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G.H. JOHNSON CRANE HIRE LTD.

# HYDRAULIC CRAWLER CRANE

# **CKE1350**

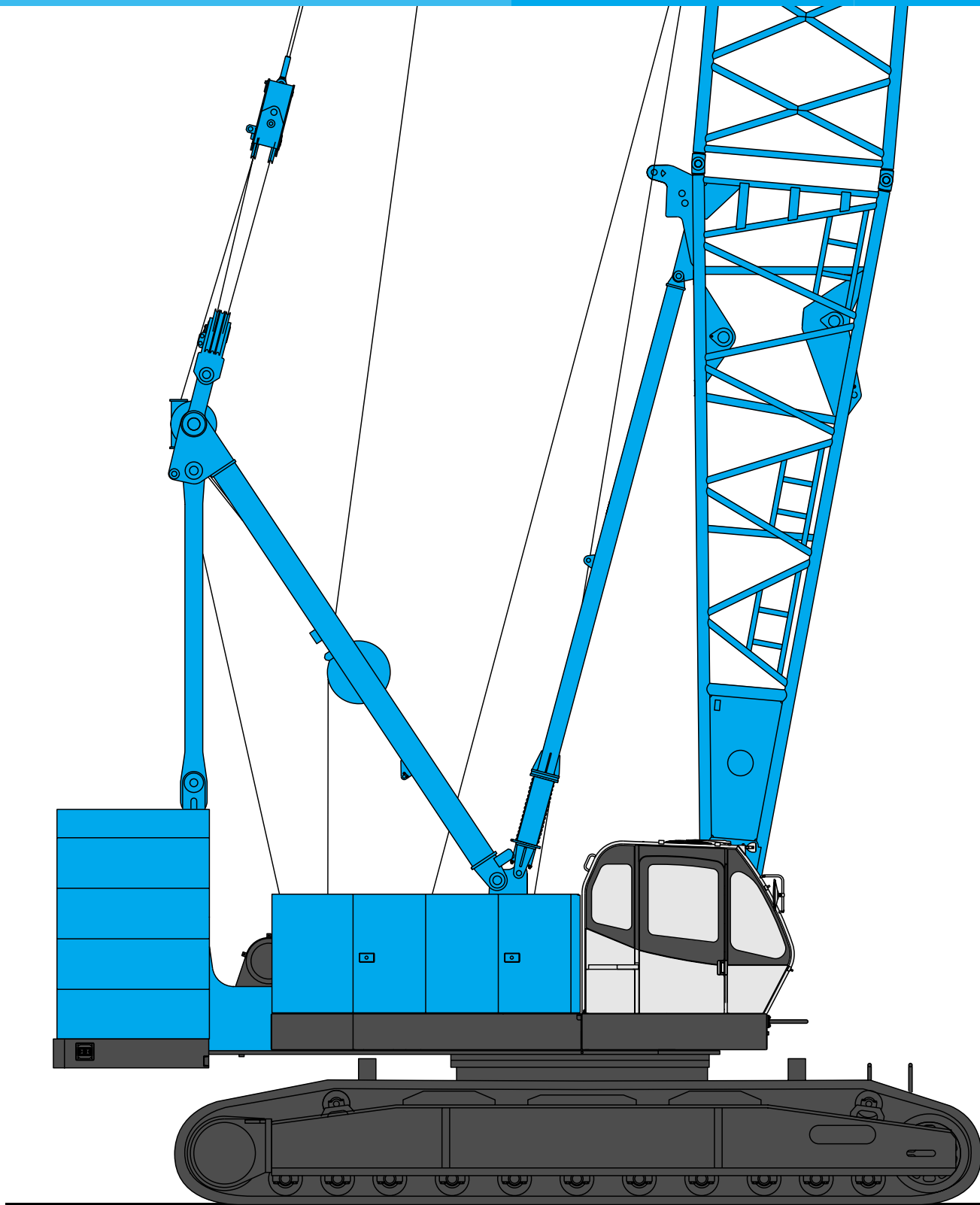
# KOBELCO

Model: CKE1350-1F

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

# 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:** 247 kW/2,000 min<sup>-1</sup> {rpm} (ISO)

**Max. torque:** 1,300 N·m/1,500 min<sup>-1</sup>

**Cooling system:** Liquid, recirculating bypass

**Starter:** 24 V/6.0 kW

**Radiator:** Corrugated type core, thermostatically controlled

**Air cleaner:** Dry type with replaceable paper element

**Throttle:** Electric throttle control, twist grip type

**Fuel filter:** Replaceable paper element

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

**Fuel tank capacity:** 400 liters



## Hydraulic System

Four variable displacement piston pumps are driven by heavy-duty 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/cm<sup>2</sup>}

**Swing system:** 27.5 MPa {280 kgf/cm<sup>2</sup>}

**Control system:** 7.0 MPa {71 kgf/cm<sup>2</sup>}

**Reservoir capacity:** 535 liters



## Boom Hoisting System

Powered by a hydraulic motor through a planetary reducer.

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

**Drum lock:** External ratchet for locking drum.

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

**Line speed:** Single line on first drum layer

**Hoisting/Lowering:** 48 to 2 m/min

**Diameter of wire ropes**

**Boom guy line:** 30 mm

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

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



## Load Hoist System

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

**Negative Brake:** A spring-set, hydraulically released 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:**

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

**Rear drum:**

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

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

**Line speed:** Single line on the first drum layer

**Hoisting/Lowering:** 120 to 3 m/min

**Line Pull:**

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



## Swing System

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

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

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

**Swing lock:** Manually, four position lock for transportation

**Swing speed:** 2.1 min<sup>-1</sup> {rpm}



## Upper Structure

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

**Counterweight:** 53.0 ton

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



## Cab & Control

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

### Cab fittings:

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

### Controls:

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



## Lower Structure

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

**Carbody weight:** 10.0 ton

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

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

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

**Track rollers:** Sealed track rollers for maintenance-free operation.

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

**Max. travel speed:** 1.3/0.9 km/h

**Max. gradeability:** 30%



## Weight

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

Specification	Weight	Ground pressure
<b>Crane boom</b>	Approx. 136 ton,	106 kPa {1.08 kgf/cm <sup>2</sup> }
<b>Luffing jib</b>	Approx. 149 ton,	116 kPa {1.18 kgf/cm <sup>2</sup> }



## Attachment

### Boom and Jib:

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

### Boom and Jib Length

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

## Main Specifications (Model: CKE1350-1F)

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

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

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

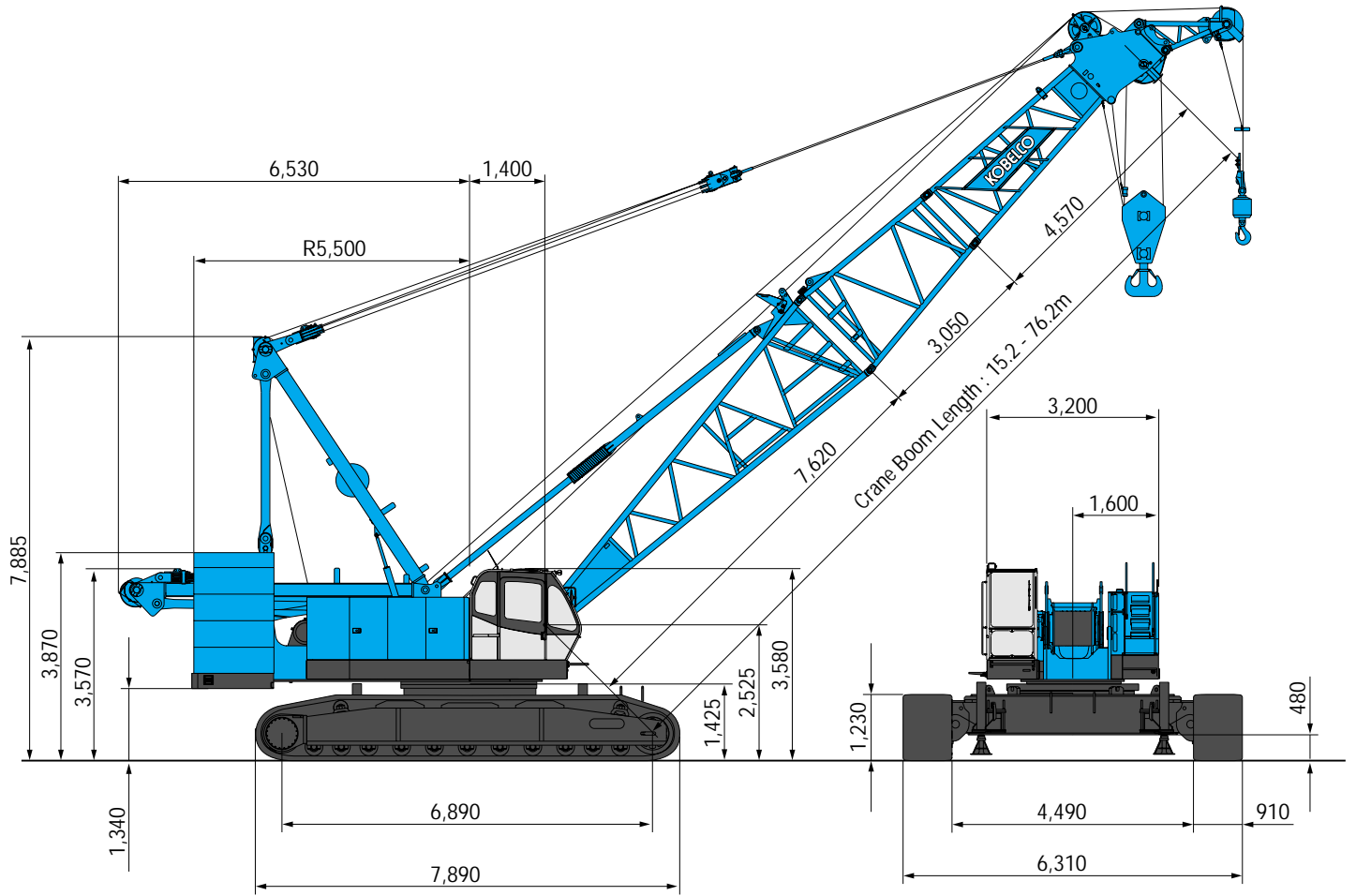
\*\* Base machine with trans-lifter, 70 t hook, main and aux. winches (non-free fall) including wire rope, self removal device.

Units are SI units. { } indicates conventional units.

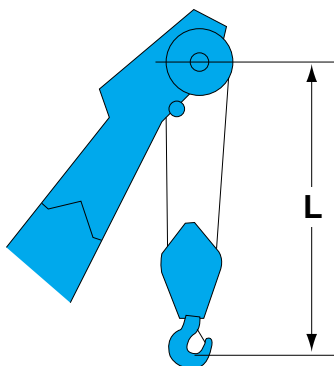
# GENERAL DIMENSIONS

## Crane Boom

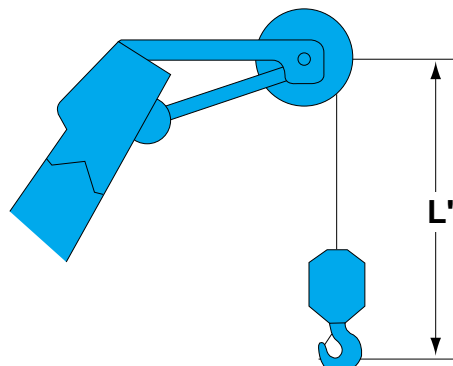
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## Limit of Hook Lifting



Hook	L
135 t hook	4.7 m
70 t hook	4.5 m
35 t hook	4.3 m



Hook	L'
13.5 t ball hook	3.7 m
13.5 t swivel hook	3.4 m

## 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 (tons)							
			1	2	3	4	5	6	7	8
135-ton	1,700	5	-	27.0	40.5	54.0	67.5	81.0	94.5	108.0
70-ton	1,200	3	-	27.0	40.5	54.0	67.5	70.0	-	-
35-ton	900	1	-	27.0	35.0	-	-	-	-	-
13.5-ton ball hook	450	0	13.5	-	-	-	-	-	-	-
13.5-ton swivel hook	100	0	13.5	-	-	-	-	-	-	-

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








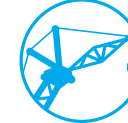

## Main Hoist Drum Rated Loads in Metric Tons

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

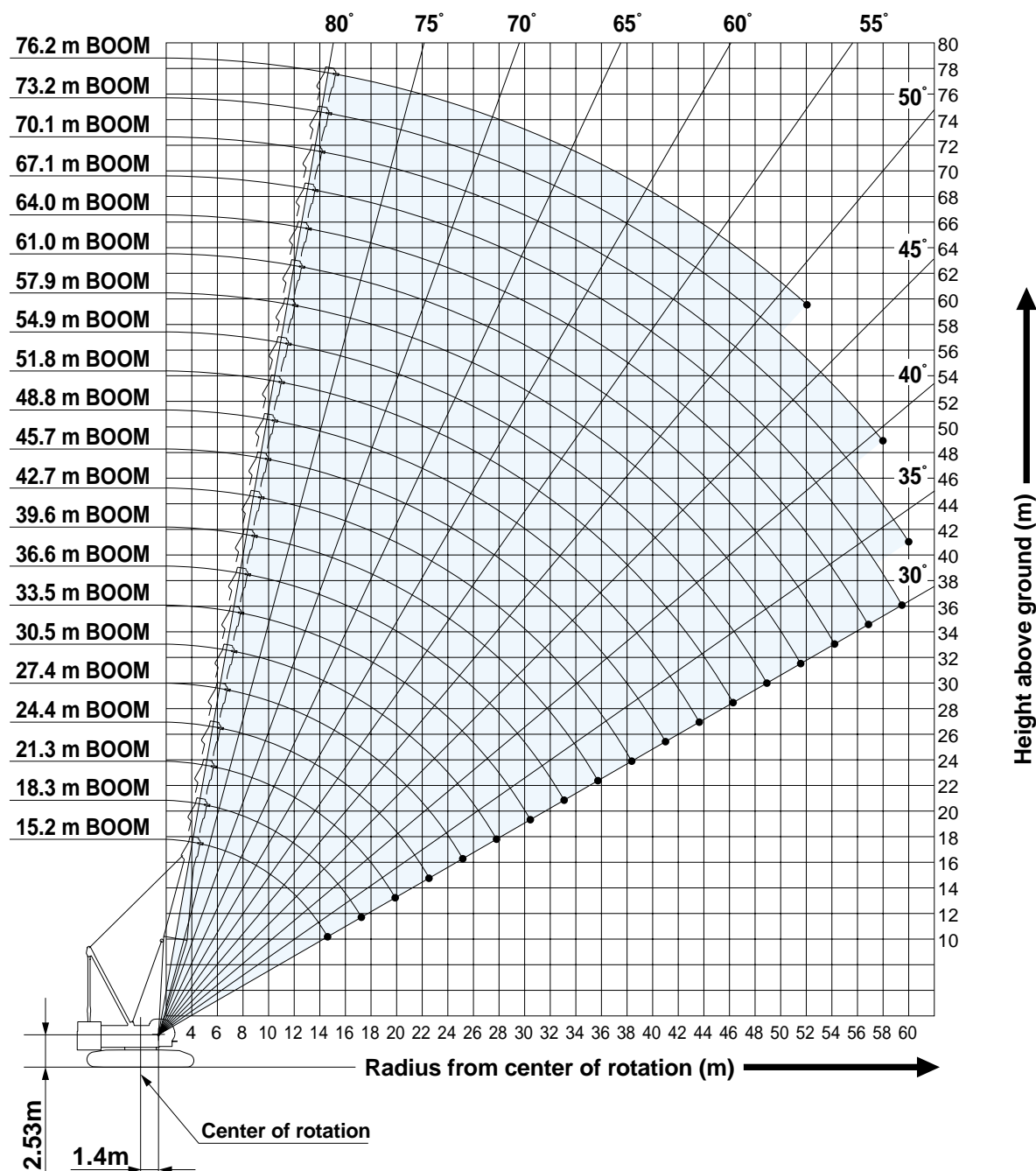
No. of Parts of Line	9	10
Max. Loads (ton)	121.5	135.0

## Symbols for Attachments:

								
Crane Boom	Auxiliary Sheave for Crane Boom	Luffing Boom	Auxiliary Sheave for Luffing Boom	Long Boom	Auxiliary Sheave for Long Boom	Fixed Jib	Luffing Jib	Luffing Boom with Luffing Jib

# 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. 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. When erecting or lowering the boom length of 73.2 m or over, the pillow plate for erection must be placed at the end of crawlers.
15. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
16. Crane boom ratings: Deduct weight of hook block, slings, and all other load handling accessories from crane boom ratings shown.
17. Auxiliary sheave ratings for crane boom: Deduct weight of hook block, slings, and all other load handling accessories from auxiliary sheave ratings for crane boom shown.
18. Crane boom lengths for auxiliary sheave mounting are 15.2 m to 73.2 m.



# Crane Boom Lifting Capacity

Unit: metric ton

**Counterweight: 53.0 t, Carbody weight: 10.0 t**

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

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

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



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

Unit: metric ton

Counterweight: 53.0 t, Carbody weight: 10.0 t

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

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

Note:

Ratings according to EN13000.

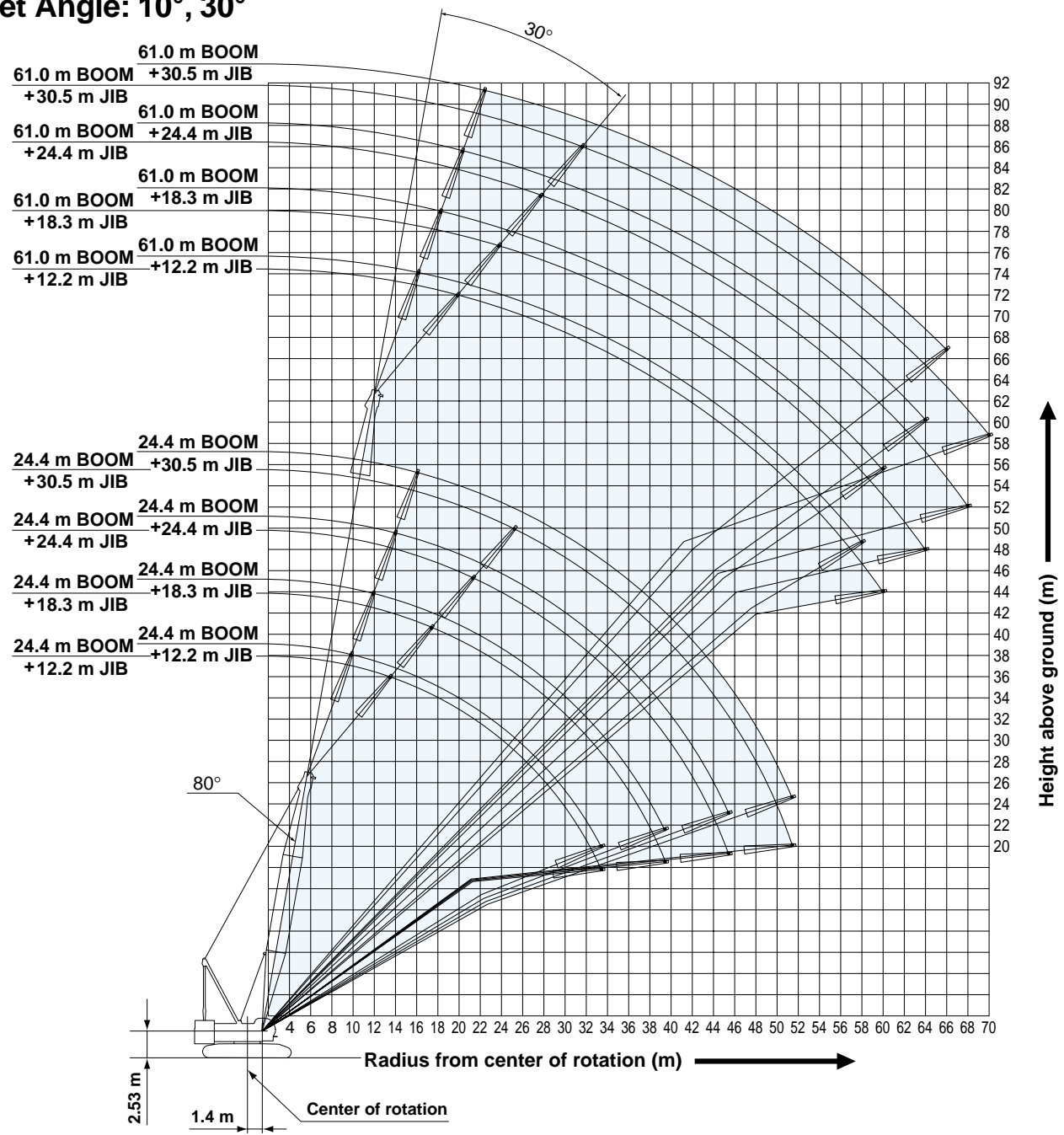
Ratings shown in   are determined by the strength of the boom or other structural components.

Refer to notes P12.



# 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/ jib inserts and guy lines must be arranged as shown in the "Operator's Manual".
9. Gantry must be in raised position for all conditions.
10. The boom should be erected over the front of crawlers, not laterally.
11. Boom backstops are required for all boom lengths.
12. Ratings shown in   are determined by the strength of the boom or other structural component.
13. When erecting or lowering the boom length 73.2 m or over, the pillow plate must placed at the end of crawlers.
14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
15. Fixed jib ratings: Deduct weight of jib hook block, slings, and all other load handling accessories from fixed jib ratings shown.
16. Crane boom lengths for fixed jib mounting are 24.4 m to 61.0 m.
17. One part of line on hook is not allowed to use for 12.2 m jib length with offset angle 10 degrees.



# Fixed Jib Lifting Capacities (Without Main Hook)

Unit: metric ton

**Jib Offset Angle: 10°**
**Counterweight: 53.0 t, Carbody weight: 10.0 t**

Boom length (m)	24.4				33.5				42.7				51.8				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	12.2	18.3	24.4	30.5	Jib length (m)
9.0	9.9 m/26.8																9.0
10.0	26.8				11.5 m/26.8												10.0
12.0	26.7	19.2			26.8	13.5 m/19.2			13.0 m/26.8								12.0
14.0	25.8	18.9	14.3 m/9.9		26.8	19.1	15.9 m/9.9		26.8	15.1 m/19.2			14.6 m/26.8				14.0
16.0	24.9	18.3	9.7	16.4 m/5.9	26.0	18.8	9.9		26.8	19.1	17.5 m/9.9		26.8	16.7 m/19.1			16.0
18.0	24.1	17.7	9.5	5.8	25.3	18.4	9.7	5.9	26.0	18.8	9.8	19.6 m/5.9	25.6	19.0	19.1 m/9.9		18.0
20.0	22.9	16.8	9.2	5.6	23.0	17.9	9.5	5.7	22.5	18.4	9.7	5.9	22.1	18.8	9.8	21.2 m/5.9	20.0
22.0	20.8	15.2	8.8	5.3	20.3	17.4	9.3	5.6	19.8	18.0	9.5	5.7	19.3	18.4	9.6	5.8	22.0
24.0	18.6	13.9	8.4	5.0	18.1	16.4	9.0	5.4	17.6	17.6	9.4	5.6	17.1	17.4	9.5	5.7	24.0
26.0	16.8	12.8	8.0	4.8	16.2	15.1	8.6	5.1	15.7	16.0	9.1	5.5	15.2	15.5	9.4	5.6	26.0
28.0	15.2	11.9	7.7	4.5	14.7	14.0	8.3	4.9	14.2	14.4	8.8	5.2	13.7	13.9	9.2	5.5	28.0
30.0	13.9	11.1	7.4	4.3	13.4	13.1	8.0	4.7	12.9	13.1	8.5	5.0	12.4	12.6	8.9	5.3	30.0
34.0	11.2	9.7	6.9	4.0	11.3	11.5	7.5	4.3	10.7	10.9	8.0	4.7	10.2	10.4	8.4	4.9	34.0
38.0		8.7	6.5	3.7	9.7	9.8	7.1	4.0	9.1	9.3	7.6	4.3	8.6	8.8	8.0	4.6	38.0
42.0		40.0 m/8.3	6.2	3.4	7.8	8.5	6.7	3.8	7.8	8.0	7.2	4.1	7.3	7.5	7.6	4.3	42.0
46.0			6.0	3.2		7.3	6.4	3.5	6.7	6.9	6.8	3.8	6.2	6.4	6.7	4.1	46.0
50.0				3.1		48.0 m/6.4	6.1	3.3	5.2	6.0	6.3	3.6	5.2	5.5	5.8	3.9	50.0
54.0							5.4	3.2		4.9	5.5	3.4	4.1	4.6	5.0	3.7	54.0
58.0								3.0		56.0 m/4.3	4.6	3.3	3.1	3.7	4.3	3.5	58.0
62.0								60.0 m/2.9			60.0 m/4.1	3.1		2.9	3.5	3.3	62.0
66.0												3.0		64.0 m/2.4	2.8	3.1	66.0
70.0														68.0 m/2.4	2.4		70.0
Reeves	2	2	1	1	2	2	1	1	2	2	1	1	2	2	1	1	Reeves

Boom length (m)	57.9				61.0				Boom length (m)
Jib length (m)	12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	Jib length (m)
14.0	15.7 m/24.0								14.0
16.0	24.0	17.8 m/19.1			16.2 m/21.2				16.0
18.0	23.5	19.1			20.7	18.3 m/19.1			18.0
20.0	21.7	18.9	20.1 m/9.9		20.3	18.9	20.7 m/9.9		20.0
22.0	19.0	18.7	9.7	22.2 m/5.9	18.7	18.7	9.8	22.8 m/5.9	22.0
24.0	16.7	17.0	9.6	5.8	16.6	16.7	9.6	5.8	24.0
26.0	14.9	15.2	9.5	5.7	14.8	14.9	9.5	5.7	26.0
28.0	13.3	13.6	9.3	5.6	13.2	13.4	9.4	5.6	28.0
30.0	12.0	12.2	9.2	5.5	11.9	12.1	9.3	5.5	30.0
34.0	9.8	10.1	8.7	5.1	9.7	10.0	8.8	5.2	34.0
38.0	8.2	8.4	8.2	4.8	8.1	8.3	8.4	4.9	38.0
42.0	6.9	7.1	7.4	4.5	6.7	7.0	7.3	4.6	42.0
46.0	5.8	6.0	6.3	4.2	5.6	5.9	6.2	4.3	46.0
50.0	4.8	5.1	5.4	4.0	4.6	4.9	5.3	4.1	50.0
54.0	3.8	4.2	4.7	3.8	3.7	4.0	4.5	3.9	54.0
58.0	2.9	3.4	3.9	3.6	2.8	3.2	3.7	3.7	58.0
62.0	2.1	2.6	3.2	3.3	2.1	2.5	3.0	3.1	62.0
66.0		64.0 m/2.3	2.5	2.7		64.0 m/2.1	2.3	2.5	66.0
70.0			68.0 m/2.2	2.1		68.0 m/2.0	68.0 m/2.2		70.0
Reeves	2	2	1	1	2	2	1	1	Reeves

Note:

Ratings according to EN13000.

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

Refer to notes P18.

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

Unit: metric ton

Jib Offset Angle: 30°

Counterweight: 53.0 t, Carbody weight: 10.0 t

Boom length (m)		24.4				33.5				42.7				51.8				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	12.2	18.3	24.4	30.5	Jib length (m)	
Working radius (m)	12.0	13.5 m/18.2																12.0	
	14.0	17.8				15.1 m/18.2												14.0	
	16.0	16.4	17.5 m/12.4			17.7				16.7 m/18.2								16.0	
	18.0	15.2	12.1			16.5	19.0 m/12.5			17.5				18.3 m/18.2				18.0	
	20.0	14.3	11.2	21.4 m/7.4		15.6	12.1			16.6	20.6 m/12.5			17.4				20.0	
	22.0	13.4	10.5	7.4		14.7	11.3	23.0 m/7.5		15.8	12.0			16.7	22.2 m/12.5			22.0	
	24.0	12.7	9.8	7.2	25.3 m/4.1	14.0	10.7	7.4		15.1	11.4	24.5 m/7.5		15.9	11.9			24.0	
	26.0	12.1	9.2	7.0	4.0	13.4	10.1	7.2	26.9 m/4.1	14.4	10.8	7.4		15.3	11.4	26.1 m/7.5		26.0	
	28.0	11.6	8.8	6.8	3.8	12.8	9.6	7.0	4.0	13.8	10.3	7.2	28.5 m/4.0	14.2	10.9	7.3		28.0	
	30.0	11.1	8.3	6.5	3.7	12.3	9.2	6.8	3.8	13.2	9.9	7.0	3.9	12.8	10.5	7.2	30.1 m/4.0	30.0	
	34.0	10.5	7.6	5.9	3.5	11.5	8.4	6.4	3.6	11.0	9.1	6.8	3.7	10.6	9.7	6.9	3.8	34.0	
	38.0		7.1	5.4	3.3	9.8	7.8	5.9	3.4	9.3	8.5	6.3	3.6	8.9	9.1	6.7	3.7	38.0	
	42.0			40.0 m/7.0	5.0	3.1	8.2	7.4	5.5	3.3	8.0	8.0	5.9	3.4	7.5	8.0	6.3	3.5	42.0
	46.0				4.8	3.0		7.0	5.2	3.1	6.9	7.2	5.6	3.3	6.4	6.8	5.9	3.4	46.0
	50.0					2.9		48.0 m/6.9	4.9	3.0	5.4	6.3	5.3	3.1	5.5	5.9	5.6	3.2	50.0
	54.0						52.0 m/2.9		4.7	2.9		5.4	5.0	3.0	4.4	5.1	5.3	3.1	54.0
	58.0									2.9		56.0 m/4.7	4.8	3.0	3.3	4.2	4.6	3.1	58.0
	62.0										60.0 m/2.9		4.0	2.9		3.3	3.9	3.0	62.0
	66.0													2.9		64.0 m/2.8	3.1	2.9	66.0
	70.0																2.3	2.9	70.0
74.0																	2.2	74.0	
Reeves		2	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1	Reeves	

Boom length (m)		57.9				61.0				Boom length (m)
Jib length (m)		12.2	18.3	24.4	30.5	12.2	18.3	24.4	30.5	Jib length (m)
Working radius (m)	18.0	19.4 m/18.1				19.9 m/18.1				18.0
	20.0	17.9				18.1				20.0
	22.0	17.1	23.3 m/12.5			17.3	23.8 m/12.4			22.0
	24.0	16.4	12.3			16.7	12.4			24.0
	26.0	15.5	11.7	27.2 m/7.5		15.3	11.9	27.7 m/7.5		26.0
	28.0	13.9	11.3	7.4		13.8	11.4	7.5		28.0
	30.0	12.5	10.8	7.3	31.1 m/4.0	12.4	11.0	7.3	31.6 m/4.0	30.0
	34.0	10.2	10.1	7.0	3.9	10.1	10.2	7.1	3.9	34.0
	38.0	8.5	9.1	6.8	3.7	8.4	9.0	6.8	3.7	38.0
	42.0	7.1	7.7	6.5	3.6	7.0	7.6	6.6	3.6	42.0
	46.0	6.0	6.5	6.1	3.4	5.9	6.4	6.2	3.5	46.0
	50.0	5.1	5.6	5.8	3.3	4.9	5.4	5.8	3.3	50.0
	54.0	4.1	4.7	5.0	3.2	3.9	4.6	4.9	3.2	54.0
	58.0	3.2	3.9	4.3	3.1	3.1	3.8	4.2	3.1	58.0
	62.0	2.3	3.1	3.6	3.0	2.2	3.0	3.4	3.1	62.0
66.0		2.3	2.9	3.0		2.3	2.7	3.0	66.0	
70.0			2.2	2.6			2.1	2.4	70.0	
74.0				72.0 m/2.3				72.0 m/2.2	74.0	
Reeves		2	1	1	2	1	1	1	1	Reeves

Note:  
 Ratings according to EN13000.  
 Ratings shown in   are determined by the strength of the boom or other structural components.  
 Refer to notes P18.

# PARTS AND ATTACHMENTS

01773 521414  
www.johnsonplant.co.uk/hire  
G.H. JOHNSON CRANE HIRE LTD.

G.H. JOHNSON CRANE HIRE LTD.  
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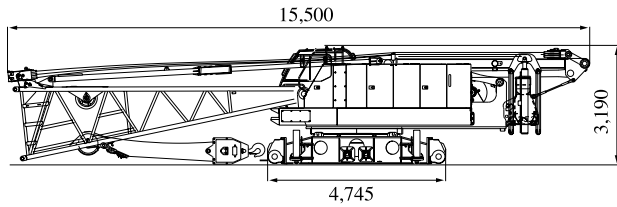
Dimensions: mm Weight: kg

## Base Machine

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

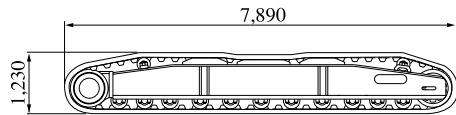
Weight: 39,700 kg\*<sup>1</sup> Width: 3,200 mm

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



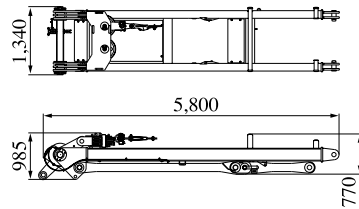
## Crawler

Weight: 14,500kg Width: 910 mm



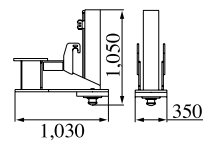
## Gantry (with lower spreader)

Weight: 2,520kg



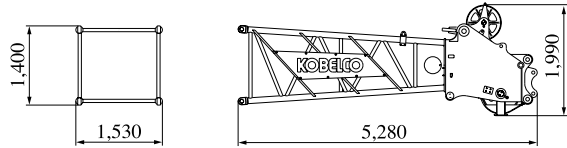
## Translifter

Weight: 370kg / 1 piece



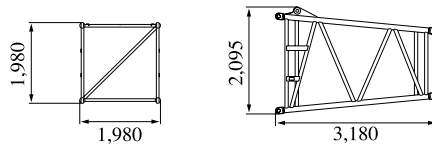
## Boom Top

Weight: 1,880kg (with guy cables)



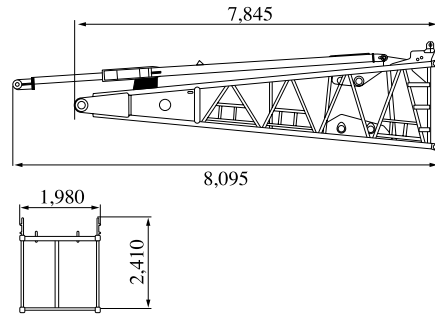
## Tapered Insert Boom

Weight: 490kg

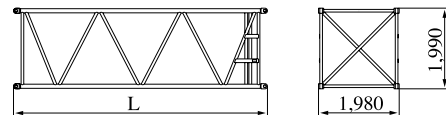


## Boom Base (with boom backstop)

Weight: 3,680kg



## Insert Boom

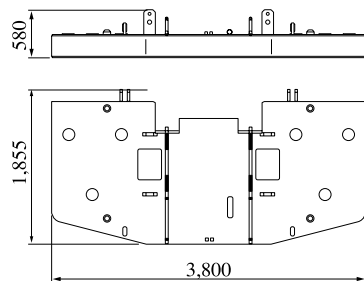


	L (mm)	Weight (kg)*
3.0 m	3,180	630
6.1 m	6,230	1,000
9.1 m	9,270	1,360

\* with guy cables

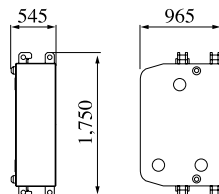
## Counterweight A

Weight: 8,000kg



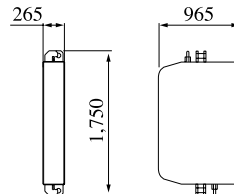
## Counterweight B

Weight: 5,000kg x 8 pieces



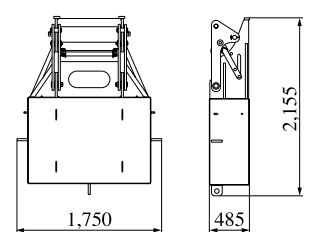
## Counterweight C

Weight: 2,500kg x 2 pieces



## Carbodyweight

Weight: 5,000kg x 2 pieces

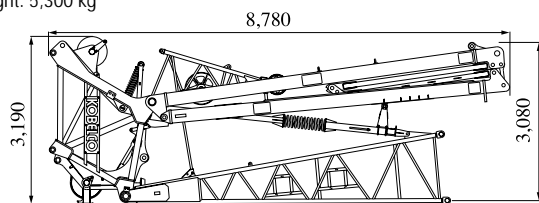




Dimensions: mm Weight: kg

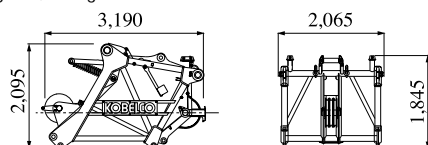
### Luffing Boom Top Assembly

Weight: 5,300 kg



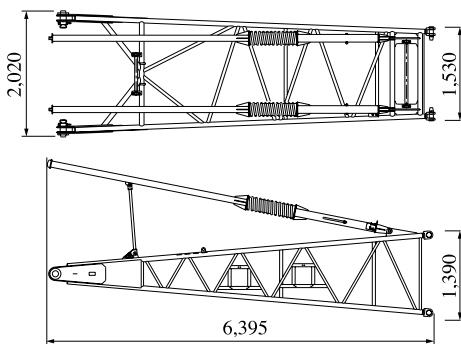
### Luffing Boom Top

Weight: 2,465 kg



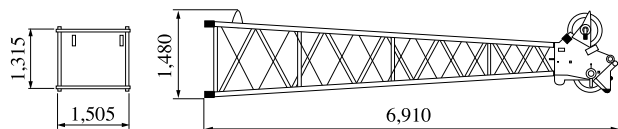
### Luffing Jib Base

Weight: 1,200 kg

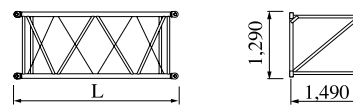


### Luffing Jib Top

Weight: 1,340 kg (with guy cables)



### Luffing Insert Jib

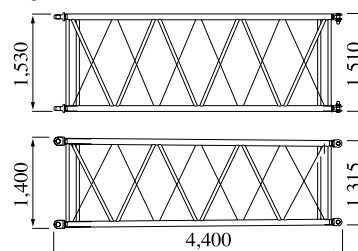


	L (mm)	Weight (kg)*
3.0 m	3,165	370
6.1 m	6,210	630
9.1 m	9,260	840

\* with guy cables

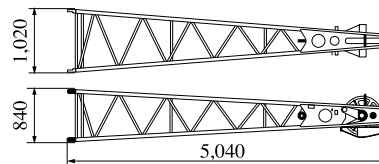
### Relay Jib (tapered Jib)

Weight: 410 kg



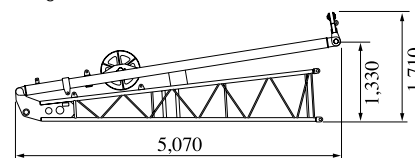
### Jib Top (For Crane)

Weight: 315 kg



### Jib Base with Strut (For Crane)

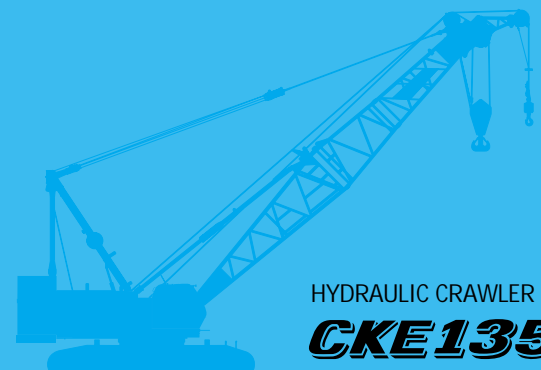
Weight: 510 kg Width: 1,040 mm



## Other Attachments

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

Note: Estimated weights may vary ± 2%.



HYDRAULIC CRAWLER CRANE  
**CKE1350**

**Standard Equipment**

**Upper structure/Lower structure**

- Counterweight: 53.0 ton (total weight)
- Carbody weight: 10.0 ton (total weight)
- 910 mm shoe crawlers
- Batteries (170 Ah/20 HR)
- Trans-lifter (jack system)
- Gantry raising/lowering cylinder
- Electric hand throttle grip
- Variable boom hoist speed controller
- Variable main/aux. hoist speed controller
- Swing neutral-free/brake select switch
- Side deck for cab
- Steps (crawlers)
- Two front working lights
- Tools (for routine maintenance)
- Two rear view mirrors
- Electric fuel pump
- Counterweight self removal
- Crawler self removal
- Cable roller (for boom)
- Upper spreader storage guide
- Tool box (front of left-side guard)

**Cab/Control**

- Boom hoist pedal (EU area only)
- Air conditioner
- Cup holder
- Ashtray
- Cigar lighter
- Intermittent wiper & window washer (skylight and front window)
- Sun visor
- Roof blind
- Floor mat (cloth)
- Foot rest
- Shoe tray
- Level gauge (operator cabin)

**Safety Device**

- Load Moment Indicator (with boom lowering slow stop function)
- LMI release key (for hook over-hoist prevention device and boom over-hoist prevention device)
- LCD multi display
- Ultimate stop function for boom over-hoist
- Function lock lever
- Propel lever lock
- Mechanical drum lock pawl (main, aux. and boom hoist)
- Signal horn
- Swing parking brake
- Mechanical swing lock pin (four positions)
- Swing flashers/warning buzzer
- Cab window guard (left side)
- Cab top guard
- Fire extinguisher
- External lamp for over-load alarm
- Life hammer

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