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HYDRAULIC CRAWLER CRANE CKE1800

KOBELCO

Model: CKE1800-1F

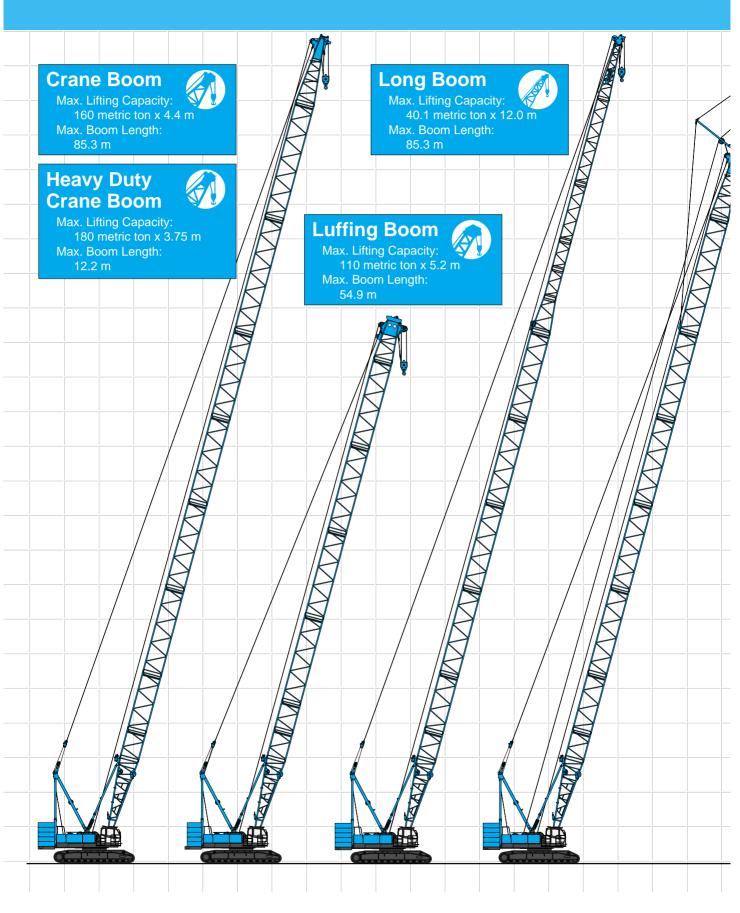


Max. Lifting Capacity: 180 ton x 3.75 m

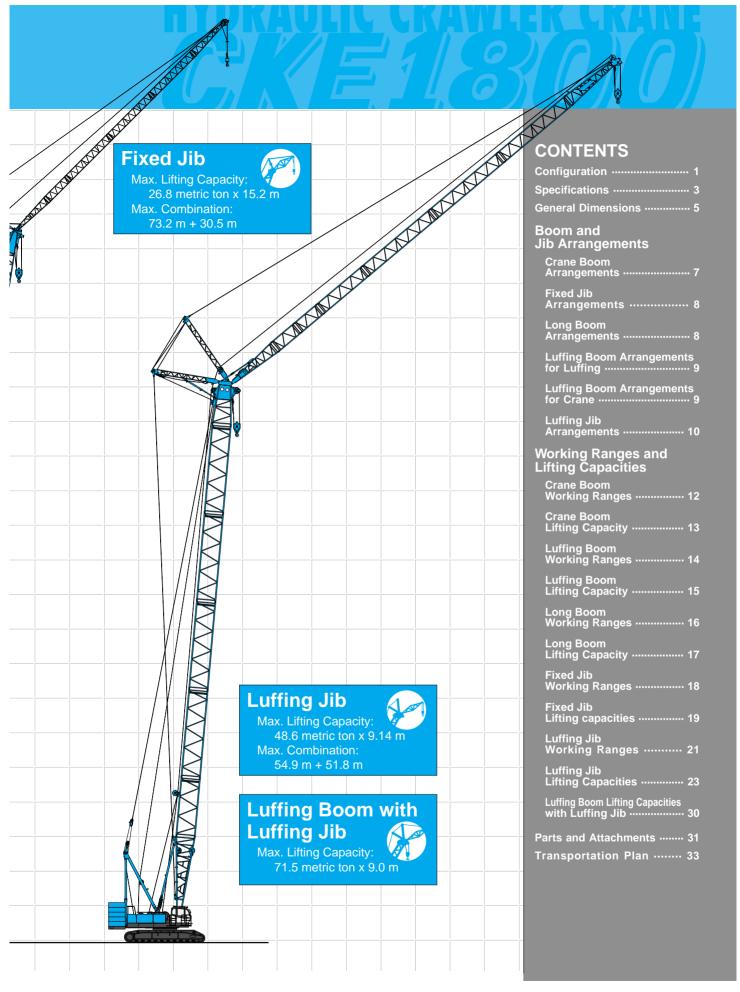
Max. Crane Boom Length: 85.3 m Max. Long Boom Length: 85.3 m

Max. Fixed Jib Combination: 73.2 m + 30.5 m Max. Luffing Jib Combination: 54.9 m +51.8 m

CONFIGURATION







SPECIFICATIONS



Power Plant

Model: Hino diesel engine P11C-UN

Type: Water-cooled, direct fuel injection, with turbocharger Complies with NRMM (Europe) Tier III and USA 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, re-circulating bypass

Starter: 24V / 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 12 V, 170 Ah/20 HR capacity batteries, series

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, third hoist circuit and each propel circuit. One of the other two pumps is used in the boom hoist circuit, and 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, individual 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 {71.3 kgf/cm²}

Reservoir capacity: 550 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: Double drum, grooved for 22 mm dia. wire rope.

Line speed: Double line on first drum layer

Hoisting/Lowering: 54 m/min

Diameter of wire ropes Boom guy line: 30 mm

Boom hoist reeving: 16 parts of 22 mm dia. high strength

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 item.)

Drum lock: External ratchet for locking drum

Drums:

Front drum:

617.4 mm P.C.D. x 833.7 mm Lg. wide drum, grooved for 25 mm wire rope. Rope capacity is 430 m working length and 510 m storage length.

Rear drum:

617.1 mm P.C.D. x 833.7 mm Lg. wide drum, grooved for 25 mm wire rope. Rope capacity is 335 m working length and 510 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: 100 m/min

Line Pull (Single-line):

Rated line pull: 132 kN {13.5 tf}



Swing System

Swing unit is powered by hydraulic motor driving spur gears through planetary reducers (2 sets), 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: 2.6 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 European Noise Regulations.

Counterweight: 60.0 ton









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 (skylight 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: 20.0 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 operation.

Shoes (flat): 64 shoes, 1,070 mm wide each crawler

Max. travel speed: 1.1/0.7 km/h Max. gradeability: 30%



Weight

Including upper and lower machine, 60.0 ton counterweight and 20.0 ton carbody weight, basic boom (or basic boom + basic jib), hook, and other accessories.

SpecificationWeightGround pressureCrane boomApprox. 164 ton,103 kPa {1.06 kgf/cm²}Luffing jibApprox. 171.0 ton,95.0 kPa {0.97 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	85.3 m
Luffing Boom	15.2 m	54.9 m
Long Boom	61.0 m	85.3 m
Fixed Jib	24.4 m + 12.2 m	73.2 m + 30.5 m
Luffing Jib	21.3 m + 21.3 m	54.9 m + 51.8 m

Main Specifications (Model: CKE 1800-1F)

Heavy Duty Crane Boom	
Max. Lifting Capacity	180 t/3.75 m
Max. Length	12.2 m
Crane Boom	
Max. Lifting Capacity	160 t/4.4 m
Max. Length	85.3 m
Luffing Boom	
Max. Lifting Capacity	110 t/5.2 m
Max. Length	54.9 m
Long Boom	
Max. Lifting Capacity	40.1 t/12.0 m
Max. Length	85.3 m
Fixed Jib	
Max. Lifting Capacity	26.8 t/15.2 m
Max. Length	30.5 m
Max. Combination	73.2 m + 30.5 m
Luffing Jib	
Max. Lifting Capacity	48.6 t/9.14 m
Jib Length	21.3 m ~ 51.8 m
Max. Combination	54.9 m + 51.8 m
Luffing Angle	60° ~ 88°
Working Speed	
Swing Speed	2.6 min ⁻¹ {rpm}
Travel Speed	1.1/0.7 km/h

Power Plant	
Model	Hino P11C-UN
Engine Output	247 kW/2,000 min ⁻¹ {rpm}
Fuel Tank Capacity	400 liters
Main & Aux. Winch	
Max. Line Speed	100 m/min (1st layer)
Rated Line Pull	132 kN {13.5 tf}
Wire Rope Diameter	25 mm
Wire Rope Length	430 m (Main) 335 m (Aux.)
Brake Type	Spring set hydraulically released (Negative)
Free Fall Brake	Wet-type multiple disc brake (Optional)
Hydraulic System	
Pumps	4 variable displacement
Max. Pressure	31.9 MPa {325 kgf/cm²}
Hydraulic Tank Capacity	550 liters
Self Erection Device	Standard
Weight	
Operating Weight*	Approx. 164 t
Ground Pressure*	103 kPa {1.06 kgf/cm²}
Counterweight	60.0 t (Upper), 20.0 t (Lower)
Transportation Weight**	Approx. 44.0 t

Including upper and lower machine, 60.0 ton counterweight, 20.0 ton carbody weight, basic boom, hook, and other accessories.

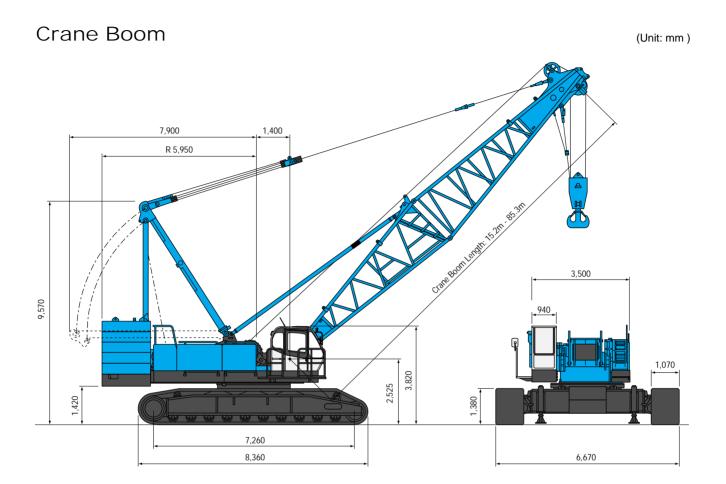
Units are SI units. { } indicates conventional units.

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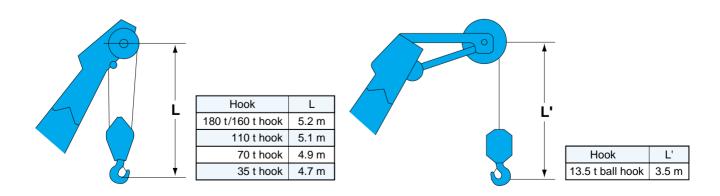


^{**} Base machine with boom base, trans-lifter, main and aux. winches (non-freefall) including wire rope, self removal device.

GENERAL DIMENSIONS

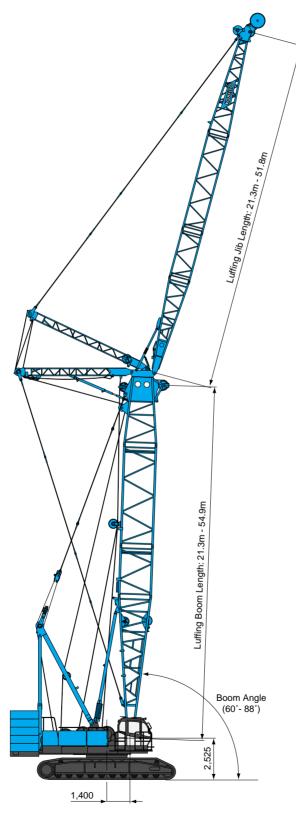


Limit of Hook Lifting





Luffing Jib (Unit: mm)



BOOM AND JIB ARRANGEMENTS

Crane Boom Arrangements

Boom length m (ft)	Boom arrangement
12.2 (40)	EHT For Heavy Duty Crane Boom
15.2 (50)	
18.3 (60)	BlioT
21.3 (70)	B 20 Siroliol
24.4 (80)	B 10 20 F
27.4 (90)	
30.5 (100)	B 20 30 10 10 10 10 10 10 1
33.5 (110)	B 10 20 30 F
36.6 (120)	Bitol 30 30 T
39.6 (130)	B 20 30 30 10 10 10 10 10 1
42.7 (140)	B 30 30 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 10 30 3
45.7 (150)	B 10 30 30 30 30 50 50 50 50
48.8 (160)	B 20 30 30 30 T S 10 S
51.8 (170)	B 10 20 30 30 30 T> B 30 30 30 T> B 10 10 20 20 30 30 T>
54.9 (180)	B 10 30 30 30 30 50 50 50 50

Boom length m (ft)	Boom arrangement
57.9 (190)	El 20 30 30 30 30 E
61.0 (200)	B 10 20 30 30 30 30 50 50 50 5
64.0 (210)	B 10 20 30 30 40 1
67.1 (220)	B 10 30 30 30 40 1
70.1 (230)	El10 20 20 30 30 30 40 T El10 20 20 20 20 20 20 20 2
73.2 (240)	B 10 20 30 30 30 40 B 10 10 20 20 30 30 30 40
76.2 (250)	El10 20 30 30 30 40 40 T El 30 30 30 30 40 40 T El1010 20 20 30 30 40 40 T
79.3 (260)	E 10 30 30 30 40 40 1
82.3 (270)	B 20 30 30 30 40 40 10 10 10 10 10 1
85.3 (280)	■ B 10 20 30 30 30 40 40 T

Symbol	Boom Length	Remarks
В	8.5 m	Boom Base
町	3.7 m	Heavy Duty Crane Boom Top
	6.7 m	Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom
40	12.2 m	Insert Boom

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

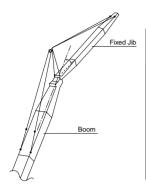


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^{*} Indicates the most flexible combination of insert booms, which can be modified to form all shorter boom arrangements.

Fixed Jib Arrangements



Crane boom length	Jib length m (ft)	Jib arrangement
24.4 m 73.2 m	12.2(40)	4.6/\(\)\\4.6
	18.3 (60)	■ B 3.0 6.1 T
	24.4 (80)	B 3.0 6.1 6.1 T
	30.5 (100)	B 3.0 6.1 6.1 6.1 T

Jib Length	Remarks
4.6 m	Jib Base
4.6 m	Jib Top
3.0 m	Insert Jib
6.1 m	Insert Jib
	4.6 m 4.6 m 3.0 m

Long Boom Arrangements

_	
Boom length m (ft)	Long Boom arrangement
61.0 (200)	B 10 10 30 30 30 M JT
64.0 (210)	B 10 10 30 30 30 10
67.1 (220)	B 10 10 30 30 30 M
70.1 (230)	B 10 10 30 30 30 30 10 20 10 10 10 10 10 10 10 10 10
73.2 (240)	B 10 10 30 30 30 30 10 10 20 ★ M JT B 10 10 30 30 30 30 10 10 30 ★
76.2 (250)	B 10 10 30 30 30 30 10 10 30 10 B 10 10 30 30 30 30 20 30 30 30
79.3 (260)	B 10 10 30 30 30 30 10 20 30 10 20 30 10 20 30 10 20 30 10 20 30 10 20 30 10 20 30 10 20 30 10 20 30 30 30 30 30 30 30
82.3 (270)	B 10 10 30 30 30 30 10 10 20 30 40 40 40 40 40 40 4
85.3 (280)	B 10 20 30 30 30 30 1001101 20 30 40 40 40 40 40 40 40 40 40 40 40 40 40

C. mak al	Lang Dagge Langeth	Dama dia
Symbol	Long Boom Length	Remarks
В	8.5 m	Boom Base
	6.4 m	Luffing Jib Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom
M	3.6 m	Tapered Boom
10	3.0 m	Luffing Insert Jib
20	6.1 m	Luffing Insert Jib
30	9.1 m	Luffing Insert Jib

[%] Indicates the most flexible combination of insert long booms, which can be modified to form all shorter long boom arrangements.

Luffing Boom Arrangements for Luffing

Editing Booth Atrai		
Boom length m (ft)	Boom arrangement	
21.3 (70)	B 10 20 C	
24.4 (80)	B 10 10 20 C	
27.4 (90)	B 10 10 30 C \}	
30.5 (100)	B 10 20 30 C	
33.5 (110)	B 10 10 20 30 C	
36.6 (120)	B 10 10 30 30 C	

_	•
Boom length m (ft)	Boom arrangement
39.6 (130)	B 10 20 30 30 C
42.7 (140)	B 10 10 20 30 30 C
45.7 (150)	B 10 10 30 30 C
48.8 (160)	B 10 20 30 30 30 C }
51.8 (170)	B 10 10 20 30 30 C
54.9 (180)	B 10 10 30 30 30 0 C

Symbol	Luffing Boom Length	Remarks
В	8.5 m	Boom Base
[C\]	3.7 m	Luffing Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom

^{*} Indicates the most flexible combination of insert luffing booms, which can be modified to form all shorter luffing boom arrangements.

Luffing Boom Arrangements for Crane

Boom	
length m (ft)	Boom arrangement
15.2 (50)	B 10 C
18.3 (60)	B 10 10 C 3
21.3 (70)	B 10 20 C
24.4 (80)	B 10 10 20 C
27.4 (90)	B 10 10 30 C 3
30.5 (100)	B 10 20 30 C \\ B 30 30 C \\
33.5 (110)	B 10 10 20 30 C

Boom length m (ft)	Boom arrangement
36.6 (120)	B 10 10 30 30 C
39.6 (130)	B 10 20 30 30 C
42.7 (140)	B 10 10 20 30 30 C
45.7 (150)	B 10 10 30 30 30 € ↑ ↑
48.8 (160)	B 10 20 30 30 30 C
51.8 (170)	B 10 10 20 30 30 C \\ B 10 30 30 30 C \\
54.9 (180)	B 20 30 30 30 C

Symbol	Luffing Boom Length	Remarks
\bigcirc B	8.5 m	Boom Base
	3.7 m	Luffing Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom

^{*} Indicates the most flexible combination of insert luffing booms, which can be modified to form all shorter luffing boom arrangements.



Luffing Jib Arrangements

Jib length m (ft)	Jib arrangement
21.3 (70)	
24.4 (80)	
27.4 (90)	
30.5 (100)	
33.5 (110)	□ JB 10 10 20 30 UT → C

Symbol	Luffing Jib Length	Remarks
JB	5.8 m	Luffing Jib Base
JT 🔾	6.4 m	Luffing Jib Top
10	3.0 m	Luffing Insert Jib
20	6.1 m	Luffing Insert Jib
30	9.1 m	Luffing Insert Jib

[※] Indicates the most flexible combination of insert luffing jibs, which can be modified to form all shorter luffing jib arrangements.

Jib length m (ft)	Jib arrangement
36.6 (120)	
39.6 (130)	
42.7 (140)	JB 10 10 20 30 30 JT 5
45.7 (150)	
48.8 (160)	✓ JB 10 20 30 30 JT →
51.8 (170)	

Luffing Boom and Jib Combinations.

			Jib Length (m)											
		21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7	48.8	51.8		
	21.3													
	24.4													
=	27.4													
Œ	30.5													
ength	33.5													
ng	36.6													
Le	39.6													
ΙΕ	42.7													
Boom	45.7													
m	48.8													
	51.8													
	54.9													

: Combinations which is allowed



Hook Blocks

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

Hooks	Mainht (lan)	No. of	No. of lines and max. rated loads (tons)									
	Weight (kg)	sheaves	1	2	3	4	5	6				
180/160-ton	2,800	8	-	26.8	40.1	53.5	66.9	80.3				
110-ton	1,800	4	•	26.8	40.1	53.5	66.9	80.3				
70-ton	1,200	3	-	26.8	40.1	53.5	66.9	70.0				
35-ton	900	1	-	26.8	35.0	•	-	-				
13.5-ton ball hook	460	0	13.5	-	-	-	-	-				

Hooks	Maight (kg)	No. of	of No. of lines and max. rated loads (tons)									
	Weight (kg)	sheaves	7	8	9	10	12	14				
180/160-ton	2,800	8	93.7	107.0	120.4	133.8	160.0	180.0				
110-ton	1,800	4	93.7	107.0	110.0	-	-	-				
70-ton	1,200	3	•	-	-	-	-	-				
35-ton	900	1	·	-	-	-	-	•				
13.5-ton ball hook	460	0	-	-	-	-	-	-				

Main Hoist Drum Rated Loads in Metric Tons

No. of Parts of Line	1	2	3	4	5	6
Max. Loads (ton)	13.5	26.8	40.1	53.5	66.9	80.3
No. of Parts of Line	7	8	9	10	12	14
Max. Loads (ton)	93.7	107.0	120.4	133.8	160.0	180.0

Symbols for Attachments:



















Crane Boom

Auxiliary Sheave for Crane Boom

Luffing Boom

Aux. Sheave for Luffing Boom

Long Boom

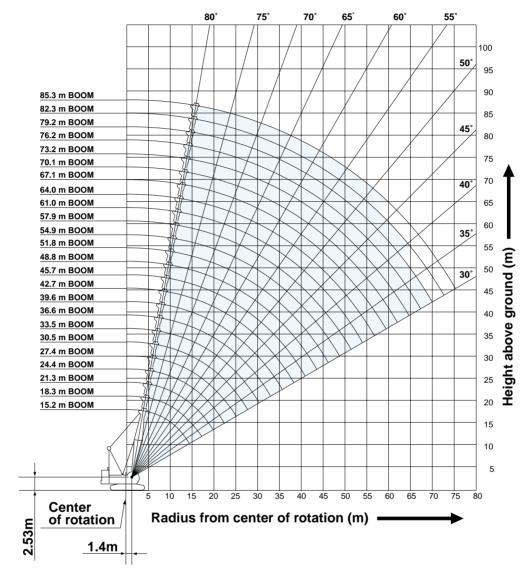
Aux. Sheave for Long Boom

Fixed Jib

Luffing Jib

Luffing Boom with Luffing Jib

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. Deduct weight of hook block(s), slings and all other load handling accessories from main boom or auxiliary sheave ratings shown.
- 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 inserts and guy lines must be arranged as shown in the "Operator's Manual"
- 9. Boom hoist reeving is 16 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.
- are determined by the strength of the boom 13. Ratings shown in or other structural component.
- 14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 15. Crane boom ratings: Deduct weight of hook block(s), slings, and all other load handling accessories from crane boom ratings shown.
- 16. Auxiliary sheave ratings: Deduct 0.6 ton (weight of auxiliary sheave frame), weight of hook block(s), slings and all other load handling accessories from crane boom ratings shown, but should not exceed 26.8
- Crane boom lengths for auxiliary sheave mounting are 15.2 m to 82.3 m.
- 17. Crane boom ratings with auxiliary sheave: Deduct 0.6 ton, weight of hook block(s), slings and all other load handling accessories from crane boom ratings shown. Minimum ratings is 1.6 tons
- 18. Heavy duty crane boom ratings: Deduct weight of hook block(s), slings and all other load handling accessories from crane boom ratings shown.





Crane Boom Lifting Capacity

Unit: metric ton

Counterweight: 60.0 t, Carbody weight: 20.0 t

Boom Length Working (m) radius (m)	12.2*	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7	48.8	51.8	Boom Length (m) Working radius (m)
3.0	3.75m /180.0														3.0
4.0	171.5	4.4m /160.0	4.9m /144.2												4.0
5.0	140.5	141.6	141.6	5.4m /131.4	5.9m /121.3										5.0
6.0	119.1	119.3	119.3	119.3	119.3	6.4m /112.0	6.9m /103.9								6.0
7.0	102.0	102.7	102.7	102.7	102.7	102.7	102.5	7.4m / 97.1	7.9m / 90.6						7.0
8.0	88.1	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	8.4m / 80.3	8.9m / 76.8				8.0
9.0	76.8	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	78.4	76.3	9.4m / 70.6			9.0
10.0	67.7	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	70.2	68.4	66.6	10.0m / 65.4	10.5m / 60.7	10.0
12.0	51.4	58.8	58.7	58.6	58.5	58.4	58.3	58.2	58.2	57.8	56.5	55.1	54.0	52.8	12.0
14.0	12.4m / 50.0	47.2	47.7	47.6	47.4	47.3	47.2	47.0	47.0	46.9	46.7	46.5	46.0	45.0	14.0
16.0		14.8m / 41.9	40.2	40.1	39.9	39.8	39.6	39.4	39.4	39.3	39.1	38.9	38.8	38.6	16.0
18.0			17.5m / 35.9		34.2	34.1	34.0	33.7	33.7	33.6	33.3	33.2	33.1	32.9	18.0
20.0				30.1	29.8	29.6	29.5	29.3	29.2	29.1	28.9	28.7	28.6	28.4	20.0
22.0				20.1m / 29.9		26.3	26.2	25.9	25.8	25.7	25.5	25.3	25.3	25.0	22.0
24.0					22.7m / 25.4		23.4	23.2	23.0	22.9	22.7	22.5	22.4	22.2	24.0
26.0						25.4m / 22.0		20.9	20.7	20.6	20.4	20.2	20.1	19.9	26.0
28.0							28.0m / 19.2		18.8	18.7	18.5	18.3	18.2	18.0	28.0
30.0								17.4	17.2	17.1	16.9	16.7	16.6	16.4	30.0
32.0								30.7m / 16.9	15.8	15.7	15.4	15.2	15.1	14.9	32.0
34.0									33.3m / 15.0		14.2	14.0	13.9	13.6	34.0
36.0										35.9m / 13.4		13.0	12.8	12.6	36.0
38.0											12.2	12.1	11.8	11.7	38.0
40.0											38.6m / 12.0		11.0	10.7	40.0
42.0												41.2m / 10.7	10.3	10.0	42.0
44.0													43.8m / 9.7	9.4	44.0
46.0														8.7	46.0
48.0														46.5m / 8.6	48.0
Reeves	14	12	12	10	10	9	8	8	7	6	6	6	5	5	Reeves
* \/aluga of 10															

^{*} Values of 12.2 m boom length are lifting capacities for heavy duty crane boom.

Boom Length Working (m) radius (m)	54.9	57.9	61.0	64.0	67.1	70.1	73.2	76.2	79.2	82.3	85.3	Boom Length (m) Working radius (m)
10.0	11.0m / 56.4	11.5m / 52.4										10.0
12.0	51.5	50.5	12.0m / 48.3	12.5m / 44.7	13.0m / 41.2	13.5m / 38.0						12.0
14.0	43.9	43.2	42.3	41.5	40.1	37.5	14.0m / 34.5	14.5m / 31.8	15.0m / 29.0	15.5m / 25.9		14.0
16.0	38.1	37.5	36.7	36.1	35.3	34.8	32.2	30.1	27.9	25.3	16.1m / 21.0	16.0
18.0	32.7	32.7	32.3	31.8	31.1	30.7	29.8	27.8	25.9	22.9	19.0	18.0
20.0	28.3	28.2	28.0	27.9	27.7	27.3	26.7	25.8	23.9	20.9	17.2	20.0
22.0	24.9	24.8	24.6	24.5	24.4	24.2	24.0	23.6	22.0	19.1	15.6	22.0
24.0	22.1	22.0	21.9	21.7	21.6	21.4	21.4	21.3	20.3	17.5	14.2	24.0
26.0	19.7	19.7	19.4	19.4	19.2	19.0	19.0	18.9	18.7	16.0	13.0	26.0
28.0	17.8	17.7	17.5	17.5	17.3	17.1	17.0	17.0	16.8	14.7	11.8	28.0
30.0	16.2	16.1	15.9	15.8	15.6	15.5	15.4	15.3	15.2	13.5	10.8	30.0
32.0	14.7	14.6	14.4	14.3	14.2	14.0	13.9	13.8	13.7	12.4	9.9	32.0
34.0	13.5	13.4	13.2	13.1	12.9	12.8	12.7	12.6	12.4	11.4	9.0	34.0
36.0	12.4	12.3	12.1	12.0	11.9	11.7	11.6	11.5	11.3	10.4	8.2	36.0
38.0	11.4	11.3	11.2	11.1	10.9	10.8	10.7	10.5	10.3	9.6	7.4	38.0
40.0	10.6	10.4	10.2	10.2	10.0	9.8	9.7	9.6	9.4	8.7	6.7	40.0
42.0	9.9	9.7	9.5	9.4	9.3	9.1	9.0	8.9	8.7	8.0	6.0	42.0
44.0	9.2	9.0	8.9	8.8	8.5	8.4	8.3	8.2	8.0	7.3	5.4	44.0
46.0	8.5	8.4	8.2	8.1	7.9	7.7	7.6	7.5	7.4	6.6	4.8	46.0
48.0	8.0	7.9	7.6	7.6	7.4	7.2	7.1	7.0	6.8	6.0	4.2	48.0
50.0	49.1m / 7.7	7.4	7.1	7.0	6.9	6.7	6.6	6.5	6.3	5.4	3.7	50.0
52.0		51.8m / 6.9	6.7	6.6	6.4	6.2	6.0	5.9	5.8	4.8	3.2	52.0
54.0			6.2	6.2	6.0	5.7	5.6	5.5	5.3	4.3	2.7	54.0
56.0			54.4m / 6.1	5.8	5.5	5.3	5.2	5.0	4.8	3.8	2.2	56.0
58.0				57.0m / 5.5	5.1	4.9	4.7	4.6	4.4	3.3	1.8	58.0
60.0					59.7m / 4.8	4.5	4.4	4.2	4.0	2.8	59.0m / 1.6	60.0
62.0						4.2	4.0	3.9	3.7	2.4		62.0
64.0						62.3m / 4.1	3.7	3.6	3.3	1.9		64.0
66.0							65.0m / 3.5	3.2	2.9	65.0m / 1.7		66.0
68.0								67.6m / 3.0	2.4			68.0
70.0									70.0m / 2.0			70.0
reeves	5	4	4	4	4	3	3	3	3	2	2	reeves

Note: Ratings according to EN13000.

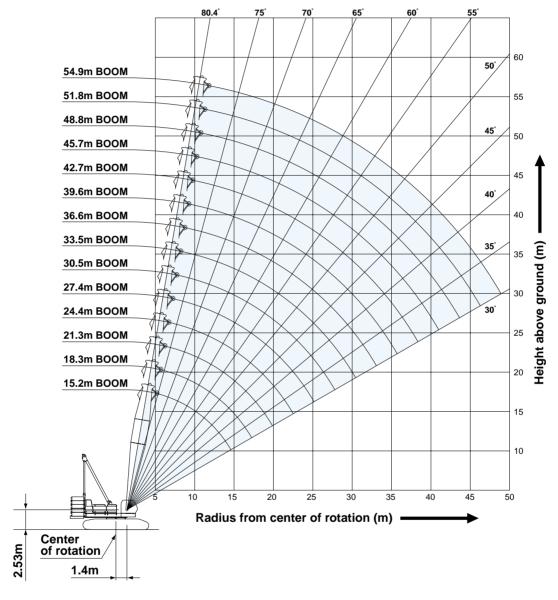
Ratings shown in _____are determined by the strength of the boom or other structural components.

Refer to notes P12.





Luffing Boom Working Ranges



NOTES:

- 1. Ratings according to EN13000.
- 2. Ratings in metric tons for 360° working area.
- Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- Deduct weight of hook block(s), slings and all other load handling accessories from long boom or jib ratings shown.
- 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/ jib inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Boom hoist reeving is 16 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.
- Luffing boom ratings: Deduct weight of hook block(s), slings and all other load handling accessories from luffing boom ratings shown.
- 16. Auxiliary sheave ratings: Deduct 0.6 ton (weight of auxiliary sheave frame), weight of hook block(s), slings and all other load handling accessories from luffing boom ratings shown, but should not exceed 26.8 tons.
- Luffing boom lengths for auxiliary sheave mounting are 15.2 m to 54.9 m.
- 17. Luffing boom ratings with auxiliary sheave: Deduct 0.6 ton, weight of hook block(s), slings and all other load handling accessories from luffing boom ratings shown.



Luffing Boom Lifting Capacity

Unit: metric ton

Counterweight: 60.0 t	Carbody weight: 20.0 t
-----------------------	------------------------

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	51.8	54.9	Boom Length (m) Working radius (m)
5.0	5.2m /110.0	5.7m /107.0													5.0
6.0	107.0	106.7	6.2m /106.2	6.8m /103.7											6.0
7.0	101.3	101.2	101.1	101.0	7.3m /96.8	7.8m /90.4									7.0
8.0	89.8	89.7	89.6	89.5	89.4	89.3	8.3m /85.5	8.8m /80.3							8.0
9.0	79.4	79.3	79.3	79.1	79.0	79.0	78.8	78.7	9.3m /75.5	9.8m /69.3					9.0
10.0	71.2	71.1	71.0	70.9	70.8	70.7	70.6	70.5	69.4	67.5	10.3m /64.0	10.8m /59.3	11.3m /55.1	11.8m /51.3	10.0
12.0	57.5	57.3	57.2	57.0	56.9	56.8	56.6	56.6	56.5	55.5	54.2	52.9	51.6	50.4	12.0
14.0	46.2	46.4	46.3	46.1	46.0	45.9	45.7	45.7	45.6	45.4	45.2	44.8	43.7	42.7	14.0
16.0	15.2m /39.2	39.0	38.9	38.6	38.5	38.4	38.2	38.1	38.0	37.8	37.7	37.6	37.4	36.9	16.0
18.0		17.8m /33.6	33.2	32.9	32.8	32.7	32.5	32.4	32.3	32.1	32.0	31.9	31.7	31.5	18.0
20.0			29.2	28.7	28.6	28.4	28.2	28.1	28.0	27.8	27.7	27.6	27.4	27.2	20.0
22.0			20.5m /28.0	25.3	25.2	25.1	24.8	24.7	24.6	24.4	24.2	24.2	24.0	23.8	22.0
24.0				23.1m /23.7	22.5	22.3	22.1	22.0	21.9	21.6	21.5	21.4	21.2	21.0	24.0
26.0					25.7m /20.4	20.1	19.8	19.7	19.6	19.3	19.2	19.1	18.9	18.7	26.0
28.0						18.2	17.9	17.8	17.7	17.5	17.3	17.2	17.0	16.8	28.0
30.0						28.4m /17.8	16.3	16.2	16.1	15.8	15.7	15.6	15.4	15.2	30.0
32.0							31.0m /15.6	14.8	14.7	14.4	14.3	14.2	13.9	13.8	32.0
34.0								33.7m /13.8	13.5	13.3	13.1	13.0	12.7	12.6	34.0
36.0									12.5	12.2	12.0	11.9	11.7	11.5	36.0
38.0									36.3m /12.3	11.2	11.0	10.9	10.7	10.5	38.0
40.0										38.9m /10.9	10.3	10.2	9.9	9.7	40.0
42.0											41.6m /9.7	9.4	9.1	9.0	42.0
44.0												8.8	8.5	8.3	44.0
46.0												44.2m /8.6	7.8	7.7	46.0
48.0													46.9m /7.6	7.1	48.0
50.0														49.5m /6.7	50.0
Reeves	8	8	8	8	8	7	7	6	6	6	5	5	5	4	Reeves

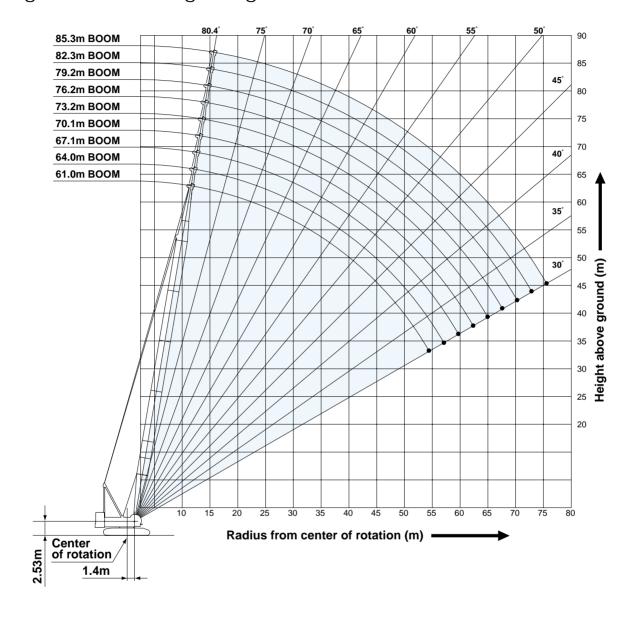
Note: Ratings according to EN13000.

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

Refer to notes P14.

Bigge

Long 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. Deduct weight of hook block(s), slings and all other load handling accessories from long boom or jib ratings shown.
- 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. Boom hoist reeving is 16 part line.
- 10. Gantry must be in raised position for all conditions.
- 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. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 14. Long boom ratings: Deduct weight of hook block(s), slings and all other load handling accessories from long boom ratings shown.
- 15. Auxiliary sheave ratings: Deduct 0.4 ton (weight of auxiliary sheave frame), weight of hook block(s), slings and all other load handling accessories from long boom ratings shown, but should not exceed 13.5 tons. Long boom length for auxiliary sheave mounting are 61.0 m to 79.2 m.



Long Boom Lifting Capacity

Unit: metric ton

Counterweight: 60.0 t, Carbody weight: 20.0 t

Boom Length Working (m) radius (m)	61.0	64.0	67.1	70.1	73.2	76.2	79.2	82.3	85.3	Boom Length (m) Working radius (m)
10.0	11.9m /40.1									10.0
12.0	40.1	12.4m/37.8	12.9m /35.0	13.4m /33.2	13.9m /31.6					12.0
14.0	37.2	35.8	34.5	32.8	31.5	14.4m /27.9	14.9m /23.9	15.5m /20.7		14.0
16.0	34.1	33.1	32.1	30.6	29.5	26.5	23.2	20.4	20.3	16.0
18.0	31.0	30.3	29.6	28.4	27.5	24.9	21.9	19.4	19.3	18.0
20.0	27.9	27.4	27.1	26.2	25.5	23.3	20.6	18.4	18.3	20.0
22.0	24.9	24.7	24.5	24.0	23.5	21.7	19.5	17.4	17.3	22.0
24.0	22.1	22.0	21.9	21.8	21.5	20.1	18.3	16.4	16.4	24.0
26.0	19.8	19.7	19.6	19.6	19.5	18.5	17.1	15.5	15.5	26.0
28.0	17.9	17.8	17.7	17.6	17.5	17.0	16.0	14.7	14.7	28.0
30.0	16.3	16.2	16.1	16.0	15.9	15.5	14.9	13.9	13.9	30.0
32.0	14.9	14.8	14.6	14.6	14.5	14.1	13.7	13.0	13.0	32.0
34.0	13.6	13.5	13.4	13.4	13.2	12.9	12.8	12.3	12.3	34.0
36.0	12.6	12.5	12.3	12.3	12.2	11.9	11.8	11.5	11.5	36.0
38.0	11.6	11.5	11.4	11.3	11.2	10.9	10.9	10.8	10.8	38.0
40.0	10.8	10.7	10.5	10.5	10.4	10.1	10.0	10.0	10.0	40.0
42.0	10.0	9.9	9.8	9.7	9.6	9.4	9.3	9.3	9.3	42.0
44.0	9.3	9.2	9.1	9.0	8.9	8.7	8.6	8.6	8.6	44.0
46.0	8.7	8.6	8.5	8.4	8.3	8.1	8.0	8.0	8.0	46.0
48.0	8.2	8.0	7.9	7.9	7.7	7.5	7.4	7.4	7.4	48.0
50.0	7.7	7.5	7.4	7.3	7.2	7.0	6.9	6.9	6.9	50.0
52.0	7.2	7.1	6.9	6.9	6.7	6.5	6.5	6.5	6.5	52.0
54.0	6.8	6.6	6.5	6.4	6.3	6.1	6.0	6.0	6.0	54.0
56.0	54.5m /6.7	6.3	6.1	6.1	5.9	5.7	5.7	5.7	5.6	56.0
58.0		57.2m /6.0	5.8	5.7	5.6	5.4	5.3	5.3	5.2	58.0
60.0			59.8m /5.5	5.4	5.2	5.0	5.0	5.0	4.8	60.0
62.0				5.0	4.9	4.7	4.6	4.6	4.4	62.0
64.0				62.4m/5.0	4.6	4.4	4.4	4.3	4.1	64.0
66.0					65.1m /4.5	4.2	4.1	4.0	3.8	66.0
68.0						67.7m /3.9	3.8	3.7	3.5	68.0
70.0							3.5	3.5	3.2	70.0
72.0							70.4m /3.4	3.2	3.0	72.0
74.0								73.0m /3.1	2.8	74.0
76.0									75.6m /2.6	76.0
reeves	3	3	3	3	3	3	2	2	2	reeves

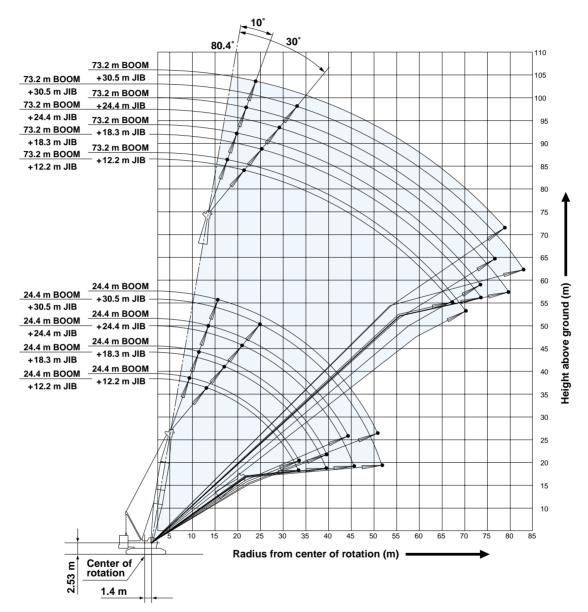
Note: Ratings according to EN13000.

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

Refer to notes P16.

Bigge

Jib Offset Angle: 10°, 30°



NOTES:

- 1. Ratings according to EN 13000.
- 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. Deduct weight of hook block (s), slings and all other load handling accessories from fixed iib ratings shown.
- 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 inserts and guy lines must be arranged as shown in the "Operator's Manual"
- 9. Boom hoist reeving is 16 part line.
- 10. Gantry must be in raised position for all conditions.
- 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. The boom should be erected over the front of the crawlers not laterally.
- 14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 15. Fixed jib ratings: Deduct weight of hook block (s), slings, and all other load handling accessories from jib ratings shown.
- 16. Boom lengths for jib mounting are 24.4 m to 73.2 m.
- 17. One part of line on hook is not allowed to use for 12.2 m jib length with offset angle 10 degrees



74.0 Reeves

Fixed Jib Lifting Capacities (Without Main Hook)

Unit: metric ton

73.2m/3.0 **74.0**

Ji	b O	ffset	: Ang	jle: 1	0°							Cour	nterwei	ght: 60	.0 t, Ca	rbody v	veight:	20.0	:
100	n length (m)		2	4.4			33	3.5			42	2.7			5	1.8		Boom leng	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 lengtl	(n
	9.0	9.8m/26.8																9.0	Τ
	10.0	26.8	11.0m/19.5			11.0m/26.8												10.0	1
	12.0	26.5	19.3	12.8m/10.1		26.3	12.8m/19.4			12.2m/26.8								12.0	1
	14.0	23.1	18.9	9.9	14.0m/6.1	24.3	19.1	14.6m/10.1		26.0	14.6m/19.3			14.0m/26.8				14.0	1
	16.0	20.7	18.1	9.7	5.9	22.8	18.7	9.9	16.8m/6.0	24.6	19.1	16.8m/10.0		26.0	16.8m/19.2			16.0	1
	18.0	19.2	17.5	9.5	5.8	21.4	18.2	9.7	5.9	23.2	18.6	9.9	18.3m/ 6.0	24.6	18.9	18.3m/ 9.9	19.8m/6.0	18.0]
	20.0	18.0	16.2	9.3	5.6	20.1	17.6	9.5	5.8	21.9	18.1	9.7	5.9	23.4	18.5	9.8	6.0	20.0	1
	22.0	16.9	14.3	8.8	5.3	19.1	16.7	9.3	5.6	20.8	17.7	9.5	5.8	22.3	18.1	9.7	5.9	22.0	1
	24.0	16.0	13.2	8.4	5.0	18.1	15.4	9.0	5.4	19.8	17.2	9.4	5.7	21.3	17.8	9.5	5.8	24.0	1
=	26.0	15.2	12.2	8.1	4.8	17.1	14.3	8.7	5.2	18.9	16.1	9.2	5.5	20.0	17.4	9.4	5.6	26.0],
<u>۔</u> اع	28.0	14.4	11.3	7.8	4.6	16.4	13.3	8.3	4.9	18.0	15.1	8.8	5.3	18.1	16.7	9.3	5.5	28.0	
radius (m)	30.0	13.7	10.6	7.4	4.4	15.7	12.5	8.0	4.7	16.8	14.2	8.6	5.0	16.4	15.7	9.0	5.3	30.0	6
	34.0	33.5m/12.7	9.4	6.9	4.0	14.5	11.1	7.5	4.4	14.2	12.6	8.0	4.7	13.7	13.9	8.5	4.9	34.0	
Working	38.0		8.4	6.5	3.7	12.7	10.0	7.1	4.0	12.2	11.4	7.6	4.4	11.6	11.8	8.0	4.6	38.0	1
5	42.0		39.6m/8.2	6.2	3.4	39.6m/12.0	9.1	6.7	3.8	10.5	10.4	7.2	4.1	9.9	10.2	7.6	4.4	42.0	٦
	46.0			44.2m/6.1	3.2		45.7m/8.4	6.4	3.5	9.2	9.4	6.8	3.9	8.6	8.8	7.3	4.1	46.0	
	50.0				3.0			6.1	3.3	48.8m/8.4	8.3	6.5	3.6	7.5	7.7	6.9	3.9	50.0	
	54.0				50.3m/3.0			51.8m/6.1	3.2		7.3	6.3	3.4	6.5	6.8	6.7	3.7	54.0	
	58.0								57.9m/3.0		54.9m/7.1	6.1	3.3	57.9m/5.8	5.9	6.2	3.5	58.0	
	62.0											61.0m/6.0	3.1		61.0m/5.4	5.5	3.4	62.0	1
	66.0												3.0			4.9	3.2	66.0	
	70.0												67.1m/3.0			67.1m/4.7	3.1	70.0]

Boo	m length (m)		6	1.0			70).1			73	3.2		Boom length (n
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	Jib length (m)
	16.0	16.8m/26.6				16.8m/21.7								16.0
	18.0	25.9	18.3m/19.1	19.8m/9.9		21.4	19.8m/19.1			18.3m/19.1	19.8m/18.7			18.0
	20.0	24.7	18.8	9.9	21.3m/6.0	21.0	19.1	21.3m/9.9		18.8	18.7	21.3m/9.9		20.0
	22.0	23.6	18.5	9.8	5.9	20.6	18.7	9.9	22.9m/5.9	18.4	18.3	9.9	22.9m/6.0	22.0
	24.0	21.8	18.1	9.7	5.9	20.2	18.4	9.8	5.9	18.0	17.9	9.8	5.9	24.0
	26.0	19.6	17.8	9.5	5.7	19.1	18.1	9.7	5.8	17.6	17.5	9.7	5.8	26.0
	28.0	17.6	17.3	9.4	5.6	17.1	17.4	9.5	5.7	16.9	16.9	9.5	5.7	28.0
	30.0	15.9	16.1	9.3	5.5	15.4	15.7	9.4	5.6	15.2	15.6	9.4	5.6	30.0
	34.0	13.2	13.4	8.8	5.2	12.7	13.0	9.2	5.4	12.5	12.8	9.2	5.4	34.0
Ξ	38.0	11.1	11.3	8.4	4.9	10.6	10.9	8.7	5.1	10.4	10.7	8.8	5.2	38.0 €
Working radius (m)	42.0	9.4	9.7	8.0	4.6	8.9	9.2	8.3	4.8	8.8	9.0	8.4	4.9	38.0 86 42.0 86 46.0 86 50.0 86
Lad	46.0	8.0	8.3	7.6	4.4	7.6	7.8	7.9	4.6	7.3	7.6	8.0	4.6	46.0
ķi	50.0	6.9	7.2	7.3	4.1	6.5	6.7	7.1	4.3	6.3	6.5	6.8	4.4	50.0
Š	54.0	6.0	6.2	6.5	3.9	5.5	5.8	6.1	4.1	5.3	5.5	5.9	4.2	54.0
	58.0	5.2	5.4	5.7	3.7	4.6	4.9	5.3	3.9	4.4	4.6	5.1	4.0	58.0
	62.0	4.4	4.7	5.0	3.5	3.8	4.1	4.5	3.8	3.5	3.8	4.2	3.8	62.0
	66.0	64.0m/4.1	4.0	4.4	3.4	3.1	3.4	3.8	3.6	2.8	3.0	3.5	3.6	66.0
	70.0		3.4	3.7	3.3	2.4	2.7	3.1	3.3	2.1	2.4	2.8	2.9	70.0
	74.0		70.1m/3.4	3.1	3.2	73.2m/2.0	2.1	2.5	2.7	70.1m/2.1	73.2m/2.0	2.3	2.4	74.0
	78.0			76.2m/2.9	2.8		76.2m/1.9	2.0	2.2			76.2m/2.0	77.7m/2.0	78.0
	82.0				2.3			79.2m/1.9	80.8m/1.9					82.0
	86.0				82.3m/2.3									86.0
	Reeves	2	2	1	1	2	2	1	1	2	2	1	1	Reeves

Note: Ratings according to EN13000.

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

One part of line on hook is not allowed to use for 12.2 m jib length with offset angle 10 degrees.



Jib Offset Angle: 30°

Counterwei	ght: 60.0 t,	Carbody	weight:	20.0 t

Boor	n length (m)		2	4.4			33	3.5			42	2.7			5	1.8		Boom leng	h (m)
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	(m)
	12.0	13.4m/17.2																12.0	
	14.0	17.2				14.6m/17.2												14.0	
	16.0	16.0	16.8m/12.8			16.8				16.8m/17.1								16.0	
	18.0	15.2	12.2			16.1	18.3m/12.8			16.7	19.8m/12.8			18.3m/17.1				18.0	
	20.0	14.3	11.2	21.3m/7.5		15.6	12.1			16.1	12.8			16.6	21.3m/12.8			20.0	
	22.0	13.5	10.5	7.4		14.8	11.4	22.9m/7.5		15.7	12.1			16.2	12.6			22.0	
	24.0	12.7	9.8	7.2	24.4m/4.1	14.1	10.8	7.4	25.9m/4.1	15.2	11.4	24.4m/7.5		15.8	12.0	25.9m/7.5		24.0	
	26.0	12.1	9.3	7.0	4.0	13.4	10.2	7.2	4.1	14.5	10.9	7.4	27.4m/4.1	15.3	11.5	7.5		26.0	
[-	28.0	11.6	8.8	6.8	3.9	12.8	9.7	7.0	4.0	13.9	10.4	7.2	4.1	14.8	11.0	7.4	29.0m/4.1	28.0	s
Working radius (m)	30.0	11.2	8.3	6.5	3.7	12.3	9.2	6.8	3.9	13.4	9.9	7.1	4.0	14.2	10.5	7.2	4.0	30.0	Working radius (m)
adir	34.0	33.5m/10.6	7.6	5.9	3.4	11.5	8.4	6.4	3.6	12.5	9.1	6.8	3.8	13.3	9.8	6.9	3.9	34.0	ng l
ğ	38.0		7.1	5.4	3.3	36.6m/11.1	7.8	5.9	3.4	11.7	8.5	6.4	3.5	11.9	9.1	6.7	3.7	38.0	adiu
ş	42.0		39.6m/7.0	5.0	3.1		7.4	5.5	3.3	10.7	8.0	5.9	3.4	10.2	8.6	6.3	3.5	42.0	n) s
5	46.0			45.7m/4.8	3.0		42.7m/7.3	5.2	3.1	45.7m/9.4	7.5	5.6	3.3	8.8	8.1	5.9	3.4	46.0	-
	50.0				2.9			48.8m/5.0	3.0		7.2	5.3	3.1	7.6	7.7	5.6	3.2	50.0	
	54.0				51.8m/2.9				2.9		51.8m/7.1	5.0	3.0	51.8m/7.2	7.1	5.4	3.2	54.0	
	58.0								54.9m/2.9			57.9m/4.9	2.9		57.9m/6.2	5.1	3.0	58.0	
	62.0												2.9			4.9	3.0	62.0	
	66.0												64.0m/2.9			64.0m/4.9	2.9	66.0	
	70.0																2.9	70.0	
	74.0																70.1m/2.9	74.0	
	Reeves	2	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1	Reeves	

Boo	m length (m)		6	1.0			70).1			73	3.2		Boom length (m
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	Jib length (m)
	18.0	19.8m/17.1												18.0
	20.0	17.0				21.3m/17.1				21.3m/17.2				20.0
	22.0	16.6	22.9m/12.8			16.9				17.1				22.0
	24.0	16.2	12.5			16.6	24.4m/13.2			16.7	25.9m/12.9			24.0
	26.0	15.9	12.0	27.4m/7.5		16.2	12.8			16.4	12.9			26.0
	28.0	15.5	11.5	7.5		15.9	12.3	29.0m/7.5		16.0	12.4	29.0m/7.6		28.0
	30.0	15.0	11.0	7.3	30.5m/4.1	15.6	11.8	7.5	32.0m/4.1	15.6	12.0	7.5	32.0m/4.1	30.0
	34.0	13.6	10.3	7.1	3.9	13.2	11.1	7.2	4.0	13.1	11.2	7.3	4.0	34.0
=	38.0	11.4	9.6	6.8	3.8	11.1	10.4	7.0	3.8	10.9	10.5	7.0	3.9	38.0
Working radius (m)	42.0	9.7	9.1	6.6	3.6	9.3	9.8	6.8	3.7	9.1	9.8	6.8	3.7	42.0 Working radius (m) 50.0 54.0 (m)
adic	46.0	8.3	8.6	6.3	3.4	7.9	8.5	6.6	3.5	7.7	8.3	6.7	3.6	46.0
Ē	50.0	7.1	7.6	5.9	3.4	6.7	7.3	6.4	3.4	6.5	7.1	6.5	3.4	50.0 g
ě	54.0	6.2	6.6	5.7	3.3	5.8	6.3	6.1	3.4	5.6	6.1	6.2	3.4	54.0
<	58.0	57.9m/5.3	5.8	5.4	3.1	4.9	5.4	5.7	3.2	4.6	5.2	5.6	3.3	58.0
	62.0		5.0	5.2	3.0	4.0	4.6	4.9	3.1	3.7	4.4	4.8	3.2	62.0
	66.0		64.0m/4.7	4.6	3.0	3.2	3.8	4.2	3.1	2.9	3.6	4.0	3.1	66.0
	70.0			4.0	2.9	67.1m/3.0	3.1	3.5	3.0	67.1m/2.8	2.9	3.3	3.0	70.0
	74.0			70.1m/4.0	2.9		73.2m/2.6	2.9	2.9		73.2m/2.4	2.6	2.9	74.0
	78.0				76.2m/2.9			2.3	2.6			2.0	2.4	78.0
	82.0							79.2m/2.1	2.0			79.2m/1.9	1.8	82.0
	84.0								83.8m/1.8				82.3m/1.8	84.0
	Reeves	2	1	1	1	2	1	1	1	2	1	1	1	Reeves

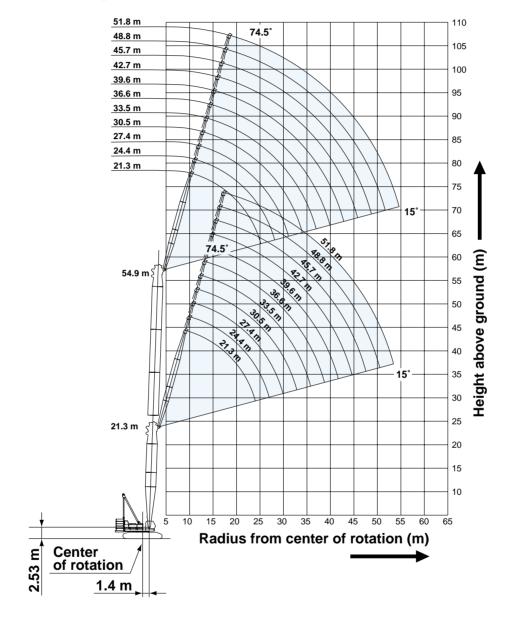
Note: Ratings according to EN13000.

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

Refer to notes P18.

Luffing Jib Working Ranges

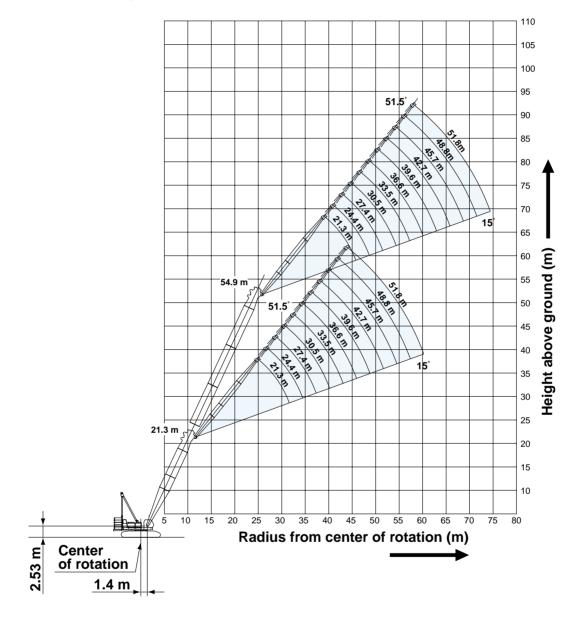
Boom Angle: 88°



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. Deduct weight of hook block(s), slings and all other load handling accessories from luffing jib ratings or main boom ratings with luffing jib shown.
- 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. Luffing boom hoist reeving is 16 part line.
- 10. Jib hoist reeving is 8 part line.

Boom Angle: 60°



- 11. Gantry must be in raised position for all conditions.
- 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 and lowering the all boom and jib combinations, the pillow plate for erection must be placed at the end of crawlers.
- 16. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 17. The minimum rated load is 2.0 tons.
- Luffing jib ratings: Deduct weight of hook block(s), slings, and all other load handling accessories from luffing jib ratings shown.
- 19. Main boom ratings with luffing jib: Deduct weight of hook block(s), slings, and all other load handling accessories from main boom ratings with luffing jib shown.





Luffing Jib Lifting Capacities (Without Main Hook)

Counterweight: 60.0 t, Carbody weight: 20.0 t

ń	Booi	m length (m)								2	1.3								Boom length	n (m)
21.3	Jib	length (m)		21	.3			27	7.4			33	.5			39	9.6		Jib length	(m)
m	Во	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	jle
B		9.14	48.6																9.14	
ŝ		10.0	48.3																10.0	1
Le		12.0	47.7				47.4												12.0	1
Boom Length		14.0	43.3	47.4			43.2				42.9				34.6				14.0	
H		16.0	35.8	40.9			35.7	40.7			35.4				33.5				16.0	1
		18.0	30.4	35.1			30.2	34.9			30.0	34.7			29.7				18.0	
	Œ	20.0	26.2	30.2			26.2	30.1			25.9	30.3			25.6	30.0			20.0	
) sn	22.0	23.0	26.1			22.9	26.0			22.7	26.1			22.4	25.9			22.0	Working radius
	adi	24.0		22.9			20.4	22.8			20.1	22.9			19.9	22.7			24.0	l g
	ı Bı	26.0			20.3		18.2	20.3			18.0	20.3			17.7	20.1			26.0	a <u>a</u>
	Working radius	28.0			18.6		16.5	18.2			16.2	18.2			16.0	17.9			28.0	s
	×	30.0			17.1	16.7		16.4	16.7		14.7	16.4			14.5	16.2			30.0	Ξ
		34.0				32.0m/15.4			14.3	13.8	32.0m/13.4	13.6	13.9		12.1	13.4			34.0	1
		38.0							36.0m/13.3	12.1		36.0m/12.5	12.2	11.7	10.3	11.2	11.8		38.0	1
		42.0											10.7	10.5		9.6	10.5	10.0	42.0	1
		46.0												44.0m/9.8			9.3	9.0	46.0	1
		50.0															48.0m/8.8	8.1	50.0	1
		50.0 Reeves			4				4				1	•			3		Reeves	1

Boo	m length (m)				21	2				Boom length	(m)
_	• ,			_				_			` '
	length (m)		45	.7			51	.8		Jib length (m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	le
	18.0	22.9								18.0	
	20.0	21.2				16.3				20.0	
	22.0	19.8	21.5			15.1				22.0	
	24.0	18.4	19.7			14.1				24.0	
	26.0	17.3	18.4			13.0	14.0			26.0	
(m)	28.0	15.9	17.3			12.3	13.1			28.0	ĕ
ns	30.0	14.4	16.2			11.5	12.3			30.0	Working
radius	34.0	12.0	13.3			10.2	10.8			34.0	ğ
	38.0	10.1	11.2			9.1	9.6			38.0	<u>a</u> . ∣
Norking	42.0	8.6	9.5	10.0		8.2	8.6			42.0	radius (m)
W	46.0	44.0m/8.0	8.2	9.1	8.5	7.3	7.7	8.7		46.0	3
	50.0		48.0m/7.6	8.1	7.8	6.3	6.8	7.8	52.0m/7.1	50.0	
	54.0			7.2	7.0		52.0m/6.3	6.9	6.6	54.0	
	58.0				56.0m/6.6			58.0m/6.2	6.0	58.0	
	62.0								5.4	62.0	
	Reeves		2	2				2		Reeves	1

Note: Ratings according to EN13000.

Ratings shown in ______ are determined by the strength of the boom or other structural components. Refer to notes P21 and P22.

Bigge

Counterweight: 60.0 t, Carbody weight: 20.0 t

Ŋ	Boo	m length (m)								2	7.4								Boom lengtl	h (m)
27.4	Jib	length (m)		2	1.3			27	'.4			33	.5			39	9.6		Jib length	(m)
3	В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	gle
В		10.0	47.4																10.0	
Boom		12.0	47.4				47.4												12.0	
Fe		14.0	44.6	47.4			44.5				44.2				34.6				14.0	
Length		16.0	36.7	40.6			36.6				36.4				33.7				16.0	
5		18.0	31.0	34.8			30.9	34.6			30.7				30.5				18.0	
		20.0	26.7	30.4			26.7	30.2			26.5	30.0			26.2	29.7			20.0	
	Œ)	22.0	23.4	26.9			23.4	26.7			23.1	26.6			22.9	26.4			22.0	[≨
		24.0		24.1			20.7	23.9			20.5	23.8			20.2	23.6			24.0	Working radius
	radius	26.0		21.2			18.5	21.3			18.3	21.4			18.0	21.1			26.0	ng
	g	28.0					16.7	19.0			16.5	19.1			16.2	18.8			28.0	rad
	ķ	30.0			16.4			17.1			14.9	17.1			14.7	16.9			30.0	
	Working	34.0			32.0m/15.1	13.5			13.7		32.0m/13.6	14.1	36.0m/12.2		12.2	13.9			34.0	3
		38.0				36.0m/12.6			11.9	11.5		36.0m/12.9	11.7	40.0m/10.2	10.3	11.7	40.0m/10.4		38.0	1
		42.0								40.0m/10.8			10.2	9.8		9.9	10.0		42.0	
		46.0											44.0m/9.6	8.7			8.8	8.5	46.0	1
		50.0															7.9	7.5	50.0	
		54.0																52.0m /7.1	54.0	1
		Reeves			4				1			4	1				3		Reeves	1

Воо	m length (m)				27	7.4				Boom length	(m)
Jik	length (m)		45	5.7			51	.8		Jib length (m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	le
	18.0	23.0								18.0	
	20.0	21.4				16.5				20.0	
	22.0	19.9				15.2				22.0	
	24.0	18.5	20.2			14.1				24.0	
	26.0	17.4	18.9			13.2	14.3			26.0	
 -	28.0	16.2	17.7			12.3	13.4			28.0	5
radius (m)	30.0	14.6	16.6			11.5	12.5			30.0	Working
ŧ	34.0	12.1	13.9			10.2	11.0			34.0	ing
	38.0	10.2	11.6			9.1	9.8			38.0	
Working	42.0	8.7	9.9	44.0m/8.8		8.2	8.8			42.0	radius (m)
<u> </u>	46.0	44.0m/8.1	8.4	8.6		7.4	7.8	48.0m/7.6		46.0	(1
^	50.0		48.0m/7.8	7.6	7.2	4.5	6.9	7.3		50.0	=
	54.0			6.8	6.5		4.4	6.5	6.2	54.0	
	58.0			56.0m/6.4	5.8			5.8	5.5	58.0	
	62.0							5.2	4.9	62.0	
	66.0								64.0m/4.6	66.0	
	Reeves			2				2		Reeves	



Counterweight: 60.0 t, Carbody weight: 20.0 t

, 1	Boor	n length (m)								3	3.5								Boom lengt	h (m)
3	Jib	length (m)		2	1.3			27	7.4			33	.5			39	9.6		Jib length	(m)
	Вс	om angle	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	gle
		10.0	47.4																10.0	
	Ī	12.0	47.4				47.4												12.0	1
5	Ī	14.0	45.7	47.4			45.6				42.6								14.0	1
	Ī	16.0	37.5	40.2			37.5				37.2				33.0				16.0	1
	Ī	18.0	31.6	34.4			31.6	34.2			31.4				31.3				18.0	1
	Ī	20.0	27.2	30.1			27.2	30.0			26.9	29.6			27.2				20.0	1
	آء	22.0	23.7	26.6			23.7	26.5			23.5	26.3			23.7	25.9			22.0	<
	radius (m)	24.0		23.9			21.0	23.8			20.8	23.5			20.9	23.4			24.0	Working
	E	26.0		21.5			18.7	21.5			18.5	21.2			18.6	21.1			26.0] <u>ģ</u>
	ī	28.0					16.8	19.5			16.7	19.3			16.7	19.2			28.0	
	Working	30.0			32.0m/14.4			17.9			15.1	17.7			15.1	17.6			30.0	radius
	Š	34.0			13.3	36.0m/11.9			36.0m/12.2		32.0m/13.7	14.6			12.6	14.4			34.0	(m)
	>	38.0				11.1			11.3	40.0m/9.8		36.0m/13.3	10.7		10.6	12.1			38.0	ح [
	Ī	42.0							40.0m/10.6	9.5			9.7	44.0m/8.3		10.2	44.0m/8.8		42.0	1
	Ī	46.0								44.0m/8.9			8.5	8.1			8.3	48.0m/7.0	46.0	1
	Ī	50.0												7.2			7.4	6.9	50.0	1
	Ī	54.0															52.0m/7.0	6.2	54.0	1
	Ī	58.0																56.0m/5.9	58.0	1
	Ī	Reeves			4				4				1				3		Reeves	1

Boo	m length (m)				33	3.5				Boom length	n (m)
Jib	length (m)		45	.7			51	.8		Jib length	(m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	le
	18.0	23.2								18.0	
	20.0	21.5				16.6				20.0	
	22.0	20.0				15.3				22.0	
	24.0	18.6	20.9			14.2				24.0	
	26.0	17.4	19.3			13.2	14.7			26.0	
	28.0	16.4	18.0			12.3	13.7			28.0	
Œ	30.0	14.8	16.9			11.6	12.8			30.0	ĕ
Morking radius (m)	34.0	12.3	14.5			10.3	11.2			34.0	Working radius (m)
adi	38.0	10.3	12.1			9.1	10.0			38.0	ηgr
- B	42.0	8.8	10.2			8.2	8.9			42.0	adi
ž	46.0	44.0m/8.1	8.7	7.6		6.3	7.9			46.0	us
Š	50.0		48.0m/8.1	7.1	52.0m/5.8	4.1	6.7	52.0m/6.4		50.0	(E)
	54.0			6.3	5.8		4.1	6.0		54.0	
	58.0			5.7	5.2			5.3	4.9	58.0	
	62.0				4.6			4.7	4.3	62.0	
	66.0							64.0m/4.5	3.8	66.0	
	70.0								68.0m/3.6	70.0	
	Reeves		2	2				2		Reeves	

Counterweight: 60.0 t, Carbody weight: 20.0 t

Bo	om length (m)								39	9.6								Boom lengt	h (m)
	b length (m)		21	.3			27	7.4			33	3.5			39).6		Jib length	(m)
	Boom angle	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	Boom an	gle
	10.0	47.4																10.0	
	12.0	47.4				47.4												12.0	
	14.0	43.4				43.0				37.7								14.0	1
	16.0	38.1	39.7			37.7				37.0				29.8				16.0	
	18.0	32.2	34.2			32.1				31.9				29.3				18.0	
	20.0	27.6	29.8			27.6	29.6			27.4	29.2			27.6				20.0	
2	22.0	24.0	26.4			24.1	26.2			23.9	25.9			24.0	25.5			22.0	<
radius (m)	24.0		23.7			21.2	23.5			21.0	23.2			21.2	23.1			24.0	Working
Ë	26.0		21.4			18.9	21.2			18.7	20.9			18.8	20.9			26.0]ĝ
						17.0	19.3			16.8	19.0			16.9	19.0			28.0	
Working	30.0						17.7			15.2	17.4			15.3	17.4			30.0	radius
į	34.0			12.4			32.0m/16.3			32.0m/13.8	14.8			12.7	14.7			34.0	Œ,
>	38.0			11.0	10.1			10.4			12.6			10.7	12.4			38.0]=
	42.0				9.1			9.4	44.0m/8.2			8.7			10.5			42.0	
	46.0							44.0m/8.8	7.7			8.0	7.1		44.0m/9.7	7.7		46.0	
	50.0											7.1	6.6			6.9	52.0m/5.9	50.0	
	54.0												52.0m/6.2			6.1	5.6	54.0	
	58.0															56.0m/5.8	4.9	58.0	1
	Reeves			4				4			;	3			. ;	3		Reeves	1

Boo	m length (m)				39	9.6				Boom length	(m)
Jib	length (m)		45	.7			51	.8		Jib length ((m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	le
	18.0	23.3								18.0	
	20.0	21.6				16.7				20.0	
	22.0	20.1				15.4				22.0	
	24.0	18.7				14.3				24.0	
	26.0	17.6	19.8			13.2	15.1			26.0	
	28.0	16.5	18.5			12.3	14.0			28.0	
Œ	30.0	15.0	17.1			11.6	13.1			30.0	≶
) sn	34.0	12.4	14.5			10.3	11.5			34.0	Working
radius (m)	38.0	10.4	12.5			9.2	10.2			38.0	ığı
	42.0	8.8	10.5			8.2	9.1			42.0	radius
Working	46.0	44.0m/8.2	8.9			6.0	8.1			46.0	s
I %	50.0		48.0m/8.3	6.5		3.7	6.6	52.0m/5.6		50.0	Ξ
	54.0			5.8	56.0m/4.7		3.9	5.4		54.0	
	58.0			5.1	4.6			4.8	60.0m/3.8	58.0	
	62.0			4.6	4.0			4.2	3.7	62.0	
	66.0				64.0m/3.8			3.7	3.2	66.0	
	70.0							68.0m/3.5	2.8	70.0	
	Reeves		2	2				2		Reeves	

Counterweight: 60.0 t, Carbody weight: 20.0 t

4.	Воо	m length (m)								4	5.7								Boom lengt	h (m)
5.7	Jib	length (m)		21	.3			27	7.4			33	3.5			39).6		Jib length	(m)
45.7 m Boom Length	В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	Boom and	gle
Вос		10.0	47.4																10.0	
ĭ		12.0	43.8				41.2												12.0	
Lei		14.0	38.3				37.5				33.0								14.0	
ngt		16.0	33.9				33.2				32.2				26.6				16.0	
h		18.0	30.4	33.7			29.6				28.9				26.1				18.0	
		20.0	27.5	29.5			26.7	29.2			26.1	28.7			25.5				20.0	
		22.0	24.3	26.1			24.3	25.8			23.7	25.6			23.1				22.0	
	Ξ	24.0		23.4			21.4	23.1			21.3	22.9			21.1	22.8			24.0	Working radius
	ns	26.0		21.1			19.1	20.9			19.0	20.6			19.1	20.5			26.0	ᆿ
	adi	28.0					17.1	19.0			17.1	18.7			17.1	18.7			28.0	ğ
	ē	30.0						17.4			15.4	17.2			15.4	17.1			30.0	<u>a</u>
	Working radius	34.0						32.0m/16.0			12.8	14.6			12.8	14.5			34.0	ls (
	×	38.0			10.3				40.0m/8.9			12.6			10.7	12.5			38.0	Ξ
		42.0			40.0m/9.6	8.0			8.7							11.0			42.0	
		46.0				44.0m/7.8			7.7	6.6			7.4			44.0m/10.2	48.0m/6.2		46.0	
		50.0								6.2			6.5	5.4			6.2		50.0	
		54.0											52.0m/6.2	5.1			5.5	4.3	54.0	
	ĺ	58.0												56.0m/4.8			4.9	4.2	58.0	
	ĺ	62.0																3.7	62.0	
		Reeves			4				4				3			:	2		Reeves	

Воо	m length (m)				45	5.7				Boom length	ı (m)
Jib	length (m)		45	5.7			51	.8		Jib length	(m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	le
	18.0	21.4								18.0	
	20.0	21.0				16.8				20.0	
	22.0	20.2				15.5				22.0	
	24.0	18.8				14.3				24.0	
	26.0	17.6	20.3			13.3				26.0	
	28.0	16.6	18.4			12.5	14.4			28.0	
~	30.0	15.1	16.8			11.7	13.4			30.0	5
Working radius (m)	34.0	12.5	14.3			10.3	11.7			34.0	Working radius (m)
di	38.0	10.5	12.3			9.2	10.4			38.0	ing
ıra	42.0	8.9	10.7			8.2	9.2			42.0	ra e
ķi	46.0	44.0m/8.2	9.2			5.6	8.2			46.0	ius
Vor	50.0		7.9	52.0m/5.0		3.3	6.5			50.0	(m)
>	54.0			5.0			3.7	56.0m/4.3		54.0	_
	58.0			4.5	3.3		56.0m/2.6	4.2		58.0	
	62.0			4.0	3.3			3.6	64.0m/2.8	62.0	
	66.0			64.0m/3.8	2.9			3.2	2.6	66.0	
	70.0				68.0m/2.7			2.8	2.2	70.0	
	74.0								72.0m/2.0	74.0	
	Reeves			2			:	2		Reeves	

Counterweight: 60.0 t, Carbody weight: 20.0 t

Воо	m length (m)								51	1.8								Boom lengtl	h (m
Jik	length (m)		21	1.3			27	'.4			33	.5			39).6		Jib length	(m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	gle
	12.0	37.2				35.4												12.0	Π
	14.0	32.7				31.6				28.8								14.0	
	16.0	29.2				28.1				27.2				23.6				16.0	
	18.0	26.3	31.9			25.3				24.4				23.1				18.0	
	20.0	23.9	28.6			22.9	27.5			22.0				21.2				20.0	
	22.0	21.8	25.7			20.9	24.9			20.1	23.5			19.3				22.0	
	24.0	20.2	23.0			19.2	22.6			18.4	21.5			17.7	20.6			24.0	
Working radius (m)	26.0		20.8			17.8	20.6			16.9	19.7			16.3	19.0			26.0	2
ins	28.0		18.9			16.5	18.7			15.7	18.1			15.1	17.4			28.0	Working
rad	30.0						17.1			14.6	16.7			14.0	16.0			30.0	
ng	34.0						32.0m/15.8			12.7	14.4			12.2	13.8			34.0	aulus
ž	38.0			9.2							12.5			10.7	12.0			38.0	
≶	42.0			8.3				44.0m/7.5						40.0m/10.0	10.6			42.0	3
	46.0			44.0m/7.8	6.5			7.1				6.1			44.0m/10.0			46.0	
	50.0				48.0m/6.1			6.2	5.3			5.8	52.0m/4.1			52.0m/5.0		50.0	
	54.0								52.0m/5.0			5.1	4.1			4.8		54.0	
	58.0												3.8			4.3	3.2	58.0	
	62.0															60.0m/4.0	3.0	62.0	
	66.0																64.0m/2.8	66.0	
	Reeves		- ;	3			3	3			3	3				2		Reeves	

Boo	m length (m)				51	1.8				Boom length	(m)
Jik	length (m)		45	5.7			51	.8		Jib length ((m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	le
	18.0	19.2								18.0	
	20.0	18.9				15.7				20.0	
	22.0	18.5				15.5				22.0	
	24.0	17.0				14.4				24.0	
	26.0	15.6	18.0			13.4				26.0	
	28.0	14.3	16.6			12.5	14.8			28.0	
 -	30.0	13.3	15.3			11.7	13.7			30.0	
<u>ٿ</u>	34.0	11.5	13.1			10.4	12.0			34.0	호
Ë	38.0	10.0	11.3			9.2	10.6			38.0	ĝ
l a	42.0	8.8	9.9			8.2	9.2			42.0	ᇗ
Working radius (m)	46.0	44.0m/8.3	8.8			5.3	8.1			46.0	Working radius (m)
Š	50.0		7.8			3.0	6.4			50.0	<u> </u>
^	54.0			3.9			3.6			54.0	ا ٿا
	58.0			3.9			56.0m/2.4	3.3		58.0	
	62.0			3.4				3.0		62.0	
	66.0			3.0				2.6		66.0	
	70.0							2.2		70.0	
	74.0							72.0m/2.0		74.0	
	Reeves		2	2			:	2		Reeves	

Counterweight: 60.0 t, Carbody weight: 20.0 t

_																				
Ćι	Boo	m length (m)								5-	4.9								Boom lengt	h (m)
54.9	Jib	length (m)		21	1.3			27	.4			33	3.5			39	9.6		Jib length	(m)
m	В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	88°	83°	65°	60°	Boom and	gle
B		12.0	33.7				32.6												12.0	
om	l	14.0	29.8				28.8				26.9								14.0	
Le		16.0	26.7				25.6				24.7				22.2				16.0	1
m Boom Length	Ì	18.0	24.1	29.6			23.1				22.1				21.2				18.0	
5	Ì	20.0	21.9	26.5			21.0	24.9			20.0				19.2				20.0	1
	Ì	22.0	20.2	24.0			19.2	22.7			18.2	21.5			17.5				22.0	
		24.0	18.7	21.9			17.6	20.6			16.7	19.7			16.0				24.0	1 _
	Ξ	26.0		20.1			16.3	18.9			15.4	18.0			14.7	17.3			26.0	Working
	ins	28.0		18.6			15.2	17.5			14.3	16.6			13.6	15.8			28.0	斎
	rad	30.0					14.2	16.2			13.3	15.3			12.6	14.6			30.0	9
	Working radius	34.0						32.0m/15.1			11.6	13.2			11.0	12.5			34.0	radius
	ž	38.0			40.0m/8.1							11.6			9.7	10.9			38.0	ıs
	š	42.0			8.0										40.0m/9.1	9.6			42.0	3
	ŀ	46.0			44.0m/7.5				6.6				48.0m/5.3			44.0m/9.1			46.0	
	ŀ	50.0							5.9				5.3				52.0m/4.2		50.0	1
	ŀ	54.0											4.8				4.2		54.0	
	ŀ	58.0											56.0m/4.5				3.9		58.0	1
	ł	62.0											50.0117-1.0				3.4		62.0	1
	ŀ	Reeves			3			3	1				3				2		Reeves	1
		1.ceves						-	,				J				_		:/ccve2	

Boo	m length (m)				54	1.9				Boom length	n (m)
Jik	length (m)		45	5.7			51	.8		Jib length	(m)
В	oom angle	88°	83°	65°	60°	88°	83°	65°	60°	Boom ang	le
	18.0	18.2								18.0	
	20.0	17.9				14.9				20.0	
	22.0	16.7				14.6				22.0	
	24.0	15.2				14.3				24.0	
	26.0	14.0	16.2			13.2				26.0	
	28.0	12.9	15.0			12.1	14.0			28.0	
Ê	30.0	11.9	13.8			11.2	13.0			30.0	×
Norking radius (m)	34.0	10.3	11.8			9.6	11.0			34.0	Working radius (m)
agi	38.0	9.0	10.2			8.3	9.4			38.0	ngı
٦	42.0	7.9	8.9			7.2	8.2			42.0	adi
출	46.0	44.0m/7.4	7.8			5.2	7.1			46.0	su
l §	50.0		7.0			2.8	6.3			50.0	3
	54.0			56.0m/3.2			3.5			54.0	
	58.0			3.2			56.0m/2.3	60.0m/2.9		58.0	
	62.0			3.1				2.7		62.0	
	66.0			2.7				2.3		66.0	
	70.0			68.0m/2.5						70.0	
	Reeves			2			- 2	2		Reeves	





Luffing Boom Lifting Capacies with Luffing Jib Attached at 23 Degree Boom to Luffing Jib Offset Angle

Unit: metric ton Counterweight: 60.0 t, Carbody weight: 20.0 t

21	Boom length (m)			21	.3		
1.3	Jib length (m)	21.3	27.4	33.5	39.6	45.7	51.8
3	7.0	70.6	67.8	65.0	61.5	57.9	53.6
Во	8.0	70.6	67.8	65.0	61.5	57.9	53.6
Boom	9.0	70.6	67.8	65.0	61.5	57.9	53.6
	10.0	66.0	63.7	61.4	58.5	55.7	52.3
Length	12.0	48.7	46.6	44.5	41.8	39.2	36.1
5	14.0	37.8	35.8	33.8	31.3	28.9	25.9
	16.0	30.3	28.4	26.5	24.1	21.8	19.0
	18.0	24.7	22.8	21.0	18.7	16.6	13.9
	20.0	20.3	18.5	16.8	14.7	12.6	10.0
	21.0	18.5	16.7	15.1	12.9	10.9	8.4
	Reeves	6	6	5	5	5	5

2	Boom length (m)	27.4						
27.4	Jib length (m)	21.3	27.4	33.5	39.6	45.7	51.8	
3	8.0	71.1	68.6	66.1	62.9	59.8	56.0	
Boom	9.0	71.1	68.6	66.1	62.9	59.8	56.0	
₿	10.0	66.2	64.1	62.0	59.3	56.7	53.5	
Lenath	12.0	48.9	47.0	45.0	42.6	40.2	37.3	
3	14.0	38.0	36.2	34.4	32.1	29.8	27.1	
5	16.0	30.5	28.7	27.0	24.8	22.7	20.2	
	18.0	24.9	23.2	21.5	19.4	17.4	15.0	
	20.0	20.5	18.9	17.3	15.3	13.4	11.0	
	22.0	17.2	15.6	14.0	12.1	10.3	8.0	
	24.0	14.4	12.9	11.4	9.5	7.7	5.5	
	25.0	13.2	11.7	10.2	8.4	6.7	4.5	
	Reeves	6	6	5	5	5	5	

ω	Boom length (m)		33.5						
33.5	Jib length (m)	21.3	27.4	33.5	39.6	45.7	51.8		
3	9.0	71.5	69.3	67.2	64.4	61.7	58.4		
В	10.0	64.9	62.9	60.9	58.4	55.9	52.9		
Boom	12.0	49.0	47.1	45.3	43.0	40.8	38.0		
	14.0	38.0	36.2	34.5	32.4	30.3	27.8		
Length	16.0	30.4	28.7	27.1	25.0	23.1	20.7		
5	18.0	24.7	23.1	21.6	19.6	17.8	15.5		
	20.0	20.5	18.9	17.4	15.5	13.8	11.6		
	22.0	17.0	15.5	14.1	12.2	10.5	8.4		
	24.0	14.2	12.8	11.4	9.6	7.9	5.9		
	26.0	12.0	10.5	9.2	7.5	5.8			
	28.0	10.1	8.7	7.4	5.7	4.1			
	30.0	8.5	7.2	5.9	4.2				
	32.0	7.2	5.8	4.6					
	Reeves	6	6	6	5	5	5		

	Boom length (m)		39.6						
39.6	Jib length (m)	21.3	27.4	33.5	39.6	45.7	51.8		
3	10.0	61.4	59.5	57.5	55.1	52.8	49.9		
Boom	12.0	48.7	46.9	45.1	42.9	40.8	38.2		
om	14.0	37.9	36.2	34.6	32.5	30.5	28.1		
Length	16.0	30.2	28.6	27.1	25.2	23.3	21.0		
ng	18.0	24.6	23.1	21.6	19.7	18.0	15.8		
5	20.0	20.2	18.8	17.3	15.6	13.9	11.8		
	22.0	16.8	15.3	14.0	12.2	10.6	8.6		
	24.0	14.0	12.6	11.3	9.6	8.0	6.1		
	26.0	11.8	10.4	9.1	7.4	5.9	4.0		
	28.0	9.9	8.5	7.3	5.7	4.2			
	30.0	8.3	7.0	5.7	4.2				
	32.0	6.9	5.6	4.4					
	35.0	5.2	3.9						
	36.0	4.7							
	37.0	4.2							
	Reeves	5	5	5	5	4	4		

•						
Boom length (m)			45	5.7		
Jib length (m)	21.3	27.4	33.5	39.6	45.7	51.8
11.0	51.9	50.1	48.3	46.1	43.9	41.3
12.0 14.0	46.6	44.8	43.2	41.0	39.0	36.4
14.0	37.7	36.1	34.5	32.5	30.6	28.3
16.0	30.1	28.5	27.0	25.2	23.4	21.2
16.0 18.0	24.4	22.9	21.5	19.7	18.0	16.0
20.0	20.1	18.6	17.3	15.6	13.9	11.9
22.0	16.6	15.2	13.9	12.2	10.7	8.8
24.0	13.8	12.5	11.2	9.6	8.1	6.2
26.0	11.6	10.2	9.0	7.4	6.0	4.1
28.0	9.7	8.4	7.2	5.6	4.2	
30.0	8.0	6.7	5.5	4.0		
32.0	6.6	5.4	4.2			
34.0	5.4	4.2				
36.0	4.4					
37.0	3.9					
Reeves	4	4	4	4	4	4

را ال	Boom length (m)		51.8						
51.8	Jib length (m)	21.3	27.4	33.5	39.6	45.7	51.8		
3	12.0	44.5	42.8	41.1	39.0	37.0	34.6		
Во	14.0	36.4	34.8	33.3	31.3	29.5	27.2		
ŝ	16.0	29.7	28.2	26.8	25.0	23.3	21.1		
Boom Length	18.0	24.1	22.7	21.3	19.6	17.9	15.9		
ng	20.0	19.7	18.3	17.0	15.4	13.8	11.9		
5	22.0	16.3	14.9	13.7	12.1	10.6	8.7		
	24.0	13.5	12.2	11.0	9.4	8.0	6.2		
	26.0	11.2	10.0	8.8	7.2	5.8	4.1		
	28.0	9.4	8.1	6.9	5.4	4.1			
	30.0	7.7	6.4	5.3	3.8				
	32.0	6.3	5.1	4.0					
	34.0	5.1	3.9						
	36.0	4.0							
	Reeves	4	4	4	3	3	3		

(II	Boom length (m)			54	1.9		
54.9	Jib length (m)	21.3	27.4	33.5	39.6	45.7	51.8
m	13.0	39.3	37.7	36.2	34.2	32.3	30.0
Во	14.0	35.6	34.0	32.5	30.6	28.8	26.6
Boom	16.0	29.4	27.9	26.5	24.7	23.0	20.9
Length	18.0	23.9	22.5	21.2	19.5	17.8	15.9
ng	20.0	19.6	18.2	16.9	15.3	13.7	11.8
5	22.0	16.1	14.8	13.5	12.0	10.5	8.6
	24.0	13.3	12.0	10.8	9.3	7.9	6.1
	26.0	11.1	9.8	8.6	7.1	5.7	4.0
	28.0	9.1	7.9	6.7	5.2	3.9	
	30.0	7.5	6.3	5.2	3.7		
	32.0	6.1	4.9	3.8			
	34.0	4.9	3.7				
	35.0	4.3					
	Reeves	3	3	3	3	3	3

Note: Ratings according to EN13000.

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

Refer to notes P21 and P22.

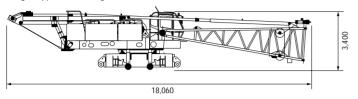
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PARTS AND ATTACHMENTS

Base Machine + Boom Base

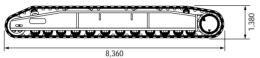
With boom base, trans-lifter, main and aux. winches (non free-fall) including wire rope, self removal device

Weight: approx. 44,000 kg*, Width: 3,500 mm



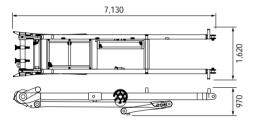
Crawler

Weight: 17,155 kg, Width: 1,070 mm

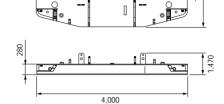


Gantry

Weight: 2,700 kg

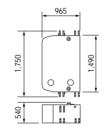


Counterweight A Weight: 10,000 kg



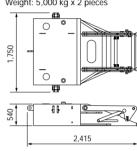
Counterweight B

Weight: 5,000 kg x 10 pieces

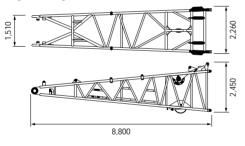


Carbody Weight A

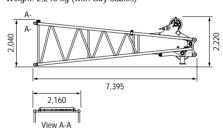
Weight: 5,000 kg x 2 pieces



Weight: 2,620 kg

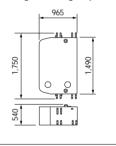


Weight: 2,240 kg (with Guy Cables)



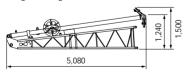
Carbody Weight B

Weight: 5,000 kg x 2 pieces

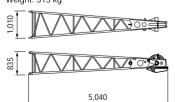


Jib Base with Strut (For Crane)

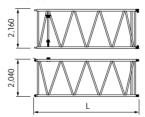
Weight: 510 kg, Width: 1,040 mm



Jib Top (For Crane) Weight: 315 kg



Insert Boom

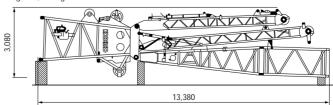


	L (mm)	Weight (kg)*
3.0m	3,180	630
6.1m	6,230	1,030
9.1m	9,280	1,420
12.2m	12,320	1,680

with guy cables

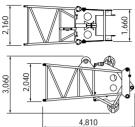
Travel Kit Assembly

Weight: 6,600 kg

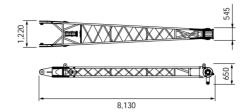


Dimensions: mm Weight: kg

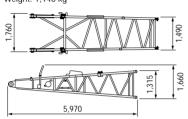




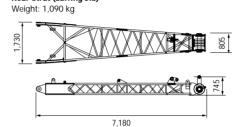
Front Strut (Luffing Jib) Weight: 1,000 kg



Luffing Jib Base Weight: 1,140 kg

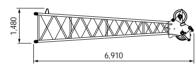


Rear Strut (Luffing Jib)



Luffing Jib Top Weight: 1,170 kg





Other Attachments

Attachments	Weight	Dimensions (L x W x H)
Base machine (without boom base)	38,150 kg	10,700 mm x 3,500 mm x 3,390 mm
Trans-lifter	360 kg	1,050 mm x 1,030 mm
Boom backstop	740 kg/1 piece	7,090 mm x 360 mm
3.0 m Insert jib (for crane)	110 kg	3,130 mm x 1,020 mm x 840 mm
6.1 m Insert jib (for crane)	190 kg	6,175 mm x 1,020 mm x 840 mm
Auxiliary sheave	295 kg	2,030 mm x 740 mm x 720 mm
Upper spreader	590 kg	2,230 mm x 395 mm x 790 mm
Lower spreader	400 kg	1,500 mm x 290 mm x 780 mm
3.0 m luffing Insert jib	310 kg	3,165 mm x 1,490 mm x 1,290 mm
6.1 m luffing Insert jib	540 kg	6,210 mm x 1,490 mm x 1,290 mm
9.1 m luffing Insert jib	740 kg	9,260 mm x 1,490 mm x 1,290 mm
Luffing jib backstop	100 kg/1 piece	2,940 mm x 210 mm x 230 mm
Strut backstop (luffing jib)	180 kg/1 piece	2,890 mm x 270 mm
Auxiliary sheave (luffing jib)	380 kg	1,010 mm x 890 mm x 910 mm
Luffing jib drum	1,470 kg	840 mm x 1,620 mm x 900 mm
180-ton hook	2,800 kg	2,225 mm x 700 mm x 1,000 mm
110-ton hook	1,730 kg	2,140 mm x 540 mm x 700 mm
70-ton hook	1,200 kg	1,825 mm x 470 mm x 700 mm
35-ton hook	900 kg	1,575 mm x 365 mm x 700 mm
Ball hook	460 kg	1,200 mm x 380 mm dia.

Note: Estimated weights may vary ± 2%.

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TRANSPORTATION PLAN

Luffing Boom 54.9 m + Luffing Jib 51.8 m

Configuration	Description	Total Weight
No.1 Low Loader Width: 3,500 mm	Base Machine = Including 3rd winch Translifter All wire ropes	Approx. 44.00 ton
No.2 Semi Loader	Crawler No.1 = Crawler No.2 = Luffing Jib Top = Total =	17.16 ton 17.16 ton 1.17 ton 35.49 ton
No.3 Semi Loader	Travel Kit Assembly =	6.60 ton
No. 4 Tent Side Truck	Counterweight B (4 x 5.00 ton) = 9.1 m Insert Boom x 1 = 9.1 m Luffing Insert Jib x 1 = 3.0 m Insert Boom x 1 = Total =	20.00 ton 1.42 ton 0.74 ton 0.63 ton 22.79 ton
No.5 Tent Side Truck	Counterweight B (4 x 5.00 ton) = 9.1 m Insert Boom x 1 = 9.1 m Luffing Insert Jib x 1 = 3.0 m Insert Boom x 1 = Total =	20.00 ton 1.42 ton 0.74 ton 0.53 ton 22.69 ton
No.6 Tent Side Truck	Counterweight B (2 x 5.00 ton) Carbody Weight B (2 x 5.00 ton) = 9.1 m Insert Boom x 1 = 9.1 m Luffing Insert Jib x 1 = Total =	10.00 ton 10.00 ton 1.42 ton 0.74 ton 22.16 ton
No.7 Tent Side Truck	Counterweight A Base = 9.1 m Insert Boom x 1 = 6.1 m Luffing Insert Jib x 1 = 3.0 m Luffing Insert Jib x 1 = Carbody Weight A (2x5.00 ton) = Total =	10.00 ton 1.42 ton 0.54 ton 0.31 ton 10.00 ton 22.27 ton

Note: Estimated weights may vary \pm 2%.

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



Standard Equipment

Upper structure/Lower structure

Counterweight: 60.0 ton (total weight) Carbody weight: 20.0 ton (total weight)

1,070 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

Swing neutral-free/brake select switch

Side deck for cab

Side deck (right side guard)

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)

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

Bigge Crane and Rigging Co.

10700 Bigge Avenue San Leandro, CA 94577

Phone: (888) 337-BIGGE or (510) 638-8100

Fax: (510) 639-4053 Email: info@bigge.com Web site: www.bigge.com

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KOBELCO CRANES CO., LTD.

17-1, Higashigotanda 2-chome, Shinagawa-ku, Tokyo 141-8626 JAPAN Tel: +81-3-5789-2130 Fax: +81-3-5789-3372

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Inquiries To:

Bulletin No. CKE1800-1FSPEC-EU2

080901IF Printed in Japan



