Boom
9.1 m	Insert Boom
9.1 m	Special Insert Boom for Luffing
4.3 m	Relay Jib
3.0 m	Luffing Insert Jib
6.1 m	Luffing Insert Jib
9.1 m	Luffing Insert Jib
	7.6 m 6.4 m 3.0 m 3.0 m 6.1 m 9.1 m 9.1 m 4.3 m 3.0 m 6.1 m

Fixed Jib Arrangements



Crane boom length	Jib length m (ft)	Jib arrangement
	12.2 (40)	B 10 T
24.4 m	18.3 (60)	B 10 20 T
61.0 m	24.4 (80)	B 10 20 20 T
	30.5 (100)	■ 10 20 20 17

Symbol	Jib Length	Remarks
В	4.6 m	Jib Base
	4.6 m	Jib Top
10	3.0 m	Insert Jib
20	6.1 m	Insert Jib

Luffing Boom Arrangements for Luffing

Boom length m (ft)	Boom arrangement
32.7 (107)	B 30A 30 10 10 T
	B 30A 30 20 T
35.7 (117)	₩ ■ 30A 30 20 10] _T
38.8 (127)	★ 30A 30 10 20 10 T
	■ 30A 30 20 20 T
41.8 (137)	
	■ 30A 30 20 20 10]T
	B 30A 30 30 20 T

Boom length m (ft)	Boom arrangement
44.8 (147)	
44.6 (147)	E 30A 30 20 30 10 T
47.9 (157)	※ ■ 30A 30 10 20 30 10 T
47.9 (137)	■ 30A 30 20 30 20 T

mark shows the standard luffing boom arrangement which enables each boom length of less than that boom length to be configured.

Symbol	Luffing Boom Length	Remarks
В	7.6 m	Boom Base
Ūτ	0.7 m	Luffng Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom
30A	9.1 m	Special Insert Boom for Luffing

Luffing Boom Arrangements for Crane

Boom length m (ft)	Boom arrangement
14.4 (47)	■ 10 10 T
17.4 (57)	※ <u>■ 20 10</u>] _T
20.5 (67)	₩ <u>B</u> 30A 10 T
23.5 (77)	
26.6 (87)	
29.6 (97)	
32.7 (107)	
35.7 (117)	

Boom length m (ft)	Boom arrangement
38.8 (127)	B 30A 30 10 20 10 T
	■ 30A 30 20 20 T
	₩ ■ B 30A 20 20 30 10 T
41.8 (137)	
41.6 (137)	
	■ 30A 30 30 20 T
44.8 (147)	B 30A 30 10 20 20 10 T
	B 30A 30 20 30 10 T
47.9 (157)	B _30A
	B 30A 30 20 30 20 T

Symbol	Luffing Boom Length	Remarks
В	7.6 m	Boom Base
Ūτ	0.7 m	Luffing Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom
30A	9.1 m	Special Insert Boom for Luffing

Luffing Jib Arrangements

Jib length m (ft)	Jib arrangement
22.9 (75)	─ JB 14A 20
25.9 (85)	
20.0 (00)	<u>JB</u> 14A I 30 ∫ √JT
29.0 (95)	J B 14A 20 20 ∴ JT
	□ JB 14A I 10 I 30
	— ЗВ 14А [10] 20 20
32.0 (105)	J B <u>I 14A I 20 30 </u> √JT
	□ B 14A I 10 I 10 30 □ √√JT
05.4.(445)	※ ✓ В 14A 110 20 30 ✓ ✓ ✓ ✓
35.1 (115)	JB 14A 30 30 ∆∫JT

Jib length m (ft)	Jib arrangement
	※ — JB 14A 10 10 20 30 — 3, — 3, — 7.
38.1 (125)	— JB] 14A 20 20 30
	✓JB 14A 10 30 30 3√JT
41.1 (135)	※ — JB 14A 10 20 20 30 —
41.1 (133)	
44.2 (145)	Ж <u>ЛВ 14A 10 20 30 30 </u> 5Л
47.2 (155)	— ЗВ 14A 10 10 20 30 30 30 30 30 30 3
47.2 (133)	
50.3 (165)	
53.3 (175)	Ж <u>ЛВ 14A 10 20 30 30 30 </u> ЛТ

 $[\]label{eq:continuous} \mbox{\ensuremath{\%}} \mbox{ mark shows the standard luffing jib arrangement which enables each luffing jib length of less than$ that jib length to be configured.

Symbol	Luffing Jib Length	Remarks
□ B	6.1 m	Luffing Jib Base
□_\$JT	6.4 m	Luffing Jib Top
14A	4.3 m	Relay Jib
10	3.0 m	Luffing Insert Jib
20	6.1 m	Luffing Insert Jib
30	9.1 m	Luffing Insert Jib

Luffing Boom and Jib Combinations

			Jib Length (m)									
		22.9	25.9	29.0	32.0	35.1	38.1	41.1	44.2	47.2	50.3	53.3
(E)	32.7	0	0	0	0	0	0	0	0	0	0	0
	35.7	0	0	0	0	0	0	0	0	0	0	0
-ength	38.8	0	0	0	0	0	0	0	0	0	0	0
1 — 1	41.8	0	0	0	0	0	0	0	0	0	0	0
Boom	44.8	0	0	0	0	0	0	0	0	0	0	0
BG	47.9	0	0	0	0	×	×	×	×	×	×	×

○: Combinations which is allowed. ×: Combinations which is not allowed.



Hook Blocks

A range of hook blocks can be specified, each with a safety latch.

111	\\\-:=\\-\(\ \)	No. of	of No. of lines and max. rated loads (tons)							
Hooks	Weight (kg)	sheaves	1	2	3	4	5	6	7	8
135-ton	1,700	5	-	27.0	40.5	54.0	67.5	81.0	94.5	108.0
70-ton	1,200	3	-	27.0	40.5	54.0	67.5	70.0	-	-
35-ton	900	1	-	27.0	35.0	-	-	-	-	-
13.5-ton ball hook	450	0	13.5	-	-	-	-	-	-	-
13.5-ton swivel hook	100	0	13.5	-	-	-	-	-	-	-

Hooks	Weight (kg)	No. of	No. of lines and max. rated loads (tons)		
HOOKS	weight (kg)	sheaves	9	10	
135-ton	1,700	5	121.5	135.0	
70-ton	1,200	3	-	-	
35-ton	900	1	-	-	
13.5-ton ball hook	450	0	-	-	
13.5-ton swivel hook	100	0	-	-	

Main Hoist Drum Rated Loads in Metric Tons

No. of Parts of Line	1	2	3	4	5	6	7	8
Max. Loads (ton)	13.5	27.0	40.5	54.0	67.5	81.0	94.5	108.0

No. of Parts of Line	9	10
Max. Loads (ton)	121.5	135.0

Symbols for Attachments:



















Crane Boom

Auxiliary Sheave for Crane Boom

Luffing Boom

Auxiliary Sheave for Luffing Boom

Long Boom

Auxiliary Sheave for Long Boom

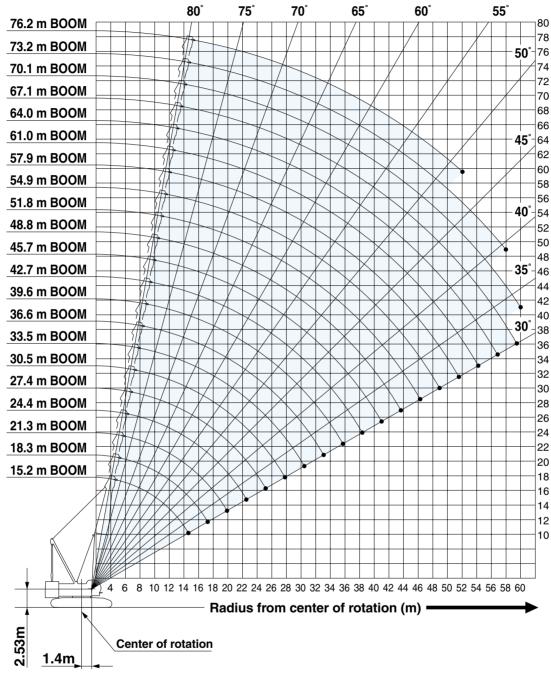
Fixed Jib

Luffing Jib

Luffing Boom with Luffing Jib

Height above ground (m)

Crane Boom Working Ranges



NOTES:

- 1. Ratings according to EN13000.
- 2. Ratings in metric tons for 360° working area.
- 3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- 4. Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
- 5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 6. Ratings are for operation on a firm and level surface, up to 1% gradient.
- At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.
- 8. Boom inserts and guy lines must be arranged as shown in the

- "Operator's Manual".
- 9. Boom hoist reeving is 12 part line.
- 10. Gantry must be in raised position for all conditions.
- 11. Boom backstops are required for all boom lengths.
- 12. The boom should be erected over the front of crawlers, not laterally.
- Ratings shown in _____ are determined by the strength of the boom or other structural component.
- 14. When erecting or lowering the boom length of 73.2 m or over, the pillow plate for erection must be placed at the end of crawlers.
- 15. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 16. Crane boom ratings: Deduct weight of hook block, slings, and all other load handling accessories from crane boom ratings shown.
- 17. Auxiliary sheave ratings for crane boom: Deduct weight of hook block, slings, and all other load handling accessories from auxiliary sheave ratings for crane boom shown.
- 18. Crane boom lengths for auxiliary sheave mounting are 15.2 m to 73.2 m.



Crane Boom Lifting Capacity

Unit: metric ton

Boom length Working (m) radius (m)	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7		Boom length (m) Working radius (m)
4.5	4.5 m/135.0												4.5
5.0	131.1	5.1 m/128.4	5.6 m/117.2										5.0
6.0	110.4	110.1	109.6	6.1 m/107.8	6.7 m/95.1								6.0
7.0	95.1	94.8	93.3	91.1	89.3	7.2 m/84.2	7.7 m/75.3						7.0
8.0	79.5	79.9	79.1	77.4	75.9	74.6	72.4	8.2 m/67.8	8.8 m/61.7				8.0
9.0	67.7	68.8	68.5	67.2	66.0	64.9	62.5	61.5	60.0	9.3 m/56.3	9.8 m/51.8		9.0
10.0	58.4	59.0	59.0	58.8	58.3	57.4	56.5	55.0	53.6	52.2	50.9	10.4 m/47.8	10.0
12.0	44.3	45.7	45.6	45.4	45.2	45.2	45.1	44.9	44.1	43.0	42.0	41.0	12.0
14.0	33.5	37.1	37.0	36.8	36.6	36.5	36.5	36.3	36.2	36.1	35.6	34.7	14.0
16.0	14.8 m/29.3	30.0	31.0	30.8	30.6	30.5	30.4	30.2	30.1	30.0	29.9	29.8	16.0
18.0		17.5 m/24.8	26.6	26.4	26.2	26.1	26.0	25.8	25.7	25.6	25.4	25.3	18.0
20.0			21.7	23.0	22.8	22.7	22.6	22.4	22.3	22.2	22.0	21.9	20.0
22.0			20.1 m/21.3	19.9	20.1	20.0	19.9	19.7	19.6	19.5	19.3	19.2	22.0
24.0				22.8 m/18.5	18.0	17.9	17.7	17.5	17.4	17.3	17.1	17.0	24.0
26.0					25.4 m/16.0	16.1	16.0	15.7	15.6	15.5	15.3	15.2	26.0
28.0						14.2	14.5	14.2	14.1	13.9	13.8	13.6	28.0
30.0						28.1 m/14.1	13.2	12.9	12.8	12.7	12.5	12.3	30.0
32.0							30.7 m/12.5	11.8	11.7	11.5	11.4	11.2	32.0
34.0								33.3 m/10.9	10.8	10.6	10.4	10.3	34.0
36.0									9.7	9.8	9.6	9.4	36.0
38.0										8.9	8.8	8.7	38.0
40.0										38.6 m/8.6	8.1	8.0	40.0
42.0											41.2 m/7.5	7.4	42.0
44.0												43.9 m/6.5	44.0
Reeves	10	10	9	8	8	7	6	6	5	5	4	4	Reeves

Boom length Working (m) radius (m)	51.8	54.9	57.9	61.0	64.0	67.1	70.1	73.2	76.2	Boom length (m) Working radius (m)
10.0	10.9 m/44.2	11.4 m/40.1	11.9m/38.4							10.0
12.0	40.0	39.1	38.2	12.5 m/35.8	13.0 m/33.4	13.5 m/26.7				12.0
14.0	33.9	33.2	32.5	31.7	30.9	26.7	14.1 m/26.7	14.6 m/24.4	15.1 m/20.4	14.0
16.0	29.3	28.7	28.1	27.4	26.7	26.3	25.7	22.7	19.4	16.0
18.0	25.2	25.1	24.6	24.0	23.4	23.0	22.5	20.6	17.5	18.0
20.0	21.7	21.6	21.5	21.2	20.7	20.4	19.9	18.8	15.8	20.0
22.0	19.0	18.9	18.8	18.6	18.4	18.1	17.7	17.1	14.3	22.0
24.0	16.8	16.7	16.6	16.4	16.2	16.2	15.8	15.4	13.0	24.0
26.0	15.0	14.9	14.7	14.6	14.4	14.4	14.2	13.8	11.8	26.0
28.0	13.5	13.4	13.2	13.1	12.9	12.8	12.7	12.4	10.7	28.0
30.0	12.2	12.1	11.9	11.7	11.6	11.5	11.4	11.2	9.7	30.0
32.0	11.1	10.9	10.8	10.6	10.4	10.4	10.2	10.0	8.8	32.0
34.0	10.1	10.0	9.8	9.6	9.4	9.4	9.2	9.1	8.0	34.0
36.0	9.2	9.1	8.9	8.8	8.6	8.5	8.4	8.2	7.2	36.0
38.0	8.5	8.4	8.2	8.0	7.8	7.8	7.6	7.4	6.5	38.0
40.0	7.8	7.7	7.5	7.3	7.1	7.1	6.9	6.7	5.8	40.0
42.0	7.2	7.1	6.9	6.7	6.5	6.5	6.3	6.1	5.2	42.0
44.0	6.7	6.5	6.4	6.2	6.0	5.9	5.7	5.5	4.6	44.0
46.0	5.9	6.0	5.9	5.7	5.4	5.3	5.2	4.9	4.0	46.0
48.0	46.5 m/5.7	5.3	5.4	5.2	4.9	4.9	4.7	4.4	3.5	48.0
50.0		49.2 m/4.8	4.7	4.7	4.5	4.4	4.2	4.0	2.9	50.0
52.0			51.8 m/4.1	4.2	4.1	4.0	3.8	3.6	2.4	52.0
54.0				3.6	3.6	3.5	3.4	3.2		54.0
56.0				54.4 m/3.4	3.0	3.1	3.0	2.8		56.0
58.0					57.1m/2.8	2.6	2.5	2.4		58.0
60.0						59.7 m/2.2	2.1			60.0
Reeves	4	3	3	3	3	2	2	2	2	Reeves

Note

Ratings according to EN13000.

Ratings shown in _____are determined by the strength of the boom or other structural components.

Refer to notes P12.



Auxiliary Sheave Lifting Capacity for Crane Boom

Unit: metric ton

Boom length Working (m) radius (m)	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7	48.8	Boom length (m) Working radius (m)
5.0	5.5 m/27.0												5.0
6.0	27.0	6.1 m/27.0	6.6 m/27.0										6.0
7.0	27.0	27.0	27.0	7.1 m/27.0	7.7 m/27.0								7.0
8.0	27.0	27.0	27.0	27.0	27.0	8.2 m/27.0	8.7 m/27.0						8.0
9.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	9.2 m/27.0	9.8 m/27.0				9.0
10.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	10.3 m/27.0	10.8 m/27.0		10.0
12.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	11.4 m/27.0	12.0
14.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	14.0
16.0	14.8 m/27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	16.0
18.0		17.5 m /23.3	25.1	24.9	24.7	24.6	24.5	24.3	24.2	24.1	23.9	23.8	18.0
20.0			20.2	21.5	21.3	21.2	21.1	20.9	20.8	20.7	20.5	20.4	20.0
22.0			20.1 m/19.8	18.4	18.6	18.5	18.4	18.2	18.1	18.0	17.8	17.7	22.0
24.0				22.8 m/17.0	16.5	16.4	16.2	16.0	15.9	15.8	15.6	15.5	24.0
26.0					25.4 m/14.5	14.6	14.5	14.2	14.1	14.0	13.8	13.7	26.0
28.0						12.7	13.0	12.7	12.6	12.4	12.3	12.1	28.0
30.0						28.1 m/12.6	11.7	11.4	11.3	11.2	11.0	10.8	30.0
32.0							30.7 m/11.0	10.3	10.2	10.0	9.9	9.7	32.0
34.0								33.3 m/9.4	9.3	9.1	8.9	8.8	34.0
36.0									8.2	8.3	8.1	7.9	36.0
38.0										7.4	7.3	7.2	38.0
40.0										38.6 m/7.1	6.6	6.5	40.0
42.0											41.2 m/6.0	5.9	42.0
44.0												43.9 m/5.0	44.0
Reeves	2	2	2	2	2	2	2	2	2	2	2	2	Reeves

Boom length Working (m) radius (m)	51.8	54.9	57.9	61.0	64.0	67.1	70.1	73.2	Boom length (m) Working radius (m)
12.0	11.9 m/27.0	12.4 m/27.0	12.9 m/27.0	13.5 m/27.0					12.0
14.0	27.0	27.0	27.0	27.0	27.0	14.5 m/25.2	15.1 m/25.2	15.6 m/22.9	14.0
16.0	27.0	27.0	26.6	25.9	25.2	24.8	24.2	21.2	16.0
18.0	23.7	23.6	23.1	22.5	21.9	21.5	21.0	19.1	18.0
20.0	20.2	20.1	20.0	19.7	19.2	18.9	18.4	17.3	20.0
22.0	17.5	17.4	17.3	17.1	16.9	16.6	16.2	15.6	22.0
24.0	15.3	15.2	15.1	14.9	14.7	14.7	14.3	13.9	24.0
26.0	13.5	13.4	13.2	13.1	12.9	12.9	12.7	12.3	26.0
28.0	12.0	11.9	11.7	11.6	11.4	11.3	11.2	10.9	28.0
30.0	10.7	10.6	10.4	10.2	10.1	10.0	9.9	9.7	30.0
32.0	9.6	9.4	9.3	9.1	8.9	8.9	8.7	8.5	32.0
34.0	8.6	8.5	8.3	8.1	7.9	7.9	7.7	7.6	34.0
36.0	7.7	7.6	7.4	7.3	7.1	7.0	6.9	6.7	36.0
38.0	7.0	6.9	6.7	6.5	6.3	6.3	6.1	5.9	38.0
40.0	6.3	6.2	6.0	5.8	5.6	5.6	5.4	5.2	40.0
42.0	5.7	5.6	5.4	5.2	5.0	5.0	4.8	4.6	42.0
44.0	5.2	5.0	4.9	4.7	4.5	4.4	4.2	4.0	44.0
46.0	4.4	4.5	4.4	4.2	3.9	3.8	3.7	3.4	46.0
48.0	46.5 m/4.2	3.8	3.9	3.7	3.4	3.4	3.2	2.9	48.0
50.0		49.2 m/3.3	3.2	3.2	3.0	2.9	2.7	2.5	50.0
52.0			51.8 m/2.6	2.7	2.6	2.5	2.3	2.1	52.0
54.0				2.1	2.1	2.0			54.0
Reeves	2	2	2	2	2	2	2	2	Reeves

Note:

Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the boom or other structural components.

Refer to notes P12.



Luffing Boom Lifting Capacity

Unit: metric ton

Counterweight: 53.0 t, Carbody weight: 10.0 t

Boom length Working (m) radius (m)	14.4	17.4	20.5	23.5	26.6	29.6	32.7	35.7	38.8	41.8	44.8		Boom length (m) Working radius (m)
5.0	5.4 m/80.0												5.0
6.0	80.0	80.0	6.5 m/80.0										6.0
7.0	80.0	80.0	80.0	80.0	7.5 m/80.0								7.0
8.0	80.0	79.4	78.8	77.0	75.2	8.1 m/72.7	8.6 m/66.0						8.0
9.0	68.2	68.2	68.1	66.8	65.3	63.8	62.5	9.1 m/60.3	9.7 m/55.7				9.0
10.0	58.3	58.3	58.2	58.1	57.7	56.4	55.2	54.1	53.4	10.2 m/51.3	10.7 m/48.0	11.2 m/44.5	10.0
12.0	44.1	44.9	44.8	44.7	44.6	44.4	44.3	43.8	43.1	42.3	41.9	41.2	12.0
14.0	32.5	36.4	36.2	36.1	36.0	35.8	35.6	35.5	35.4	35.3	35.0	34.2	14.0
16.0	14.6 m/29.1	29.3	30.2	30.1	30.0	29.8	29.6	29.5	29.4	29.2	29.2	29.0	16.0
18.0		17.3 m/24.5	25.8	25.7	25.6	25.3	25.2	25.1	24.9	24.8	24.7	24.5	18.0
20.0			19.9 m/20.7	22.3	22.2	21.9	21.8	21.7	21.5	21.4	21.3	21.1	20.0
22.0				19.0	19.5	19.3	19.1	19.0	18.8	18.7	18.6	18.4	22.0
24.0				22.5 m/17.8	17.3	17.1	16.9	16.8	16.6	16.5	16.4	16.2	24.0
26.0					25.2 m/15.5	15.3	15.2	15.0	14.8	14.7	14.6	14.4	26.0
28.0						27.8 m/13.4	13.7	13.5	13.3	13.2	13.1	12.9	28.0
30.0							12.2	12.2	12.0	11.9	11.8	11.6	30.0
32.0							30.5 m/11.7	11.1	10.9	10.8	10.7	10.5	32.0
34.0								33.1 m/10.2	10.0	9.8	9.7	9.5	34.0
36.0									35.7 m/8.8	9.0	8.9	8.6	36.0
38.0										7.9	8.1	7.9	38.0
40.0										38.4 m/7.7	7.2	7.2	40.0
42.0											41.0 m/6.7	6.4	42.0
44.0												43.7 m/5.6	44.0
Reeves	6	6	6	6	6	6	5	5	5	4	4	4	Reeves

Note:

Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the boom or other structural components.

Refer to notes P12 and below.

Auxiliary Sheave Lifting Capacity for Luffing Boom (With 70 t Main Hook)

Unit: metric ton

											•		
Boom length Working (m) radius (m)		17.4	20.5	23.5	26.6	29.6	32.7	35.7	38.8	41.8	44.8	47.9	Boom length (m) Working radius (m)
7.0	27.0	7.6 m/27.0											7.0
8.0	27.0	27.0	8.1 m/27.0	8.6 m/27.0									8.0
9.0	27.0	27.0	27.0	27.0	9.1 m/27.0	9.7 m/27.0							9.0
10.0	27.0	27.0	27.0	27.0	27.0	27.0	10.2 m/27.0	10.7 m/27.0	11.3 m/27.0	11.8 m/27.0			10.0
12.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	12.3 m/27.0	12.8 m/27.0	12.0
14.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	14.0
16.0	14.6 m/27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	16.0
18.0		17.3 m/23.0	24.3	24.2	24.1	23.8	23.7	23.6	23.4	23.3	23.2	23.0	18.0
20.0			19.9 m/19.2	20.8	20.7	20.4	20.3	20.2	20.0	19.9	19.8	19.6	20.0
22.0				17.5	18.0	17.8	17.6	17.5	17.3	17.2	17.1	16.9	22.0
24.0				22.5 m/16.3	15.8	15.6	15.4	15.3	15.1	15.0	14.9	14.7	24.0
26.0					25.2 m/14.0	13.8	13.7	13.5	13.3	13.2	13.1	12.9	26.0
28.0						27.8 m/11.9	12.2	12.0	11.8	11.7	11.6	11.4	28.0
30.0							10.7	10.7	10.5	10.4	10.3	10.1	30.0
32.0							30.5 m/10.2	9.6	9.4	9.3	9.2	9.0	32.0
34.0								33.1 m/8.7	8.5	8.3	8.2	8.0	34.0
36.0									35.7 m/7.3	7.5	7.4	7.1	36.0
38.0										6.4	6.6	6.4	38.0
40.0										38.4 m/6.2	5.7	5.7	40.0
42.0											41.0 m/5.2	4.9	42.0
44.0												43.7 m/4.1	44.0
Reeves	2	2	2	2	2	2	2	2	2	2	2	2	Reeves

Note:

Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the boom or other structural components.

Refer to notes P12 and below.

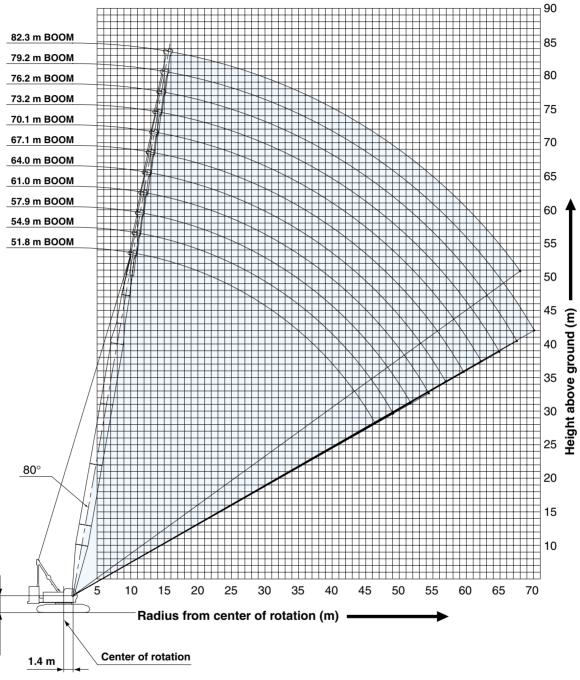
Note: Luffing boom

21. Luffing boom lengths for auxiliary sheave mounting are 14.4 m to 47.9 m.

^{19.} Luffing boom ratings: Deduct weight of hook block, slings and all other load handling accessories from luffing boom ratings shown.

^{20.} Auxiliary sheave ratings for luffing boom: Deduct weight of hook block, slings and all other load handling accessories from auxiliary sheave ratings for luffing boom shown.

Long Boom Working Ranges



NOTES

1. Ratings according to EN13000.

2.53 m

- 2. Ratings in metric tons for 360° working area.
- 3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- 4. Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
- 5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 6. Ratings are for operation on a firm and level surface, up to 1% gradient.
- At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.

- Boom inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Boom hoist reeving is 12 part line.
- 10. Gantry must be in raised position for all conditions.
- 11. Boom backstops are required for all boom lengths.
- 12. The boom should be erected over the front of crawlers, not laterally.
- 13. Ratings shown in ______ are determined by the strength of the boom or other structural component.
- 14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 15. Long boom ratings: Deduct weight of hook block, slings, and all other load handling accessories from long boom ratings shown.
- 16. Auxiliary sheave ratings for long boom: Deduct weight of hook block, slings, and all other load handling accessories from auxiliary sheave ratings for long boom shown.
- 17. Long boom lengths for auxiliary sheave mounting are 51.8 m to 79.2 m.



Long Boom Lifting Capacity

Unit: metric ton

Counterweight: 53.0 t, Carbody weight: 10.0 t

Boom length Working (m) radius (m)	51.8	54.9	57.9	61.0	64.0	67.1	70.1	73.2	76.2	79.2	82.3	Boom length (m) Working radius (m)
10.0	10.6 m/44.3	11.2 m/40.5	11.7 m/38.2									10.0
12.0	41.6	40.1	37.8	12.2 m/35.3	12.7 m/33.5	13.3 m/27.0	13.8 m/26.0					12.0
14.0	36.1	36.0	35.5	33.4	32.4	27.0	25.8	14.3 m/22.3	14.9 m/19.4	15.4 m/17.0	15.9 m/15.0	14.0
16.0	30.1	30.0	29.8	29.7	29.6	27.0	23.7	20.8	18.5	16.6	14.9	16.0
18.0	25.6	25.6	25.4	25.2	25.1	25.2	22.0	19.2	17.1	15.3	13.7	18.0
20.0	22.2	22.2	22.0	21.8	21.7	21.8	20.5	17.9	15.9	14.2	12.7	20.0
22.0	19.5	19.5	19.3	19.1	19.0	19.1	19.0	16.8	14.9	13.3	11.9	22.0
24.0	17.4	17.3	17.1	16.9	16.8	16.9	16.8	15.8	14.0	12.5	11.1	24.0
26.0	15.6	15.5	15.3	15.1	15.0	15.1	15.0	14.9	13.2	11.8	10.5	26.0
28.0	14.1	14.0	13.8	13.6	13.5	13.6	13.5	13.4	12.5	11.1	9.9	28.0
30.0	12.8	12.7	12.5	12.3	12.2	12.3	12.2	12.1	11.9	10.6	9.5	30.0
32.0	11.7	11.6	11.4	11.2	11.1	11.2	11.0	11.0	10.9	10.1	9.0	32.0
34.0	10.7	10.6	10.4	10.2	10.1	10.2	10.1	10.0	10.0	9.7	8.6	34.0
36.0	9.8	9.8	9.6	9.4	9.2	9.3	9.2	9.2	9.1	9.0	8.3	36.0
38.0	9.1	9.0	8.8	8.6	8.5	8.6	8.4	8.4	8.3	8.2	8.0	38.0
40.0	8.4	8.3	8.1	7.9	7.8	7.9	7.8	7.7	7.7	7.5	7.5	40.0
42.0	7.8	7.7	7.5	7.3	7.2	7.3	7.2	7.1	7.0	6.9	6.9	42.0
44.0	7.3	7.2	7.0	6.8	6.7	6.7	6.6	6.6	6.5	6.4	6.3	44.0
46.0	6.8	6.7	6.5	6.3	6.2	6.2	6.1	6.1	6.0	5.9	5.8	46.0
48.0	46.4 m/6.8	6.3	6.1	5.9	5.7	5.8	5.7	5.6	5.5	5.4	5.4	48.0
50.0		49.1 m/6.1	5.7	5.5	5.3	5.4	5.2	5.2	5.1	5.0	4.9	50.0
52.0			51.7 m/5.4	5.1	5.0	5.0	4.9	4.8	4.7	4.6	4.5	52.0
54.0				4.8	4.6	4.6	4.5	4.4	4.4	4.2	4.1	54.0
56.0				54.4 m/4.7	4.3	4.3	4.2	4.1	4.0	3.9	3.8	56.0
58.0					56.9 m/4.1	4.0	3.8	3.8	3.7	3.5	3.4	58.0
60.0						59.6 m/3.8	3.5	3.5	3.4	3.2	3.1	60.0
62.0							3.3	3.2	3.1	3.0	2.9	62.0
64.0							62.2 m/3.2	2.9	2.9	2.7	2.6	64.0
66.0								64.9 m/2.8	2.6	2.5	2.4	66.0
68.0									67.5 m/2.4	2.2	2.1	68.0
70.0										2.0		70.0
72.0										70.1 m/2.0		72.0
Reeves	4	3	3	3	3	2	2	2	2	2	2	Reeves

Auxiliary Sheave Lifting Capacity for Long Boom

Unit: metric ton

(With 35 t Main Hook)

Counterweight: 53.0 t, Carbody weight: 10.0 t

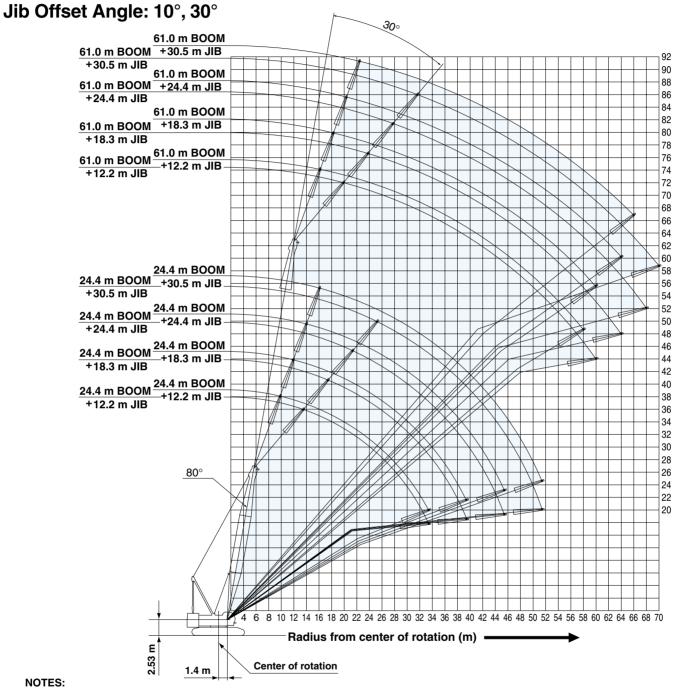
Boom length Working (m) radius (m)	51.8	54.9	57.9	61.0	64.0	67.1	70.1	73.2	76.2	79.2	Boom length (m) Working radius (m)
10.0	11.3 m/13.5	11.9 m/13.5									10.0
12.0	13.5	13.5	12.4 m/13.5	12.9 m/13.5	13.4 m/13.5						12.0
14.0	13.5	13.5	13.5	13.5	13.5	13.5	14.5 m/13.5	15.0 m/13.5	15.6 m/13.5		14.0
16.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	16.1 m/13.5	16.0
18.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	18.0
20.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.9	20.0
22.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	22.0
24.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.7	11.2	24.0
26.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	11.9	10.5	26.0
28.0	12.8	12.7	12.5	12.3	12.2	12.3	12.2	12.1	11.2	9.8	28.0
30.0	11.5	11.4	11.2	11.0	10.9	11.0	10.9	10.8	10.6	9.3	30.0
32.0	10.4	10.3	10.1	9.9	9.8	9.9	9.7	9.7	9.6	8.8	32.0
34.0	9.4	9.3	9.1	8.9	8.8	8.9	8.8	8.7	8.7	8.4	34.0
36.0	8.5	8.5	8.3	8.1	7.9	8.0	7.9	7.9	7.8	7.7	36.0
38.0	7.8	7.7	7.5	7.3	7.2	7.3	7.1	7.1	7.0	6.9	38.0
40.0	7.1	7.0	6.8	6.6	6.5	6.6	6.5	6.4	6.4	6.2	40.0
42.0	6.5	6.4	6.2	6.0	5.9	6.0	5.9	5.8	5.7	5.6	42.0
44.0	6.0	5.9	5.7	5.5	5.4	5.4	5.3	5.3	5.2	5.1	44.0
46.0	5.5	5.4	5.2	5.0	4.9	4.9	4.8	4.8	4.7	4.6	46.0
48.0	47.4 m/5.2	5.0	4.8	4.6	4.4	4.5	4.4	4.3	4.2	4.1	48.0
50.0		4.7	4.4	4.2	4.0	4.1	3.9	3.9	3.8	3.7	50.0
52.0		50.1 m/4.7	4.1	3.8	3.7	3.7	3.6	3.5	3.4	3.3	52.0
54.0			52.7 m/3.9	3.5	3.3	3.3	3.2	3.1	3.1	2.9	54.0
56.0				55.4 m/3.3	3.0	3.0	2.9	2.8	2.7	2.6	56.0
58.0					57.9 m/2.8	2.7	2.5	2.5	2.4	2.2	58.0
60.0						2.5	2.2	2.2	2.1		60.0
62.0						60.6 m/2.4	2.0				62.0
Reeves	1	1	1	1	1	1	1	1	1	1	Reeves

Note: Ratings according to EN13000.

Ratings shown in ______ are determined by the strength of the boom or other structural components.

Refer to notes P16.

Fixed Jib Working Ranges



NOTES:

- 1. Ratings according to EN13000.
- 2. Ratings in metric tons for 360° working area.
- 3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- 4. Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
- 5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 6. Ratings are for operation on a firm and level surface, up to 1 % gradient.
- 7. At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.

- 8. Boom/ jib inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Gantry must be in raised position for all conditions.
- 10. The boom should be erected over the front of crawlers, not laterally.
- 11. Boom backstops are required for all boom lengths.
- 12. Ratings shown in are determined by the strength of the boom or other structural component.
- 13. When erecting or lowering the boom length 73.2 m or over, the pillow plate must placed at the end of crawlers.
- 14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 15. Fixed jib ratings: Deduct weight of jib hook block, slings, and all other load handling accessories from fixed jib ratings shown.
- 16. Crane boom lengths for fixed jib mounting are 24.4 m to 61.0 m.

Height above ground (m)



Fixed Jib Lifting Capacities (Without Main Hook)

Unit: metric ton

Jib Offset Angle: 10°

ıŊ	, OI	1561	Ang	ie. I	U							Cour	iterwei	ght: 53.	0 t, Ca	rbody v	weight:	10.01	Ĺ
oom	length (m)		24	.4			33	3.5			42	2.7			51	.8		Boom leng	th (
Jib le	ength (m)	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	Jib length	(m
	9.0	9.9 m/26.8																9.0	Γ
	10.0	26.8				11.5 m/26.8												10.0	
	12.0	26.7	19.2			26.8	13.5 m/19.2			13.0 m/26.8								12.0	Ī
Γ	14.0	25.8	18.9	14.3 m/9.9		26.8	19.1	15.9 m/9.9		26.8	15.1 m/19.2			14.6 m/26.8				14.0	1
	16.0	24.9	18.3	9.7	16.4 m/5.9	26.0	18.8	9.9		26.8	19.1	17.5 m/9.9		26.8	16.7 m/19.1			16.0	Ī
	18.0	24.1	17.7	9.5	5.8	25.3	18.4	9.7	5.9	26.0	18.8	9.8	19.6 m/5.9	25.6	19.0	19.1 m/9.9		18.0	1
	20.0	22.9	16.8	9.2	5.6	23.0	17.9	9.5	5.7	22.5	18.4	9.7	5.9	22.1	18.8	9.8	21.2 m/5.9	20.0	Ī
Γ	22.0	20.8	15.2	8.8	5.3	20.3	17.4	9.3	5.6	19.8	18.0	9.5	5.7	19.3	18.4	9.6	5.8	22.0	
_	24.0	18.6	13.9	8.4	5.0	18.1	16.4	9.0	5.4	17.6	17.6	9.4	5.6	17.1	17.4	9.5	5.7	24.0	Ϊ.
S (m)	26.0	16.8	12.8	8.0	4.8	16.2	15.1	8.6	5.1	15.7	16.0	9.1	5.5	15.2	15.5	9.4	5.6	26.0	9
radius	28.0	15.2	11.9	7.7	4.5	14.7	14.0	8.3	4.9	14.2	14.4	8.8	5.2	13.7	13.9	9.2	5.5	28.0	
g	30.0	13.9	11.1	7.4	4.3	13.4	13.1	8.0	4.7	12.9	13.1	8.5	5.0	12.4	12.6	8.9	5.3	30.0	ladidə (III)
Working	34.0	11.2	9.7	6.9	4.0	11.3	11.5	7.5	4.3	10.7	10.9	8.0	4.7	10.2	10.4	8.4	4.9	34.0	9
>	38.0		8.7	6.5	3.7	9.7	9.8	7.1	4.0	9.1	9.3	7.6	4.3	8.6	8.8	8.0	4.6	38.0] ,
	42.0		40.0 m/8.3	6.2	3.4	7.8	8.5	6.7	3.8	7.8	8.0	7.2	4.1	7.3	7.5	7.6	4.3	42.0	Ī
	46.0			6.0	3.2		7.3	6.4	3.5	6.7	6.9	6.8	3.8	6.2	6.4	6.7	4.1	46.0	
	50.0				3.1		48.0 m/6.4	6.1	3.3	5.2	6.0	6.3	3.6	5.2	5.5	5.8	3.9	50.0	l
	54.0							5.4	3.2		4.9	5.5	3.4	4.1	4.6	5.0	3.7	54.0	
	58.0								3.0		56.0 m/4.3	4.6	3.3	3.1	3.7	4.3	3.5	58.0	1
	62.0								60.0 m/2.9			60.0 m/4.1	3.1		2.9	3.5	3.3	62.0	1
	66.0												3.0		64.0 m/2.4	2.8	3.1	66.0	1
	70.0															68.0 m/2.4	2.4	70.0	1
	Reeves	2	2	1	1	2	2	1	1	2	2	1	1	2	2	1	1	Reeves	1

Boo	m length (m)		57	'.9			61	1.0		Boom lengtl	h (m)
Jib	length (m)	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	Jib length	(m)
	14.0	15.7 m/24.0								14.0	
	16.0	24.0	17.8 m/19.1			16.2 m/21.2				16.0	
	18.0	23.5	19.1			20.7	18.3 m/19.1			18.0	
	20.0	21.7	18.9	20.1 m/9.9		20.3	18.9	20.7 m/9.9		20.0	
	22.0	19.0	18.7	9.7	22.2 m/5.9	18.7	18.7	9.8	22.8 m/5.9	22.0	
	24.0	16.7	17.0	9.6	5.8	16.6	16.7	9.6	5.8	24.0	
	26.0	14.9	15.2	9.5	5.7	14.8	14.9	9.5	5.7	26.0	
	28.0	13.3	13.6	9.3	5.6	13.2	13.4	9.4	5.6	28.0	
Ê	30.0	12.0	12.2	9.2	5.5	11.9	12.1	9.3	5.5	30.0	ş
Working radius (m)	34.0	9.8	10.1	8.7	5.1	9.7	10.0	8.8	5.2	34.0	Working radius
rad	38.0	8.2	8.4	8.2	4.8	8.1	8.3	8.4	4.9	38.0	gra
ķ	42.0	6.9	7.1	7.4	4.5	6.7	7.0	7.3	4.6	42.0	dius
Wor	46.0	5.8	6.0	6.3	4.2	5.6	5.9	6.2	4.3	46.0	3
	50.0	4.8	5.1	5.4	4.0	4.6	4.9	5.3	4.1	50.0	_
	54.0	3.8	4.2	4.7	3.8	3.7	4.0	4.5	3.9	54.0	
	58.0	2.9	3.4	3.9	3.6	2.8	3.2	3.7	3.7	58.0	
	62.0	2.1	2.6	3.2	3.3	2.1	2.5	3.0	3.1	62.0	
	66.0		64.0 m/2.3	2.5	2.7		64.0 m/2.1	2.3	2.5	66.0	
	70.0			68.0 m/2.2	2.1			68.0 m/2.0	68.0 m/2.2	70.0	
	Reeves	2	2	1	1	2	2	1	1	Reeves	

Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the boom or other structual components.

Jib Offset Angle: 30°

Unit: metric ton

	· •	fset	9		_						L	Cour	iterwei	ght: 53.	υ t, Cal	rboay v	veignt:	10.0 t	•
Boon	n length (m)		24	1.4			33	3.5			42	2.7			51	.8		Boom lengt	th
Jib	length (m)	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	Jib length	(n
	12.0	13.5 m/18.2																12.0	Γ
	14.0	17.8				15.1 m/18.2												14.0	1
	16.0	16.4	17.5 m/12.4			17.7				16.7 m/18.2								16.0	
	18.0	15.2	12.1			16.5	19.0 m/12.5			17.5				18.3 m/18.2				18.0	
	20.0	14.3	11.2	21.4 m/7.4		15.6	12.1			16.6	20.6 m/12.5			17.4				20.0	
	22.0	13.4	10.5	7.4		14.7	11.3	23.0 m/7.5		15.8	12.0			16.7	22.2 m/12.5			22.0	
	24.0	12.7	9.8	7.2	25.3 m/4.1	14.0	10.7	7.4		15.1	11.4	24.5 m/7.5		15.9	11.9			24.0	
	26.0	12.1	9.2	7.0	4.0	13.4	10.1	7.2	26.9 m/4.1	14.4	10.8	7.4		15.3	11.4	26.1 m/7.5		26.0	1
	28.0	11.6	8.8	6.8	3.8	12.8	9.6	7.0	4.0	13.8	10.3	7.2	28.5 m/4.0	14.2	10.9	7.3		28.0	١.
٤	30.0	11.1	8.3	6.5	3.7	12.3	9.2	6.8	3.8	13.2	9.9	7.0	3.9	12.8	10.5	7.2	30.1 m/4.0	30.0	
radius (m)	34.0	10.5	7.6	5.9	3.5	11.5	8.4	6.4	3.6	11.0	9.1	6.8	3.7	10.6	9.7	6.9	3.8	34.0	9
	38.0		7.1	5.4	3.3	9.8	7.8	5.9	3.4	9.3	8.5	6.3	3.6	8.9	9.1	6.7	3.7	38.0	9
Working	42.0		40.0 m/7.0	5.0	3.1	8.2	7.4	5.5	3.3	8.0	8.0	5.9	3.4	7.5	8.0	6.3	3.5	42.0	, ,,,,
إ≷	46.0			4.8	3.0		7.0	5.2	3.1	6.9	7.2	5.6	3.3	6.4	6.8	5.9	3.4	46.0	1
	50.0				2.9		48.0 m/6.9	4.9	3.0	5.4	6.3	5.3	3.1	5.5	5.9	5.6	3.2	50.0	
Ī	54.0				52.0 m/2.9			4.7	2.9		5.4	5.0	3.0	4.4	5.1	5.3	3.1	54.0	
	58.0								2.9		56.0 m/4.7	4.8	3.0	3.3	4.2	4.6	3.1	58.0	
ı	62.0								60.0 m/2.9			4.0	2.9		3.3	3.9	3.0	62.0	
İ	66.0												2.9		64.0 m/2.8	3.1	2.9	66.0	
ı	70.0												68.0 m/2.9			2.3	2.9	70.0	1
Ì	74.0																2.2	74.0	ĺ
ı	Reeves	2	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1	Reeves	1

Воо	m length (m)		57	.9			61	.0		Boom lengti	h (m)
Jik	length (m)	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	Jib length	(m)
	18.0	19.4 m/18.1				19.9 m/18.1				18.0	
	20.0	17.9				18.1				20.0	
	22.0	17.1	23.3 m/12.5			17.3	23.8 m/12.4			22.0	
	24.0	16.4	12.3			16.7	12.4			24.0	
	26.0	15.5	11.7	27.2 m/7.5		15.3	11.9	27.7 m/7.5		26.0	
	28.0	13.9	11.3	7.4		13.8	11.4	7.5		28.0	
	30.0	12.5	10.8	7.3	31.1 m/4.0	12.4	11.0	7.3	31.6 m/4.0	30.0	
	34.0	10.2	10.1	7.0	3.9	10.1	10.2	7.1	3.9	34.0	
Ê	38.0	8.5	9.1	6.8	3.7	8.4	9.0	6.8	3.7	38.0	8
ins (42.0	7.1	7.7	6.5	3.6	7.0	7.6	6.6	3.6	42.0	Ř
rad	46.0	6.0	6.5	6.1	3.4	5.9	6.4	6.2	3.5	46.0	gra
Working radius (m)	50.0	5.1	5.6	5.8	3.3	4.9	5.4	5.8	3.3	50.0	Working radius
Wor	54.0	4.1	4.7	5.0	3.2	3.9	4.6	4.9	3.2	54.0	Ē
	58.0	3.2	3.9	4.3	3.1	3.1	3.8	4.2	3.1	58.0	
	62.0	2.3	3.1	3.6	3.0	2.2	3.0	3.4	3.1	62.0	
	66.0		2.3	2.9	3.0		2.3	2.7	3.0	66.0	
	70.0			2.2	2.6			2.1	2.4	70.0	
	74.0				72.0 m/2.3				72.0 m/2.2	74.0	
	Reeves	2	1	1	2	1	1	1	1	Reeves	

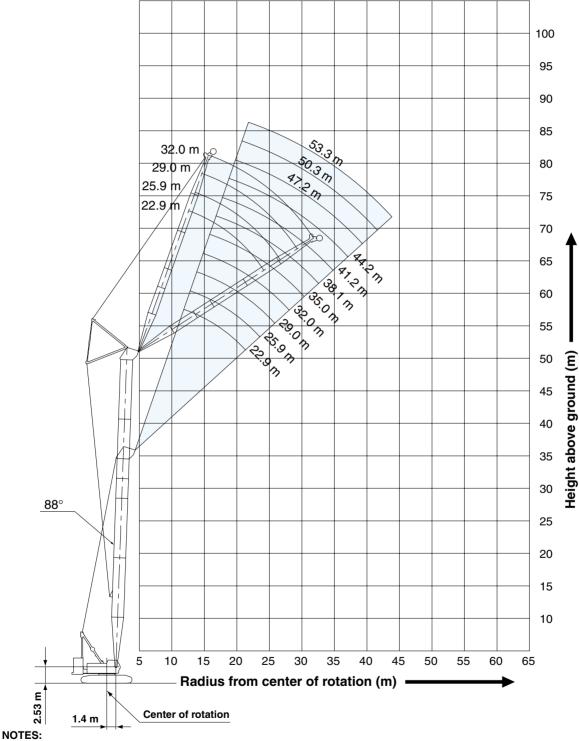
Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the boom or other structual components.

Refer to notes P18.

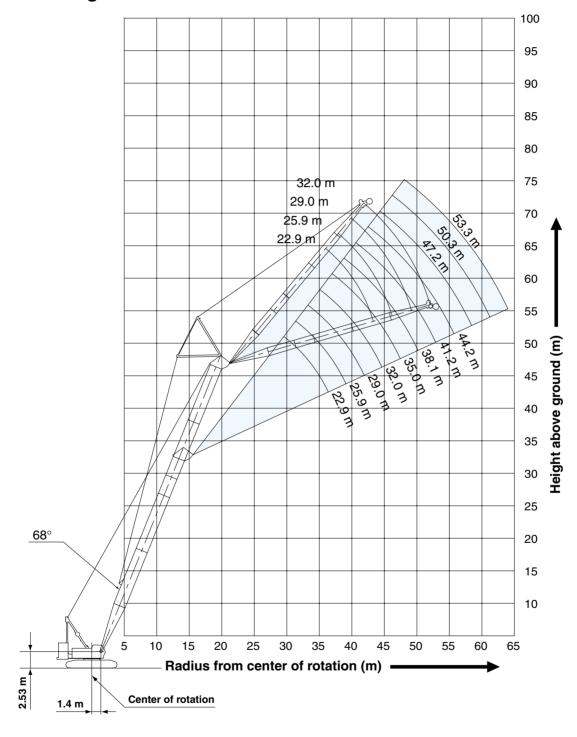
Luffing Jib Working Ranges

Boom Angle: 88°



- 1. Ratings according to EN13000.
- 2. Ratings in metric tons for 360° working area.
- 3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- 4. Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
- 5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefor
- has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 6. Ratings are for operation on a firm and level surface, up to 1% gradient.
- At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.
- 8. Boom/jib inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Luffing boom hoist reeving is 12 part line.
- 10. Luffing jib hoist reeving is 8 part line.
- 11. Gantry must be in raised position for all conditions.

Boom Angle: 68°



- 12. Boom and jib backstops are required for all boom and jib combinations.
- 13. Ratings shown in _____ are determined by the strength of the boom or other structural component.
- 14. The boom should be erected over the front of crawlers, not laterally.
- 15. When erecting or lowering booms of the following lengths, pillow plate must placed at the end of crawlers:
 - With 53.0 ton counterweight + 10.0 ton carbody weight: Boom length 44.8 m or over
 - With optional 48.0 ton counterweight (no carbody weight): Boom length 38.8 m or over
- 16. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 17. The minimum rated load is 2.0 ton.
- 18. Luffing jib ratings: Deduct weight of jib hook block, slings, and all other load handling accessories from luffing jib ratings shown.
- Luffing boom ratings with luffing jib: Deduct weight of main hook block, slings and all other load handling accessories from luffing boom ratings with luffing jib shown.



Luffing Jib Lifting Capacities (Without Main Hook)

Unit: metric ton

Counterweight: 53.0 t, Carbody weight: 10.0 t

ω Bo	oom length (m)								3:	2.7								Boom length	n (m)
B	ib length (m)		22	2.9			29	0.0			35	i.1			41	.1		Jib length	(m)
∃	Boom angle	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	Boom and	gle
ŏ M	12.0	36.0																12.0	
š	14.0	32.0				32.0												14.0	
E 0	16.0	28.0				28.0				26.6								16.0	
₫	18.0	24.4	26.4			24.6				24.4				21.0				18.0	
	20.0	20.3	23.2			20.8	22.7			20.9				19.9				20.0	7 <
Working Radius (m)	22.0	17.1	20.6			17.7	20.2			17.9	19.9			18.5				22.0	Working
i ii	24.0	14.5	18.4			15.2	18.1			15.5	17.9			15.9	17.4			24.0	cing
- E	26.0		16.3			13.2	16.3			13.5	16.1			13.9	15.8			26.0	Radius
King is	28.0		13.8			11.5	14.7			11.9	14.5			12.3	14.3			28.0	dius
No.	30.0			11.2		10.0	12.8			10.5	13.2			10.9	12.9			30.0	(m)
	34.0			9.7	8.8		9.7	9.1		8.2	10.3			8.6	10.3			34.0	7
	38.0				7.7			8.0	7.2	36.0 m/7.3	8.1	7.5		6.9	8.2			38.0	
	42.0				40.0 m/7.2			7.0	6.4		40.0 m/7.1	6.8	5.9	5.4	6.6	6.2		42.0	
	46.0								5.6			5.9	5.3		5.2	5.6	4.7	46.0	
	50.0											48.0 m/5.5	4.6			4.9	4.3	50.0	
	54.0												52.0 m/4.3			4.3	3.7	54.0	
	58.0																56.0 m/3.5	58.0	
	Reeves			3				3	•			2			2	2		Reeves	

Boo	om length (m)				32.7				Boom length	(m)
Ji	b length (m)		47	.2			53.3		Jib length (ı	m)
В	Boom angle	88°	83°	68°	63°	88°	83°	68°	Boom angl	le
	20.0	16.8							20.0	
	22.0	15.9				13.3			22.0	
	24.0	15.1				12.6			24.0	
	26.0	13.7	15.0			12.0			26.0	
٦	28.0	12.1	13.8			11.4	13.1		28.0	_ <
Radius (m)	30.0	10.7	12.7			10.5	12.4		30.0	Working
diu	34.0	8.5	10.1			8.4	10.7		34.0	ing
	38.0	6.8	8.1			6.7	8.6		38.0	Rac
Working	42.0	5.5	6.6			5.4	6.9		42.0	Radius
Wor	46.0	4.4	5.3	4.9		44.0 m/4.0	5.6	48.0 m/4.2	46.0	\mathfrak{E}
	50.0	48.0 m/3.9	4.2	4.6	3.6		4.3	4.2	50.0	
	54.0		52.0 m/3.7	3.9	3.4			3.7	54.0	
	58.0			3.4	2.9			3.1	58.0	
	62.0			60.0 m/3.2	2.5			2.7	62.0	
	64.0							2.5	64.0	
	Reeves		2	2			2		Reeves	

Note:

Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the

boom or other structual components.

Refer to notes P21 and 22.

Во	om length (m)								35	5.7								Boom length	h (m
Ji	ib length (m)		22	2.9			29	9.0			35	i.1			41	1.1		Jib length	(m)
E	Boom angle	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	Boom and	gle
	12.0	35.8																12.0	
	14.0	31.8				31.0												14.0	
	16.0	27.8				27.8				24.9								16.0	
	18.0	24.6	26.2			24.5				23.6				19.9				18.0	
_	20.0	20.4	23.0			20.9	22.5			21.1				18.9				20.0	ີ <
s (m	22.0	17.2	20.4			17.8	20.0			18.0	19.7			17.9				22.0	Working
Radius (m)	24.0	14.6	18.2			15.3	17.9			15.5	17.7			16.0	17.2			24.0	
	26.0		16.5			13.3	16.2			13.6	16.0			14.0	15.7			26.0	Radius
ξ	28.0		14.2			11.6	14.7			11.9	14.5			12.3	14.2			28.0	lius
Working	30.0			32.0 m/9.9		10.1	13.2			10.5	13.2			10.9	13.0			30.0	_] 🗒
	34.0			9.3	36.0 m/7.7		9.9	36.0 m/8.1		8.3	10.5			8.6	10.5			34.0	
	38.0			8.0	7.4			7.7	40.0 m/6.2	36.0 m/7.3	8.2	40.0 m/6.7		6.9	8.4			38.0	
	42.0				40.0 m/6.8			6.7	6.0		40.0 m/7.3	6.5	44.0 m/5.0	5.4	6.7	5.8		42.0	
	46.0							44.0 m/6.2	5.2			5.6	4.9		5.3	5.3	48.0 m/3.9	46.0	
	50.0											4.9	4.3			4.6	3.9	50.0	
	54.0												52.0 m/4.0			4.0	3.4	54.0	
	58.0															56.0 m/3.7	2.9	58.0	
	Reeves			3				3			- 2	2	·			2		Reeves	

Unit: metric ton

Counterweight: 53.0 t, Carbody weight: 10.0 t

ယ္က	Во	om length (m)			3	5.7			Boom length	(m)
35.7	Ji	b length (m)		47	.2		53	.3	Jib length (m)
3	Е	Boom angle	88°	83°	68°	63°	88°	83°	Boom ang	le
Boom Length		20.0	16.0						20.0	
ğ		22.0	15.2				12.8		22.0	
Fe		24.0	14.4				12.1		24.0	1
ngt		26.0	13.7	14.8			11.5		26.0	
3	اءِا	28.0	12.1	13.7			10.9	12.7	28.0	
	Radius (m)	30.0	10.8	12.6			10.4	12.0	30.0	Working
	ğ	34.0	8.5	10.3			8.4	10.6	34.0	ing
		38.0	6.9	8.3			6.7	8.7	38.0	Ba
	ğ.	42.0	5.5	6.7			5.4	7.0	42.0	lius
	Working	46.0	4.4	5.4	4.6		44.0 m/3.9	5.7	46.0	Radius (m)
	-	50.0	48.0 m/3.9	4.3	4.2	52.0 m/2.9		4.4	50.0	
		54.0		52.0 m/3.8	3.7	2.9			54.0	Ī
		58.0			3.2	2.6			58.0	
		62.0			2.7	2.2			62.0	
		64.0				2.0			64.0]
		Reeves		2	2		2	2	Reeves	

ယ္က	Boo	om length (m)								38	3.8								Boom length	n (m)
8.8	Jil	length (m)		22	2.9			29	.0			35	i.1			41	1.1		Jib length	(m)
38.8 m Boom Length	В	oom angle	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	Boom and	gle
ğ		12.0	35.6																12.0	
ĭ		14.0	31.6				28.7												14.0	
Lei		16.0	27.6				27.2				23.2								16.0	
ng		18.0	24.8	26.0			24.5				22.0				18.8				18.0	
5	ج [20.0	20.6	22.8			21.1	22.3			20.9				17.8				20.0	_ <
	Working Radius (m)	22.0	17.3	20.2			17.9	19.8			18.1	19.4			16.9				22.0	Working Radius (m)
	ij	24.0	14.7	18.1			15.4	17.7			15.6	17.5			16.1	17.0			24.0	ing
	g.	26.0		16.3			13.4	16.0			13.6	15.8			14.1	15.5			26.0	Rac
	Ē,	28.0		14.7			11.6	14.5			12.0	14.3			12.4	14.0			28.0	Ji us
	No.	30.0		11.7	32.0 m/9.4		10.1	13.3			10.6	13.1			11.0	12.8			30.0	Ξ
		34.0			8.9			10.2	36.0 m/7.6		8.3	10.7			8.7	10.7			34.0	
		38.0			7.7	6.6		36.0 m/8.4	7.3		36.0 m/7.3	8.4	40.0 m/6.2		6.9	8.5			38.0	
		42.0			40.0 m/7.1	5.9			6.3	5.2		40.0 m/7.4	6.1		5.5	6.8	44.0 m/4.9		42.0	
		46.0							44.0 m/5.9	4.7			5.3	4.1		5.4	4.9		46.0	
		50.0								48.0 m/4.4			4.6	3.8			4.2	3.1	50.0	
		54.0												3.3			3.6	2.9	54.0	
		58.0															56.0 m/3.4	2.5	58.0	
		62.0																60.0 m/2.3	62.0	
		Reeves		(3			3	3			2	2			2	2		Reeves	

Во	om length (m)			38.8			Boom length	(m)
Ji	b length (m)		47.2		53	.3	Jib length (ı	m)
В	Boom angle	88°	83°	68°	88°	83°	Boom angl	le
	20.0	15.2					20.0	
	22.0	14.4			12.3		22.0	
	24.0	13.7			11.6		24.0	
	26.0	13.0	14.8		11.1		26.0	
<u>-</u>	28.0	12.2	13.6		10.5		28.0	<
Radius (m)	30.0	10.8	12.5		10.0	11.9	30.0	Working
diu	34.0	8.6	10.5		8.4	10.5	34.0	ing
	38.0	6.9	8.4		6.8	8.9	38.0	Rac
Working	42.0	5.5	6.8		5.4	7.2	42.0	Radius (m)
Wor	46.0	4.4	5.5	48.0 m/3.8	44.0 m/3.7	5.8	46.0	$\mathbf{\tilde{E}}$
	50.0	48.0 m/3.9	4.4	3.8		4.6	50.0	
	54.0		52.0 m/3.9	3.3			54.0	
	58.0			2.8			58.0	
	62.0			2.4			62.0	
	Reeves		2		2	2	Reeves	

Note:

Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the boom or other structual components.

Refer to notes P21 and 22.

Unit: metric ton

Counterweight: 53.0 t, Carbody weight: 10.0 t

4.	Воо	m length (m)								4	1.8								Boom length	h (m)
1.8	Jib	length (m)		22	2.9			29	.0			3	5.1			41	.1		Jib length	(m)
m	В	oom angle	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	Boom and	gle
Вос		12.0	32.8																12.0	
Ħ		14.0	31.1				26.6												14.0	
41.8 m Boom Length		16.0	27.4				25.2				21.7								16.0	
ngt		18.0	24.7	25.7			24.0				20.6				17.7				18.0	
Ь	ء	20.0	20.8	22.6			21.3	22.1			19.5				16.8				20.0	 ≥
	Working Radius (m)	22.0	17.5	20.0			18.1	19.6			18.2	19.2			15.9				22.0	Working Radius
	ğ	24.0	14.8	17.9			15.5	17.6			15.7	17.3			15.1				24.0	ing
	B Rs	26.0		16.2			13.4	15.8			13.7	15.6			14.2	15.1			26.0	Rac
	ķi	28.0		14.7			11.7	14.4			12.0	14.2			12.4	13.9			28.0	lius
	۷o۲	30.0		12.6			10.2	13.2			10.6	12.9			11.0	12.7			30.0	3
		34.0			8.3			10.5			8.3	11.0			8.7	10.7			34.0	
		38.0			7.3	6.1		36.0 m/9.0	6.7		36.0 m/7.3	8.6			6.9	8.7			38.0	
		42.0			40.0 m/6.8	5.5			6.0	4.7		6.6	5.4		5.5	6.9	44.0 m/4.5		42.0	
		46.0				44.0 m/5.1			5.2	4.3			4.9	3.7		5.5	4.5		46.0	
		50.0								3.7			4.2	3.4		48.0 m/4.8	3.9	52.0 m/2.5	50.0	
		54.0											52.0 m/3.9	2.9			3.3	2.5	54.0	
		58.0												56.0 m/2.7			2.9	2.2	58.0	
		62.0																60.0 m/2.0	62.0	
		Reeves		3	3			2	2				2				2		Reeves	

Во	om length (m)			41.8			Boom length	(m)
Ji	b length (m)		47.2		53	.3	Jib length (ı	m)
Е	oom angle	88°	83°	68°	88°	83°	Boom angl	е
	20.0	14.4					20.0	
	22.0	13.6			11.8		22.0	
	24.0	12.9			11.2		24.0	
	26.0	12.3			10.6		26.0	
(28.0	11.7	13.4		10.1		28.0	<
Working Radius (m)	30.0	10.9	12.5		9.6	11.4	30.0	Working
diu	34.0	8.6	10.6		8.4	10.2	34.0	ing
J Ra	38.0	6.9	9.1		6.8	8.8	38.0	Ba
kinç	42.0	5.5	7.4		5.5	7.3	42.0	Radius (m)
Nor	46.0	4.4	6.0	48.0 m/3.4	44.0 m/3.7	5.9	46.0	Ē
	50.0	48.0 m/3.8	4.8	3.4		4.8	50.0	
	54.0		3.6	3.0			54.0	
	58.0			2.5			58.0	
	62.0			2.1			62.0	
	64.0			2.0			64.0	
	Reeves		2		2	2	Reeves	

Ratings according to EN13000. Ratings according to E1413000.

Ratings shown in ______ are determined by the strength of the boom or other structual components.

Refer to notes P21 and 22.

Во	om length (m)								44	1.8							Boom length	h (m
Ji	b length (m)		22	2.9			29	9.0			35	i.1			41.1		Jib length	(m)
E	Boom angle	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	Boom ang	gle
	12.0	30.2															12.0	
	14.0	28.6				24.6											14.0	
	16.0	27.2				23.3				20.3							16.0	
	18.0	24.7	25.5			22.2				19.2				16.6			18.0	
_	20.0	20.9	22.4			21.0	21.8			18.3				15.7			20.0	<
Œ,	22.0	17.6	19.8			18.2	19.4			17.4				14.9			22.0	Working
Radius	24.0	14.9	17.7			15.6	17.4			15.8	17.0			14.2			24.0	ing
R.	26.0		16.0			13.5	15.7			13.8	15.4			13.5	15.0		26.0	Rac
ğ	28.0		14.5			11.8	14.2			12.1	14.0			12.5	13.7		28.0	Radius
Working	30.0		13.1			10.2	13.0			10.7	12.8			11.1	12.5		30.0	E
	34.0			36.0 m/7.3			10.7			8.3	10.8			8.8	10.6		34.0	
	38.0			7.0	40.0 m/5.2		36.0 m/9.3	6.2		36.0 m/7.4	8.8			7.0	8.9		38.0	
	42.0			6.0	5.0			5.6	44.0 m/3.9		6.8	4.9		5.5	7.1		42.0	
	46.0				44.0 m/4.7			4.8	3.9			4.5	48.0 m/3.0		5.6	3.8	46.0	
	50.0							48.0 m/4.5	3.3			3.9	3.0		48.0 m/4.9	3.5	50.0	
	54.0											3.4	2.6			3.0	54.0	
	58.0												56.0 m/2.4			2.6	58.0	
	Reeves			3				2			2	2			2		Reeves	

Unit: metric ton

Counterweight: 53.0 t, Carbody weight: 10.0 t

4	Во	om length (m)		44	1.8		Boom length	(m)	
44.8	Jib length (m)		47	. .2	53	3.3	Jib length (ı	Jib length (m)	
3	E	Boom angle	88°	83°	88°	83°	Boom angl	е	
Boom		20.0	13.7				20.0		
Ĭ		22.0	13.0		11.2		22.0		
Le		24.0	12.3		10.6		24.0		
Length		26.0	11.7		10.1		26.0	ا ا	
7	Œ	28.0	11.1	13.1	9.6		28.0	Working	
	Radius	30.0	10.6	12.4	9.1	10.8	30.0	κiŋ	
	Bac	34.0	8.6	10.4	8.2	9.7	34.0		
	ing	38.0	6.9	8.9	6.8	8.7	38.0	di	
	Working	42.0	5.6	7.6	5.5	7.4	42.0	Radius (m)	
	>	46.0	4.4	6.1		6.0	46.0	احا	
		50.0	48.0 m/3.7	4.9		4.9	50.0		
		54.0		3.7			54.0		
		Reeves	2	2	:	2	Reeves		

Note:
Ratings according to EN13000.
Ratings shown in ______ are determined by the strength of the boom or other structual components.
Refer to notes P21 and 22.

	Boom length (n	1)					47	7.9						Boom length	(m)
ł	Jib length (m))	2:	2.9			29	9.0			32	2.0		Jib length (m)	
ı	Boom angle	88°	83°	68°	63°	88°	83°	68°	63°	88°	83°	68°	63°	Boom ang	le
I	12.0	27.8												12.0	
	14.0	26.4				22.7								14.0	1
	16.0	25.0				21.5				20.3				16.0	1
	18.0	23.8	25.2			20.4				19.2				18.0]
	20.0	21.1	22.1			19.4				18.3				20.0	_
	22.0 24.0 26.0	17.7	19.6			18.3	19.0			17.4	18.9			22.0	Working
dius	ਦੂੰ 24.0	15.0	17.5			15.7	17.2			15.9	17.0			24.0	grii
	26.0		15.8			13.6	15.5			13.8	15.3			26.0	Rac
	28.0 30.0		14.4			11.8	14.1			12.0	13.9			28.0	Radius
	§ 30.0		13.1			10.3	12.8			10.6	12.7			30.0	E
	34.0			36.0 m/6.7			10.9			32.0 m/9.3	10.8			34.0	
	38.0			6.5			36.0 m/9.5	40.0 m/5.2			8.7			38.0	
	42.0			5.5	4.2			5.1			40.0 m/7.5	4.6		42.0	
	46.0				3.8			4.4	3.0			4.2	48.0 m/2.6	46.0	
	50.0							48.0 m/4.0	2.8			3.6	2.6	50.0	
	54.0								52.0 m/2.6			52.0 m/3.4	2.2	54.0	
a	Reeves			3				2			2)		Reeves] !



Luffing Boom Lifting Capacities with Luffing Jib

Unit: metric ton

Attached at 23 Degree Boom to Luffing Jib Offset Angle

Counterweight: 53.0 t, Carbody weight: 10.0 t

μ	Boom length (m)			32	2.7		
32.7	Jib length (m)	22.9	29.0	35.1	41.1	47.2	53.3
3	8.6 m	53.9	50.5	47.4	43.7	39.6	35.6
Boom	9.0 m	50.5	47.3	44.3	40.6	36.7	32.8
Ĭ	10.0 m	43.5	40.4	37.6	34.2	30.5	26.8
Length	12.0 m	32.7	29.9	27.4	24.3	21.1	17.8
ngt	14.0 m	24.5	21.9	19.5	16.7	13.7	10.7
	16.0 m	18.7	16.3	14.1	11.5	8.6	5.9
	18.0 m	14.4	12.1	10.0	7.6	4.9	
	20.0 m	11.2	9.0	7.0			
	22.0 m	8.7	6.5				
	24.0 m	6.7					
	26.0 m	5.0					
	Reeves	4	4	4	4	3	3

4	Boom length (m) 41.8						
41.8	Jib length (m)	22.9	29.0	35.1	41.1	47.2	53.3
3	10.0 m	39.6	36.6	34.0	30.8	27.3	23.9
Boom	12.0 m	31.0	28.3	25.9	23.0	19.9	16.8
Ĭ	14.0 m	24.3	21.8	19.6	17.0	14.1	11.3
l ength	16.0 m	18.5	16.1	14.1	11.6	8.9	6.3
₹	18.0 m	14.3	12.1	10.1	7.8	5.3	
3	20.0 m	11.0	8.9	7.1	4.8		
	22.0 m	8.5	6.4				
	24.0 m	6.4					
	Reeves	3	3	3	3	3	2

ယ္	Boom length (m)			35	i.7		
35.7	Jib length (m)	22.9	29.0	35.1	41.1	47.2	53.3
3	9.1m	48.5	45.3	42.3	38.8	35.0	31.1
Boom	10.0 m	42.5	39.4	36.7	33.3	29.7	26.1
3	12.0 m	32.5	29.8	27.3	24.3	21.1	17.9
Length	14.0 m	24.5	21.9	19.6	16.9	13.9	11.0
ngt	16.0 m	18.7	16.3	14.2	11.9	8.9	6.1
7	18.0 m	14.4	12.1	10.1	7.7	5.1	
	20.0 m	11.2	9.0	7.1			
	22.0 m	8.6	6.5				
	24.0 m	6.7					
	26.0 m	5.0					
	Reeves	4	4	4	3	3	3

4	Boom length (m)			44	.8		
44.8	Jib length (m)	22.9	29.0	35.1	41.1	47.2	53.3
3	10.7 m	36.4	33.6	31.1	28.0	24.7	21.4
Boom	12.0 m	30.6	28.0	25.6	22.8	19.7	16.6
	14.0 m	24.1	21.6	19.5	16.8	14.0	11.2
Length	16.0 m	18.5	16.2	14.2	11.8	9.1	6.6
ngt	18.0 m	14.2	12.0	10.1	7.8	5.4	
7	20.0 m	11.0	8.9	7.1	4.9		
	22.0 m	8.4	6.4				
	24.0 m	6.3					
	Reeves	3	3	3	3	2	2

ယ္က	Boom length (m)			38	3.8		
38.8	Jib length (m)	22.9	29.0	35.1	41.1	47.2	53.3
3	9.7 m	43.7	40.6	37.8	34.5	30.9	27.2
Boom	10.0 m	41.4	38.5	35.7	32.4	28.9	25.4
ĭ	12.0 m	31.6	28.9	26.5	23.5	20.4	17.2
<u>E</u>	14.0 m	24.3	21.8	19.6	16.9	14.0	11.1
Length	16.0 m	18.5	16.1	14.0	11.5	8.8	6.2
	18.0 m	14.3	12.1	10.1	7.7	5.1	
	20.0 m	11.1	8.9	7.0			
	22.0 m	8.5	6.4				
	24.0 m	6.4					
	Reeves	4	4	3	3	3	3

4	Boom length (m)		47.9	
47.9	Jib length (m)	22.9	29.0	32.0
3	11.2 m	33.2	30.5	29.3
Boom	12.0 m	30.1	27.5	26.3
Ħ	14.0 m	23.5	21.1	20.0
Lei	16.0 m	18.4	16.2	15.2
Length	18.0 m	14.1	12.0	11.1
Ъ	20.0 m	10.9	8.8	8.0
	22.0 m	8.3	6.4	5.5
	24.0 m	6.2		
	Reeves	3	3	5

Note:

Ratings according to EN13000.

Ratings shown in _____ are determined by the strength of the boom or other structual components.

Refer to notes P21 and 22.

TRANSPORTATION PLAN

Luffing Boom 44.8 m + Luffing Jib 53.3 m

Configuration	Description	Total Weight
No.1 Low Loader 17,830	Base machine with non-free fall winches (main & aux.) = Third drum for luffing jib hoist including wire rope = Total	39.7 ton 2.37 ton 42.07 ton
No.2 Low Loader	Crawler (2 x 14.5 ton) = 9.1 m Insert Boom = 9.1 m Luffing Insert Jib = Total	29.0 ton 1.36 ton 0.84 ton 31.2 ton
No.3 Low Loader	Luffing Boom Top Assembly =	5.3 ton
No.4 Tent Side Truck	9.1 m Special Insert Boom For Luffing = 9.1 m Luffing Insert Jib = 3.0 m Insert Boom = Counterweight C (2 x 2.5 ton) = Total	2.31 ton 0.84 ton 0.63 ton 5.0 ton 8.78 ton
No.5 Tent Side Truck	6.1 m Insert Boom = 6.1 m Luffing Insert Jib = 4.3 m Relay Jib = Counterweight B (3 x 5.0 ton) = Carbodyweight = Total	1.00 ton 0.63 ton 0.41 ton 15.0 ton 5.0 ton 22.04 ton
No.6 Tent Side Truck	9.1 m Insert Boom = 9.1 m Luffing Insert Jib = Counterweight A = Counterweight B (2 x 5.0 ton) = Total	1.36 ton 0.84 ton 8.0 ton 10.0 ton 20.2 ton
No.7 Tent Side Truck	3.0 m Luffing Insert Jib = Luffing Jib Top = Counterweight B (3 x 5.0 ton) = Carbodyweight = Auxiliary Sheave = Total	0.37 ton 1.34 ton 15.0 ton 5.0 ton 0.38 ton 22.09 ton

Note: Estimated weights may vary \pm 2%.

This transportation plan depends on specifications of your trailers/trucks and the areas or countries where you transport.

PARTS AND ATTACHMENTS

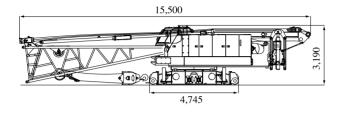
Dimensions: mm Weight: kg

Base Machine

With trans-lifter, 70 t hook, main and aux. winches (non-free fall) including wire rope, self removal device

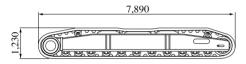
Weight: 39,700 kg*1 Width: 3,200 mm

*1: With free-fall main and auxiliary winches, total weight increases by 790 kg.



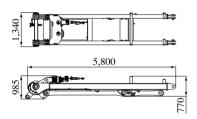
Crawler

Weight: 14,500kg Width: 910 mm



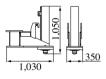
Gantry (with lower spreader)

Weight: 2,520kg



Translifter

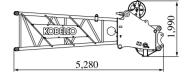
Weight: 370kg / 1 piece



Boom Top

Weight: 1,880kg (with guy cables)

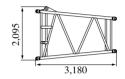




Tapered Insert Boom

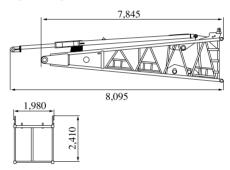
Weight: 490kg



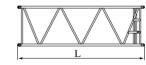


Boom Base (with boom backstop)

Weight: 3,680kg



Insert Boom

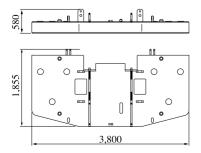




	L (mm)	Weight (kg)*
3.0 m	3,180	630
6.1 m	6,230	1,000
9.1 m	9,270	1,360

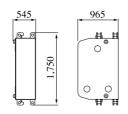
^{*} with guy cables

Counterweight A Weight: 8,000kg



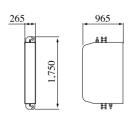
Counterweight B

Weight: 5,000kg x 8 pieces



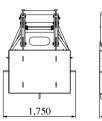
Counterweight C

Weight: 2,500kg x 2 pieces

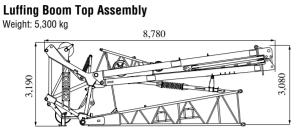


Carbodyweight

Weight: 5,000kg x 2 pieces

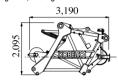


Dimensions: mm Weight: kg



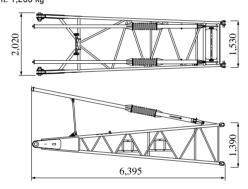
Luffing Boom Top

Weight: 2,465 kg





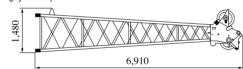
Luffing Jib Base Weight: 1,200 kg



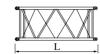
Luffing Jib Top

Weight: 1,340 kg (with guy cables)





Luffing Insert Jib

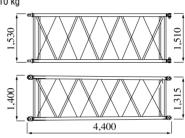




	L (mm)	Weight (kg)*
3.0 m	3,165	370
6.1 m	6,210	630
9.1 m	9,260	840
		* with guy cables

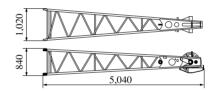
Relay Jib (tapered Jib)

Weight: 410 kg



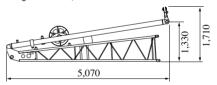
Jib Top (For Crane)

Weight: 315 kg



Jib Base with Strut (For Crane)

Weight: 510 kg Width: 1,040 mm



Other Attachments

Attachments	Weight	Dimensions (L x W x H)
9.1 m special insert boom for luffing	2,310 kg (with guy cables)	9,270 mm x 1,980 mm x 2,595 mm
3.0 m insert jib (for crane)	110 kg	3,130 mm x 840 mm x 1,020 mm
6.1 m insert jib (for crane)	190 kg	6,175 mm x 840 mm x 1,020 mm
Jib strut (for luffing)	2,010 kg	6,945 mm x 2,080 mm x 1,150 mm
Auxiliary sheave (for luffing)	380 kg	1,012 mm x 895 mm
Auxiliary sheave (for crane)	295 kg	725 mm x 2,030 mm
Rear guide roller	380 kg	2,880 mm x 1,100 mm x 1,090 mm
Boom upper spreader	485 kg	2,045 mm x 365 mm x 880 mm
Boom lower spreader	320 kg	1,150 mm x 255 mm x 910 mm
Jib upper spreader (for luffing)	260 kg	925 mm x 605 mm x 1,200 mm
Jib lower spreader (for luffing)	405 kg	1,940 mm x 460 mm x 1,070 mm
135 t hook block	1,700 kg	710 mm x 700 mm x 1,975 mm
70 t hook block	1,200 kg	470 mm x 700 mm x 1,825 mm
35 t hook block	900 kg	365 mm x 700 mm x 1,575 mm
Ball hook	450 kg	380 mm dia x 1,200 mm
Swivel hook	100 kg	300 mm x 160 mm dia. x 950 mm
Self removal device	1,680 kg	1,050 mm x 1,760 mm x 2,180 mm
Backstop (1 piece)	460 kg	6,985 mm x 275 mm



Standard Equipment

Upper structure/Lower structure

Counterweight: 53.0 ton (total weight) Carbody weight: 10.0 ton (total weight)

910 mm shoe crawlers Batteries (170 Ah/20 HR) Trans-lifter (jack system) Gantry raising/lowering cylinder Electric hand throttle grip

Variable boom hoist speed controller Variable main/aux. hoist speed controller Swing neutral-free/brake select switch

Swing neutral-free/brake se Side deck for cab Steps (crawlers)

Two front working lights

Tools (for routine maintenance)

Two rear view mirrors Electric fuel pump

Counterweight self removal

Crawler self removal

Cable roller (for boom)

Upper spreader storage guide Tool box (front of left-side guard)

Cab/Control

Boom hoist pedal (EU area only)

Air conditioner

Cup holder

Ashtray

Cigar lighter

Intermittent wiper & window washer (skylight and front window)

Sun visor

Roof blind

Floor mat (cloth)

Foot rest

Shoe tray

Level gauge (operator cabin)

Safety Device

Load Moment Indicator (with boom lowering slow stop function)

LMI release key (for hook over-hoist prevention device

and boom over-hoist prevention device)

LCD multi display

Ultimate stop function for boom over-hoist

Function lock lever Propel lever lock

Mechanical drum lock pawl (main, aux. and boom hoist)

Signal horn

Swing parking brake

Mechanical swing lock pin (four positions)

Swing flashers/warning buzzer Cab window guard (left side)

Cab top guard Fire extinguisher

External lamp for over-load alarm

Life hammer

Note: Standard equipment may vary depending on your areas or countries.

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