# **KOBELCO**

# **HYDRAULIC CRAWLER CRANE**

# CKET/O

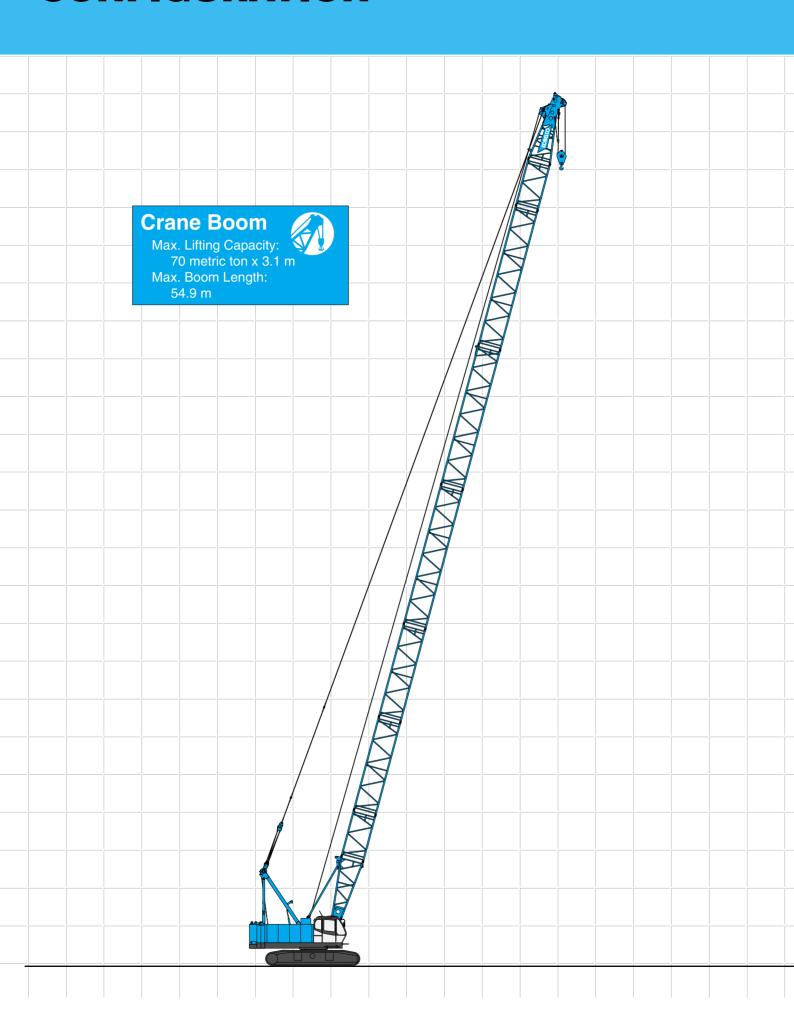
Model: CKE700-1F

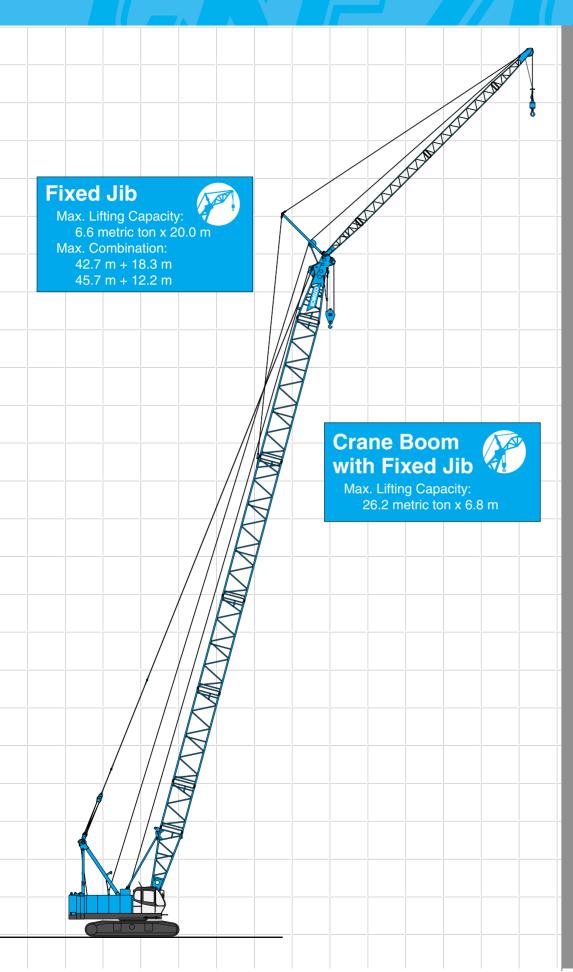


Max. Lifting Capacity: 70 t x 3.1 m Max. Crane Boom Length: 54.9 m Max. Fixed Jib Combination: 42.7 + 18.3 m

45.7 + 12.2 m

# **CONFIGURATION**





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## **SPECIFICATIONS**



### **Power Plant**

Model: Hino diesel engine J08E-TM

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

Displacement: 7.684 liters

Rated Power:159 kW at 2,000 min<sup>-1</sup> {rpm} (ISO)

Max. torque: 797 N·m/1,600 min-1

Cooling system: Liquid, recirculating bypass

Starter: 24 V/5.0 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, 150 Ah/20 HR capacity batteries, series connected.

Fuel tank capacity: 400 liters



## **Hydraulic System**

Three variable displacement piston pumps are driven by heavyduty 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<sup>2</sup>}

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

Reservoir capacity: 440 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 line 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 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:

550 mm P.C.D. x 545 mm wide drum, grooved for 22 mm wire rope. Rope capacity is 220 m working length and 335 m storage length.

### Rear drum:

 $550 \text{ mm P.C.D.} \times 545 \text{ mm}$  wide drum, grooved for 22 mm wire rope. Rope capacity is 130 m working length and 335 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: 69 kN {7.0 tf}



## **Swing System**

Swing unit is powered by hydraulic motor driving spur gear through planetary reducer, the swing system provides  $360^{\circ}$  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<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: 22.6 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 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: 3.1 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): 63 shoes, 800 mm wide each crawler

Max. travel speed: 1.9/1.2 km/h Max. gradeability: 40%



## Weight

Including upper and lower machine, 22.6 ton counterweight, 3.1 ton cabody weight, basic boom (or basic jib), hook, and other accessories.

 Specification
 Weight
 Ground pressure

 Crane boom
 Approx. 67.1 ton,
 80.1 kPa {0.82 kgf/cm²}

 Fixed Jib
 Approx. 70.1 ton,
 83.7 kPa {0.85 kgf/cm²}



## **Attachment**

### **Boom and Jib:**

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

Boom Jib Lenath

	Min. Length	Max. Length
	(Min. Combination)	(Max. Combination)
Crane Boom	9.1 m	54.9 m
Fixed Jib	30.5 m + 6.1 m	42.7 m + 18.3 m 45.7 m + 12.2 m

## Main Specifications (Model: CKE700-1F)

•	· , , , , , , , , , , , , , , , , , , ,					
Crane Boom						
Max. Lifting Capacity	70 t/3.1 m					
Max. Length	54.9 m					
Fixed Jib						
Max. Lifting Capacity	6.6 t/20.0m					
Max. Combination	42.7 m + 18.3 m, 45.7 m + 12.2 m					
Main & Aux. Winch						
Max. Line Speed	120 m/min (1st layer)					
Rated Line Pull (Single Line)	69 kN {7.0 tf}					
Wire Rope Diameter	22 mm					
Wire Rope Length	220 m (Main) 130 m (Aux.)					
Brake Type	Spring set hydraulically released (Negative)					
Free-Fall Brake Type	Wet-type multiple disc brake (Optional)					
Working Speed						
Swing Speed	4.0 min <sup>-1</sup> {rpm}					
Travel Speed	1.9/1.2 km/h					
Power Plant						
Model	Hino J08E-TM					
Engine Output	159 kW/2,000 min <sup>-1</sup> {rpm}					
Fuel Tank Capacity	400 liters					

Hydraulic System							
Main Pumps	3 variable displacement						
Max. Pressure	31.9 MPa {325 kgf/cm²}						
Hydraulic Tank Capacity	440 liters						
Self-Removal Device	Standard counterweight removal						
Weight							
Operating Weight*	Approx. 67.1 t						
Ground Pressure*	80.1 kPa {0.82 kgf/cm²}						
Counterweight	22.6 t (Upper), 3.1 t (Lower)						
Transport Weight**	Approx. 41.2 t						

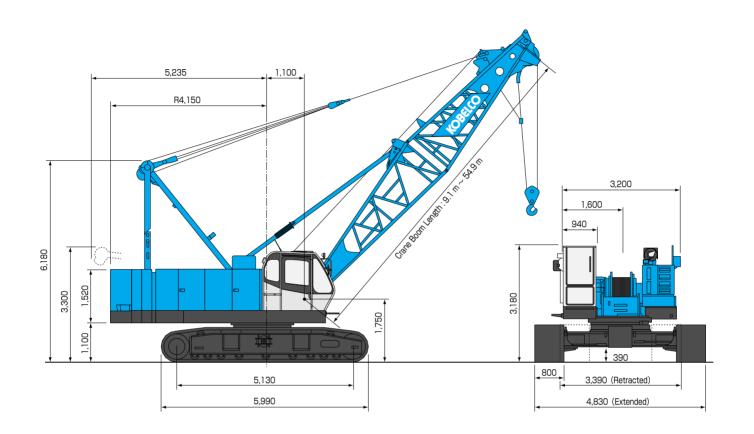
Units are SI units.  $\{\ \}$  indicates conventional units.

Line speeds in table are for light loads. Line speed varies with load.

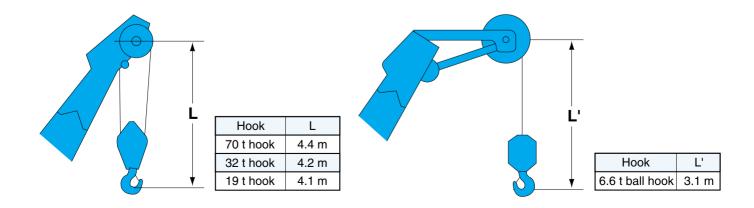
- \* Including upper and lower machine, 22.6 ton counterweight, 3.1 ton carbody weight, basic boom, hook, and other accessories.
- \*\* Base machine with gantry, boom base, crawlers, wire ropes for main and aux. winches, lower spreader and upper spreader. (Refer to P14)

## **GENERAL DIMENSIONS**

Crane Boom (Unit: mm)



## **Limit of Hook Lifting**



# **BOOM AND JIB ARRANGEMENTS**

## **Crane Boom Arrangements**

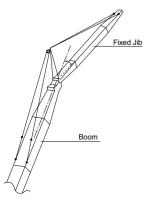
Boom length m (ft)	Boom arrangement
9.1 (30)	BT 3.9
12.2 (40)	** B 10 T
15.2 (50)	* B 10 10 T
18.3 (60)	** B 10 20 T
21.3 (70)	B 20 20 T B 10 30 T
24.4 (80)	B 10 20 20 T  B 20 30 T  B 10 10 30 T
27.4 (90)	** B 10 20 30 T B 30 T B 10 10 20 20 T
30.5 (100)	B 20 20 30 T  B 10 30 30 T  B 10 10 20 30 T
33.5 (110)	B 20 30 30 T  B 10 10 30 30 T  B 10 20 20 20 T  B 10 20 20 30 T

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

Symbol	Boom Length	Remarks				
В	5.2 m	Boom Base				
	3.9 m	Boom Top				
10	3.0 m	Insert Boom				
20	6.1 m	Insert Boom				
20	6.1 m	Insert Boom with lug				
30	9.1 m	Insert Boom				
30	9.1 m	Insert Boom with lug				

 $<sup>\</sup>ensuremath{\nearrow}$  mark shows the guy line installing position when the fixed jib is used.

## **Fixed Jib Arrangements**



Crane boom length	Jib length m (ft)	Jib arrangement
30.5 m	6.1 (20)	3.0/\3.0
45.7 m	12.2 (40)	€ B 20 IT
30.5 m 2 42.7 m	18.3 (60)	B 20   20   T

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



## **Hook Blocks**

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

•		•		•							
Hooks	Moight (kg)	No. of	No. of lines and max. rated loads (tons)								
HOOKS	Weight (kg)	sheaves	1	2	3	4	5				
70-ton	800	5	_	_	21.0	28.0	35.0				
32-ton	500	2	_	14.0	21.0	28.0	32.0				
19-ton	400	1	_	14.0	19.0	_	_				
6.6-ton ball hook	160	0	6.6	_	_	_	_				

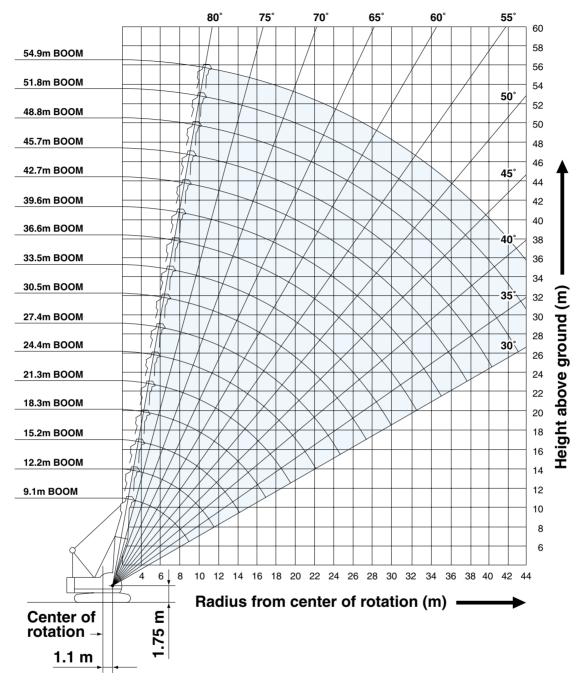
Hooks	Maight (kg)	No. of	No. of lines and max. rated loads (tons)								
HOOKS	Weight (kg)	sheaves	6	7	8	9	10				
70-ton	800	5	42.0	49.0	56.0	63.0	70.0				
32-ton	500	2		_	_	_	_				
19-ton	400	1	l	_	_	_	_				
6.6-ton ball hook	6.6-ton 160 0		_	_	_						

## **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.
- 7. At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.

- Boom inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Boom hoist reeving is 12 part line.
- 10. Gantry must be in raised position for all conditions.
- 11. Boom backstops are required for all boom lengths.
- 12. Crawler frames must be fully extended for all crane operations.
- 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 9.1 m to 51.8 m.



## **Crane Boom Lifting Capacity**

Unit: metric ton

Counterweight: 22.6 t, Carbody weight: 3.1 t

Counterweight: 22.6 t, Carbody weight: 3.1 t

Boom Length Working (m) radius (m)	9.1	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	Boom Length (m) Working radius (m)
3.0		3.6m/65.0															3.0
4.0	65.5	65.0	4.2m/61.8	4.7m/49.8													4.0
5.0	52.6	51.7	48.6	46.0	5.2m/41.7	5.7m/35.6											5.0
6.0	39.4	39.3	38.9	37.1	35.4	33.8	6.3m/31.0	6.8m/27.3									6.0
7.0	31.1	31.0	30.9	30.8	29.7	28.5	27.5	26.5	7.3m/24.4	7.9m/21.7							7.0
8.0	24.8	25.6	25.4	25.4	25.3	24.6	23.8	23.0	22.2	21.5	8.4m/19.7	8.9m/18.0					8.0
9.0	18.9	21.7	21.5	21.5	21.4	21.3	20.9	20.2	19.5	18.9	18.3	17.8	9.4m/16.4				9.0
10.0	9.2m/17.7	18.8	18.7	18.6	18.5	18.4	18.3	18.0	17.4	16.9	16.3	15.9	15.4	14.9	10.5m/13.7	11.0m/12.6	10.0
12.0		11.9m/13.7	14.6	14.5	14.4	14.3	14.2	14.2	14.0	13.8	13.3	13.0	12.6	12.2	11.8	11.5	12.0
14.0			12.0	11.9	11.7	11.6	11.5	11.5	11.3	11.3	11.1	10.9	10.5	10.2	9.8	9.6	14.0
16.0			14.5m/11.0	10.0	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.2	8.9	8.6	8.3	8.1	16.0
18.0				17.1m/9.0	8.4	8.3	8.2	8.1	8.0	7.9	7.8	7.7	7.6	7.4	7.1	6.9	18.0
20.0					19.8m/7.4	7.2	7.1	7.0	6.8	6.8	6.6	6.6	6.5	6.4	6.1	6.0	20.0
22.0						6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.3	5.2	22.0
24.0						22.4m/6.2	5.5	5.4	5.2	5.2	5.0	5.0	4.8	4.7	4.6	4.5	24.0
26.0							25.1m/5.1	4.8	4.6	4.6	4.4	4.4	4.2	4.1	4.0	3.9	26.0
28.0								27.7m/4.3	4.1	4.1	3.9	3.8	3.7	3.6	3.5	3.3	28.0
30.0									3.7	3.6	3.5	3.4	3.3	3.1	3.0	2.9	30.0
32.0									30.3m/3.6	3.3	3.1	3.0	2.9	2.7	2.6	2.4	32.0
34.0										33.0m/3.0	2.8	2.7	2.5	2.4	2.2	2.0	34.0
36.0											35.6m/2.4	2.4	2.2	2.1	1.8	1.7	36.0
38.0												2.0	1.9	1.7	1.5	1.4	38.0
40.0												38.3m/1.9	1.6	1.4	1.2	1.1	40.0
42.0													40.9m/1.4	1.2			42.0
Reeves	10	10	9	8	7	6	5	4	4	4	3	3	3	3	2	2	Reeves

Note:

Ratings according to EN13000.

Ratings shown in \_\_\_\_\_\_are determined by the strength of the boom or other structural components.

Refer to notes P8.

# Auxiliary Sheave Lifting Capacity for Crane Boom (With 19t Main Hook) Counterweight: 22.6 t,

Unit: metric ton

Boom Length Working (m) radius (m)	9.1	12.2	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7	48.8	51.8	Boom Length (m) Working radius (m)
3.0	3.8m/6.6															3.0
4.0	6.6	4.3m/6.6	4.9m/6.6													4.0
5.0	6.6	6.6	6.6	5.4m/6.6	5.9m/6.6											5.0
6.0	6.6	6.6	6.6	6.6	6.6	6.4m/6.6										6.0
7.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	7.5m/6.6								7.0
8.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	8.6m/6.6						8.0
9.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	9.1m/6.6	9.6m/6.6				9.0
10.0	9.2m/6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	10.1m/6.6	10.7m/6.6	11.2m/6.6	10.0
12.0		11.9m/6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	12.0
14.0			6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	14.0
16.0			14.5m/6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	16.0
18.0				17.1m/6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.4	18.0
20.0					19.8m/6.6	6.5	6.4	6.3	6.1	6.1	5.9	5.9	5.8	5.7	5.4	20.0
22.0						5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.6	22.0
24.0						22.4m/5.5	4.8	4.7	4.5	4.5	4.3	4.3	4.1	4.0	3.9	24.0
26.0							25.1m/4.4	4.1	3.9	3.9	3.7	3.7	3.5	3.4	3.3	26.0
28.0								27.7m/3.6	3.4	3.4	3.2	3.1	3.0	2.9	2.8	28.0
30.0									3.0	2.9	2.8	2.7	2.6	2.4	2.3	30.0
32.0									30.3m/2.9	2.6	2.4	2.3	2.2	2.0	1.9	32.0
34.0										33.0m/2.3	2.1	2.0	1.8	1.7	1.5	34.0
36.0											35.6m/1.7	1.7	1.5	1.4	1.1	36.0
38.0												1.3	1.2			38.0
40.0												38.3m/1.2				40.0
Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

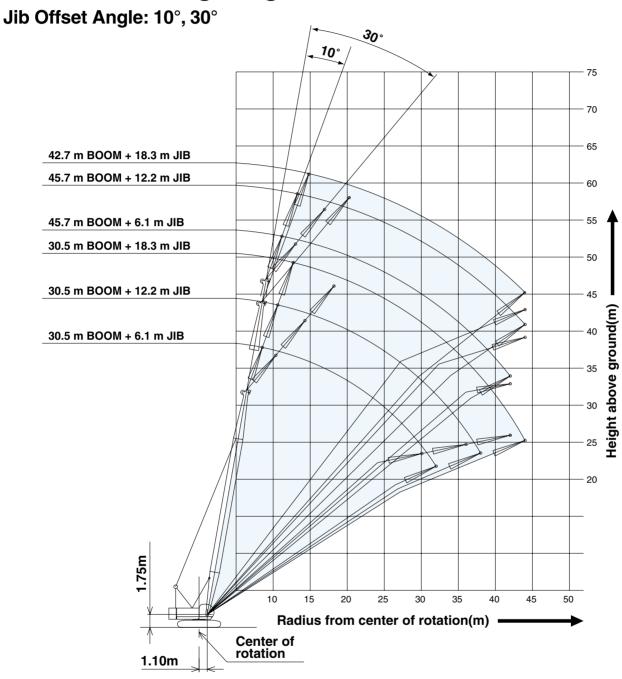
Note:

Ratings according to EN13000.

Ratings shown in \_\_\_\_\_are determined by the strength of the boom or other structural components.

Refer to notes P8.

## **Fixed Jib Working Ranges**



### NOTES:

- 1. Ratings according to EN13000.
- 2. Ratings in metric tons for 360° working area.
- Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- 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/ jib 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  $\underline{\text{must}}$  be fully extended for all crane operations.
- 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 jib mounting are 30.5 m to 45.7 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)

Unit: metric ton

Jib Offset Angle: 10°

Counterweight: 22.6 t, Carbody weight: 3.1 t

В	Boom length (m)		30.5			33.5			36.6			39.6		Boom length (m)	
	Jib length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	Jib length (I	m)
	9.0	6.6			6.6									9.0	
	10.0	6.6			6.6			6.6			6.6			10.0	1
	12.0	6.6	6.6	4.5	6.6	6.6		6.6	6.6		6.6			12.0	1
	14.0	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	14.0	1
	16.0	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	16.0	
	18.0	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	18.0	1
	20.0	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	6.6	6.6	4.5	20.0	1
ء ا	22.0	6.1	6.4	4.5	6.0	6.2	4.5	5.9	6.2	4.5	5.8	6.0	4.5	22.0	
radius (m)	24.0	5.4	5.6	4.5	5.2	5.5	4.5	5.1	5.4	4.5	5.0	5.3	4.5	24.0	Working
adin	26.0	4.7	5.0	4.5	4.6	4.8	4.5	4.5	4.8	4.5	4.4	4.6	4.5	26.0	ing
ng	28.0	4.2	4.4	4.5	4.1	4.3	4.4	4.0	4.2	4.3	3.9	4.1	4.2	28.0	radius
Working	30.0	3.8	4.0	4.1	3.6	3.8	3.9	3.5	3.7	3.9	3.4	3.6	3.7	30.0	(m) sr
>	32.0	3.4	3.6	3.7	3.2	3.4	3.5	3.1	3.3	3.5	3.0	3.2	3.3	32.0	]=
	34.0		3.2	3.3	2.9	3.1	3.2	2.8	3.0	3.1	2.6	2.9	3.0	34.0	1
	36.0		2.9	3.0	2.6	2.8	2.9	2.5	2.7	2.8	2.3	2.5	2.7	36.0	1
	38.0		2.6	2.8		2.5	2.6	2.2	2.4	2.5	2.0	2.2	2.4	38.0	]
	40.0			2.5		2.3	2.4		2.1	2.3	1.7	1.9	2.1	40.0	
	42.0			2.3		2.0	2.1		1.9	2.0		1.7	1.8	42.0	
	44.0			2.1			1.9		1.6	1.8		1.4	1.6	44.0	
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	Reeves	

Во	oom length (m)		42.7		45	5.7	Boom length (m)	
J	lib length (m)	6.1	12.2	18.3	6.1	12.2	Jib length (m	1)
	12.0	6.6			6.6		12.0	
	14.0	6.6	6.6	4.5	6.6	6.6	14.0	
	16.0	6.6	6.6	4.5	6.6	6.6	16.0	
	18.0	6.6	6.6	4.5	6.6	6.6	18.0	
	20.0	6.6	6.6	4.5	6.5	6.6	20.0	
	22.0	5.7	6.0	4.5	5.6	5.8	22.0	
<u>=</u>	24.0	4.9	5.2	4.5	4.8	5.1	24.0	. ≤
Working radius (m)	26.0	4.3	4.5	4.5	4.2	4.4	26.0	Working radius (m)
adir	28.0	3.8	4.0	4.1	3.6	3.9	28.0	ng r
ing	30.0	3.3	3.5	3.6	3.2	3.4	30.0	adiu
Vork	32.0	2.9	3.1	3.2	2.7	3.0	32.0	s (m
>	34.0	2.5	2.8	2.9	2.3	2.6	34.0	=
	36.0	2.2	2.4	2.6	2.0	2.2	36.0	
	38.0	1.8	2.1	2.2	1.6	1.9	38.0	
	40.0	1.6	1.8	2.0	1.4	1.6	40.0	
	42.0	1.3	1.6	1.7	1.1	1.4	42.0	
	44.0	1.1	1.3	1.5		1.1	44.0	
	Reeves	1	1	1	1	1	Reeves	



Ratings according to EN13000.

Ratings shown in \_\_\_\_\_are determined by the strength of the boom or other structural components.

Refer to notes P10.

Unit: metric ton

## Jib Offset Angle: 30°

Counterweight: 22.6 t, Carbody weight: 3.1 t

В	oom length (m)		30.5			33.5			36.6			39.6		Boom length (	(m)
	Jib length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	Jib length (n	1)
	12.0	6.6			6.6			6.6			6.6			12.0	
	14.0	6.6			6.6			6.6			6.6			14.0	
	16.0	6.6	5.0		6.6	5.0		6.6	5.0		6.6	5.0		16.0	
	18.0	6.6	5.0	3.2	6.6	5.0	3.2	6.6	5.0		6.6	5.0		18.0	
	20.0	6.6	5.0	3.2	6.6	5.0	3.2	6.6	5.0	3.2	6.6	5.0	3.2	20.0	
	22.0	6.2	5.0	3.2	6.1	5.0	3.2	6.1	5.0	3.2	5.9	5.0	3.2	22.0	
=	24.0	5.5	5.0	3.2	5.4	5.0	3.2	5.3	5.0	3.2	5.2	5.0	3.2	24.0	<b>s</b>
E (m)	26.0	4.8	4.9	3.2	4.7	5.0	3.2	4.6	5.0	3.2	4.5	4.9	3.2	26.0	Working
radius	28.0	4.3	4.6	3.2	4.2	4.5	3.2	4.1	4.4	3.2	4.0	4.3	3.2	28.0	lig.
	30.0	3.8	4.1	3.1	3.7	4.0	3.2	3.6	3.9	3.2	3.5	3.8	3.2	30.0	radius
Working	32.0		3.7	3.0	3.3	3.6	3.0	3.2	3.5	3.1	3.1	3.4	3.2	32.0	(m)
>	34.0		3.3	2.8		3.2	2.9	2.9	3.1	3.0	2.7	3.0	3.1	34.0	=
	36.0		3.0	2.7		2.9	2.8		2.8	2.9	2.3	2.7	2.9	36.0	
	38.0			2.6		2.6	2.7		2.5	2.7	2.0	2.4	2.6	38.0	
	40.0			2.5			2.5		2.2	2.5		2.1	2.3	40.0	
	42.0			2.4			2.3			2.2		1.8	2.1	42.0	
	44.0						2.1			2.0		1.5	1.8	44.0	
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	Reeves	

Вс	oom length (m)		42.7		45	5.7	Boom length (	m)
	Jib length (m)	6.1	12.2	12.2 18.3		6.1 12.2		1)
	14.0	6.6			6.6		14.0	
	16.0	6.6			6.6		16.0	
	18.0	6.6	5.0		6.6	5.0	18.0	
	20.0	6.6	5.0	3.2	6.6	5.0	20.0	
	22.0	5.9	5.0	3.2	5.8	5.0	22.0	
	24.0	5.1	5.0	3.2	5.0	5.0	24.0	
Ê	26.0	4.4	4.8	3.2	4.3	4.7	26.0	Vo
Working radius	28.0	3.9	4.3	3.2	3.8	4.2	28.0	Working radius (m)
grad	30.0	3.4	3.8	3.2	3.3	3.7	30.0	y rac
ķ	32.0	3.0	3.3	3.2	2.9	3.2	32.0	ius
٧	34.0	2.6	3.0	3.2	2.4	2.9	34.0	$\Xi$
	36.0	2.2	2.6	2.8	2.1	2.5	36.0	
	38.0	1.9	2.3	2.5	1.7	2.1	38.0	
	40.0	1.6	2.0	2.3	1.4	1.8	40.0	
	42.0		1.7	2.0	1.2	1.5	42.0	
	44.0		1.4	1.7		1.3	44.0	
	Reeves	1	1	1	1	1	Reeves	

Ratings according to EN13000.
Ratings shown in \_\_\_\_\_\_are determined by the strength of the boom or other structural components.
Refer to notes P10.



## **Crane Boom Lifting Capacity with Fixed Jib**

Unit: metric ton

Counterweight: 22.6 t, Carbody weight: 3.1 t

В	oom length (m)		30.5			33.5			36.6			39.6		Boom length	(m)
	Jib length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	Jib length (r	m)
	6.0	6.8m/26.2	6.8m/25.7	6.8m/25.2										6.0	
	7.0	25.4	24.9	24.4	7.3m/23.3	7.3m/22.8	7.3m/22.3	7.9m/20.6	7.9m/20.1	7.9m/19.6				7.0	
	8.0	21.9	21.4	20.9	21.1	20.6	20.1	20.4	19.9	19.4	8.4m/18.6	8.4m/18.1	8.4m/17.6	8.0	
	9.0	19.1	18.6	18.1	18.4	17.9	17.4	17.8	17.3	16.8	17.2	16.7	16.2	9.0	]
	10.0	16.9	16.4	15.9	16.3	15.8	15.3	15.8	15.3	14.8	15.2	14.7	14.2	10.0	
	12.0	13.1	12.6	12.1	12.9	12.4	11.9	12.7	12.2	11.7	12.2	11.7	11.2	12.0	
	14.0	10.4	9.9	9.4	10.2	9.7	9.2	10.2	9.7	9.2	10.0	9.5	9.0	14.0	
E	16.0	8.4	7.9	7.4	8.3	7.8	7.3	8.2	7.7	7.2	8.1	7.6	7.1	16.0	<b>§</b>
radius	18.0	7.0	6.5	6.0	6.9	6.4	5.9	6.8	6.3	5.8	6.7	6.2	5.7	18.0	Working radius
Jac	20.0	5.9	5.4	4.9	5.7	5.2	4.7	5.7	5.2	4.7	5.5	5.0	4.5	20.0	ا تو ا
Working	22.0	5.0	4.5	4.0	4.9	4.4	3.9	4.8	4.3	3.8	4.7	4.2	3.7	22.0	lius
Š	24.0	4.3	3.8	3.3	4.1	3.6	3.1	4.1	3.6	3.1	3.9	3.4	2.9	24.0	€
	26.0	3.7	3.2	2.7	3.5	3.0	2.5	3.5	3.0	2.5	3.3	2.8	2.3	26.0	
	28.0	27.7m/3.2	27.7m/2.7	27.7m/2.2	3.0	2.5	2.0	3.0	2.5	2.0	2.8	2.3	1.8	28.0	
	30.0				2.6	2.1	1.6	2.5	2.0	1.5	2.4	1.9	1.4	30.0	
	32.0				30.3m/2.5	30.3m/2.0	30.3m/1.5	2.2	1.7	1.2	2.0	1.5		32.0	
	34.0							33.0m/1.9	33.0m/1.4		1.7	1.2		34.0	
	36.0										35.6m/1.3			36.0	]
	Reeves	4	4	4	4	4	4	3	3	3	3	3	3	Reeves	

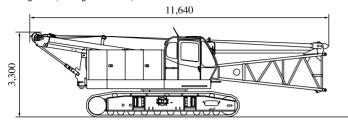
Boo	om length (m)		42.7		45	.7	Boom length (	m)
Ji	ib length (m)	6.1	12.2	18.3	6.1	12.2	Jib length (m	1)
	9.0	16.7	16.2	15.7	9.4m/15.3	9.4m/14.8	9.0	
	10.0	14.8	14.3	13.8	14.3	13.8	10.0	
	12.0	11.9	11.4	10.9	11.5	11.0	12.0	
	14.0	9.8	9.3	8.8	9.4	8.9	14.0	
	16.0	8.1	7.6	7.1	7.8	7.3	16.0	
٦	18.0	6.6	6.1	5.6	6.5	6.0	18.0	_
radius (m)	20.0	5.5	5.0	4.5	5.4	4.9	20.0	or Ki
adir	22.0	4.6	4.1	3.6	4.5	4.0	22.0	ng r
ing	24.0	3.9	3.4	2.9	3.7	3.2	24.0	adiu
Working	26.0	3.3	2.8	2.3	3.1	2.6	26.0	Working radius (m)
>	28.0	2.7	2.2	1.7	2.6	2.1	28.0	-
	30.0	2.3	1.8	1.3	2.2	1.7	30.0	
	32.0	1.9	1.4		1.8	1.3	32.0	
	34.0	1.6	1.1		1.4		34.0	
	36.0	1.3			1.1		36.0	
	Reeves	3	3	3	3	3	Reeves	

Ratings according to EN13000. Refer to notes P10.

## **PARTS AND ATTACHMENTS**

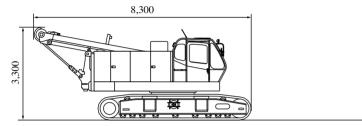
### **Base Machine**

Base machine with gantry, boom base, crawlers, wire ropes for main and aux. winches, lower spreader and upper spreader
Weight: 41,240 kg Width: 3,390 mm



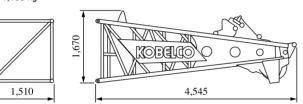
#### **Base Machine**

Base machine with gantry, crawlers, wire ropes for main and aux. winches Weight: 38,940 kg Width: 3,390 mm



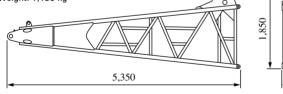
### Boom Top (with guy cables)

Weight: 1,160 kg



## **Boom Base** Weight: 1,130 kg

1,515

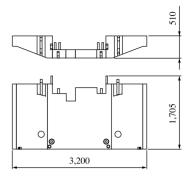




## Dimensions: mm, Weight: kg

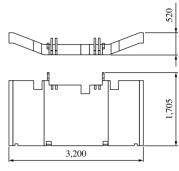
## Counterweight A

Weight: 8,990 kg



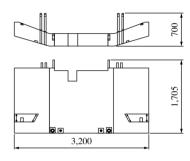
## Counterweight B

Weight: 7,370 kg



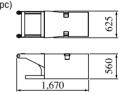
## Counterweight C

Weight: 6,190 kg



## **Carbody** weight

Weight: 1,550 kg (1pc)



## **Other Attachments**

Attachment	Weight	Dimensions (L x W x H)
3.0 m insert boom	360 kg (with guy cables)	3,160 mm x 1,510 mm x 1,515 mm
6.1 m insert boom	600 kg (with guy cables)	6,210 mm x 1,510 mm x 1,515 mm
6.1 m insert boom with lug	620 kg (with guy cables)	6,210 mm x 1,510 mm x 1,645 mm
9.1 m insert boom	840 kg (with guy cables)	9,260 mm x 1,510 mm x 1,515 mm
9.1 m insert boom with lug	860 kg (with guy cables)	9,260 mm x 1,510 mm x 1,645 mm
Jib Top	145 kg	3,475 mm x 675 mm x 625 mm
Jib base	125 kg	3,190 mm x 675 mm x 625 mm
6.1 m insert jib	165 kg (with guy cables)	6,160 mm x 675 mm x 625 mm
Jib strut	190 kg	3,700 mm x 670 mm x 500 mm
Auxiliary sheave	140 kg	1,010 mm x1,310 mm
Upper spreader	280 kg	1,580 mm x300 mm x 680 mm
Lower spreader	170 kg	870 mm x 300 mm x 610 mm
Crawler(1pc)	6,950 kg	5,990 mm x 800 mm x 980 mm
6.6-ton ball hook	160 kg	815 mm x 300 mm dia.
19-ton hook block	400 kg	590 mm x 385 mm x 1,270 mm
32-ton hook block	500 kg	590 mm x 330 mm x 1,530 mm
70-ton hook block	800 kg	600 mm x 380 mm x 1,770 mm



## **Standard Equipment**

## Upper structure/Lower structure

Counterweight: 22.6 ton (total weight) Carbody weight: 3.1 ton (total weight)

800 mm shoe crawlers Batteries (150 Ah/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

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 (two positions)

Swing flashers/warning buzzer

Cab window quard (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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