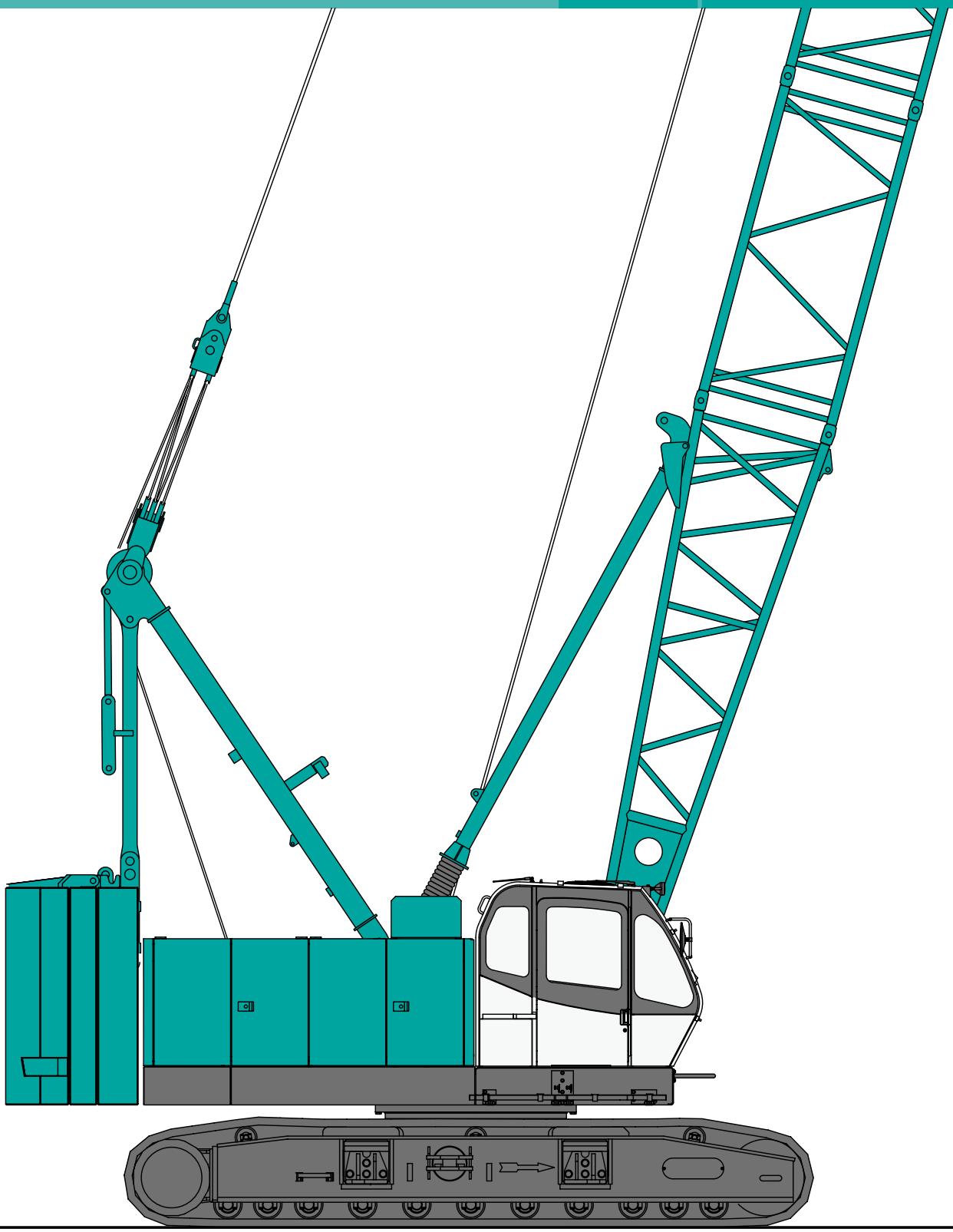
KOBELCO

HYDRAULIC CRAWLER CRANE

CKL1000i

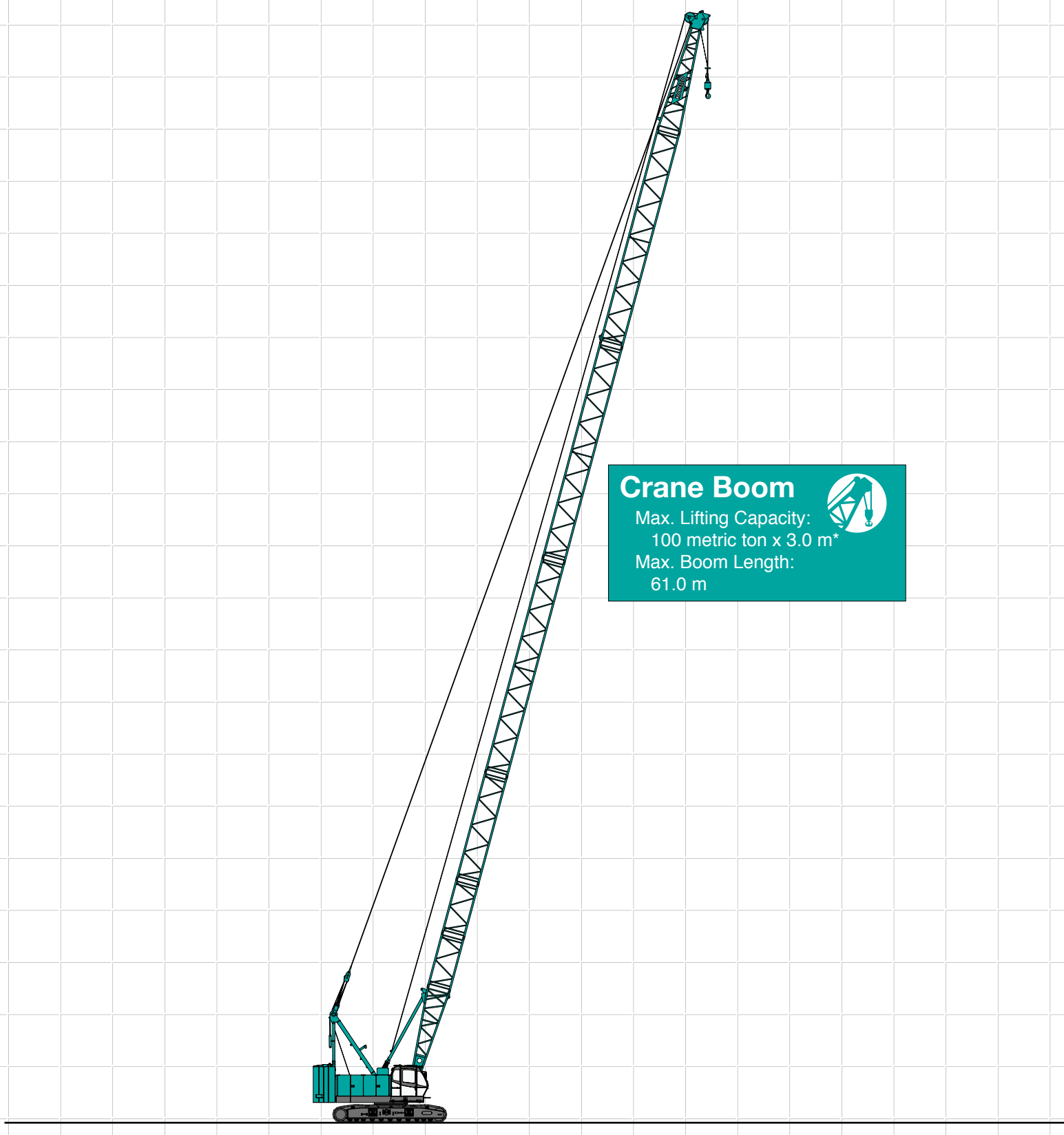
Model: CKL1000i



Max. Lifting Capacity: 100 t x 3.0 m*
Max. Crane Boom Length: 61.0 m
Max. Fixed Jib Combination: 51.8 m + 18.3 m

*Auxiliary sheave is necessary.

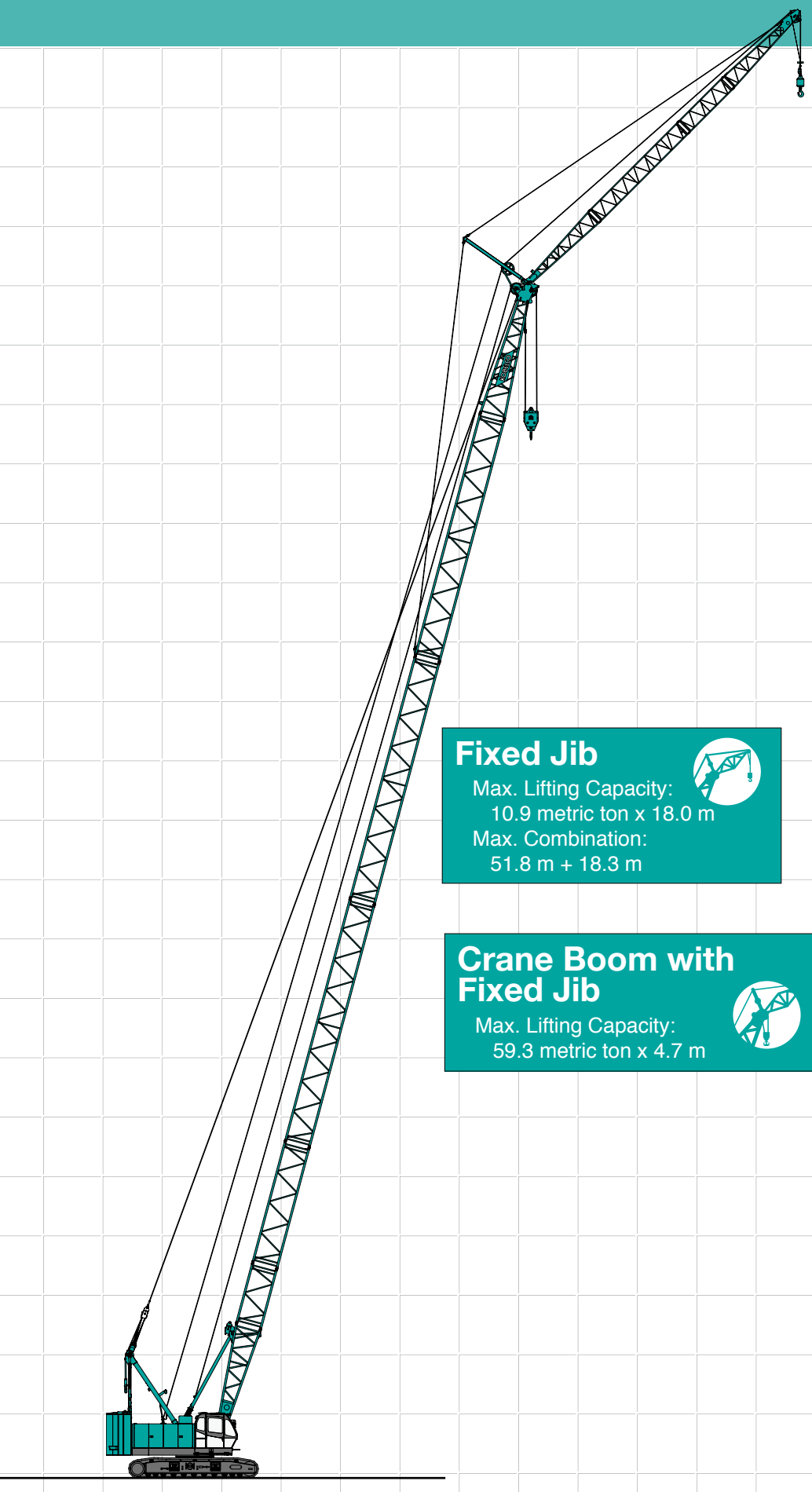
CONFIGURATION



Crane Boom

Max. Lifting Capacity:
100 metric ton x 3.0 m*
Max. Boom Length:
61.0 m

*Auxiliary sheave is necessary.



Fixed Jib
Max. Lifting Capacity:
10.9 metric ton x 18.0 m
Max. Combination:
51.8 m + 18.3 m

Crane Boom with Fixed Jib
Max. Lifting Capacity:
59.3 metric ton x 4.7 m

CONTENTS

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: 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 volt, 150 Ah/20 HR capacity series connected
Fuel tank capacity: 370 liters

Hydraulic System

Three variable displacement piston pumps are driven by heavy-duty pump drive. Two of variable displacement pumps are used in the main hook hoist circuit, boom hoist circuit, auxiliary hook hoist circuit, third hoist circuit and each propel 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 paper 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/cm^2}
Swing system: 27.5 MPa {280 kgf/cm^2}
Control system: 7.0 MPa {71 kgf/cm^2}
Reservoir capacity: 380 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 16 mm dia. wire rope.
Line speed: Single on first drum layer
Hoisting/Lowering: 70 to 2 m/min

Diameter of wire ropes
Boom guy line: 30 mm
Boom hoist reeving: 12 parts of 16 mm dia.high strength wire rope
Boom backstops: 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 multiple-disc 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 mm P.C.D. x 617 mm wide drum, grooved for 26 mm wire rope. Rope capacity is 240 m working length and 300 m storage length.
Rear drum:
614 mm P.C.D. x 617 mm wide drum, grooved for 26 mm wire rope. Rope capacity is 165 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: 122 kN {12.5 tf}

Swing System

Swing unit is powered by hydraulic motor driving spur gear through planetary reducer, the swing system provides 360° rotation.
Swing parking brakes: A spring-set, hydraulically released multiple-disc brake is mounted on swing motor.
Swing circle: Single-row ball bearing with an integral internally cut swing gear.
Swing lock: Manually, two position lock for transportation
Swing speed: 4.0 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: 29.3 t

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 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.

Carbody weight: 7.9 t

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): 66 shoes, 800 mm wide each crawler

Max. Travel speed: 1.9/1.2 km/h

Max. gradeability: 40%

Weight

Including upper and lower machine, 29.3 t counterweight, 7.9 t carbody weight basic boom, hook, and other accessories.

Specification	Weight	Ground pressure
Crane boom	Approx. 83.8 t,	88.9 kPa {0.91 kgf/cm^2}
Boom and Jib:		

Attachment

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

Boom Jib Length

	Min. Length (Min. Combination)	Max. Length (Max. Combination)
Crane Boom	12.2 m	61.0 m
Fixed Jib	24.4 m + 9.1 m	51.8 m + 18.3 m

Optional Attachment

Translifter:

Loading and unloading of main unit from trailers.

Free Fall Winch:

Hoist lowering free fall function.

Main Specifications (Model: CKL1000i)

Crane Boom	
Max. Lifting Capacity	100 t / 3.0 m***
Max. Length	61.0 m
Fixed Jib	
Max. Lifting Capacity	10.9 t / 18.0 m
Max. Length	18.3 m
Max. Combination	51.8 m + 18.3 m
Main & Aux. Winch	
Max. Line Speed	120 m/min
Rated Line Pull (Single Line)	122 kN {12.5 tf}
Wire Rope	26.0 mm dia.
Wire Rope Length	240 m
Brake Type	Wet-type multiple disc brake
Working Speed	
Swing Speed	4.0 min^{-1} {4.0 rpm}
Travel Speed	1.7/1.1 km/h

Power Plant	
Model	Hino P11C-UN
Engine Output	247 kW/2,000 min^{-1} {rpm}
Fuel Tank Capacity	370 liters
Hydraulic System	
Main Pumps	3 variable displacement
Max. Pressure	31.9 MPa {325 kgf/cm^2}
Hydraulic Tank Capacity	380 liters
Self-Removal Device	Standard counterweight removal
Weight	
Operating Weight*	Approx. 84.0 t
Ground Pressure	89.0 kPa
Counterweight	29.3 t (Upper), 7.9 t (Lower)
Transport Weight**	Approx. 44.7 t

Units are SI units. { } indicates conventional units.

* Including upper and lower machine, counterweight, carbody weight, 12.2 m boom, 100 t hook block, and other accessories.

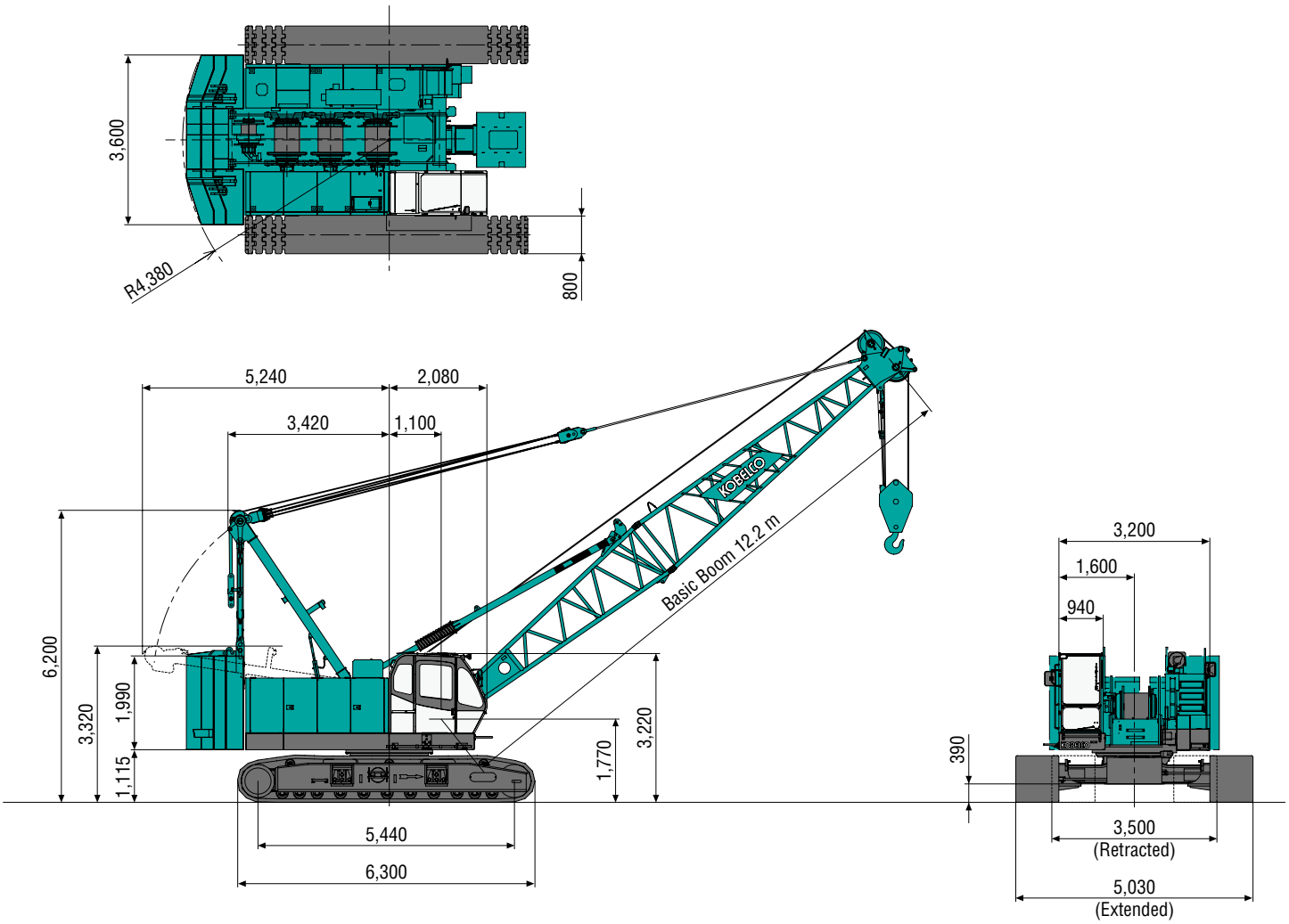
** Base machine with gantry, boom base, crawlers, wire ropes for main and aux. winches, lower spreader and upper spreader.

***Auxiliary sheave is necessary.

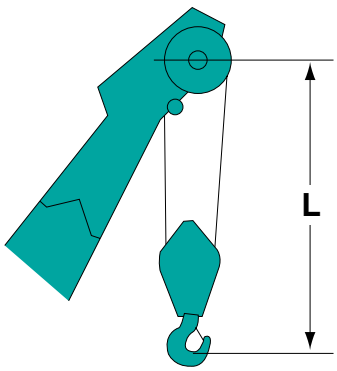
GENERAL DIMENSIONS

Crane Boom

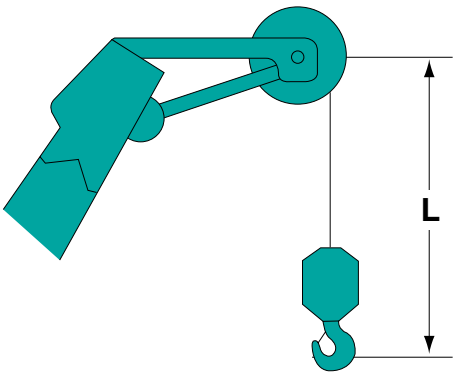
(Unit: mm)



Limit of Hook Lifting



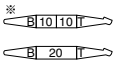
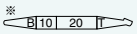
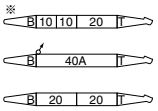
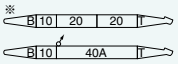
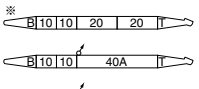
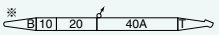
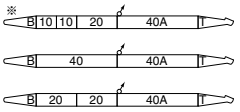
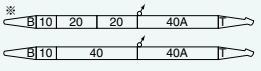
Hook	L
100 t hook	4.1 m
70 t hook	4.1 m
35 t hook	3.9 m

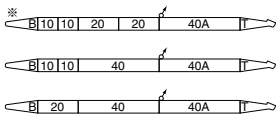
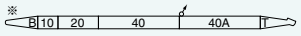
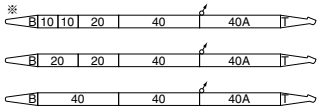
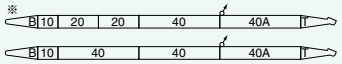
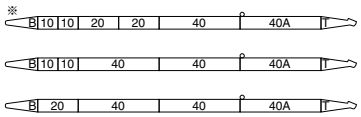
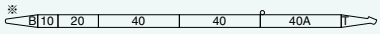
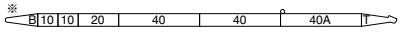


Hook		L
11 t	hook	3.5 m

BOOM AND JIB ARRANGEMENTS

Crane Boom Arrangements

Boom length m (ft)	Boom arrangement
12.2 (40)	
15.2 (50)	
18.3 (60)	
21.3 (70)	
24.4 (80)	
27.4 (90)	
30.5 (100)	
33.5 (110)	
36.6 (120)	
39.6 (130)	

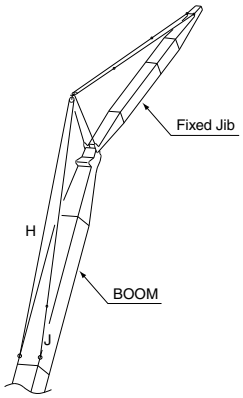
Boom length m (ft)	Boom arrangement
42.7 (140)	
45.7 (150)	
48.8 (160)	
51.8 (170)	
54.9 (180)	
57.9 (190)	
61.0 (200)	

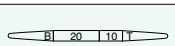
Symbol	Boom Length	Remarks
B	5.8 m	Boom Base
T	6.4 m	Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
40	12.2 m	Insert Boom
40A	12.2 m	Insert Boom with lug

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.

Fixed Jib Arrangements



Crane boom length	Jib length m (ft)	Jib arrangement
24.4 m ≀ 51.8 m	9.1 (30)	
	12.2 (40)	
	15.2 (50)	
	18.3 (60)	

Symbol	Jib Length	Remarks
B	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	Weight (kg)	No. of sheaves	No. of lines and max. rated loads (t)							
			1	2	3	4	5	6	7*	8*
100-t	1,300	4	—	—	—	50.0	62.5	75.0	87.5	100.0
70-t	900	3	—	—	37.5	50.0	62.5	70.0	—	—
35-t	700	1	—	25.0	35.0	—	—	—	—	—
11-t ball hook	290	0	11.0	—	—	—	—	—	—	—

*Auxiliary sheave is necessary.

Symbols for Attachments:

Crane Boom

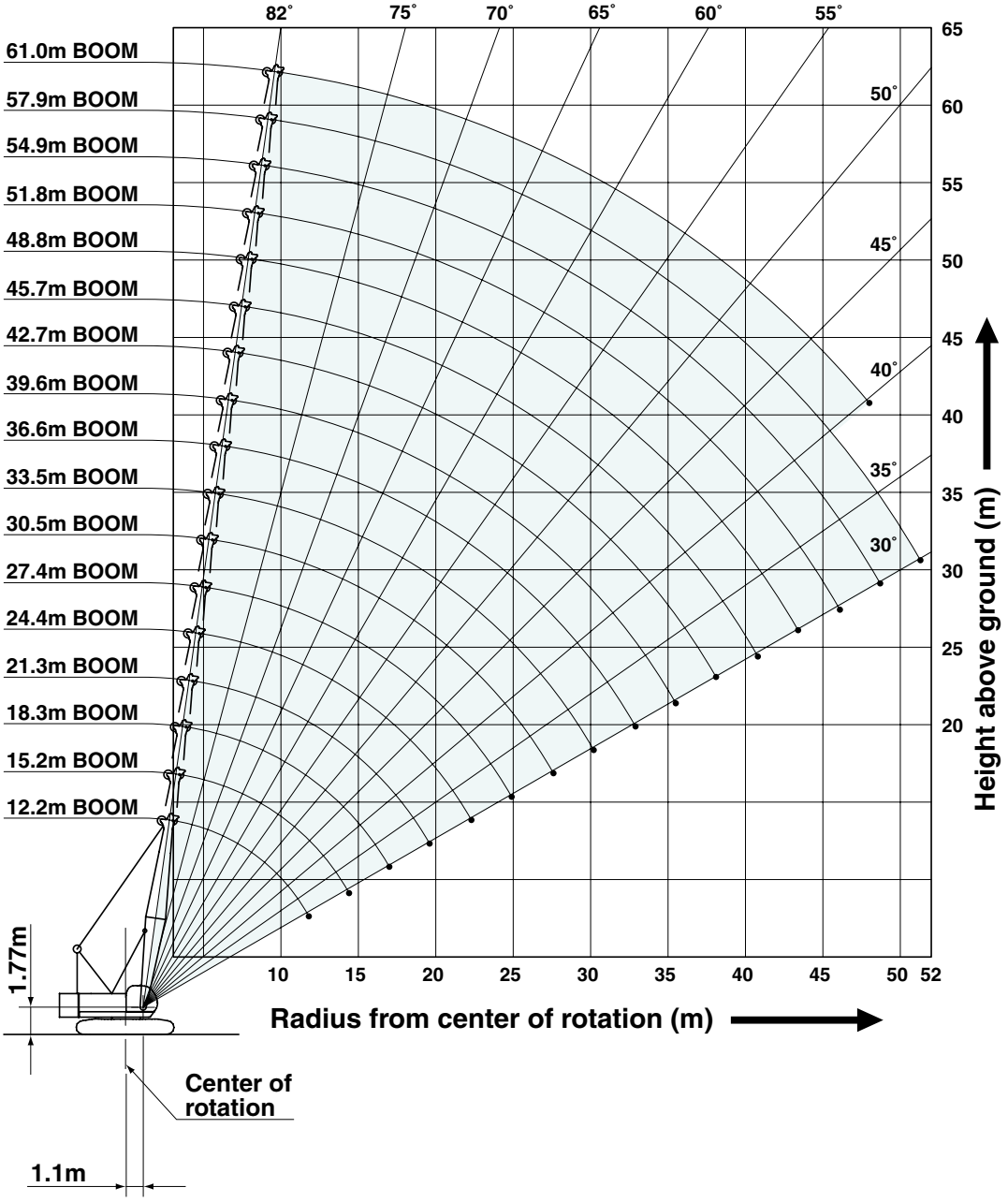
Auxiliary Sheave for Crane Boom

Fixed Jib

Crane Boom with Fixed Jib

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.
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 12 part line.
10. Gantry must be in raised position for all conditions.
11. Boom backstops are required for all boom lengths.
12. Crawler frames must be fully extended for all crane operations.
13. Ratings shown in [ ] are determined by the strength of the boom or other structural component.
14. Instruction in the “Operator's Manual” must be strictly observed when operating the machine.
15. Crane boom ratings: Deduct weight of main hook block, slings, and all other load handling accessories from crane boom ratings shown.
16. 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.
17. Crane boom lengths for auxiliary sheave mounting are 12.2 m to 57.9 m.

Crane Boom Lifting Capacity

Unit: metric ton

Counterweight: 29.3 t, Carbody weight: 7.9 t

Working radius (m) \ Boom length (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	54.9	57.9	61.0	Boom length (m) \ Working radius (m)
3.0	100.0	3.4m/90.0																**3.0**
4.0	86.5	86.4	86.2	4.3m/75.0	4.7m/65.4													**4.0**
5.0	70.1	69.9	68.2	64.8	61.5	5.1m/49.2	5.6m/47.9											**5.0**
6.0	53.0	52.8	52.7	50.3	48.2	46.3	44.4	42.6	6.4m/37.3	6.8m/34.8								**6.0**
7.0	45.6	45.4	44.0	42.2	40.6	39.2	37.8	36.5	35.3	34.1	7.3m/31.7	7.7m/28.0						**7.0**
8.0	38.1	38.3	37.7	36.3	35.1	34.0	32.8	31.8	30.8	29.8	28.9	27.8	8.3m/21.9	8.5m/19.2				**8.0**
9.0	32.1	32.5	32.4	31.8	30.8	29.9	28.9	28.1	27.3	26.5	25.7	25.0	20.8	18.6	9.1m/16.2	9.4m/13.9	9.8m/11.8	**9.0**
10.0	27.1	28.1	28.0	27.9	27.4	26.7	25.8	25.1	24.5	23.8	23.1	22.5	19.5	17.4	15.2	13.4	11.7	**10.0**
12.0	11.8m/19.6	22.1	22.0	21.8	21.7	21.7	21.2	20.7	20.2	19.6	19.1	18.6	17.3	15.4	13.3	11.7	10.2	**12.0**
14.0		17.1	18.0	17.9	17.7	17.7	17.5	17.4	17.1	16.6	16.1	15.8	15.4	13.8	11.9	10.4	9.0	**14.0**
16.0		14.4m/16.1	15.2	15.0	14.9	14.8	14.7	14.6	14.5	14.3	13.9	13.6	13.3	12.4	10.7	9.3	8.0	**16.0**
18.0			17.0m/13.4	12.9	12.8	12.7	12.5	12.5	12.4	12.2	12.1	11.9	11.6	11.4	9.7	8.4	7.2	**18.0**
20.0				19.6m/11.3	11.2	11.1	10.9	10.8	10.7	10.6	10.4	10.4	10.3	10.0	8.9	7.6	6.5	**20.0**
22.0					9.9	9.8	9.6	9.5	9.4	9.3	9.1	9.0	9.0	8.9	8.1	7.0	5.9	**22.0**
24.0					22.3m/9.7	8.7	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8	7.5	6.4	5.4	**24.0**
26.0						24.9m/8.3	7.6	7.6	7.5	7.3	7.2	7.1	7.0	6.9	6.8	5.9	4.9	**26.0**
28.0							27.6m/7.1	6.8	6.7	6.6	6.4	6.3	6.3	6.1	6.0	5.4	4.5	**28.0**
30.0								6.2	6.1	5.9	5.8	5.7	5.6	5.5	5.4	5.0	4.1	**30.0**
32.0								30.2m/6.1	5.5	5.4	5.2	5.1	5.1	4.9	4.8	4.6	3.8	**32.0**
34.0									32.9m/5.3	4.9	4.7	4.7	4.6	4.4	4.3	4.3	3.4	**34.0**
36.0										35.5m/4.6	4.3	4.2	4.1	4.0	3.9	3.8	3.2	**36.0**
38.0											4.0	3.9	3.8	3.6	3.5	3.4	2.9	**38.0**
40.0											38.1m/3.9	3.5	3.4	3.3	3.1	3.0	2.6	**40.0**
42.0												40.8m/3.4	3.1	3.0	2.8	2.7	2.3	**42.0**
44.0													43.4m/2.9	2.7	2.6	2.5	2.1	**44.0**
46.0														2.4	2.3	2.2	1.9	**46.0**
48.0														46.1m/2.4	2.0	1.9	1.7	**48.0**
50.0															48.7m/1.9	1.8		**50.0**
52.0																51.3m/1.7		**52.0**
Reeves	8*	8*	7*	6	6	4	4	4	3	3	3	3	2	2	2	2	2	**Reeves**

Note:
Ratings according to EN13000. (Ratings 75% tipping load)
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 (Without Main Hook)

Unit: metric ton

Counterweight: 29.3 t, Carbody weight: 7.9 t

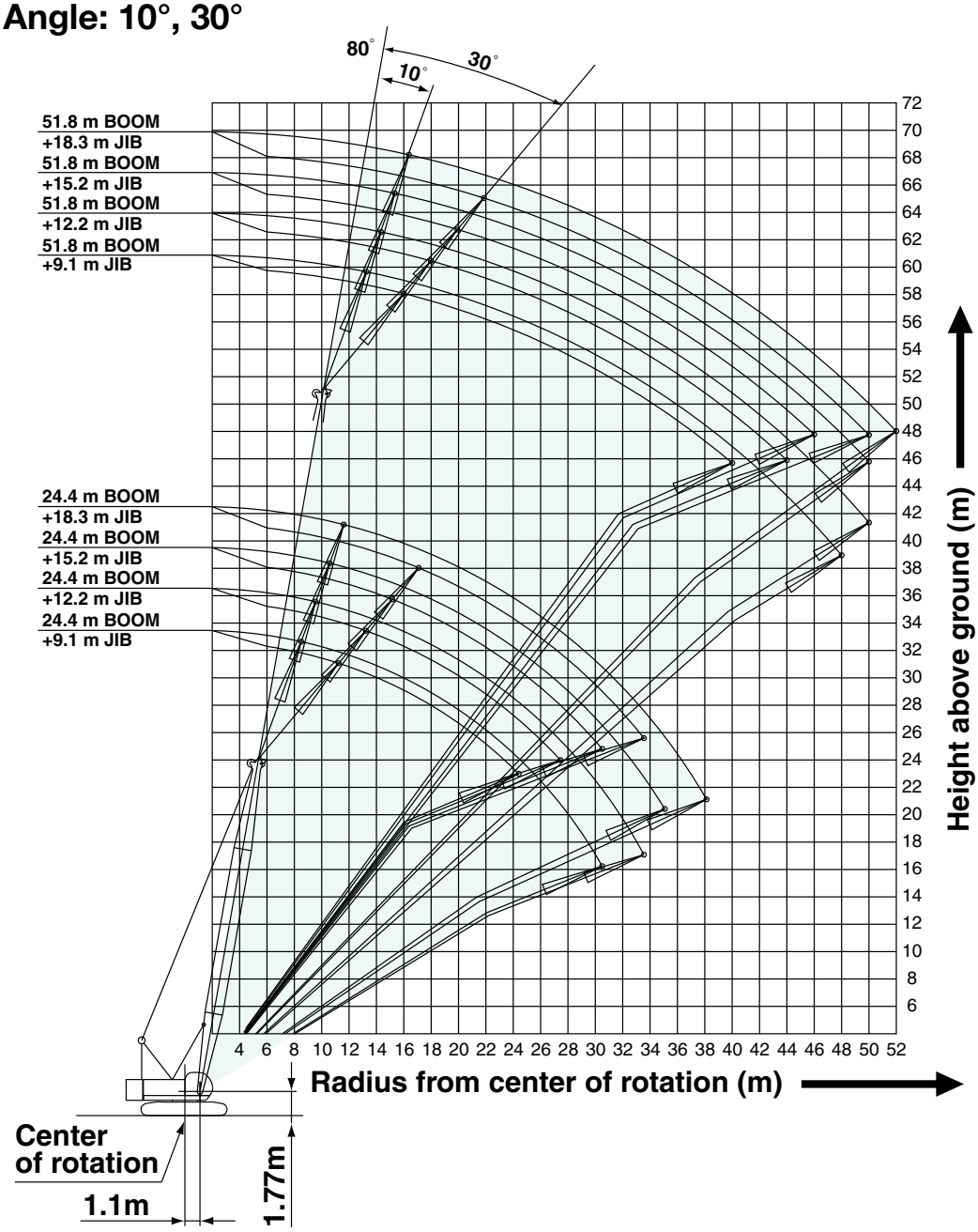
Working radius (m) \ Boom Length (m)	12.2	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7	Boom Length (m) \ Working radius (m)
3.7	11.0												**3.7**
4.0	11.0	4.1m/11.0	4.7m/11.0										**4.0**
5.0	11.0	11.0	11.0	11.0	5.4m/11.0	5.8m/11.0							**5.0**
6.0	11.0	11.0	11.0	11.0	11.0	11.0	6.3m/11.0	6.7m/11.0					**6.0**
7.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	7.1m/11.0	7.5m/11.0			**7.0**
8.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	8.4m/11.0	**8.0**
9.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	**9.0**
10.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	**10.0**
12.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	**12.0**
14.0	12.8m/11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	**14.0**
16.0		15.4m/11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	**16.0**
18.0			11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	**18.0**
20.0				10.7	10.7	10.6	10.4	10.3	10.2	10.1	9.9	9.9	**20.0**
22.0				20.6m/9.8	9.4	9.3	9.1	9.0	8.9	8.8	8.6	8.5	**22.0**
24.0					23.3m/8.5	8.2	8.0	7.9	7.8	7.7	7.6	7.5	**24.0**
26.0						25.9m/7.1	7.1	7.1	7.0	6.8	6.7	6.6	**26.0**
28.0							6.4	6.3	6.2	6.1	5.9	5.8	**28.0**
30.0							28.6m/6.2	5.7	5.6	5.4	5.3	5.2	**30.0**
32.0								31.2m/5.3	5.0	4.9	4.7	4.6	**32.0**
34.0									33.9m/4.5	4.4	4.2	4.2	**34.0**
36.0										4.0	3.8	3.7	**36.0**
38.0										36.5m/3.9	3.5	3.4	**38.0**
40.0											39.1m/3.3	3.0	**40.0**
42.0												41.8m/2.6	**42.0**
Reeves	1	1	1	1	1	1	1	1	1	1	1	1	**Reeves**

Working radius (m) \ Boom Length (m)	48.8	51.8	54.9	57.9	Boom Length (m) \ Working radius (m)
8.0	8.6m/11.0				**8.0**
9.0	11.0	11.0	9.5m/11.0	9.9m/11.0	**9.0**
10.0	11.0	11.0	11.0	11.0	**10.0**
12.0	11.0	11.0	11.0	11.0	**12.0**
14.0	11.0	11.0	11.0	9.9	**14.0**
16.0	11.0	11.0	10.2	8.8	**16.0**
18.0	11.0	10.9	9.2	7.9	**18.0**
20.0	9.8	9.5	8.4	7.1	**20.0**
22.0	8.5	8.4	7.6	6.5	**22.0**
24.0	7.4	7.3	7.0	5.9	**24.0**
26.0	6.5	6.4	6.3	5.4	**26.0**
28.0	5.8	5.6	5.5	4.9	**28.0**
30.0	5.1	5.0	4.9	4.5	**30.0**
32.0	4.6	4.4	4.3	4.1	**32.0**
34.0	4.1	3.9	3.8	3.8	**34.0**
36.0	3.6	3.5	3.4	3.3	**36.0**
38.0	3.3	3.1	3.0	2.9	**38.0**
40.0	2.9	2.8	2.6	2.5	**40.0**
42.0	2.6	2.5	2.3	2.2	**42.0**
44.0	2.3	2.2	2.1	2.0	**44.0**
46.0	44.5m/2.2	1.9	1.8	1.7	**46.0**
48.0		47.2m/1.7	1.5	1.5	**48.0**
Reeves	1	1	1	1	**Reeves**

Note:
Ratings according to EN13000.
Ratings shown in [ ] are determined by the strength of the boom or other structural components.
Refer to notes 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.
3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
4. Weight of hook block (s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions, out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
6. Ratings are for operation on a firm and level surface, up to 1% gradient.
7. At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.
8. Boom inserts and guy lines must be arranged as shown in the "Operator's Manual".
9. Boom hoist reeving is 12 part line.
10. Gantry must be in raised position for all conditions.
11. Boom backstops are required for all boom lengths.
12. Crawler frames must be fully extended for all crane operations.
13. Ratings shown in [ ] are determined by the strength of the boom or other structural component.
14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
15. Fixed jib ratings: Deduct weight of jib hook block, slings, and all other load handling accessories from fixed jib ratings shown.
16. Crane boom lengths for fixed jib mounting are 24.4 m to 51.8 m.
17. Crane boom ratings with fixed jib: Deduct weight of jib hook block, slings, and all other load handling accessories from crane boom ratings with fixed jib shown.

Fixed Jib Lifting Capacities (Without Main Hook)

Jib Offset Angle: 10°

Unit: metric ton

Counterweight: 29.3 t, Carbody weight: 7.9 t

Boom length (m)	24.4				30.5				36.6				42.7				Boom length (m)
Jib length (m)	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	Jib length (m)
9.0	10.9																9.0
10.0	10.9				10.9												10.0
12.0	10.9	10.9	9.0		10.9	10.9			10.9								12.0
14.0	10.9	10.9	9.0	8.1	10.9	10.9	9.0	8.1	10.9	10.9	9.0		10.9	10.9			14.0
16.0	10.9	10.5	8.7	7.7	10.9	10.9	9.0	8.1	10.9	10.9	9.0	8.1	10.9	10.9	9.0		16.0
18.0	10.9	9.5	7.8	6.8	10.9	10.6	8.7	7.5	10.9	10.9	9.0	8.1	10.9	10.9	9.0	8.1	18.0
20.0	10.3	8.6	7.1	6.2	10.1	9.7	7.9	6.8	9.9	10.0	8.6	7.4	9.6	9.8	9.0	7.9	20.0
22.0	9.0	7.8	6.5	5.6	8.8	8.9	7.2	6.2	8.6	8.7	8.0	6.8	8.4	8.5	8.5	7.3	22.0
24.0	8.0	7.2	5.9	5.1	7.8	8.0	6.6	5.7	7.5	7.7	7.3	6.2	7.3	7.5	7.6	6.7	24.0
26.0	7.2	6.7	5.5	4.7	7.0	7.1	6.2	5.3	6.7	6.9	6.8	5.8	6.5	6.7	6.7	6.3	26.0
28.0	6.5	6.2	5.1	4.4	6.3	6.4	5.7	4.9	6.1	6.2	6.2	5.4	5.8	5.9	6.0	5.8	28.0
30.0	5.9	5.8	4.8	4.1	5.7	5.8	5.4	4.6	5.5	5.5	5.7	5.0	5.2	5.3	5.4	5.4	30.0
32.0		5.5	4.5	3.8	5.2	5.3	5.1	4.3	5.0	5.0	5.1	4.7	4.7	4.8	4.9	4.9	32.0
34.0			4.2	3.6	4.7	4.8	4.8	4.0	4.5	4.6	4.7	4.4	4.3	4.3	4.4	4.5	34.0
36.0				3.4		4.4	4.5	3.8	4.1	4.2	4.2	4.2	3.8	3.9	4.0	4.0	36.0
38.0				3.2		4.0	4.1	3.6	3.8	3.8	3.9	3.9	3.5	3.6	3.6	3.7	38.0
40.0							3.8	3.4	3.4	3.5	3.6	3.6	3.2	3.3	3.3	3.3	40.0
42.0								3.3		3.2	3.3	3.3	2.9	3.0	3.0	3.1	42.0
44.0								3.1			3.0	3.1	2.5	2.7	2.8	2.8	44.0
46.0												2.8	2.2	2.3	2.5	2.6	46.0
48.0												2.4		2.0	2.2	2.3	48.0
50.0															1.9	2.0	50.0
52.0																1.7	52.0
Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

Working radius (m)

Boom length (m)	48.8				51.8				Boom length (m)
Jib length (m)	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	Jib length (m)
14.0	10.9				10.9				14.0
16.0	10.9	10.9			10.9	10.9			16.0
18.0	10.8	10.9	9.0	8.1	10.7	10.8	9.0	8.1	18.0
20.0	9.5	9.6	9.0	8.1	9.4	9.5	9.0	8.1	20.0
22.0	8.2	8.4	8.5	7.8	8.1	8.3	8.3	8.0	22.0
24.0	7.2	7.3	7.4	7.2	7.1	7.2	7.3	7.4	24.0
26.0	6.3	6.5	6.6	6.7	6.2	6.4	6.5	6.6	26.0
28.0	5.7	5.8	5.9	5.9	5.6	5.7	5.8	5.8	28.0
30.0	5.1	5.2	5.2	5.3	5.0	5.1	5.1	5.2	30.0
32.0	4.6	4.6	4.7	4.8	4.4	4.5	4.6	4.7	32.0
34.0	4.1	4.2	4.3	4.3	4.0	4.1	4.2	4.2	34.0
36.0	3.7	3.8	3.8	3.9	3.6	3.6	3.7	3.8	36.0
38.0	3.4	3.4	3.5	3.5	3.3	3.3	3.4	3.4	38.0
40.0	3.0	3.1	3.2	3.2	2.9	3.0	3.0	3.1	40.0
42.0	2.8	2.8	2.9	2.9	2.7	2.7	2.8	2.8	42.0
44.0	2.5	2.5	2.6	2.6	2.3	2.4	2.5	2.5	44.0
46.0	2.2	2.2	2.4	2.4	2.1	2.1	2.2	2.3	46.0
48.0	1.8	1.9	2.1	2.1	1.7	1.8	1.9	2.0	48.0
50.0	1.4	1.6	1.8	1.9		1.5	1.6	1.7	50.0
52.0			1.5	1.6				1.5	52.0
Reeves	1	1	1	1	1	1	1	1	Reeves

Working radius (m)

Note:
Ratings according to EN13000.
Ratings shown in [ ] are determined by the strength of the boom or other structural components.
Refer to notes P12.

Unit: metric ton

Jib Offset Angle: 30°

Counterweight: 29.3 t, Carbody weight: 7.9 t

Boom length (m)	24.4				30.5				36.6				42.7				Boom length (m)
Jib length (m)	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	Jib length (m)
12.0	9.5																12.0
14.0	9.3	6.9			9.5				9.5								14.0
16.0	8.6	6.4			9.0	6.7			9.4				9.5				16.0
18.0	8.0	5.9	4.8		8.6	6.2	5.0		9.0	6.5			9.4	6.7			18.0
20.0	7.5	5.6	4.5	3.8	8.0	5.9	4.7	3.9	8.5	6.2	4.9	4.1	8.9	6.4	5.1		20.0
22.0	7.1	5.3	4.2	3.6	7.6	5.6	4.4	3.7	8.1	5.9	4.6	3.9	8.4	6.1	4.8	4.0	22.0
24.0	6.8	5.0	4.0	3.4	7.3	5.3	4.2	3.5	7.7	5.6	4.4	3.7	7.6	5.8	4.6	3.8	24.0
26.0		4.8	3.8	3.2	7.0	5.1	4.0	3.3	7.0	5.4	4.2	3.5	6.7	5.6	4.4	3.6	26.0
28.0			3.6	3.0	6.4	4.9	3.8	3.1	6.2	5.1	4.0	3.3	6.0	5.4	4.2	3.4	28.0
30.0			3.5	2.9		4.7	3.7	3.0	5.6	4.9	3.8	3.2	5.3	5.2	4.0	3.3	30.0
32.0				2.8			3.6	2.9	5.1	4.8	3.7	3.1	4.8	5.0	3.9	3.2	32.0
34.0								2.8		4.6	3.6	3.0	4.4	4.5	3.8	3.1	34.0
36.0								2.7			3.5	2.9	3.9	4.1	3.7	3.0	36.0
38.0											3.4	2.8		3.7	3.6	2.9	38.0
40.0												2.7			3.5	2.8	40.0
42.0																2.7	42.0
44.0																2.6	44.0
Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

Working radius (m)

Boom length (m)	48.8				51.8				Boom length (m)
Jib length (m)	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	Jib length (m)
18.0	9.5				9.5				18.0
20.0	9.2	6.6	5.1		9.3	6.6			20.0
22.0	8.5	6.3	4.9	4.1	8.5	6.4	5.0		22.0
24.0	7.5	6.0	4.7	3.9	7.5	6.1	4.8	3.9	24.0
26.0	6.6	5.8	4.5	3.7	6.6	5.9	4.6	3.8	26.0
28.0	5.9	5.6	4.3	3.6	5.9	5.7	4.4	3.6	28.0
30.0	5.2	5.4	4.1	3.4	5.2	5.4	4.2	3.5	30.0
32.0	4.7	4.9	4.0	3.3	4.7	4.8	4.1	3.4	32.0
34.0	4.2	4.4	3.9	3.2	4.2	4.3	4.0	3.3	34.0
36.0	3.9	3.9	3.8	3.1	3.7	3.8	3.9	3.2	36.0
38.0	3.5	3.6	3.7	3.0	3.3	3.5	3.6	3.1	38.0
40.0		3.2	3.4	2.9	3.0	3.2	3.3	3.0	40.0
42.0		2.9	3.0	2.8		2.9	3.0	2.9	42.0
44.0			2.7	2.7		2.6	2.7	2.6	44.0
46.0				2.6			2.4	2.4	46.0
48.0				2.3				2.2	48.0
50.0								2.0	50.0
Reeves	1	1	1	1	1	1	1	1	Reeves

Working radius (m)

Note:
Ratings according to EN13000.
Ratings shown in ☐ are determined by the strength of the boom or other structural components.
Refer to notes P12.

Crane Boom Lifting Capacity with Fixed Jib

Unit: metric ton

Counterweight: 29.3 t, Carbody weight: 7.9 t

Boom length (m)	24.4				27.4				30.5				33.5				Boom length (m)
Jib length (m)	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	Jib length (m)
4.0	4.7m/63.2	4.7m/62.8	4.7m/62.4	4.7m/61.9													**4.0**
5.0	59.9	59.5	59.1	58.6	5.1m/47.6	5.1m/47.2	5.1m/46.8	5.1m/46.3	5.6m/46.3	5.6m/45.9	5.6m/45.5	5.6m/45.0					**5.0**
6.0	46.6	46.2	45.8	45.3	44.7	44.3	43.9	43.4	42.8	42.4	42.0	41.5	41.0	40.6	40.2	39.7	**6.0**
7.0	39.0	38.6	38.2	37.7	37.6	37.2	36.8	36.3	36.2	35.8	35.4	34.9	34.9	34.5	34.1	33.6	**7.0**
8.0	33.5	33.1	32.7	32.2	32.4	32.0	31.6	31.1	31.2	30.8	30.4	29.9	30.2	29.8	29.4	28.9	**8.0**
9.0	29.2	28.8	28.4	27.9	28.3	27.9	27.5	27.0	27.3	26.9	26.5	26.0	26.5	26.1	25.7	25.2	**9.0**
10.0	25.8	25.4	25.0	24.5	25.1	24.7	24.3	23.8	24.2	23.8	23.4	22.9	23.5	23.1	22.7	22.2	**10.0**
12.0	20.1	19.7	19.3	18.8	20.1	19.7	19.3	18.8	19.6	19.2	18.8	18.3	19.1	18.7	18.3	17.8	**12.0**
14.0	16.1	15.7	15.3	14.8	16.1	15.7	15.3	14.8	15.9	15.5	15.1	14.6	15.8	15.4	15.0	14.5	**14.0**
16.0	13.3	12.9	12.5	12.0	13.2	12.8	12.4	11.9	13.1	12.7	12.3	11.8	13.0	12.6	12.2	11.7	**16.0**
18.0	11.2	10.8	10.4	9.9	11.1	10.7	10.3	9.8	10.9	10.5	10.1	9.6	10.9	10.5	10.1	9.6	**18.0**
20.0	9.6	9.2	8.8	8.3	9.5	9.1	8.7	8.2	9.3	8.9	8.5	8.0	9.2	8.8	8.4	7.9	**20.0**
22.0	8.3	7.9	7.5	7.0	8.2	7.8	7.4	6.9	8.0	7.6	7.2	6.7	7.9	7.5	7.1	6.6	**22.0**
24.0	22.3m/8.1	22.3m/7.7	22.3m/7.3	22.3m/6.8	7.1	6.7	6.3	5.8	6.9	6.5	6.1	5.6	6.8	6.4	6.0	5.5	**24.0**
26.0					24.9m/6.7	24.9m/6.3	24.9m/5.9	24.9m/5.4	6.0	5.6	5.2	4.7	6.0	5.6	5.2	4.7	**26.0**
28.0									27.6m/5.5	27.6m/5.1	27.6m/4.7	27.6m/4.2	5.2	4.8	4.4	3.9	**28.0**
30.0													4.6	4.2	3.8	3.3	**30.0**
32.0													30.2m/4.5	30.2m/4.1	30.2m/3.7	30.2m/3.2	**32.0**
Reeves	6	6	5	5	4	4	4	4	4	4	4	4	4	4	4	4	**Reeves**

Working radius (m)

Boom length (m)	36.6				39.6				42.7				45.7				Boom length (m)
Jib length (m)	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	Jib length (m)
6.0	6.4m/35.7	6.4m/35.3	6.4m/34.9	6.4m/34.4	6.8m/33.2	6.8m/32.8	6.8m/32.4	6.8m/31.9									**6.0**
7.0	33.7	33.3	32.9	32.4	32.5	32.1	31.7	31.2	7.3m/30.1	7.3m/29.7	7.3m/29.3	7.3m/28.8	7.7m/26.4	7.7m/26.0	7.7m/25.6	7.7m/25.1	**7.0**
8.0	29.2	28.8	28.4	27.9	28.2	27.8	27.4	26.9	27.3	26.9	26.5	26.0	26.2	25.8	25.4	24.9	**8.0**
9.0	25.7	25.3	24.9	24.4	24.9	24.5	24.1	23.6	24.1	23.7	23.3	22.8	23.4	23.0	22.6	22.1	**9.0**
10.0	22.9	22.5	22.1	21.6	22.2	21.8	21.4	20.9	21.5	21.1	20.7	20.2	20.9	20.5	20.1	19.6	**10.0**
12.0	18.6	18.2	17.8	17.3	18.0	17.6	17.2	16.7	17.5	17.1	16.7	16.2	17.0	16.6	16.2	15.7	**12.0**
14.0	15.5	15.1	14.7	14.2	15.0	14.6	14.2	13.7	14.5	14.1	13.7	13.2	14.2	13.8	13.4	12.9	**14.0**
16.0	12.9	12.5	12.1	11.6	12.7	12.3	11.9	11.4	12.3	11.9	11.5	11.0	12.0	11.6	11.2	10.7	**16.0**
18.0	10.8	10.4	10.0	9.5	10.6	10.2	9.8	9.3	10.5	10.1	9.7	9.2	10.3	9.9	9.5	9.0	**18.0**
20.0	9.1	8.7	8.3	7.8	9.0	8.6	8.2	7.7	8.8	8.4	8.0	7.5	8.8	8.4	8.0	7.5	**20.0**
22.0	7.8	7.4	7.0	6.5	7.7	7.3	6.9	6.4	7.5	7.1	6.7	6.2	7.4	7.0	6.6	6.1	**22.0**
24.0	6.7	6.3	5.9	5.4	6.6	6.2	5.8	5.3	6.5	6.1	5.7	5.2	6.4	6.0	5.6	5.1	**24.0**
26.0	5.9	5.5	5.1	4.6	5.7	5.3	4.9	4.4	5.6	5.2	4.8	4.3	5.5	5.1	4.7	4.2	**26.0**
28.0	5.1	4.7	4.3	3.8	5.0	4.6	4.2	3.7	4.8	4.4	4.0	3.5	4.7	4.3	3.9	3.4	**28.0**
30.0	4.5	4.1	3.7	3.2	4.3	3.9	3.5	3.0	4.2	3.8	3.4	2.9	4.1	3.7	3.3	2.8	**30.0**
32.0	3.9	3.5	3.1	2.6	3.8	3.4	3.0	2.5	3.6	3.2	2.8	2.3	3.5	3.1	2.7	2.2	**32.0**
34.0	32.9m/3.7	32.9m/3.3	32.9m/2.9	32.9m/2.4	3.3	2.9	2.5	2.0	3.1	2.7	2.3	1.8	3.1	2.7	2.3	1.8	**34.0**
36.0					35.5m/3.0	35.5m/2.6	35.5m/2.2	35.5m/1.7	2.7	2.3	1.9	1.4	2.6	2.2	1.8		**36.0**
38.0									2.4	2.0	1.6		2.3	1.9	1.5		**38.0**
40.0									38.1m/2.3	38.1m/1.9	38.1m/1.5		1.9	1.5			**40.0**
42.0													40.8m/1.8	40.8m/1.4			**42.0**
Reeves	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	**Reeves**

Working radius (m)

Unit: metric ton

Counterweight: 29.3 t, Carbody weight: 7.9 t

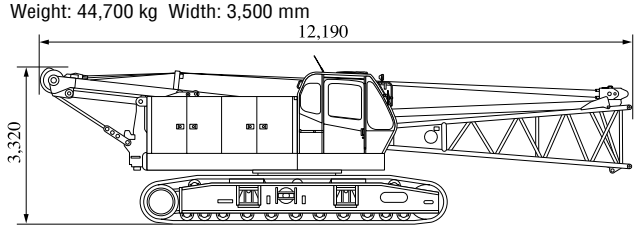
Boom length (m)		48.8				51.8				Boom length (m)	
Jib length (m)		9.1	12.2	15.2	18.3	9.1	12.2	15.2	18.3	Jib length (m)	
Working radius (m)	8.0	8.1m/20.3	8.1m/19.9	8.1m/19.5	8.1m/19.0	8.5m/17.6	8.5m/17.2	8.5m/16.8	8.5m/16.3	8.0	Working radius (m)
	9.0	19.2	18.8	18.4	17.9	17.0	16.6	16.2	15.7	9.0	
	10.0	17.9	17.5	17.1	16.6	15.8	15.4	15.0	14.5	10.0	
	12.0	15.7	15.3	14.9	14.4	13.8	13.4	13.0	12.5	12.0	
	14.0	13.8	13.4	13.0	12.5	12.2	11.8	11.4	10.9	14.0	
	16.0	11.7	11.3	10.9	10.4	10.8	10.4	10.0	9.5	16.0	
	18.0	10.0	9.6	9.2	8.7	9.8	9.4	9.0	8.5	18.0	
	20.0	8.7	8.3	7.9	7.4	8.4	8.0	7.6	7.1	20.0	
	22.0	7.4	7.0	6.6	6.1	7.3	6.9	6.5	6.0	22.0	
	24.0	6.3	5.9	5.5	5.0	6.2	5.8	5.4	4.9	24.0	
	26.0	5.4	5.0	4.6	4.1	5.3	4.9	4.5	4.0	26.0	
	28.0	4.7	4.3	3.9	3.4	4.5	4.1	3.7	3.2	28.0	
	30.0	4.0	3.6	3.2	2.7	3.9	3.5	3.1	2.6	30.0	
	32.0	3.5	3.1	2.7	2.2	3.3	2.9	2.5	2.0	32.0	
	34.0	3.0	2.6	2.2	1.7	2.8	2.4	2.0	1.5	34.0	
	36.0	2.5	2.1	1.7	1.2	2.4	2.0	1.6		36.0	
	38.0	2.2	1.8	1.4		2.0	1.6			38.0	
	40.0	1.8	1.4			1.7				40.0	
	42.0	1.5				1.4				42.0	
Reeves		2	2	2	2	2	2	2	2	Reeves	

Note:
Ratings according to EN13000.
Refer to notes P12.

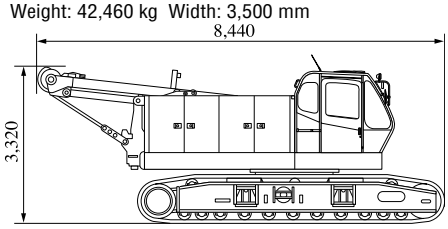
PARTS AND ATTACHMENTS

Dimensions: mm Weight: kg

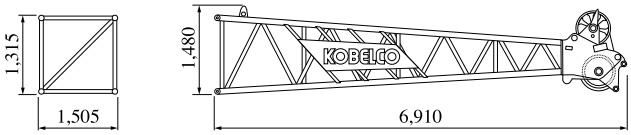
Base Machine
Base machine with gantry, boom base, crawlers, wire ropes for main and aux. winches, lower spreader and upper spreader
Weight: 44,700 kg Width: 3,500 mm



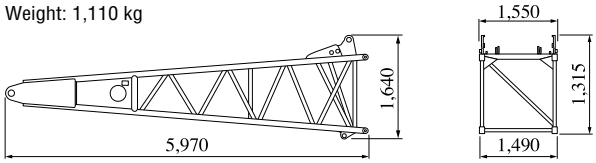
Base Machine
Base machine with gantry, crawlers, wire ropes for main and aux. winches
Weight: 42,460 kg Width: 3,500 mm



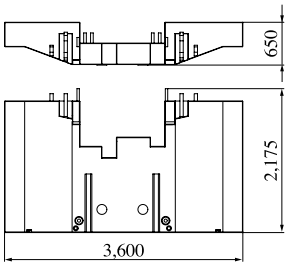
Boom Top
Weight: 1,240 kg (with guy cables)



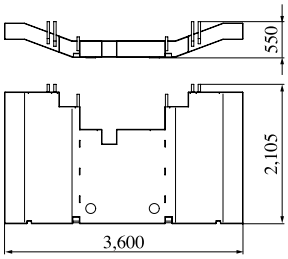
Boom Base
Weight: 1,110 kg



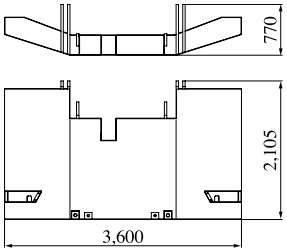
Counterweight No.1
Weight: 12,480 kg



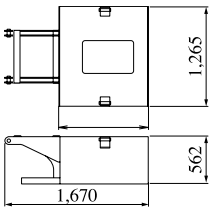
Counterweight No.2
Weight: 7,380 kg



Counterweight No.3
Weight: 9,360 kg



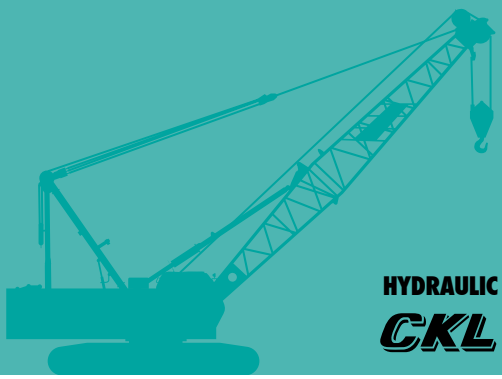
Carbodyweight
Weight: 3,950 kg (1 pc)



Other Attachments

Attachments	Weight	Dimensions (L x W x H)
3.0 m insert boom	360 kg (with guy cables)	3,165 mm x 1,490 mm x 1,315 mm
6.1 m insert boom	590 kg (with guy cables)	6,210 mm x 1,490 mm x 1,315 mm
12.2 m insert boom	1,080 kg (with guy cables)	12,305 mm x 1,490 mm x 1,315 mm
12.2 m insert boom with lug	1,100 kg (with guy cables)	12,305 mm x 1,490 mm x 1,315 mm
Jib top	280 kg	4,910 mm x 800 mm x 800 mm
Jib base	200 kg	4,810 mm x 795 mm x 795 mm
3.0 m insert jib	120 kg (with guy cables)	3,115 mm x 795 mm x 795 mm
6.1 m insert jib	210 kg (with guy cables)	6,160 mm x 795 mm x 795 mm
Jib strut	250 kg	3,620 mm x 835 mm x 615 mm
Upper spreader	235 kg	1,460 mm x 250 mm x 630 mm
Crawler (1 piece)	7,500 kg	6,280 mm x 800 mm x 980 mm
Auxiliary sheave	195 kg	870 mm x 820 mm
11-t ball hook	290 kg	1,065 mm x 355 mm dia.
35-t hook block	700 kg	1,575 mm x 700 mm x 400 mm
70-t hook block	900 kg	1,820 mm x 700 mm x 385 mm
100-t hook block	1,300 kg	1,870 mm x 700 mm x 478 mm

Note: Estimated weights may vary ± 2%.



HYDRAULIC CRAWLER CRANE

CKL1000i

Standard Equipment

Upper structure/Lower structure

Counterweight: 29.3 t (total weight)
Carbody weight: 7.9 t (total weight)
800 mm shoe crawlers
Batteries (150Ah/20HR)
Travel kit
Gantry raising/lowering cylinder
Electric hand throttle grip
Variable boom hoist speed controller
Variable main/aux. hoist speed controller
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)
Tool box (front of left-side guard)

Cab/Control

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
External lamp for over-load alarm

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require.
Due to our policy of continuous product improvements, all designs and specifications are subject to change without advance notice.

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Bulletin No. CKL1000i-SPEC-IN3 Printed in India