## **Hydraulic Crawler Crane**





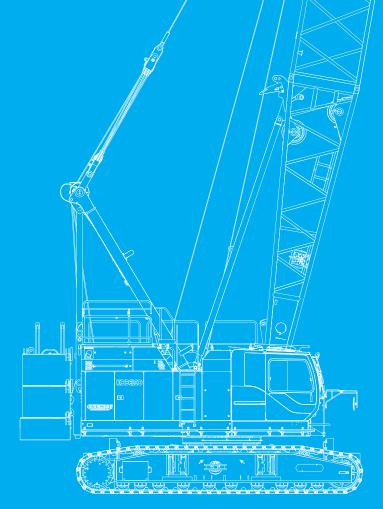
Model: CKE1100G-2

# 1100G

Max. Lifting Capacity: 110 t x 3.6 m \*
Max. Crane Boom Length: 70.1 m

Max. Fixed Jib Combination: 61.0 m + 21.3 m

\* Auxiliary sheave is necessary.







## CKE1100G-2 CONTENTS

3	SPECIFICATIONS
5	GENERAL DIMENSIONS
6	BOOM AND JIB ARRANGEMENTS
7	WORKING RANGES
10	SUPPLEMENTAL DATA
11	LIFTING CAPACITIES
16	SUPPLEMENTAL DATA FOR CLAMSHELL
17	LIFTING CAPACITIES
18	SUPPLEMENTAL DATA FOR REDUCED WEIGHTS
19	LIFTING CAPACITIES
20	TRANSPORTATION PLAN
21	PARTS AND ATTACHMENTS

## **SPECIFICATIONS**



#### **Power Plant**

Model: HINO J08E-VV

Type: 4 cycle, water-cooled, vertical in-line 6, direct injection,

turbo-charger, intercooled

Complies with NRMM (Europe) Stage IV and US EPA Tier 4

Final

Displacement: 7,684 liters
Rated power: 213 kW/2,100 min<sup>-1</sup>
Max. Torque: 1,017 N·m/1,600 min<sup>-1</sup>
Cooling System: Water-cooled

Starter: 24V-5kW

Radiator: Corrugated type core, thermostatically controlled Air cleaner: Dry type with replaceable paper element Throttle: Twist grip type hand throttle, electrically actuated

Fuel filter: Replaceable paper element

Batteries: Two 12V x 136 Ah/5HR capacity batteries, series

connected

Fuel tank capacity: 400 liters AdBlue® tank capacity: 60 liters



#### **Hydraulic System**

Main pumps: 4 variable displacement piston pumps

**Control:** Full-flow hydraulic control system for infinitely variable pressure to all winches, propel and swing. 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

Max. relief valve pressure:

Load hoist, boom hoist and propel system: 31.9 MPa

Swing system: 27.5 MPa Control system: 5.4 MPa Hydraulic Tank 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 **Boom hoisting/lowering:** 20mm x 155 m

Boom guy line: 34 mm

Boom backstops: Required for all boom length



#### **Load Hoisting System**

Front and rear drums for load hoist powered by 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)

Drum Lock: External ratchet for locking drum

Drum:

#### Front Drum:

 $614~\mathrm{mm}$  P.C.D x  $617~\mathrm{mm}$  wide drum, grooved for  $26~\mathrm{mm}$  wire rope. Rope capacity is  $265~\mathrm{m}$  working length and  $360~\mathrm{m}$  storage length.

**Rear Drum:** 614 mm P.C.D x 617 mm wide drum, grooved for 26 mm wire rope. Rope capacity is 235 m working length and 360 m storage length.

Diameter of wire rope

Main winch: 26 mm x 265 m Aux. winch: 26 mm x 235 m Third winch: 26 mm x 190 m

Line Speed\*:

Hoisting/lowering: 120 to 3 m/min

Line Pull:

Max. Line Pull\*: 208 kN {21.2 tf}

(Referential performance)

Rated Line Pull: 108 kN {11.0 tf}
\*Single line on first drum layer



#### **Swing System**

Swing unit is powered by hydraulic motor driving spur gears 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, four position lock for transportation

Swing Speed: 3.2 min<sup>-1</sup>



#### **Upper Structure**

Torsion-free precision machined upper frame. All components are located clearly and service friendly. Engine will with low noise level.

Counter weight: 34.6 ton



#### **Cab & Control**

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

#### Cab fittings:

Air conditioner, convenient compartment (for tool), cup holder, cigarette lighter, sun visor, roof blind, tinted glass, floor mat, footrest, and shoe tray



#### **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.

Carbodyweight: 6.5 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.

Shoe (flat): 900 mm wide each crawler

Max. gradeability: 40%



#### Weight

Including upper and lower machine, 34.6 ton counterweight and 6.5 ton carbody weight, basic boom (or basic boom + basic jib), hook, and other accessories.

Weight: 102.1 ton

Ground pressure: 95.9 kPa



#### **Attachment**

#### Boom & Jib:

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

#### Boom and Jib length

	Min. Length	Max. Length
	(Min. combination)	(Max. combination)
Crane Boom	15.2 m	70.1 m
Fixed lib	27.4 m + 9.1 m	61.0 m + 21.3 m

#### Main Specifications (Model: CKE1100G-2)

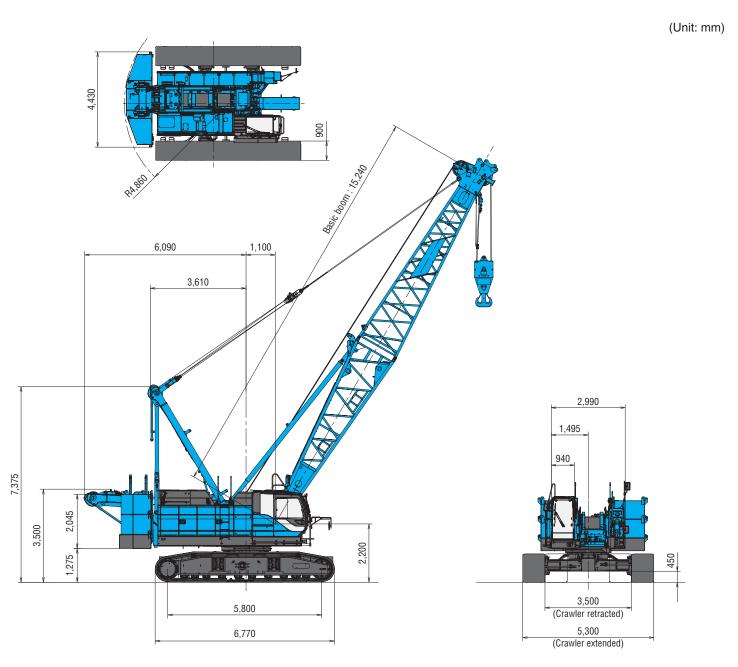
Crane Boom				
Max. Lifting Capacity	110 t x 3.6 m *3			
Max. Length	70.1 m			
Fixed Jib				
Max. Lifting Capacity	10.9 t x 22.0 m			
Max. Combination	61.0 m + 21.3 m			
Main & Aux. Winch				
Max. Line Speed (1st layer)	120 m/min			
Rated Line Pull (Single line)	108 kN {11.0 tf}			
Wire Rope Diameter	26 mm			
Wire Rope Length	265m (Main), 235 m (Aux.)			
Brake Type (Free fall) Wet-type multiple disc brake (Option				
Working Speed				
Swing Speed	3.2 min <sup>-1</sup> {rpm}			
Travel Speed	1.4/1.0 km/h			
Power Plant				
Model	HINO J08E-VV			
Engine Output	213 kW/2,100min <sup>-1</sup>			
Fuel Tank	400 liters			
AdBlue® Tank	60 liters			

Hydraulic System		
Main Pums 4 variable displacement		
Max. Pressure	31.9 Mpa {325 kg/cm <sup>2</sup> }	
Hydraulic Tank Capacity	535 liters	
Self-Removal Device		
	counterweight/crawler self-removal device	
Weight		
Operating Weight	102.1 t *1	
Ground Pressure	95.9 kPa	
Counterweight	34,600 kg	
Transport Weight	59,305 kg *2	

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

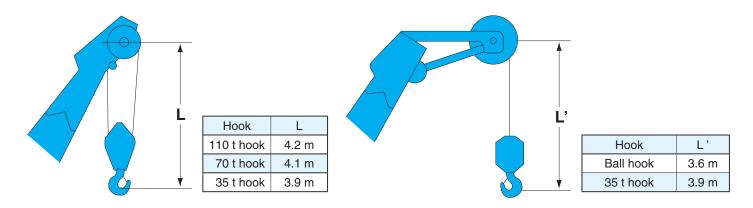
Line speeds in table are for light loads. Line speed varies with load.

- \*1 Including upper and lower machine, 34.6 ton counterweight, 6.5 ton carbody weight, basic boom, hook, and other accessories.
- \*2 Base machine with boom base, gantry, crawlers, and wire ropes (front/rear/boom hoist)
- \*3 Auxiliary sheave is must.



This catalog may contain photographs of machines with specifications, attachments and optional equipment.

## **Limit of Hook Lifting**



## **BOOM AND JIB ARRANGEMENTS**

## **Crane Boom Arrangements**

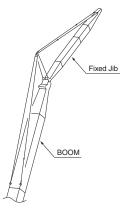
Boom length m (ft)	Boom arrangement
15.2 (50)	<b>€</b> 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
18.3 (60)	<b>※</b> ← 6 10 1 7
21.3 (70)	# E 10 10 17 3
24.4 (80)	
27.4 (90)	* = B 10 10 20 T
30.5 (100)	# = B 10 20 0 20 T 3
33.5 (110)	# B 10 10 20 20 T
36.6 (120)	※ <u>■ 10 20 40A T</u>
39.6 (130)	# E 10 10 20 40A 1
42.7 (140)	
45.7 (150)	*

Boom length m (ft)	Boom arrangement
48.8 (160)	★
51.8 (170)	* 8 10 10 20 40 40A 1 3 40A 1
54.9 (180)	*
57.9 (190)	# E 10 10 20 20 40 40A T  B 20 40 40 40 T
61.0 (200)	※ <u>8 10 20 40 40 40A 1 </u> 3
64.0 (210)	
67.1 (220)	★ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
70.1 (230)	

Symbol	Boom Length	Remarks
В	7.6 m	Boom Base
ightharpoons	7.6 m	Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
40	12.2 m	Insert Boom
40A	12.2 m	Insert Boom with lug

- mark shows the boom insert with lug attached and the guy line installing position when the fixed jib is used.
- $\circ$  mark shows the installing of the cable roller for the insert boom.

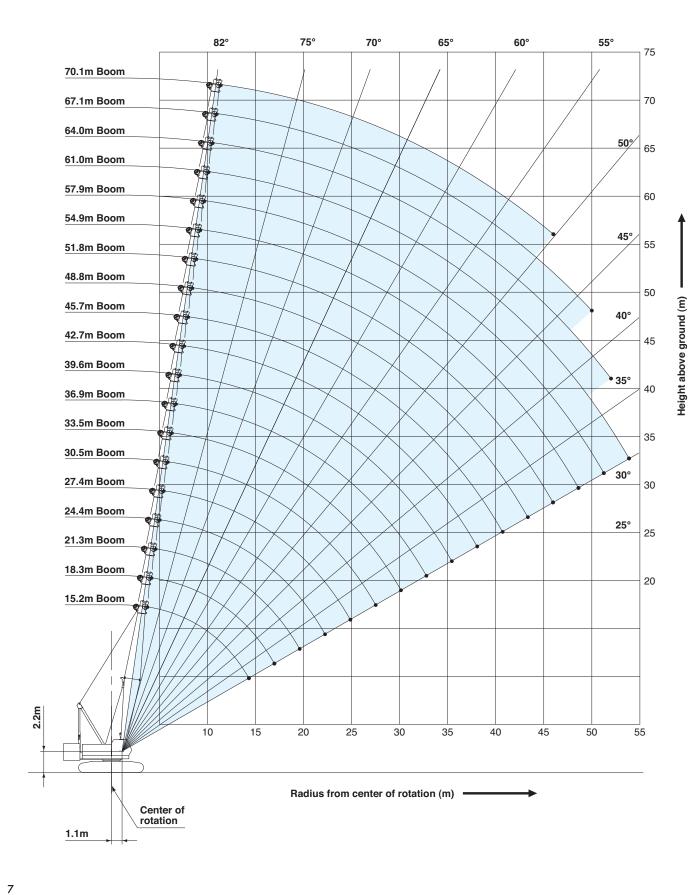
## **Fixed Jib Arrangements**



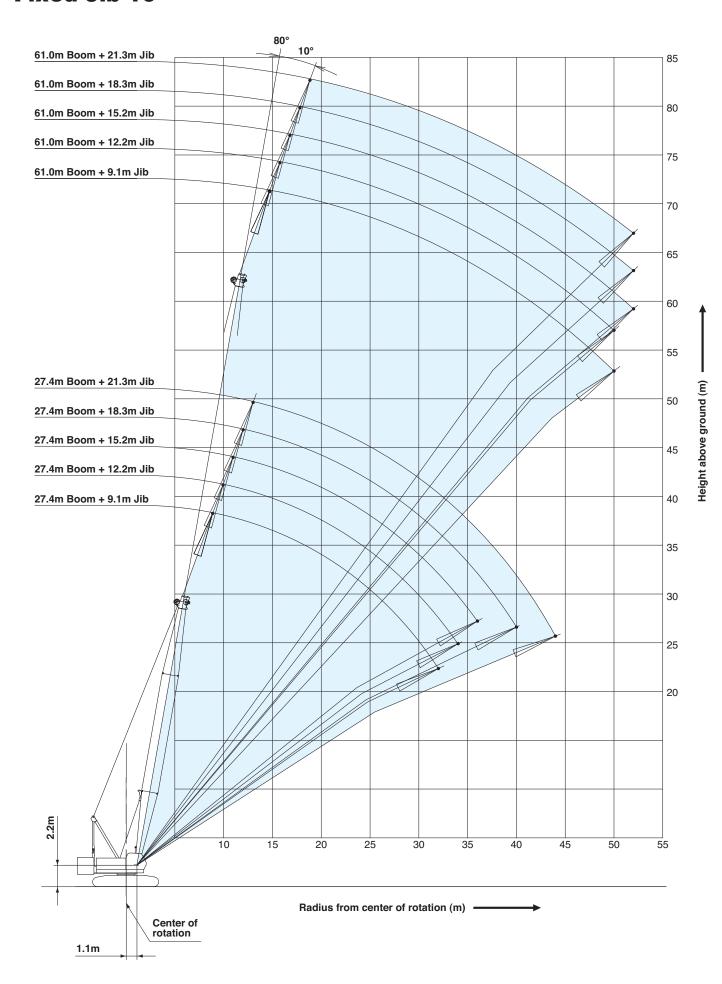
Crane boom length	Jib length m (ft)	Jib arrangement	
27.4 m ~ 61.0 m	9.1 (30)	4.6 / \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	12.2 (40)	B 10 T	
	15.2 (50)	B 20 T	
	18.3 (60)	B 20 10 T	
	21.3 (70)	B 10   10   20   T	

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

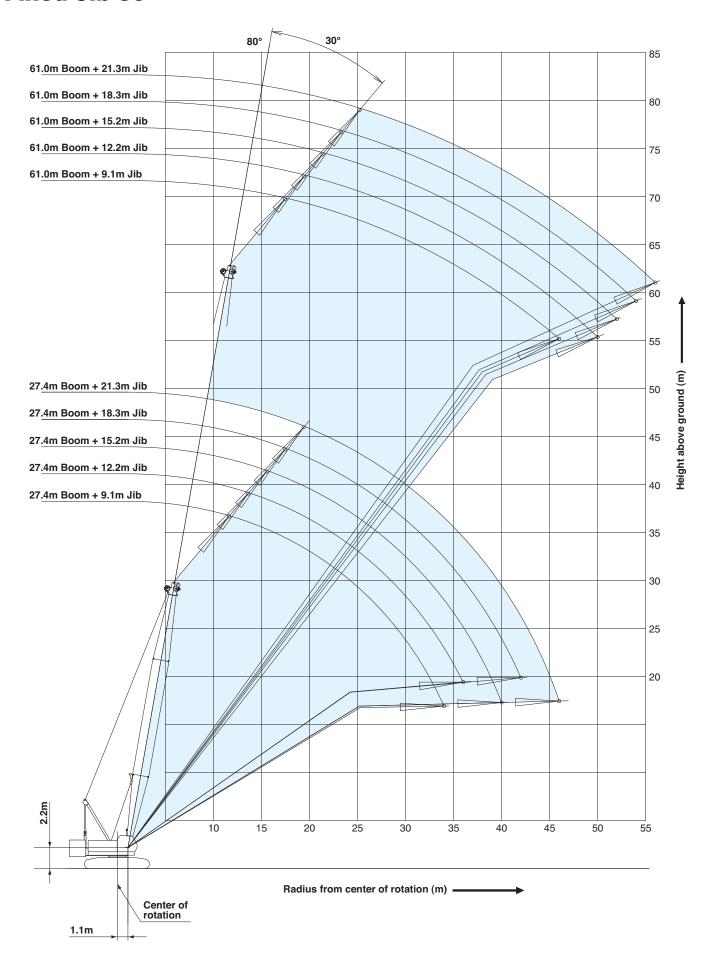
#### **Crane Boom**



## Fixed Jib 10°



#### Fixed Jib 30°



## SUPPLEMENTAL DATA

- Ratings according to EN13000.
- Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
- Deduct weight of hook block (s), slings and all other load handling accessories from main boom ratings shown.
- 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.
- The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 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.
- •Boom inserts and guy lines must be arranged as shown in the "operator's manual".
- •Boom hoist reeving is 10 part line.
- · Gantry must be in raised position for all conditions.
- ·Boom backstops are required for all boom lengths.
- •The boom should be erected over the front of the crawlers, not laterally.
- When erecting and lowering the boom of 70.1m and the combination of the boom of 61.0m and the jib of any length, place blocking steel plates between the ends of the crawlers and the ground.
- Ratings inside of boxes \_\_\_\_\_ are limited by strength of materials.
- •The minimum rated load is 1.5 (Ton).
- •Crawler frames must be fully extended for all crane operations.

#### (Crane boom lifting)

•The total load that can be lifted is the value for weight of main hook block, slings, and all other load handling accessories deducted from crane boom ratings shown.

#### (Fixed jib lifting)

- The total load that can be lifted is the value for weight of jib hook block, slings, and all other load handling accessories deducted from fixed jib ratings shown.
- •The availability of fixed jib mounting
  - On crane boom: Range 27.4 m to 61.0 m.

#### <Reference Information>

#### Main hoist loads

No. of Parts of Line	1	2	3	4	5
Maximum Loads (kN)	108	216	324	431	539
Maximum Loads (t)	11.0	22.0	33.0	44.0	55.0
No. of Parts of Line	6	7	8	9*	10*
Maximum Loads (kN)	647	755	863	971	1,079
Maximum Loads (t)	66.0	77.0	88.0	99.0	110.0

<sup>\*</sup>Use auxiliary sheave

#### **Auxiliary hoist loads**

No. of Parts of Line	1	2
Maximum Loads (kN)	108	216
Maximum Loads (t)	11.0	22.0

Weight of hook block						
Hook Block 110 t 70 t 35 t Ball Hook						
Weight (t) 1.7 0.9 0.7 0.45						

Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.

	rane	Boor	n Lift	ing C	apaci	ities				ounterweig arbody We	ight: 6.5 t
										Unit	: metric ton
Boom Length Working (m) radius (m)	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	Boom Length (m) Working radius (m)
3.5	3.6m/110.0										3.5
4.0	98.6	4.1m/95.3	4.6m/86.0								4.0
5.0	77.7	77.7	77.7	77.0	5.5m/66.0	5.9m/58.9					5.0
6.0	62.2	62.2	62.2	62.2	60.7	58.2	6.4m/52.4	6.8m/47.1			6.0
7.0	53.3	53.2	53.2	53.1	51.2	49.4	47.6	46.0	7.3m/42.7	7.8m/38.9	7.0
8.0	44.5	44.4	44.4	44.2	44.2	42.7	41.4	40.1	38.9	37.7	8.0
9.0	37.6	37.5	37.4	37.3	37.3	37.2	36.5	35.5	34.5	33.5	9.0
10.0	32.5	32.4	32.3	32.2	32.2	32.1	32.0	31.7	30.9	30.1	10.0
12.0	25.5	25.3	25.2	25.1	25.1	24.9	24.9	24.8	24.7	24.6	12.0
14.0	20.8	20.7	20.6	20.4	20.4	20.3	20.2	20.1	20.0	19.9	14.0
16.0	14.4m/20.1	17.4	17.3	17.1	17.1	16.9	16.9	16.7	16.7	16.6	16.0
18.0		17.1m/16.0	14.8	14.7	14.6	14.5	14.4	14.3	14.2	14.1	18.0
20.0			19.7m/13.2	12.8	12.7	12.6	12.5	12.4	12.3	12.2	20.0
22.0				11.3	11.2	11.1	11.0	10.8	10.8	10.6	22.0
24.0				22.4m/11.1	10.0	9.8	9.8	9.6	9.5	9.4	24.0
26.0					25.0m/9.5	8.8	8.7	8.6	8.5	8.4	26.0
28.0						27.6m/8.1	7.9	7.7	7.6	7.5	28.0
30.0							7.2	7.0	6.9	6.8	30.0
32.0							30.3m/7.1	6.4	6.3	6.1	32.0
34.0								32.9m/6.1	5.7	5.6	34.0
36.0									35.6m/5.3	5.1	36.0
38.0										4.7	38.0
40.0										38.2m/4.6	40.0
Reeves	10	9	8	7	6	6	5	5	4	4	Reeves

Boom Length Working (m) radius (m)	45.7	48.8	51.8	54.9	57.9	61.0	64.0	67.1	70.1	Boom Length (m) Working radius (m)
8.0	8.2m/35.6	8.7m/32.9								8.0
9.0	32.4	31.7	9.1m/30.4	9.6m/28.1						9.0
10.0	29.1	28.5	27.7	27.0	26.1	10.5m/22.0	10.9m/22.0	11.4m/19.1	11.9m/15.0	10.0
12.0	24.0	23.6	23.0	22.4	21.7	21.4	20.8	18.4	14.9	12.0
14.0	19.8	19.7	19.4	18.9	18.4	18.2	17.6	16.5	13.1	14.0
16.0	16.4	16.4	16.3	16.1	15.8	15.6	15.2	14.8	11.7	16.0
18.0	13.9	13.9	13.8	13.6	13.5	13.5	13.2	12.8	10.4	18.0
20.0	12.0	12.0	11.9	11.7	11.6	11.6	11.4	11.3	9.3	20.0
22.0	10.5	10.5	10.3	10.2	10.0	10.1	9.9	9.8	8.3	22.0
24.0	9.2	9.2	9.1	8.9	8.8	8.8	8.6	8.5	7.5	24.0
26.0	8.2	8.2	8.0	7.9	7.7	7.7	7.6	7.5	6.7	26.0
28.0	7.3	7.3	7.2	7.0	6.9	6.9	6.7	6.6	6.0	28.0
30.0	6.6	6.5	6.4	6.3	6.1	6.1	6.0	5.8	5.3	30.0
32.0	5.9	5.9	5.8	5.6	5.5	5.5	5.3	5.2	4.7	32.0
34.0	5.4	5.3	5.2	5.0	4.9	4.9	4.7	4.6	4.2	34.0
36.0	4.9	4.8	4.7	4.6	4.4	4.4	4.2	4.1	3.7	36.0
38.0	4.5	4.4	4.3	4.1	4.0	3.9	3.8	3.6	3.2	38.0
40.0	4.1	4.0	3.9	3.7	3.5	3.5	3.3	3.2	2.7	40.0
42.0	40.8m/4.0	3.7	3.5	3.3	3.2	3.1	2.9	2.8	2.3	42.0
44.0		43.5m/3.5	3.2	3.0	2.8	2.8	2.6	2.4	1.9	44.0
46.0			2.9	2.7	2.5	2.5	2.3	2.1	1.6	46.0
48.0			46.1m/2.9	2.4	2.2	2.2	2.0	1.8		48.0
50.0				48.8m/2.3	2.0	1.9	1.7	1.6		50.0
52.0					51.4m/1.8	1.7	1.5			52.0
54.0						1.5				54.0
Reeves	4	3	3	3	3	2	2	2	2	Reeves



Ratings according to EN13000.

Ratings shown in \_\_\_\_\_ are determined by the strength of the boom or other structural components. Lifting capacities may vary depending on hook used or with/without auxiliary sheave.

					_	арас 10°)		s (W	ithou	ıt Ma	ain H	look	Bloc	ck)		ody We	ght: 34.6 eight: 6.5	t
В	oom length (m)			27.4					30.5					33.5		Uni	t: metric to	
	lib length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m	
	10.0	10.9					10.9										10.0	
	12.0	10.9	10.9	10.9			10.9	10.9	10.9			10.9	10.9				12.0	1
	14.0	10.9	10.9	10.9	9.8	7.1	10.9	10.9	10.9	9.9	7.1	10.9	10.9	10.9	9.9		14.0	
İ	16.0	10.9	10.9	10.9	9.6	6.9	10.9	10.9	10.9	9.7	6.9	10.9	10.9	10.9	9.7	7.0	16.0	1
	18.0	10.9	10.9	10.2	8.9	6.7	10.9	10.9	10.7	9.3	6.8	10.9	10.9	10.9	9.5	6.8	18.0	
	20.0	10.9	10.9	9.2	8.0	6.5	10.9	10.9	9.7	8.4	6.6	10.9	10.9	10.2	8.8	6.7	20.0	
	22.0	10.9	10.2	8.4	7.3	6.4	10.9	10.9	8.9	7.6	6.5	10.9	10.9	9.3	8.0	6.5	22.0	
	24.0	10.1	9.4	7.7	6.7	6.0	10.0	10.0	8.2	7.0	6.3	9.9	10.0	8.6	7.4	6.4	24.0	
=	26.0	9.1	8.7	7.2	6.2	5.5	8.9	9.1	7.6	6.5	5.8	8.8	9.0	8.0	6.8	6.1	26.0	8
u) sr	28.0	8.2	8.1	6.7	5.7	5.1	8.0	8.2	7.0	6.0	5.4	7.9	8.1	7.4	6.3	5.6	28.0	orki
radius (m)	30.0	7.4	7.5	6.2	5.4	4.7	7.3	7.4	6.6	5.6	5.0	7.2	7.3	7.0	5.9	5.2	30.0	ng r
l g	32.0	6.8	6.9	5.9	5.0	4.4	6.6	6.7	6.2	5.3	4.7	6.5	6.6	6.5	5.6	4.9	32.0	adiu
Working	34.0		6.3	5.5	4.7	4.2	6.1	6.2	5.9	5.0	4.4	6.0	6.1	6.1	5.3	4.6	34.0	Working radius (m)
3	36.0			5.3	4.5	3.9		5.7	5.6	4.7	4.1	5.5	5.5	5.6	5.0	4.3	36.0	ತ
	38.0				4.2	3.7			5.3	4.5	3.9	5.0	5.1	5.2	4.7	4.1	38.0	

4.9

1

4.3

4.1

3.9

1

3.7

3.5

3.4

3.2

1

1

4.7

1

4.8

4.4

4.1

1

4.5

4.3

4.1

3.8

1

3.9

3.7

3.5

3.4

3.3

3.1

1

40.0

42.0

44.0

46.0

48.0

50.0

Reeves

Во	om length (m)			36.6					39.6					42.7			Boom length (	m)
Ji	ib length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m	1)
	12.0	10.9	10.9				10.9					10.9					12.0	П
	14.0	10.9	10.9	10.9	10.0		10.9	10.9	10.9			10.9	10.9	10.9			14.0	Н
	16.0	10.9	10.9	10.9	9.8	7.0	10.9	10.9	10.9	9.8	7.1	10.9	10.9	10.9	9.9	7.1	16.0	
	18.0	10.9	10.9	10.9	9.6	6.9	10.9	10.9	10.9	9.7	6.9	10.9	10.9	10.9	9.7	6.9	18.0	
	20.0	10.9	10.9	10.6	9.1	6.7	10.9	10.9	10.9	9.5	6.8	10.9	10.9	10.9	9.6	6.8	20.0	
	22.0	10.9	10.9	9.7	8.3	6.6	10.9	10.9	10.1	8.7	6.6	10.8	10.9	10.5	9.0	6.7	22.0	
	24.0	9.7	9.9	9.0	7.7	6.4	9.6	9.8	9.4	8.0	6.5	9.5	9.7	9.8	8.3	6.5	24.0	
	26.0	8.7	8.8	8.3	7.1	6.3	8.6	8.7	8.7	7.4	6.4	8.4	8.6	8.7	7.7	6.4	26.0	
	28.0	7.8	7.9	7.8	6.6	5.9	7.7	7.8	7.9	6.9	6.1	7.6	7.7	7.8	7.2	6.3	28.0	
<u>آء</u> [	30.0	7.0	7.1	7.2	6.2	5.5	6.9	7.0	7.1	6.5	5.7	6.8	6.9	7.0	6.8	5.9	30.0	
radius (m)	32.0	6.4	6.5	6.6	5.8	5.1	6.3	6.4	6.5	6.1	5.4	6.1	6.2	6.3	6.4	5.6	32.0	Working radius (m)
adir	34.0	5.8	5.9	6.0	5.5	4.8	5.7	5.8	5.9	5.8	5.0	5.6	5.7	5.8	5.8	5.2	34.0	ng r
	36.0	5.3	5.4	5.5	5.2	4.6	5.2	5.3	5.4	5.4	4.8	5.0	5.2	5.2	5.3	5.0	36.0	adic
Working	38.0	4.9	4.9	5.0	4.9	4.3	4.7	4.8	4.9	5.0	4.5	4.6	4.7	4.8	4.9	4.7	38.0	n) SI
>	40.0	4.5	4.5	4.6	4.7	4.1	4.3	4.4	4.5	4.6	4.3	4.2	4.3	4.4	4.4	4.5	40.0	اځا
	42.0		4.2	4.3	4.3	3.9	4.0	4.1	4.1	4.2	4.1	3.8	3.9	4.0	4.1	4.1	42.0	
	44.0			3.9	4.0	3.7		3.7	3.8	3.9	3.9	3.5	3.6	3.7	3.7	3.8	44.0	
	46.0				3.7	3.6			3.5	3.6	3.6		3.3	3.4	3.4	3.5	46.0	
	48.0				3.4	3.4			3.2	3.3	3.3		3.1	3.1	3.2	3.2	48.0	
	50.0					3.2				3.0	3.1			2.9	2.9	3.0	50.0	
	52.0										2.9				2.7	2.7	52.0	
	54.0										2.6				2.5	2.5	54.0	
	56.0															2.3	56.0	ı
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves	Ш



40.0

42.0

44.0

46.0

48.0 50.0

Reeves

1

1

1

Ratings according to EN13000.

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

4.0

1

3.5

3.3

3.2

1

1

1

Lifting capacities may vary depending on hook used or with/without auxiliary sheave.

						арас 10°)		s (Wi	ithou	ıt Ma	ain H	look	Bloc	ck)			ght: 34.6 t eight: 6.5 t
	(U	IID U	1156	LAII	gie i	10,										Uni	t: metric ton
Вос	om length (m)			45.7					48.8					51.8			Boom length (m
Ji	b length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m)
	14.0	10.9	10.9				10.9	10.9				10.9					14.0
	16.0	10.9	10.9	10.9	9.9		10.9	10.9	10.9	10.0		10.9	10.9	10.9			16.0
	18.0	10.9	10.9	10.9	9.8	7.0	10.9	10.9	10.9	9.8	7.0	10.9	10.9	10.9	9.8	7.0	18.0
	20.0	10.9	10.9	10.9	9.6	6.8	10.9	10.9	10.9	9.6	6.9	10.9	10.9	10.9	9.7	6.9	20.0
	22.0	10.6	10.8	10.9	9.3	6.7	10.5	10.7	10.8	9.5	6.8	10.4	10.6	10.7	9.5	6.8	22.0
	24.0	9.3	9.5	9.6	8.6	6.6	9.3	9.4	9.5	8.9	6.6	9.1	9.3	9.4	9.2	6.7	24.0
	26.0	8.3	8.4	8.5	8.0	6.5	8.2	8.4	8.5	8.3	6.5	8.1	8.2	8.3	8.4	6.6	26.0
	28.0	7.4	7.5	7.6	7.5	6.4	7.3	7.4	7.6	7.6	6.4	7.2	7.3	7.4	7.5	6.5	28.0
	30.0	6.6	6.8	6.9	6.9	6.2	6.5	6.7	6.8	6.9	6.3	6.4	6.5	6.7	6.7	6.4	30.0
	32.0	6.0	6.1	6.2	6.3	5.8	5.9	6.0	6.1	6.2	6.0	5.7	5.9	6.0	6.1	6.1	32.0
Ξ	34.0	5.4	5.5	5.6	5.7	5.5	5.3	5.4	5.5	5.6	5.6	5.2	5.3	5.4	5.5	5.5	34.0
gins	36.0	4.9	5.0	5.1	5.2	5.2	4.8	4.9	5.0	5.1	5.1	4.7	4.8	4.9	4.9	5.0	36.0
Working radius	38.0	4.4	4.5	4.6	4.7	4.7	4.3	4.4	4.5	4.6	4.7	4.2	4.3	4.4	4.5	4.5	34.0 36.0 38.0 40.0 42.0
ķ	40.0	4.0	4.1	4.2	4.3	4.3	3.9	4.0	4.1	4.2	4.2	3.8	3.9	4.0	4.1	4.1	40.0
§     	42.0	3.7	3.8	3.8	3.9	4.0	3.6	3.7	3.8	3.8	3.9	3.4	3.5	3.6	3.7	3.7	42.0
	44.0	3.3	3.4	3.5	3.6	3.6	3.2	3.3	3.4	3.5	3.5	3.1	3.2	3.3	3.4	3.4	44.0
	46.0	3.1	3.1	3.2	3.3	3.3	3.0	3.0	3.1	3.2	3.2	2.8	2.9	3.0	3.1	3.1	46.0
	48.0	2.8	2.9	2.9	3.0	3.1	2.7	2.8	2.8	2.9	3.0	2.5	2.6	2.7	2.8	2.8	48.0
	50.0		2.6	2.7	2.8	2.8	2.4	2.5	2.6	2.7	2.7	2.2	2.3	2.4	2.5	2.5	50.0
	52.0			2.4	2.5	2.6		2.2	2.3	2.4	2.4	1.9	2.0	2.1	2.2	2.2	52.0
	54.0				2.3	2.3			2.0	2.1	2.2		1.8	1.9	1.9	2.0	54.0
	56.0				2.0	2.1			1.8	1.9	1.9		1.5	1.6	1.7	1.8	56.0
	58.0					1.9				1.7	1.7						58.0
	60.0										1.5						60.0
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

Во	om length (m)			54.9					57.9					61.0			Boom length (m)
J	ib length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m)
	14.0	10.9															14.0
	16.0	10.9	10.9	10.9			10.9	10.9				10.9	10.9				16.0
	18.0	10.9	10.9	10.9	9.9	7.1	10.9	10.9	10.9	9.9		10.9	10.9	10.9	9.9		18.0
	20.0	10.9	10.9	10.9	9.7	6.9	10.9	10.9	10.9	9.8	7.0	10.9	10.8	10.8	9.8	7.0	20.0
	22.0	10.3	10.5	10.6	9.6	6.8	10.1	10.3	10.5	9.6	6.8	10.1	10.3	10.4	9.7	6.9	22.0
	24.0	9.0	9.2	9.3	9.4	6.7	8.9	9.0	9.2	9.3	6.7	8.8	9.0	9.1	9.2	6.8	24.0
	26.0	7.9	8.1	8.2	8.3	6.6	7.8	8.0	8.1	8.2	6.6	7.7	7.9	8.0	8.1	6.7	26.0
	28.0	7.0	7.2	7.3	7.4	6.5	6.9	7.0	7.2	7.3	6.5	6.8	7.0	7.1	7.2	6.6	28.0
	30.0	6.3	6.4	6.5	6.6	6.4	6.1	6.3	6.4	6.5	6.4	6.1	6.2	6.3	6.4	6.5	30.0
Ε	32.0	5.6	5.7	5.8	5.9	6.0	5.4	5.6	5.7	5.8	5.8	5.4	5.5	5.6	5.7	5.8	32.0 Working radius (m) 36.0 38.0 (m)
Working radius (m)	34.0	5.0	5.1	5.2	5.3	5.4	4.9	5.0	5.1	5.2	5.2	4.8	4.9	5.0	5.1	5.2	34.0
gra	36.0	4.5	4.6	4.7	4.8	4.9	4.4	4.5	4.6	4.7	4.7	4.3	4.4	4.5	4.6	4.6	36.0
ķ	38.0	4.1	4.2	4.3	4.3	4.4	3.9	4.0	4.1	4.2	4.3	3.8	3.9	4.0	4.1	4.2	38.0 E
s	40.0	3.6	3.8	3.9	3.9	4.0	3.5	3.6	3.7	3.8	3.8	3.4	3.5	3.6	3.7	3.8	<b>40.0</b> $\widehat{\mathbb{B}}$
	42.0	3.3	3.4	3.5	3.6	3.6	3.1	3.2	3.3	3.4	3.5	3.0	3.1	3.3	3.3	3.4	42.0
	44.0	2.9	3.1	3.1	3.2	3.3	2.7	2.9	3.0	3.1	3.1	2.6	2.7	2.9	3.0	3.0	44.0
	46.0	2.6	2.7	2.8	2.9	3.0	2.4	2.5	2.6	2.7	2.8	2.2	2.4	2.5	2.6	2.7	46.0
	48.0	2.2	2.4	2.5	2.6	2.6	2.0	2.2	2.3	2.4	2.4	1.9	2.1	2.2	2.3	2.3	48.0
	50.0	2.0	2.1	2.2	2.3	2.3	1.7	1.9	2.0	2.1	2.1	1.6	1.8	1.9	2.0	2.0	50.0
	52.0	1.7	1.8	1.9	2.0	2.1		1.6	1.7	1.8	1.8			1.6	1.7	1.7	52.0
	54.0		1.6	1.7	1.7	1.8				1.5	1.6						54.0
	56.0				1.5	1.6											56.0
	Reeves	1	1	1	1	1	1	1	1	1	1	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.

Lifting capacities may vary depending on hook used or with/without auxiliary sheave.

			Jib ffset		_		ities	s (Wi	thou	ıt Ma	in H	ook	Bloc	:k)			ght: 34.6 t eight: 6.5 t
	(U	ID U	1156	LAII	jie i	<b>30</b> J										Uni	t: metric ton
Во	om length (m)			27.4					30.5					33.5			Boom length (m)
J	ib length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m)
	12.0	9.5															12.0
	14.0	9.5	7.0				9.5					9.5					14.0
	16.0	9.5	7.0	5.2			9.5	7.0				9.5	7.0				16.0
	18.0	9.5	7.0	5.2	4.2		9.5	7.0	5.2			9.5	7.0	5.2			18.0
	20.0	9.5	7.0	5.2	4.2	4.2	9.5	7.0	5.2	4.2		9.5	7.0	5.2	4.2		20.0
	22.0	9.1	6.7	5.2	4.2	4.0	9.4	6.9	5.2	4.2	4.1	9.5	7.0	5.2	4.2	4.1	22.0
	24.0	8.6	6.4	5.1	4.2	3.7	8.9	6.5	5.2	4.2	3.8	9.2	6.7	5.2	4.2	3.9	24.0
	26.0	8.1	6.1	4.9	4.1	3.5	8.6	6.3	5.0	4.2	3.6	8.8	6.4	5.1	4.2	3.7	26.0
Ξ	28.0	7.6	5.8	4.6	3.9	3.3	8.2	6.0	4.8	4.0	3.4	8.1	6.2	4.9	4.1	3.5	28.0 ≶
ins.	30.0	7.1	5.5	4.5	3.7	3.2	7.7	5.8	4.6	3.8	3.3	7.3	6.0	4.7	3.9	3.3	30.0
Working radius (m)	32.0	6.6	5.2	4.3	3.6	3.0	6.9	5.6	4.4	3.7	3.1	6.5	5.8	4.5	3.8	3.2	28.0 Working radius (m) 32.0 34.0 (m) 36.0 (m)
ξį	34.0	6.1	4.9	4.1	3.4	2.9	6.3	5.4	4.2	3.5	3.0	5.9	5.6	4.4	3.6	3.1	34.0 ਫ਼ਿੰ
Š	36.0		4.6	3.9	3.2	2.8	5.8	5.2	4.0	3.4	2.9	5.3	5.4	4.3	3.5	3.0	36.0 ∄
İ	38.0			3.7	3.0	2.7		5.0	3.8	3.3	2.8	4.8	5.2	4.2	3.4	2.9	38.0
İ	40.0			3.5	2.8	2.6			3.6	3.2	2.7		4.7	4.1	3.3	2.8	40.0
	42.0				2.6	2.5			3.4	3.1	2.6		4.4	4.0	3.2	2.7	42.0
	44.0					2.4				3.0	2.5			3.9	3.1	2.6	44.0
l	46.0					2.3				2.9	2.4				3.0	2.5	46.0
	48.0										2.3				2.9	2.4	48.0
	50.0															2.3	50.0
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

Во	om length (m)			36.6					39.6					42.7			Boom length (m)
Ji	b length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m)
	14.0	9.5					9.5										14.0
	16.0	9.5	7.0				9.5	7.0				9.5					16.0
	18.0	9.5	7.0	5.2			9.5	7.0	5.2			9.5	7.0				18.0
	20.0	9.5	7.0	5.2	4.2		9.5	7.0	5.2	4.2		9.5	7.0	5.2			20.0
	22.0	9.5	7.0	5.2	4.2	4.2	9.5	7.0	5.2	4.2	4.2	9.5	7.0	5.2	4.2		22.0
	24.0	9.5	6.9	5.2	4.2	4.0	9.5	7.0	5.2	4.2	4.0	9.5	7.0	5.2	4.2	4.1	24.0
	26.0	8.9	6.6	5.2	4.2	3.8	8.8	6.7	5.2	4.2	3.8	8.7	6.9	5.2	4.2	3.9	26.0
	28.0	8.0	6.3	5.0	4.2	3.6	7.9	6.5	5.1	4.2	3.6	7.8	6.6	5.2	4.2	3.7	28.0
	30.0	7.2	6.1	4.8	4.0	3.4	7.1	6.3	4.9	4.1	3.5	7.0	6.4	5.0	4.2	3.6	30.0
	32.0	6.5	5.9	4.7	3.8	3.3	6.4	6.1	4.8	3.9	3.3	6.3	6.2	4.9	4.0	3.4	32.0
Œ	34.0	5.8	5.7	4.5	3.7	3.1	5.7	5.9	4.6	3.8	3.2	5.7	5.9	4.7	3.9	3.3	34.0 ≦
radius (m)	36.0	5.3	5.5	4.4	3.6	3.0	5.2	5.4	4.5	3.7	3.1	5.2	5.3	4.6	3.7	3.2	34.0 Working radius (m) 40.0 42.0 (m)
] rac	38.0	4.8	5.1	4.2	3.5	2.9	4.7	4.8	4.3	3.5	3.0	4.5	4.9	4.4	3.6	3.1	38.0
Working	40.0	4.4	4.6	4.0	3.4	2.8	4.2	4.4	4.1	3.4	2.9	4.0	4.2	4.3	3.5	3.0	40.0 ਫ਼ਿੰ
Wor	42.0	4.0	4.2	3.8	3.3	2.7	3.9	4.0	3.9	3.4	2.8	3.6	3.8	4.0	3.4	2.9	42.0 <b>3</b>
	44.0		3.9	3.6	3.2	2.7	3.5	3.6	3.7	3.3	2.7	3.3	3.4	3.6	3.3	2.8	44.0
	46.0			3.4	3.1	2.6		3.3	3.5	3.2	2.6	3.0	3.1	3.3	3.2	2.7	46.0
	48.0			3.2	3.0	2.5			3.2	3.1	2.5		2.8	3.0	3.1	2.6	48.0
	50.0				2.9	2.4			2.9	3.0	2.4		2.6	2.7	2.8	2.5	50.0
	52.0					2.3				2.7	2.3			2.5	2.5	2.4	52.0
	54.0					2.2				2.5	2.2				2.3	2.3	54.0
	56.0										2.1				2.1	2.2	56.0
	58.0										2.0					2.0	58.0
	60.0															1.8	60.0
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves



Ratings according to EN13000.

Ratings according to EN10000.

Ratings shown in \_\_\_\_\_\_ are determined by the strength of the boom or other structural components. Lifting capacities may vary depending on hook used or with/without auxiliary sheave.

Please refer rated chart in operator's cabin.

			Jib ffse				ities	s (Wi	thou	ıt Ma	in	Hook	Blo	ck)			ght: 34.6 t eight: 6.5 t
	10		1130		gie i	00 ,										Uni	t: metric ton
Во	om length (m)			45.7	,	,		,	48.8					51.8			Boom length (m)
J	ib length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m)
	16.0	9.5					9.5					9.5					16.0
	18.0	9.5	7.0				9.5	7.0				9.5	7.0				18.0
	20.0	9.5	7.0	5.2			9.5	7.0	5.2	1		9.5	7.0	5.2			20.0
	22.0	9.5	7.0	5.2	4.2		9.5	7.0	5.2	4.2	1	9.5	7.0	5.2	4.2		22.0
	24.0	9.5	7.0	5.2	4.2	4.1	9.5	7.0	5.2	4.2	4.2	9.5	7.0	5.2	4.2	4.2	24.0
	26.0	8.6	7.0	5.2	4.2	3.9	8.5	7.0	5.2	4.2	4.0	8.4	7.0	5.2	4.2	4.0	26.0
	28.0	7.6	6.8	5.2	4.2	3.8	7.6	6.9	5.2	4.2	3.8	7.4	7.0	5.2	4.2	3.9	28.0
	30.0	6.8	6.5	5.1	4.2	3.6	6.8	6.7	5.2	4.2	3.7	6.7	6.8	5.2	4.2	3.7	30.0
	32.0	6.1	6.3	5.0	4.1	3.5	6.1	6.3	5.0	4.1	3.5	6.0	6.2	5.1	4.2	3.6	32.0
Ē	34.0	5.5	5.7	4.8	3.9	3.3	5.5	5.7	4.9	4.0	3.4	5.4	5.6	5.0	4.1	3.4	34.0 ≤
radius (m)	36.0	5.0	5.2	4.7	3.8	3.2	4.9	5.1	4.7	3.9	3.3	4.8	5.0	4.8	3.9	3.3	36.0 Working radius (m) 40.0 42.0
adji	38.0	4.6	4.7	4.5	3.7	3.1	4.5	4.6	4.6	3.8	3.2	4.4	4.5	4.7	3.8	3.2	38.0 ਫ਼੍ਰ
	40.0	3.8	4.0	4.4	3.6	3.0	3.6	4.2	4.4	3.7	3.1	3.9	4.1	4.2	3.7	3.1	40.0 క్రి
Working	42.0	3.4	3.6	4.0	3.5	2.9	3.2	3.8	4.0	3.6	3.0	3.0	3.7	3.9	3.6	3.0	42.0
>	44.0	3.1	3.2	3.4	3.4	2.8	2.9	3.1	3.6	3.5	2.9	2.7	3.4	3.5	3.5	2.9	44.0
	46.0	2.7	2.9	3.0	3.2	2.8	2.6	2.7	2.9	3.4	2.8	2.3	2.5	3.2	3.3	2.9	46.0
	48.0	2.5	2.6	2.7	2.9	2.7	2.3	2.4	2.6	3.1	2.7	2.1	2.2	2.4	3.0	2.8	48.0
	50.0	2.2	2.3	2.5	2.6	2.6	2.1	2.2	2.3	2.4	2.7	1.8	1.9	2.1	2.7	2.7	50.0
	52.0		2.1	2.2	2.3	2.4	1.9	1.9	2.1	2.2	2.3	1.6	1.7	1.8	2.0	2.5	52.0
	54.0			2.0	2.1	2.2		1.7	1.8	1.9	2.0		1.5	1.6	1.7	1.8	54.0
	56.0			1.8	1.9	1.9			1.6	1.7	1.8				1.5	1.6	56.0
	58.0				1.7	1.7			1.5	1.5	1.6						58.0
	60.0					1.6											60.0
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves

Во	om length (m)			54.9					57.9					61.0			Boom length (	m)
J	ib length (m)	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	9.1	12.2	15.2	18.3	21.3	Jib length (m	1)
	18.0	9.5					9.5					9.5					18.0	П
	20.0	9.5	7.0				9.5	7.0				9.5	7.0				20.0	Ιİ
	22.0	9.5	7.0	5.2			9.5	7.0	5.2			9.5	7.0	5.2			22.0	Н
	24.0	9.4	7.0	5.2	4.2		9.3	7.0	5.2	4.2		9.2	7.0	5.2	4.2		24.0	
	26.0	8.3	7.0	5.2	4.2	4.1	8.1	7.0	5.2	4.2	4.1	8.1	7.0	5.2	4.2	4.1	26.0	Н
	28.0	7.3	7.0	5.2	4.2	3.9	7.2	7.0	5.2	4.2	4.0	7.1	7.0	5.2	4.2	4.0	28.0	Н
	30.0	6.5	6.8	5.2	4.2	3.8	6.4	6.6	5.2	4.2	3.8	6.3	6.6	5.2	4.2	3.8	30.0	Н
	32.0	5.8	6.0	5.2	4.2	3.6	5.7	5.9	5.2	4.2	3.7	5.6	5.9	5.2	4.2	3.7	32.0	Н
Œ	34.0	5.2	5.4	5.0	4.1	3.5	5.1	5.3	5.1	4.2	3.5	5.0	5.3	5.2	4.2	3.6	34.0	8
radius	36.0	4.7	4.9	4.9	4.0	3.4	4.6	4.8	4.9	4.1	3.4	4.5	4.7	4.9	4.1	3.5	36.0	Working radius
] rac	38.0	4.2	4.4	4.6	3.9	3.3	4.1	4.3	4.4	3.9	3.3	4.0	4.2	4.4	4.0	3.4	38.0	gra
Working	40.0	3.8	4.0	4.1	3.8	3.2	3.7	3.8	4.0	3.8	3.2	3.6	3.8	3.9	3.9	3.3	40.0	l suit
۱ŏ	42.0	3.4	3.6	3.7	3.7	3.1	3.3	3.4	3.6	3.7	3.1	3.2	3.4	3.5	3.7	3.2	42.0	(E)
	44.0	3.1	3.2	3.4	3.5	3.0	2.9	3.1	3.2	3.4	3.0	2.8	3.0	3.2	3.3	3.1	44.0	Ιl
	46.0	2.1	2.3	3.0	3.2	2.9	1.9	2.7	2.9	3.0	3.0	2.4	2.6	2.8	3.0	3.0	46.0	H
	48.0	1.8	2.0	2.7	2.9	2.8	1.6	1.8	2.6	2.7	2.9		2.3	2.5	2.6	2.8	48.0	Ιİ
	50.0	1.6	1.7	1.9	2.6	2.7		1.5	2.2	2.4	2.5		2.0	2.1	2.3	2.4	50.0	Н
	52.0		1.5	1.6	1.8	2.4				2.1	2.2			1.8	2.0	2.1	52.0	
	54.0				1.5	2.1					1.9				1.7	1.8	54.0	H
	56.0										1.7					1.6	56.0	Ιİ
	Reeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeves	H



Ratings according to EN13000.

Ratings shown in \_\_\_\_\_ are determined by the strength of the boom or other structural components. Lifting capacities may vary depending on hook used or with/without auxiliary sheave.

## SUPPLEMENTAL DATA FOR CLAMSHELL RATING CHART

- Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
- Deduct weight of bucket, slings and all other load handling accessories from main boom ratings shown.
- •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. The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- Rated loads do not exceed 66% of minimum tipping loads.
- 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.
- •Boom inserts and guy lines must be arranged as shown in the "operator's manual".
- •Boom hoist reeving is 10 part line.
- · Gantry must be in raised position for all conditions.
- •Boom backstops are required for all boom lengths.
- •The boom should be erected over the front of the crawlers, not laterally.
- •Crawler frames must be fully extended for all crane operations.

#### (Clamshell bucket lifting)

- •The total load that can be lifted is the value for weight of bucket, slings, and all other load handling accessories deducted from main boom ratings shown.
- •The weight of bucket and materials must not exceed rated load
- •Optimum bucket should be required according to material.
- •Bucket capacity (m³) x specified gravity of material (ton/m³) + bucket weight (ton) = rated load.
- Bucket weight must also be decreased according to operating cycle and bucket lowering height.
- Rated loads are determined by stability and boom strength.
   During simultaneous operations of boom and swing, rapid acceleration or deceleration must be avoided.
- Do not attempt to cast the bucket while swinging or diagonal draw-cutting.

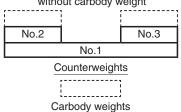
#### <Reference Information>

#### Main hoist loads

No. of Parts of Line	1
Maximum Loads (kN)	98
Maximum Loads (t)	10.0

#### Assembling the counterweight

23.1 ton counterweight without carbody weight



Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.

Cı	rane B	ell Rati oom C				Counterweight: 23.1 t Without Carbody Weight Crawler Fully Extended Unit: metric ton
Boom length Load (m) radius (m)	45.0	18.3	21.3	24.4		Boom length (m) Load radius (m)
7.0	10.0					7.0
8.0	10.0	10.0				8.0
9.0	10.0	10.0	10.0			9.0
10.0	10.0	10.0	10.0	9.4		10.0
11.0	10.0	10.0	10.0	9.3		11.0
12.0	10.0	10.0	10.0	9.3		12.0
13.0	10.0	10.0	10.0	9.3		13.0
14.0	10.0	10.0	10.0	9.3		14.0
15.0		10.0	10.0	9.3		15.0
16.0		9.8	9.9	9.0		16.0
17.0			9.3	8.8		17.0
18.0			8.6	8.6		18.0
19.0			7.9	8.2		19.0
20.0				7.6		20.0
21.0				7.1		21.0
22.0						22.0
23.0						23.0
24.0						24.0
25.0						25.0
26.0						26.0
27.0						27.0
28.0						28.0
29.0						29.0
30.0						30.0
31.0						31.0
32.0						32.0
33.0						33.0
Reeves	1	1	1	1		Reeves

Note:

## SUPPLEMENTAL DATA FOR REDUCED WEIGHTS RATING CHART

- Ratings according to EN13000.
- Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
- Deduct weight of hook block(s), slings and all other load handling accessories from main boom ratings shown.
- •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. The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 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.
- •Boom inserts and guy lines must be arranged as shown in the "operator's manual".
- •Boom hoist reeving is 10 part line.
- •Gantry must be in raised position for all conditions.
- ·Boom backstops are required for all boom lengths.
- •The boom should be erected over the front of the crawlers, not laterally.
- Ratings inside of boxes \_\_\_\_\_ are limited by strength of materials.
- •The minimum rated load is 1.5 (ton).
- •Crawler frames must be fully extended for all crane operations.

#### (Crane boom lifting)

•The total load that can be lifted is the value for weight of hook block, slings, and all other load handling accessories deducted from main boom ratings shown.

Countarwoight	Carbody weight	Boom	lenght
Counterweight	Carbody weight	Without aux.	With aux.
23.1 ton	Without	15.2 m ~ 57.9 m	15.2 m $\sim$ 54.9 m

#### Assembling the counterweight

23.1 ton counterweight without carbody weight

No.2 No.3

No.1



#### <Reference Information>

#### Main hoist loads

No. of Parts of Line	1	2	3	4	5
Maximum Loads (kN)	108	216	324	431	539
Maximum Loads (t)	11.0	22.0	33.0	44.0	55.0
No. of Parts of Line	6	7	8	9*	10*
Maximum Loads (kN)	647	755	863	971	1,079
Maximum Loads (t)	66.0	77.0	88.0	99.0	110.0

<sup>\*</sup>Use auxiliary sheave

#### **Auxiliary hoist loads**

No. of Parts of Line	1	2
Maximum Loads (kN)	108	216
Maximum Loads (t)	11.0	22.0

Weight of hook block									
Hook Block 110 t 70 t 35 t Ball Hook									
Weight (t)	1.7	0.9	0.7	0.45					

Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.

										dy Weight	
Boom length Working (m) radius (m)	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	Boom length (m) Working radius (m)
3.5	3.6m/94.2										3.5
4.0	85.3	4.1m/83.3									4.0
4.5	76.2	75.7	4.6m/69.2								4.5
5.0	68.9	66.0	62.3	59.1							5.0
5.5	58.9	58.4	55.5	52.8	5.5m/50.4	5.9m/44.6					5.5
6.0	50.8	50.4	49.9	47.8	45.7	43.8	6.4m/39.2	6.8m/35.4			6.0
7.0	39.6	39.3	39.0	38.7	38.4	37.0	35.6	34.4	7.3m/31.7	7.8m/28.6	7.0
8.0	32.3	32.3	32.2	32.1	32.0	31.9	30.8	29.9	28.8	27.9	8.0
9.0	27.2	27.2	27.2	27.2	27.2	27.1	27.0	26.3	25.4	24.7	9.0
10.0	23.5	23.5	23.5	23.5	23.4	23.3	23.2	23.2	22.7	22.0	10.0
12.0	18.2	18.2	18.2	18.2	18.1	18.0	18.0	17.9	17.9	17.7	12.0
14.0	14.8	14.8	14.8	14.8	14.7	14.6	14.5	14.4	14.4	14.2	14.0
16.0	14.4m/14.3	12.5	12.4	12.3	12.2	12.1	12.0	12.0	11.9	11.8	16.0
18.0		17.1m/11.5	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.9	18.0
20.0			19.7m/9.4	9.1	9.0	8.9	8.7	8.7	8.6	8.5	20.0
22.0				8.0	7.9	7.7	7.6	7.6	7.5	7.4	22.0
24.0				22.4m/7.8	7.0	6.8	6.7	6.7	6.6	6.4	24.0
26.0					25.0m/6.5	6.1	5.9	5.9	5.8	5.7	26.0
28.0						27.6m/5.6	5.3	5.3	5.1	5.0	28.0
30.0							4.8	4.7	4.6	4.5	30.0
32.0							30.3m/4.6	4.3	4.1	4.0	32.0
34.0								32.9m/4.1	3.7	3.5	34.0
36.0									35.6m/3.3	3.1	36.0
38.0										2.8	38.0
40.0										38.2m/2.6	40.0
42.0											42.0
44.0						_					44.0
Reeves	10	8	7	6	5	5	4	4	3	3	Reeves

Boom length Working (m) radius (m)	45.7	48.8	51.8	54.9	57.9			Boom length (m) Working radius (m)
8.0	8.2m/26.3	8.7m/24.0						8.0
9.0	23.9	23.2	9.1m/22.2	9.6m/20.3				9.0
10.0	21.3	20.8	20.1	19.5	18.9			10.0
12.0	17.4	17.0	16.5	16.0	15.5			12.0
14.0	14.1	14.0	13.8	13.4	13.0			14.0
16.0	11.6	11.6	11.4	11.4	11.0			16.0
18.0	9.8	9.7	9.6	9.6	9.4			18.0
20.0	8.3	8.3	8.1	8.1	8.0			20.0
22.0	7.2	7.1	7.0	7.0	6.8			22.0
24.0	6.3	6.2	6.1	6.0	5.9			24.0
26.0	5.5	5.4	5.3	5.3	5.1			26.0
28.0	4.9	4.8	4.6	4.6	4.5			28.0
30.0	4.3	4.2	4.1	4.0	3.8			30.0
32.0	3.8	3.7	3.5	3.5	3.3			32.0
34.0	3.3	3.3	3.1	3.0	2.8			34.0
36.0	2.9	2.9	2.7	2.6	2.4			36.0
38.0	2.6	2.5	2.3	2.2	2.1			38.0
40.0	2.2	2.2	2.0	1.9	1.7			40.0
42.0	40.8m/2.1	1.9	1.7	1.6				42.0
44.0		43.5m/1.6						44.0
46.0								46.0
48.0								48.0
50.0								50.0
52.0								52.0
54.0								54.0
56.0								56.0
58.0								58.0
Reeves	3	3	3	2	2			Reeves



Ratings according to EN13000.

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

Lifting capacities may vary depending on hook used or with/without auxiliary sheave.

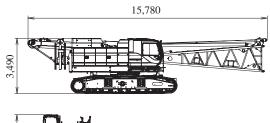
## **TRANSPORTATION PLAN**

Name	Dimension	Weight (kg)
Base Machine  • Boom base  • Gantry  • Crawler  • Wire rope (Front / rear / boom hoist)	15,780 064 87 084 87 3,500	59,305
• Gantry • Crawler • Wire rope (Front / rear / boom hoist)	9,420	56,700
Base Machine  • Boom base  • Gantry  • Wire rope (Front / rear / boom hoist)  • Without crawler	15,040 2,990 2,990 3,730 2,990	35,240
• Gantry • Wire rope (Front / rear / boom hoist) • Without crawler	8,650 2,990 2,990 2,990	32,635
Crawler	6,770	12,035

## **PARTS AND ATTACHMENTS**

#### **Base Machine**

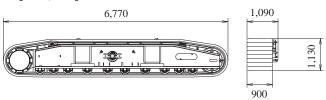
Boom base, Gantry, Crawler, Wire rope (Front/rear/boom hoist) Weight: 59,305 kg Width: 3,500 mm





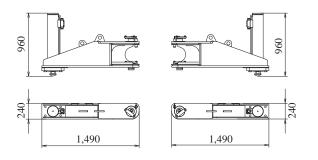
#### Crawler

Weight: 12,035 kg



#### Translifter

Weight: 370 kg / 1 piece

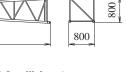


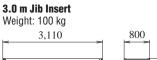
# Backstop Weight: 440 kg 6,790 Jib Tip Weight: 280 kg 800 5,000

#### Jib Base

Weight: 200 kg



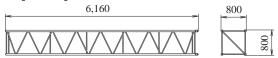


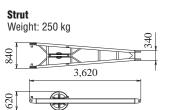


## 

#### 6.0 m Jib Insert

Weight: 180 kg

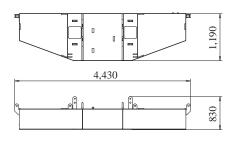






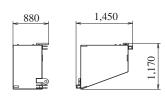
#### Counterweight No.1

Weight: 11,600 kg



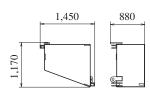
#### Counterweight No.3, No.5 (R)

Weight: 5,750 kg



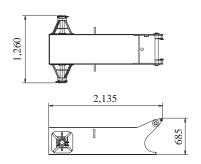
#### Counterweight No.2, No.4 (L)

Weight: 5,750 kg



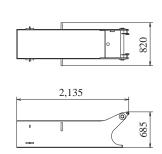
#### **Carbody Weight (With float)**

Weight: 3,320 kg / 1 piece

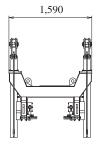


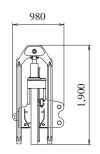
#### **Carbody Weight (Without float)**

Weight: 3,250 kg / 1 piece

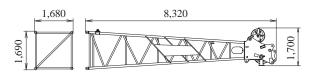


#### **Self Removal Unit** Weight: 870 kg

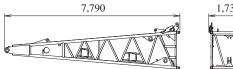




## **Boom Tip** Weight: 1,535 kg



#### **Boom Base** Weight: 2,235 kg



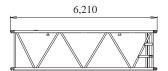


3.0 m **Boom Insert** Weight: 385 kg





6.1 m **Boom Insert** Weight: 655 kg



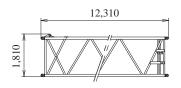


12.2 m **Boom Insert** Weight: 1,195 kg





12.2 m **Boom Insert (with Lug)** Weight: 1,220 kg



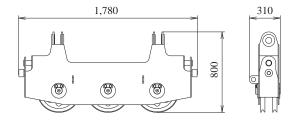


#### Gantry Weight: 1,320 kg

(C) o 1,250 5,360 09/

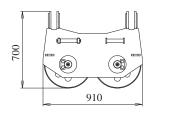
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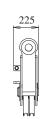
**Upper Spreader** Weight: 300 kg



**Lower Spreader** 

Weight: 200 kg

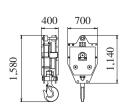




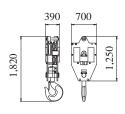
**Ball Hook** Weight: 450 kg



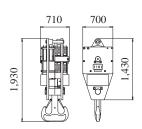
**35 t Hook** Weight: 700 kg



70 t Hook Weight: 900 kg



110 t Hook Weight: 1,700 kg



Note: This catalog may contain photographs of machines with specifications, attachments and optional equipment not certified for operation in your country. Please consult KOBELCO for those items you may require. Due to our policy of continual product improvements all designs and specifications are subject to change without advance notice.



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