HYDRAULIC CRAWLER CRANE CKE 1100

Model: CKE1100

KOBELCO



Max. Lifting Capacity: 110 t x 3.6 m* Max. Crane Boom Length: 70.1 m Max. Fixed Jib Combination: 61.0 m + 21.3 m

CONFIGURATION



*Auxiliary sheave is necessary.



SPECIFICATIONS



Power Plant

Model: Hino diesel engine P11C-UN Type: Water-cooled, direct fuel injection, with turbocharger Complies with NRMM (Europe) Stage IIIA and US EPA Tier III. Displacement: 10.520 liters Rated Power: 247kW/2,000 min⁻¹ {rpm} (ISO) Max. torque: 1,300 N·m/1,500 min⁻¹ Cooling system: Liquid, re-circulating 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 12 volt, 170 Ah/20 HR capacity batteries, series connected

Fuel tank capacity: 400 liters

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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, 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 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: 34 mm

Boom hoist reeving: 10 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 item.)

Drum lock: External ratchet for locking drum.

Drums:

Front drum:

 $614 \mbox{ mm}$ P.C.D. x $617 \mbox{ mm}$ Lg. wide drum, grooved for 26 mm wire rope. Rope capacity is 265 m working length and 300 m storage length.

Rear drum:

614 mm P.C.D. x 617 mm Lg. wide drum, grooved for 26 mm wire rope. Rope capacity is 235 m working length and 300 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 (Single-line):

Rated line pull: 108 kN {11.0 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:** 3.2 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:** 34.0 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 guick disconnect feature for individual removal as a unit from axles. Also crawler assemblies can be hydraulically extended for wide-track operation or retracted for transportation. Crawler belt tension is maintained by hydraulic jack force on the track-adjusting bearing block.

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.

Main Specifications (Model: CKE1100) **Crane Boom** Max. Lifting Capacity 110 t/3.6 m*** Max. Length 70.1 m **Fixed Jib** Max. Lifting Capacity 10.9 t/22.0 m Max. Combination 61.0 m + 21.3 m Main & Aux. Winch Max. Line Speed 120 m/min (1st layer) Rated Line Pull (Single Line) 108 kN {11.0 tf} Wire Rope Diameter 26 mm 265 m (Main) 235 m (Aux.) Wire Rope Length Spring set hydraulically released Brake Type multiple disc brake (Negative) Free-Fall Brake Type Wet-type multiple disc brake (Optional) Working Speed Swing Speed 3.2 min⁻¹ {rpm} Travel Speed 1.4/1.0 km/h

Shoes (flat): 63 shoes, 900 mm wide each crawler Max. Travel speed: 1.4/1.0 km/h Max. gradeability: 30%



Weight

Including upper and lower machine, 34.0 ton counterweight, basic boom, hook, and other accessories.

Specification	Weight	Ground pressure			
Crane boom	Approx. 99 ton,	92.9 kPa {0.95 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	70.1 m
Fixed Jib	27.4 m + 9.1 m	61.0 m + 21.3 m

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/cm ² }				
Hydraulic Tank Capacity	535 liters				
Self-Removal Device	Standard counterweight removal				
Weight					
Operating Weight*	Approx. 99 t				
Ground Pressure*	92.9 kPa {0.95 kgf/cm ² }				
Counterweight	34.0 t				
Transport Weight**	Approx. 40.7 t				

and lower machine, 34.0 ton counterweight, basic boom, hook, and other accessories.

** Base machine with gantry, boom base, carbody, wire ropes, lower spreader and upper spreader (Refer to P14)

Units are SI units. { } indicates conventional units.

*** Auxiliary sheave is necessary.

GENERAL DIMENSIONS

Crane Boom

(Unit: mm)



Limit of Hook Lifting



BOOM AND JIB ARRANGEMENTS

Crane Boom Arrangements

Boom length m (ft)	Boom arrangement
15.2 (50)	BT
18.2 (60)	BIOT
21.3 (70)	
24.4 (80)	
27.4 (90)	B[10]10]20T $B[20]20T$ H H H H H H H
30.5 (100)	
33.5 (110)	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
36.6 (120)	B10 20 40A T
39.6 (130)	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
42.7 (140)	BI0 20 20 40A T BI10 40 40A T
45.7 (150)	B1010 20 20 40A T B1010 40 40A T B1010 40 40A T B20 40 40A T

Boom length m (ft)	Boom arrangement
48.8 (160)	
51.8 (170)	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
54.9 (180)	B 10 20 40 40A T B 10 40 40A T
57.9 (190)	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
61.0 (200)	B 10 20 40 40 40A T →
64.0 (210)	B[10]10] 20 40 40 40A T B[20] 20 40 40 40A T
67.1 (220)	
70.1 (230)	B 10 10 20 20 40 40 40A T

Symbol	Boom Length	Remarks
В	7.6 m	Boom Base
\square	7.6 m	Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
40	12.2 m	Insert Boom
40A	12.2 m	Insert Boom with Lug

mark shows the guy line installing position when the fixed jib is used. Indicates the most flexible combination of insert booms, which can be modified to form all shorter boom arrangements.

Note: If a fixed jib is not used, a 12.2 m boom can be used in place of a 12.2 m boom with lug.

Fixed Jib Arrangements



Crane boom length	Jib length m (ft)	Jib arrangement
	9.1 (30)	BĪT
27.4 m	12.2 (40)	B 10 T
2	15.2 (50)	────────────────────────────────────
61.0 m	18.3 (60)	B 10 20 T
	21.3 (70)	B 10 10 20 T

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



Hook Blocks

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

Hooks We	Maight (kg)	No. of	No. of lines and max. rated loads (tons)							
HOOKS	Hooks Weight (kg)	sheaves	1	2	3	4	5	6	7	8
110-ton	1,700	5	-	-	-	44.0	55.0	66.0	77.0	88.0
70-ton	900	3	-	22.0	33.0	44.0	55.0	66.0	70.0	-
35-ton	700	1	-	22.0	33.0	-	-	-	-	-
11-ton ball hook	450	0	11.0	-	-	-	-	-	-	-

Hooke	Woight (kg)	No. of				
HUUKS	Hooks Weight (kg)		9	10		
110-ton	1,700	5	99.0	110.0		
70-ton	900	3	-	-		
35-ton	700	1	-	-		
11-ton ball hook	450	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)	11.0	22.0	33.0	44.0	55.0	66.0	77.0	88.0	
No. of Parts of Line	9	10							
Max. Loads (ton)	99.0	110.0							

Symbols for Attachments:



WORKING RANGES AND LIFTING CAPACITIES

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 10 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. Crawler frames must be fully extended for all crane operations.
- 14. Ratings shown in ______ are determined by the strength of the boom or other structural component.
- Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 16. Crane boom ratings: Deduct weight of main hook block, slings, and all other load handling accessories from crane boom ratings shown.
- Auxiliary sheave ratings for crane boom: Deduct weight of ball hook, 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 67.1 m.



Crane Boom Lifting Capacity

Unit: metric ton

Counterweight: 34.0 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	Boom Length (m) Working radius (m)
3.0	3.6m/110*												3.0
4.0	98.6	4.1m/95.3	4.6m/86.0										4.0
5.0	77.7	77.7	77.7	77.0	5.5m/66.0	5.9m/58.9							5.0
6.0	62.2	62.2	62.2	62.2	60.7	58.2	6.4m/52.4	6.8m/47.1					6.0
7.0	53.3	53.2	53.2	53.1	51.2	49.4	47.6	46.0	7.3m/42.7	7.8m/38.9			7.0
8.0	44.5	44.4	44.4	44.2	44.2	42.7	41.4	40.1	38.9	37.7	8.2m/35.6	8.7m/32.9	8.0
9.0	37.6	37.5	37.4	37.3	37.3	37.2	36.5	35.5	34.5	33.5	32.4	31.7	9.0
10.0	32.5	32.4	32.3	32.2	32.2	32.1	32.0	31.7	30.9	30.1	29.1	28.5	10.0
12.0	25.5	25.3	25.2	25.1	25.1	24.9	24.9	24.8	24.7	24.6	24.0	23.6	12.0
14.0	20.8	20.7	20.6	20.4	20.4	20.3	20.2	20.1	20.0	19.9	19.8	19.7	14.0
16.0	14.4m/20.1	17.4	17.3	17.1	17.1	16.9	16.9	16.7	16.7	16.6	16.4	16.4	16.0
18.0		17.1m/16.0	14.8	14.7	14.6	14.5	14.4	14.3	14.2	14.1	13.9	13.9	18.0
20.0			19.7m/13.2	12.8	12.7	12.6	12.5	12.4	12.3	12.2	12.0	12.0	20.0
22.0				11.3	11.2	11.1	11.0	10.8	10.8	10.6	10.5	10.5	22.0
24.0				22.4m/11.1	10.0	9.8	9.8	9.6	9.5	9.4	9.2	9.2	24.0
26.0					25.0m/9.5	8.8	8.7	8.6	8.5	8.4	8.2	8.2	26.0
28.0						27.6m/8.1	7.9	7.7	7.6	7.5	7.3	7.3	28.0
30.0							7.2	7.0	6.9	6.8	6.6	6.5	30.0
32.0							30.3m/7.1	6.4	6.3	6.1	5.9	5.9	32.0
34.0								32.9m/6.1	5.7	5.6	5.4	5.3	34.0
36.0									35.6m/5.3	5.1	4.9	4.8	36.0
38.0										4.7	4.5	4.4	38.0
40.0										38.2m/4.6	4.1	4.0	40.0
42.0											40.8m/4.0	3.7	42.0
44.0												43.5m/3.5	44.0
Reeves	10	9	8	7	6	6	5	5	4	4	4	3	Reeves

Boom Length Working (m) radius (m)	51.8	54.9	57.9	61.0	64.0	67.1	70.1	Boom Length (m) Working radius (m)
9.0	9.1m/30.4	9.6m/28.1						9.0
10.0	27.7	27.0	26.1	10.5m/22.0	10.9m/22.0	11.4m/19.1	11.9m/15.0	10.0
12.0	23.0	22.4	21.7	21.4	20.8	18.4	14.9	12.0
14.0	19.4	18.9	18.4	18.2	17.6	16.5	13.1	14.0
16.0	16.3	16.1	15.8	15.6	15.2	14.8	11.7	16.0
18.0	13.8	13.6	13.5	13.5	13.2	12.8	10.4	18.0
20.0	11.9	11.7	11.6	11.6	11.4	11.3	9.3	20.0
22.0	10.3	10.2	10.0	10.1	9.9	9.8	8.3	22.0
24.0	9.1	8.9	8.8	8.8	8.6	8.5	7.5	24.0
26.0	8.0	7.9	7.7	7.7	7.6	7.5	6.7	26.0
28.0	7.2	7.0	6.9	6.9	6.7	6.6	6.0	28.0
30.0	6.4	6.3	6.1	6.1	6.0	5.8	5.3	30.0
32.0	5.8	5.6	5.5	5.5	5.3	5.2	4.7	32.0
34.0	5.2	5.0	4.9	4.9	4.7	4.6	4.2	34.0
36.0	4.7	4.6	4.4	4.4	4.2	4.1	3.7	36.0
38.0	4.3	4.1	4.0	3.9	3.8	3.6	3.2	38.0
40.0	3.9	3.7	3.5	3.5	3.3	3.2	2.7	40.0
42.0	3.5	3.3	3.2	3.1	2.9	2.8	2.3	42.0
44.0	3.2	3.0	2.8	2.8	2.6	2.4	1.9	44.0
46.0	2.9	2.7	2.5	2.5	2.3	2.1	1.6	46.0
48.0	46.1m/2.9	2.4	2.2	2.2	2.0	1.8		48.0
50.0		48.8m/2.3	2.0	1.9	1.7	1.6		50.0
52.0			51.4m/1.8	1.7	1.5			52.0
54.0				1.5				54.0
Reeves	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 P8.

*Auxiliary sheave is necessary.



Auxiliary Sheave Lifting Capacity for Crane Boom (With 70 t Main Hook) Linit: motri

Unit: metric ton
Counterweight: 34.0 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	Boom Length (m) Working radius (m)
4.0	4.8m/22.0												4.0
5.0	22.0	5.3m/22.0	5.8m/22.0										5.0
6.0	22.0	22.0	22.0	6.2m/22.0	6.7m/22.0								6.0
7.0	22.0	22.0	22.0	22.0	22.0	7.2m/22.0	7.6m/22.0						7.0
8.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	8.1m/22.0	8.5m/22.0				8.0
9.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	9.4m/22.0	9.9m/22.0	9.0
10.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	10.0
12.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	12.0
14.0	19.5	19.4	19.3	19.1	19.1	19.0	18.9	18.8	18.7	18.6	18.5	18.4	14.0
16.0	14.8	16.1	16.0	15.8	15.8	15.6	15.6	15.4	15.4	15.3	15.1	15.1	16.0
18.0		12.8	13.5	13.4	13.3	13.2	13.1	13.0	12.9	12.8	12.6	12.6	18.0
20.0		18.7m/11.6	11.0	11.5	11.4	11.3	11.2	11.1	11.0	10.9	10.7	10.7	20.0
22.0			21.3m/9.3	10.0	9.9	9.8	9.7	9.5	9.5	9.3	9.2	9.2	22.0
24.0				8.5	8.7	8.5	8.5	8.3	8.2	8.1	7.9	7.9	24.0
26.0					7.5	7.5	7.4	7.3	7.2	7.1	6.9	6.9	26.0
28.0					26.6m/7.1	6.5	6.6	6.4	6.3	6.2	6.0	6.0	28.0
30.0						29.2m/5.9	5.9	5.7	5.6	5.5	5.3	5.2	30.0
32.0							31.9m/5.2	5.1	5.0	4.8	4.6	4.6	32.0
34.0								4.5	4.4	4.3	4.1	4.0	34.0
36.0								34.5m/4.3	3.8	3.8	3.6	3.5	36.0
38.0									37.2m/3.4	3.4	3.2	3.1	38.0
40.0										39.8m/3.0	2.8	2.7	40.0
42.0											2.4	2.4	42.0
44.0											42.4m/2.3	2.1	44.0
46.0												45.1m/1.9	46.0
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	Boom Length (m) Working radius (m)
10.0	10.4m/22.0	10.8m/22.0	11.3m/21.9	11.7m/20.2			10.0
12.0	21.7	21.1	20.4	20.1	12.2m/19.1	12.6m/16.5	12.0
14.0	18.1	17.6	17.1	16.9	16.3	15.2	14.0
16.0	15.0	14.8	14.5	14.3	13.9	13.5	16.0
18.0	12.5	12.3	12.2	12.2	11.9	11.5	18.0
20.0	10.6	10.4	10.3	10.3	10.1	10.0	20.0
22.0	9.0	8.9	8.7	8.8	8.6	8.5	22.0
24.0	7.8	7.6	7.5	7.5	7.3	7.2	24.0
26.0	6.7	6.6	6.4	6.4	6.3	6.2	26.0
28.0	5.9	5.7	5.6	5.6	5.4	5.3	28.0
30.0	5.1	5.0	4.8	4.8	4.7	4.5	30.0
32.0	4.5	4.3	4.2	4.2	4.0	3.9	32.0
34.0	3.9	3.7	3.6	3.6	3.4	3.3	34.0
36.0	3.4	3.3	3.1	3.1	2.9	2.8	36.0
38.0	3.0	2.8	2.7	2.6	2.5	2.3	38.0
40.0	2.6	2.4	2.2	2.2	2.0	1.9	40.0
42.0	2.2	2.0	1.9	1.8	1.6	1.5	42.0
44.0	1.9	1.7	1.5	1.5			44.0
46.0	1.6						46.0
48.0							48.0
50.0							50.0
52.0							52.0
Reeves	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 P8.

Fixed Jib Working Ranges

Jib Offset Angle: 10°, 30°



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.
- 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, opera-
- tion 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 10 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. Crawler frames must be fully extended for all crane operations.14. Ratings shown in ______ are determined by the strength of the boom
- or other structural component. 15. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- Fixed jib ratings: Deduct weight of jib hook block, slings, and all other load handling accessories from fixed jib ratings shown.
- 17. Crane boom lengths for fixed jib mounting are 27.4 m to 61.0 m.



Fixed Jib Lifting Capacities (Without Main Hook)

Jib Offset Angle: 10°

Unit: metric ton Counterweight: 34.0 t

			07				22	E			20	C			45	5.7		
	m length (m)		27					5.5				.6						Boom length (m)
Jib	length (m)	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	Jib length (m)
	10.0	10.9																10.0
	12.0	10.9	10.9			10.9	10.9			10.9								12.0
	14.0	10.9	10.9	9.8	7.1	10.9	10.9	9.9		10.9	10.9			10.9	10.9			14.0
	16.0	10.9	10.9	9.6	6.9	10.9	10.9	9.7	7.0	10.9	10.9	9.8	7.1	10.9	10.9	9.9		16.0
	18.0	10.9	10.9	8.9	6.7	10.9	10.9	9.5	6.8	10.9	10.9	9.7	6.9	10.9	10.9	9.8	7.0	18.0
	20.0	10.9	10.9	8.0	6.5	10.9	10.9	8.8	6.7	10.9	10.9	9.5	6.8	10.9	10.9	9.6	6.8	20.0
	22.0	10.9	10.2	7.3	6.4	10.9	10.9	8.0	6.5	10.9	10.9	8.7	6.6	10.6	10.8	9.3	6.7	22.0
	24.0	10.1	9.4	6.7	6.0	9.9	10.0	7.4	6.4	9.6	9.8	8.0	6.5	9.3	9.5	8.6	6.6	24.0
Ê	26.0	9.1	8.7	6.2	5.5	8.8	9.0	6.8	6.1	8.6	8.7	7.4	6.4	8.3	8.4	8.0	6.5	26.0 ≶
ns (28.0	8.2	8.1	5.7	5.1	7.9	8.1	6.3	5.6	7.7	7.8	6.9	6.1	7.4	7.5	7.5	6.4	28.0 ^t
Working radius (m)	30.0	7.4	7.5	5.4	4.7	7.2	7.3	5.9	5.2	6.9	7.0	6.5	5.7	6.6	6.8	6.9	6.2	26.0 Working radius (m) 30.0 32.0 34.0 (m)
king	32.0	6.8	6.9	5.0	4.4	6.5	6.6	5.6	4.9	6.3	6.4	6.1	5.4	6.0	6.1	6.3	5.8	32.0 g
Vor	34.0		6.3	4.7	4.2	6.0	6.1	5.3	4.6	5.7	5.8	5.8	5.0	5.4	5.5	5.7	5.5	34.0 â
-	36.0			4.5	3.9	5.5	5.5	5.0	4.3	5.2	5.3	5.4	4.8	4.9	5.0	5.2	5.2	36.0
	38.0			4.2	3.7	5.0	5.1	4.7	4.1	4.7	4.8	5.0	4.5	4.4	4.5	4.7	4.7	38.0
	40.0			4.0	3.5		4.7	4.5	3.9	4.3	4.4	4.6	4.3	4.0	4.1	4.3	4.3	40.0
	42.0				3.3			4.3	3.7	4.0	4.1	4.2	4.1	3.7	3.8	3.9	4.0	42.0
	44.0				3.2			4.1	3.5		3.7	3.9	3.9	3.3	3.4	3.6	3.6	44.0
	46.0							3.8	3.4			3.6	3.6	3.1	3.1	3.3	3.3	46.0
	48.0								3.3			3.3	3.3	2.8	2.9	3.0	3.1	48.0
	50.0								3.1			3.0	3.1		2.6	2.8	2.8	50.0
	52.0												2.9			2.5	2.6	52.0
	54.0												2.6			2.3	2.3	54.0
	56.0															2.0	2.1	56.0
	58.0																1.9	58.0
R	eeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

Boo	m length (m)		51	.8			57	' .9			61	.0		Boom lengt	th (m)
Jib	o length (m)	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	Jib length	(m)
	14.0	10.9												14.0	
	16.0	10.9	10.9			10.9	10.9			10.9	10.9			16.0	
	18.0	10.9	10.9	9.8	7.0	10.9	10.9	9.9		10.9	10.9	9.9		18.0	
	20.0	10.9	10.9	9.7	6.9	10.9	10.9	9.8	7.0	10.9	10.8	9.8	7.0	20.0	
	22.0	10.4	10.6	9.5	6.8	10.1	10.3	9.6	6.8	10.1	10.3	9.7	6.9	22.0	
	24.0	9.1	9.3	9.2	6.7	8.9	9.0	9.3	6.7	8.8	9.0	9.2	6.8	24.0	
Ē	26.0	8.1	8.2	8.4	6.6	7.8	8.0	8.2	6.6	7.7	7.9	8.1	6.7	26.0	Ş
Working radius (m)	28.0	7.2	7.3	7.5	6.5	6.9	7.0	7.3	6.5	6.8	7.0	7.2	6.6	28.0	Working
grac	30.0	6.4	6.5	6.7	6.4	6.1	6.3	6.5	6.4	6.1	6.2	6.4	6.5	30.0	grad
rking	32.0	5.7	5.9	6.1	6.1	5.4	5.6	5.8	5.8	5.4	5.5	5.7	5.8	32.0	
ş	34.0	5.2	5.3	5.5	5.5	4.9	5.0	5.2	5.2	4.8	4.9	5.1	5.2	34.0	E
	36.0	4.7	4.8	4.9	5.0	4.4	4.5	4.7	4.7	4.3	4.4	4.6	4.6	36.0	
	38.0	4.2	4.3	4.5	4.5	3.9	4.0	4.2	4.3	3.8	3.9	4.1	4.2	38.0	
	40.0	3.8	3.9	4.1	4.1	3.5	3.6	3.8	3.8	3.4	3.5	3.7	3.8	40.0	
	42.0	3.4	3.5	3.7	3.7	3.1	3.2	3.4	3.5	3.0	3.1	3.3	3.4	42.0	
	44.0	3.1	3.2	3.4	3.4	2.7	2.9	3.1	3.1	2.6	2.7	3.0	3.0	44.0	
	46.0	2.8	2.9	3.1	3.1	2.4	2.5	2.7	2.8	2.2	2.4	2.6	2.7	46.0	
	48.0	2.5	2.6	2.8	2.8	2.0	2.2	2.4	2.4	1.9	2.1	2.3	2.3	48.0	
	50.0	2.2	2.3	2.5	2.5	1.7	1.9	2.1	2.1	1.6	1.8	2.0	2.0	50.0	
	52.0	1.9	2.0	2.2	2.2		1.6	1.8	1.8			1.7	1.7	52.0	
	54.0		1.8	1.9	2.0			1.5	1.6					54.0	
	56.0		1.5	1.7	1.8									56.0	
R	eeves	1	1	1	1	1	1	1	1	1	1	1	1	Reev	es

Note:

Ratings according to EN13000.

Ratings shown in ______are determined by the strength of the boom or other structural components. Refer to notes P11.

Jib Offset Angle: 30°

Unit: metric ton

Counterweight: 34.0 t

Boo	n length (m)		27	. 4			33	.5			39).6			45.7			
Jib	length (m)	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	Jib length (m)
	12.0	9.5																12.0
	14.0	9.5	7.0			9.5				9.5								14.0
	16.0	9.5	7.0			9.5	7.0			9.5	7.0			9.5				16.0
	18.0	9.5	7.0	4.2		9.5	7.0			9.5	7.0			9.5	7.0			18.0
	20.0	9.5	7.0	4.2	4.2	9.5	7.0	4.2		9.5	7.0	4.2		9.5	7.0			20.0
	22.0	9.1	6.7	4.2	4.0	9.5	7.0	4.2	4.1	9.5	7.0	4.2	4.2	9.5	7.0	4.2		22.0
	24.0	8.6	6.4	4.2	3.7	9.2	6.7	4.2	3.9	9.5	7.0	4.2	4.0	9.5	7.0	4.2	4.1	24.0
	26.0		6.1	4.1	3.5	8.8	6.4	4.2	3.7	8.8	6.7	4.2	3.8	8.6	7.0	4.2	3.9	26.0
Ê	28.0		5.8	3.9	3.3	8.1	6.2	4.1	3.5	7.9	6.5	4.2	3.6	7.6	6.8	4.2	3.8	28.0 ≶
Working radius (m)	30.0			3.7	3.2	7.3	6.0	3.9	3.3	7.1	6.3	4.1	3.5	6.8	6.5	4.2	3.6	28.0 Working radius (m 36.0
rad	32.0			3.6	3.0		5.8	3.8	3.2	6.4	6.1	3.9	3.3	6.1	6.3	4.1	3.5	32.0 ^G
king	34.0			3.4	2.9			3.6	3.1		5.9	3.8	3.2	5.5	5.7	3.9	3.3	34.0 ^{di}
Vor	36.0				2.8			3.5	3.0		5.4	3.7	3.1	5.0	5.2	3.8	3.2	36.0 Ĵ
	38.0				2.7			3.4	2.9			3.5	3.0	4.6	4.7	3.7	3.1	38.0
	40.0								2.8			3.4	2.9			3.6	3.0	40.0
	42.0											3.4	2.8			3.5	2.9	42.0
	44.0												2.7			3.4	2.8	44.0
	46.0																2.8	46.0
	48.0																2.7	48.0
	50.0																2.6	50.0
	52.0																	52.0
	54.0																	54.0
	56.0																	56.0
	58.0																	58.0
Re	eves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

Boo	m length (m)		51	.8			57	7.9			61	.0		Boom lengt	:h (m)
Jit	o length (m)	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	9.1	12.2	18.3	21.3	Jib length	(m)
	16.0	9.5												16.0	
	18.0	9.5	7.0			9.5				9.5				18.0	1
	20.0	9.5	7.0			9.5	7.0			9.5	7.0			20.0	
	22.0	9.5	7.0	4.2		9.5	7.0			9.5	7.0			22.0]
	24.0	9.5	7.0	4.2	4.2	9.3	7.0	4.2		9.2	7.0	4.2		24.0	
	26.0	8.4	7.0	4.2	4.0	8.1	7.0	4.2	4.1	8.1	7.0	4.2	4.1	26.0	1
Ē	28.0	7.4	7.0	4.2	3.9	7.2	7.0	4.2	4.0	7.1	7.0	4.2	4.0	28.0	Š
Working radius (m)	30.0	6.7	6.8	4.2	3.7	6.4	6.6	4.2	3.8	6.3	6.6	4.2	3.8	30.0	Working radius
g rad	32.0	6.0	6.2	4.2	3.6	5.7	5.9	4.2	3.7	5.6	5.9	4.2	3.7	32.0	gra
kinç	34.0	5.4	5.6	4.1	3.4	5.1	5.3	4.2	3.5	5.0	5.3	4.2	3.6	34.0	dius
Nor	36.0	4.8	5.0	3.9	3.3	4.6	4.8	4.1	3.4	4.5	4.7	4.1	3.5	36.0	E
	38.0	4.4	4.5	3.8	3.2	4.1	4.3	3.9	3.3	4.0	4.2	4.0	3.4	38.0	
	40.0	3.9	4.1	3.7	3.1	3.7	3.8	3.8	3.2	3.6	3.8	3.9	3.3	40.0	
	42.0		3.7	3.6	3.0	3.3	3.4	3.7	3.1	3.2	3.4	3.7	3.2	42.0	
	44.0		3.4	3.5	2.9	2.9	3.1	3.4	3.0	2.8	3.0	3.3	3.1	44.0	
	46.0			3.3	2.9		2.7	3.0	3.0	2.4	2.6	3.0	3.0	46.0	
	48.0			3.0	2.8			2.7	2.9		2.3	2.6	2.8	48.0	
	50.0			2.7	2.7			2.4	2.5		2.0	2.3	2.4	50.0	
	52.0				2.5			2.1	2.2			2.0	2.1	52.0	
	54.0								1.9			1.7	1.8	54.0	
	56.0								1.7				1.6	56.0	
R	eeves	1	1	1	1	1	1	1	1	1	1	1	1	Reev	es

Note:

Ratings according to EN13000. Ratings shown in ______are of are determined by the strength of the boom or other structural components. Refer to notes P11.

PARTS AND ATTACHMENTS

Dimensions: mm Weight: kg



Other Attachments

Attachments	Weight	Dimensions (L x W x H)
12.2 m insert boom with lug	1,385 kg (with guy cables)	12,310 mm x 1,675 mm x 1,810 mm
3.0 m insert jib	100 kg	3,115 mm x 800 mm x 800 mm
6.1 m insert jib	180 kg	6,160 mm x 800 mm x 800 mm
Jib strut	250 kg	3,620 mm x 835 mm x 615 mm
Upper spreader	300 kg	1,780 mm x 305 mm x 800 mm
Lower spreader	200 kg	905 mm x 255 mm x 710 mm
110-ton hook block	1,700 kg	710 mm x 700 mm x 1,930 mm
70-ton hook block	900 kg	385 mm x 700 mm x 1,820 mm
35-ton hook block	700 kg	470 mm x 700 mm x 1,575 mm
11-ton ball hook	450 kg	380 mm dia. x 1,200 mm

Note: Estimated weights may vary ± 2%.



Upper structure/Lower structure	Safety Device
Counterweight: 34.0 ton (total weight) 900 mm shoe crawlers Batteries (170 Ah/20 HR) Travel kit 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 Side deck for cab Steps (crawlers) Two front working lights Upper spreader storage guide Tools (for routine maintenance) Two rear view mirrors Mirror for monitoring drums Electric fuel pump Counterweight self-removal Cable roller (for boom)	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
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)	

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