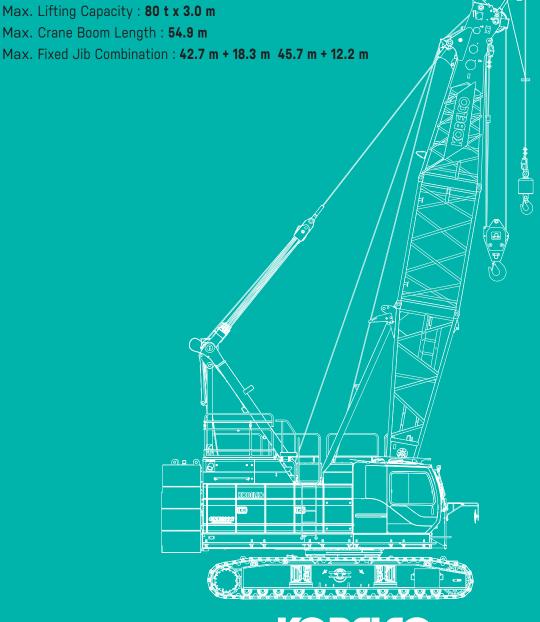
# **Hydraulic Crawler Crane**





Model: CKE800G-3

800G





# Fixed Jib Max. Lifting Capacity: 7.0 metric ton x 20.0 m Max. Combination: 42.7 m + 18.3 m 45.7 m + 12.2 m



# **CKE800G-3 CONTENTS**

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# **SPECIFICATIONS**



#### **Power Plant**

Model: HINO J08E-YD

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

turbo-charger, intercooled

Complies with NRMM (Europe) Stage V

Displacement: 7.684 L

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: Electrically controlled, in conjunction with floor mounted

pedal

Fuel filter: Replaceable paper element

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

Fuel tank capacity: 400 L

AdBlue® tank usable volume: 30 L



#### **Hydraulic System**

Main pumps: 3 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

Oil Quantity (at the reference level): 375 L



#### **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 16mm dia. wire rope

Line Speed: Single line on first drum layer
Hoisting/Lowering: 70 to 2 m/min

Boom hoisting/lowering: 16 mm x 150 m (5/8 in. x 492 ft)

Boom guy line: 30 mm (1-3/16 in.)

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

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 mm P.C.D x 545 mm wide drum, grooved for 22 mm wire rope. Rope capacity is 130 m working length and

335m storage length.

Diameter of wire rope

Main winch: 22 mm x 220 m Aux. winch: 22 mm x 130 m Third winch: 22 mm x 145 m

Line Speed\*:

Hoisting/lowering: 120 to 3 m/min

Line Pull:

Max. Line Pull\*\*: 153 kN {15.5 tf}

(Referential performance)

Rated Line Pull: 78 kN {8.0 tf}

\*Single line on first drum layer

<sup>\*\*</sup>Max. line pull is not based on wire rope strength



#### **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: 4.0 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.

Counterweight: 27.2 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 retractedfor transportation. Crawler belt tension is maintained by hydraulic jack force on the track-adjusting bearing block.

Carbody weight: 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): 800 mm wide each crawler

Max. gradeability: 40%



#### Weight

Including upper and lower machine, 27.2 ton counterweight and 6.5 ton carbody weight, basic boom (or basic boom + basic jib), hook, and other accessories.

Weight: 75.7 ton

Ground pressure: 84.8 kPa



#### **Attachment**

#### Boom & Jib:

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

#### Boom and Jib length

	Min. Length (Min. combination)	Max. Length (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: CKE800G-3)

Crane Boom				
Max. Lifting Capacity	80 t x 3.0 m			
Max. Length	54.9 m			
Fixed Jib				
Max. Lifting Capacity	7.0 t x 20.0 m			
Max. Combination	42.7 m + 18.3 m, 45.7 m +12.2 m			
Main & Aux. Winch				
Max. Line Speed (1st layer)	120 m/min			
Rated Line Pull (Single line)	78 kN {8.0 tf}			
Wire Rope Diameter	22 mm			
/ire Rope Length 220 m (Main), 130 m (Aux.)				
Brake Type (Free fall)	Wet-type multiple disc brake (Optional)			
Working Speed				
Swing Speed	4.0 min <sup>-1</sup> {rpm}			
Travel Speed	1.7/1.1 km/h			
Power Plant				
Model	HINO J08E-YD			
Engine Output	213 kW/2,100 min <sup>-1</sup>			
Fuel Tank	400 L			
AdBlue® Tank Usable Volume	30 L			

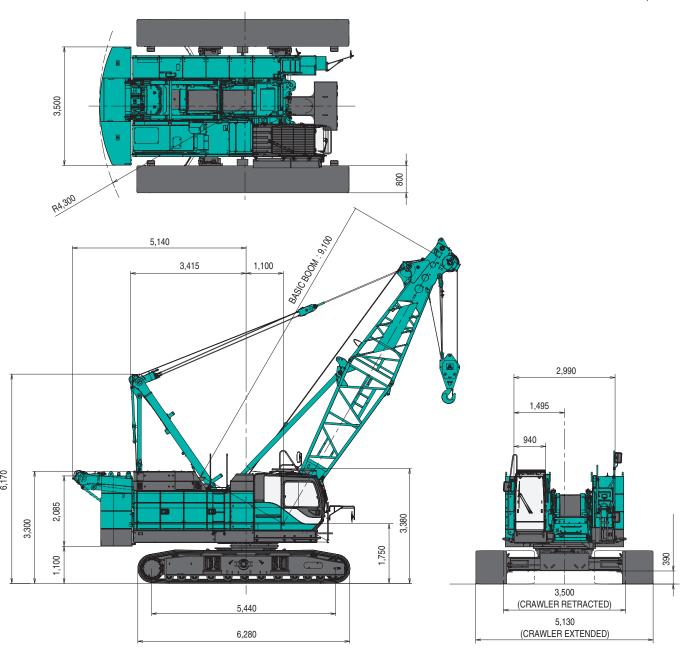
Hydraulic System				
Main Pumps	3 variable displacement			
Max. Pressure	31.9 MPa {325 kg/cm²}			
Oil Quantity (at the reference level)	375 L			
Self-Removal Device				
	Counterweight/self-removal device (option)			
Weight				
Operating Weight	75.7 t *1			
Ground Pressure	84.8 kPa			
Counterweight	27,200 kg			
Transport Weight	39,780 kg *2			

Units are SI units. { } indicates conventional units.

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

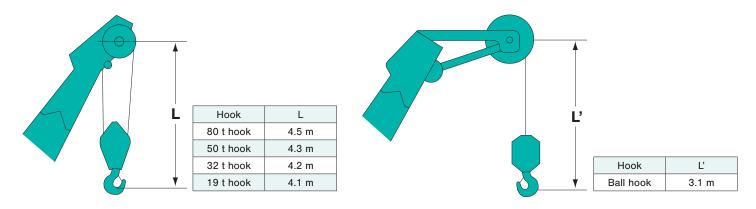
- \*1 Including upper and lower machine, 27.2 ton counterweight, 6.5 ton carbody weight, basic boom, hook, and other accessories.
- \*2 Base machine with boom base, gantry, crawlers, and wire ropes (front/rear/boom drum)

(Unit: mm)



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

# **Limit of Hook Lifting**



# **BOOM AND JIB ARRANGEMENTS**

### **Crane Boom Arrangements**

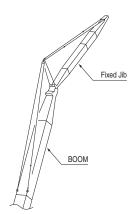
Boom length m (ft)	Boom arrangement
9.1 (30)	<1>□
12.2 (40)	<b>※ &lt;</b> ₹50 <b>1</b> >
15.2 (50)	< <u>16.1</u> → ※ < <u>15.03.01</u> →
18.3 (60)	
21.3 (70)	
24.4 (80)	★ ● 1
27.4 (90)	★ < 8   30   6.1   9.1   1   1   2       ★   9.1   9.1   1   2       ★   9.1   1       ★   9.1   1   2       ★   9.1   1   2       ★   9.1   1       ★   9.1       ★   9.1   1       ★   9.1   1       ★   9.1   1
30.5 (100)	
33.5 (110)	
36.6 (120)	★

Boom length m (ft)	Boom arrangement
39.6 (130)	
42.7 (140)	
45.7 (150)	X < 830 6.1 9.1 9.1 9.1 D  < 830 8.0 6.1 6.1 9.1 9.1 D  < 10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
48.8 (160)	
51.8 (170)	
54.9 (180)	

Symbol	Boom Length	Remarks	
$\triangleleft$ B	5.2 m	Boom Base	
$\triangleright$	3.9 m	Boom Tip	
3.0	3.0 m	Boom Insert	
6.1	6.1 m	Boom Insert	
6.1	6.1 m	Boom Insert (with lug)	
9.1	9.1 m	Boom Insert	
9.1	9.1 m	Boom Insert (with lug)	

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

## **Fixed Jib Arrangements**

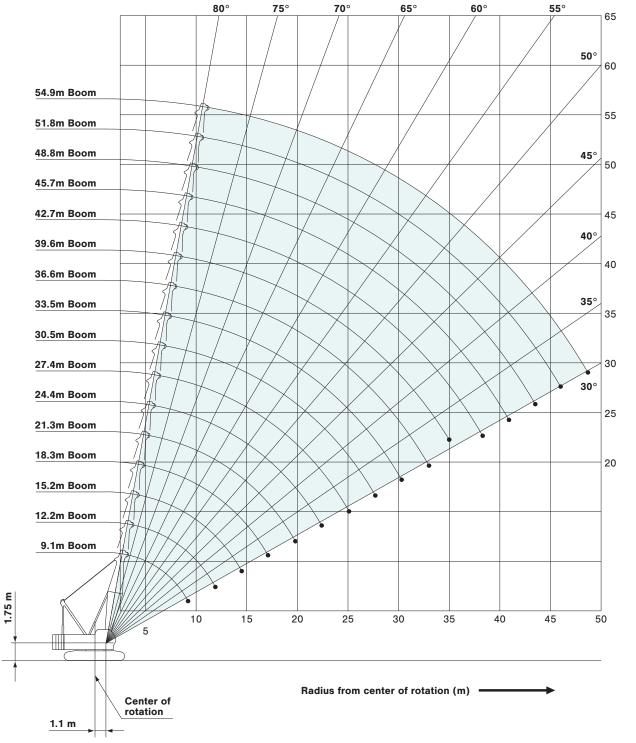


Crane boom length	Jib length m (ft)	Jib arrangement	
30.5 m to 45.7 m	6.1 (20)	3.0 / \3.0	
30.5 111 to 45.7 111	12.2 (40)	B 6.1 T	
30.5 m to 42.7 m	18.3 (60)	<u> </u>	

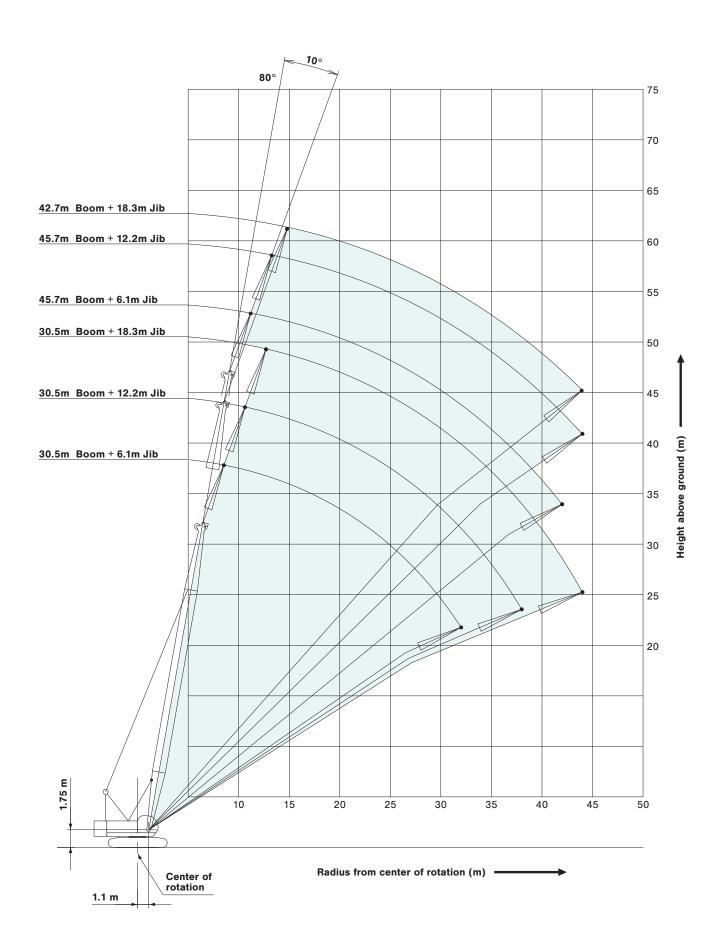
Symbol	Jib Length	Remarks
В	3.0 m	Jib Base
	3.0 m	Jib Tip
6.1	6.1 m	Jib Insert

<sup>%</sup>indicates the most flexible combination of boom inserts, which can be modified to form all shorter boom arrangements.

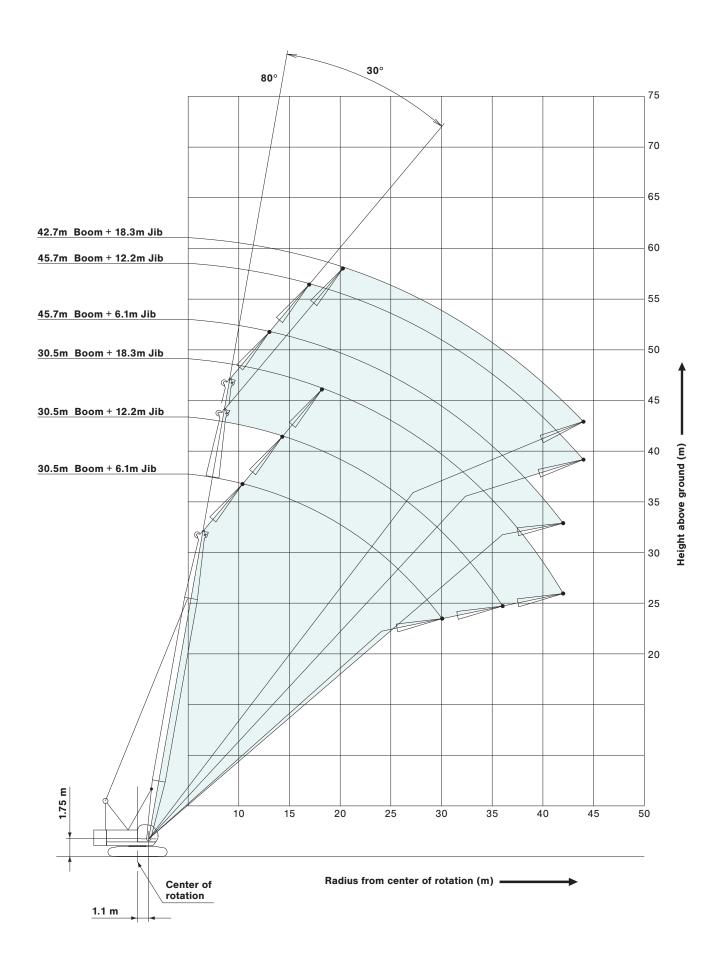
### **Crane Boom**



# Fixed Jib 10°



### Fixed Jib 30°



### SUPPLEMENTAL DATA

- Ratings are calculated to comply with EN13000, ISO 4305 and include factors based on a 4 degree tipping angle.
- Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
- The weight of hook block, slings, and all other load handling accessories shall be considered part of the lifted load.
- 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 the 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 12 parts of 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 based on structural competence.
- The minimum rated load is 1.1 t.
- Crawlers must be fully extended for all crane operations.
- Ratings shown are based on allowable wind speed of 9.8 m/s or less.

The wind speed mentioned here means the instantaneous wind speed.

Ratings shown are based on allowable travel speed of 0.1 m/s

#### (Crane boom lifting)

 The total load that can be lifted is the value of the 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 of the 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 30.5 m to 45.7 m.

But 18.3 m jib is not allowed to install on 45.7 m main boom.

#### <Reference Information>

#### Main hoist loads

No. of Parts of Line	1	2	3	4	5
Maximum Loads (kN)	78	157	235	314	392
Maximum Loads (t)	8.0	16.0	24.0	32.0	40.0

No. of Parts of Line	6	7	8	9	10
Maximum Loads (kN)	471	549	628	706	785
Maximum Loads (t)	48.0	56.0	64.0	72.0	80.0

#### **Auxiliary hoist loads**

No. of Parts of Line	1
Maximum Loads (kN)	69
Maximum Loads (t)	7.0

Weight of hook block									
Hook Block	80 t	50 t	32 t	19 t	Ball Hook				
Weight (t)	0.8	0.7	0.5	0.4	0.16				

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

#### Assembling the counterweight (standard type)

27.2 ton counterweight 6.5 ton carbody weight

	No.5
No.3	
No.2	
No.1	
	No.2

Counterweights

Carbody weigh	ts

#### Assembling the counterweight (optional type)

(Equipped with self removal device)

26.1 ton counterweight6.5 ton carbody weight

No.4		No.5
No.2		No.3
	No.1	

Counterweights

Carbody weights

 Although the total weight of the counterweight is different between machine equipped with self-removal device and machine not equipped with self-removal device, the lifting capacity is the same.

# **LIFTING CAPACITIES**

	Cra	ane	Во	om	Lift	ting	Ca	ıpa	citie	es							jht: 27.2 t ght: 6.5 t
																Unit:	metric ton
Boom length Working (m) radius (m)	0.1	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	80.0	3.6m/76.2															3.0
4.0	69.0	72.6	4.2m/69.6	4.7m/59.3													4.0
5.0	57.9	57.7	57.5	55.1	5.2m/50.0	5.7m/42.9											5.0
6.0	47.5	47.3	46.7	44.6	42.6	40.8	6.3m/37.2	6.8m/33.0									6.0
7.0	39.8	39.6	38.9	37.3	35.8	34.5	33.3	32.0	7.3m/29.5	7.9m/26.4							7.0
8.0	32.9	32.7	32.5	32.0	30.9	29.8	28.8	27.8	26.9	26.0	8.4m/24.0						8.0
9.0	26.0	27.8	27.6	27.5	27.0	26.2	25.4	24.5	23.8	23.1	22.4	21.7	9.4m/20.1				9.0
10.0	9.2m/24.5	24.1	23.9	23.8	23.7	23.3	22.6	21.9	21.3	20.6	20.0	19.4	19.0	18.4	10.5m/17.1	11.0m/15.7	10.0
12.0		11.9m/19.3	18.8	18.7	18.6	18.5	18.4	17.9	17.4	16.9	16.5	16.0	15.6	15.1	14.8	14.4	12.0
14.0			15.4	15.3	15.1	15.0	14.9	14.8	14.7	14.2	13.9	13.5	13.2	12.8	12.5	12.1	14.0
16.0			14.5m/14.7	12.9	12.7	12.6	12.5	12.3	12.2	12.1	11.9	11.5	11.3	10.9	10.7	10.4	16.0
18.0				17.1m/11.8	10.9	10.8	10.7	10.5	10.4	10.3	10.2	10.0	9.8	9.4	9.3	9.0	18.0
20.0					19.8m/9.6	9.3	9.2	9.1	9.0	8.8	8.7	8.6	8.5	8.3	8.1	7.8	20.0
22.0						8.2	8.1	7.9	7.8	7.7	7.6	7.5	7.4	7.2	7.1	6.9	22.0
24.0						22.4m/8.0	7.2	7.0	6.9	6.8	6.6	6.5	6.4	6.3	6.2	6.1	24.0
26.0							25.1m/6.8	6.2	6.1	6.0	5.9	5.7	5.6	5.5	5.4	5.3	26.0
28.0								27.7m/5.7	5.5	5.4	5.2	5.1	5.0	4.9	4.8	4.7	28.0
30.0									4.9	4.8	4.7	4.5	4.4	4.3	4.2	4.1	30.0
32.0									30.3m/4.9	4.3	4.2	4.0	3.9	3.8	3.7	3.6	32.0
34.0										33.0m/4.1	3.8	3.6	3.5	3.4	3.3	3.2	34.0
36.0											35.0m/3.5	3.3	3.2	3.0	2.9	2.8	36.0
38.0												2.9	2.8	2.7	2.6	2.5	38.0
40.0												38.3m/2.9	2.6	2.4	2.3	2.2	40.0
42.0													40.9m/2.4	2.1	2.0	1.9	42.0
44.0														43.5m/2.0	1.8	1.7	44.0
46.0															1.6	1.5	46.0
48.0																1.3	48.0
50.0																48.7m/1.2	50.0
Reeves	10	10	9	8	7	6	5	5	4	4	3	3	3	3	3	2	Reeves

Note:

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.

Boom leng
Jib lengt

# Fixed Jib Lifting Capacities (Jib Offset Angle: 10°)

Counterweight: 27.2 t Carbody Weight: 6.5 t

		_								U	mit: metric tor	1
В	oom length (m)		30.5			33.5			36.6		Boom length (m)	)
Γ,	Jib length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	Jib length (m)	
	9.0	7.0			7.0						9.0	
	10.0	7.0			7.0			7.0			10.0	
	12.0	7.0	7.0	4.5	7.0	7.0		7.0	7.0		12.0	
	14.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	14.0	
	16.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	16.0	
	18.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	18.0	
	20.0	6.8	7.0	4.5	6.8	6.9	4.5	6.7	6.9	4.5	20.0	
Œ	22.0	6.1	6.4	4.5	6.0	6.2	4.5	5.9	6.2	4.5	22.0	8
sn (	24.0	5.4	5.6	4.5	5.2	5.5	4.5	5.1	5.4	4.5	24.0	Working radius
radius	26.0	4.7	5.0	4.5	4.6	4.8	4.5	4.5	4.8	4.5	26.0	ğ
	28.0	4.2	4.4	4.5	4.1	4.3	4.4	4.0	4.2	4.3	28.0	adi
Working	30.0	3.8	4.0	4.1	3.6	3.8	3.9	3.5	3.7	3.9		
×	32.0	3.4	3.6	3.7	3.2	3.4	3.5	3.1	3.3	3.5	32.0	3
	34.0		3.2	3.3	2.9	3.1	3.2	2.8	3.0	3.1	34.0	
	36.0		2.9	3.0	2.6	2.8	2.9	2.5	2.7	2.8	36.0	
	38.0		2.6	2.8		2.5	2.6	2.2	2.4	2.5	38.0	
	40.0			2.5		2.3	2.4		2.1	2.3	40.0	
	42.0			2.3		2.0	2.1		1.9	2.0	42.0	
	44.0			2.1			1.9		1.6	1.8	44.0	
	Reeves	1	1	1	1	1	1	1	1	1	Reeves	

В	oom length (m)		39.6			42.7		45.7			Boom length (m)	
	Jib length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2		Jib length (n	1)
	10.0	7.0									10.0	П
	12.0	7.0			7.0			7.0			12.0	]
	14.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0		14.0	
	16.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0		16.0	]
	18.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0		18.0	]
	20.0	6.6	6.7	4.5	6.6	6.7	4.5	6.5	6.6		20.0	]
	22.0	5.8	6.0	4.5	5.7	6.0	4.5	5.6	5.8		22.0	<b>S</b>
Œ	24.0	5.0	5.3	4.5	4.9	5.2	4.5	4.8	5.1		24.0	Working
radius	26.0	4.4	4.6	4.5	4.3	4.5	4.5	4.2	4.4		26.0	gri
- 1	28.0	3.9	4.1	4.2	3.8	4.0	4.1	3.6	3.9		28.0	ra
Working	30.0	3.4	3.6	3.7	3.3	3.5	3.6	3.2	3.4		30.0	radius
Į.	32.0	3.0	3.2	3.3	2.9	3.1	3.2	2.7	3.0		32.0	(E
>	34.0	2.6	2.9	3.0	2.5	2.8	2.9	2.3	2.6		34.0	ا ت
	36.0	2.3	2.5	2.7	2.2	2.4	2.6	2.0	2.2		36.0	]
	38.0	2.0	2.2	2.4	1.8	2.1	2.2	1.6	1.9		38.0	]
	40.0	1.7	1.9	2.1	1.6	1.8	2.0	1.4	1.6		40.0	
	42.0		1.7	1.8	1.3	1.6	1.7	1.1	1.4		42.0	
	44.0		1.4	1.6	1.1	1.3	1.5		1.1		44.0	
	Reeves	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.

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

# **LIFTING CAPACITIES**

#### **Fixed Jib Lifting Capacities** Counterweight: 27.2 t Carbody Weight: 6.5 t (Jib Offset Angle: 30°) Unit: metric ton 30.5 33.5 36.6 Boom length (m) Boom length (m) 12.2 18.3 12.2 18.3 Jib length (m) 6.1 6.1 6.1 12.2 18.3 Jib length (m) 7.0 7.0 7.0 12.0 12.0 14.0 7.0 7.0 7.0 14.0 16.0 7.0 5.0 7.0 5.0 7.0 5.0 16.0 18.0 7.0 5.0 3.2 7.0 5.0 3.2 7.0 5.0 18.0 6.9 6.8 5.0 3.2 6.8 3.2 20.0 5.0 3.2 5.0 20.0 22.0 5.0 5.0 3.2 22.0 6.2 3.2 6.1 6.1 5.0 3.2 24.0 5.5 5.0 3.2 5.4 5.0 3.2 5.3 5.0 3.2 24.0 Working radius (m) 26.0 4.8 4.9 3.2 4.7 5.0 3.2 4.6 3.2 26.0 28.0 4.3 4.6 3.2 4.2 4.5 3.2 4.1 4.4 3.2 28.0 30.0 3.8 4.1 3.1 3.7 4.0 3.2 3.6 3.9 3.2 30.0 32.0 3.7 3.3 3.6 3.0 3.2 3.5 3.1 32.0 3.0 $\Xi$ 34.0 3.3 2.8 3.2 2.9 2.9 3.1 3.0 34.0 3.0 2.7 2.9 2.8 2.8 36.0 2.9 36.0 38.0 2.6 2.6 2.7 2.5 2.7 38.0 40.0 2.5 2.5 2.2 2.5 40.0 42.0 2.4 2.3 2.2 42.0 44.0 2.1 2.0 44.0 Reeves 1 1 1 Reeves

В	oom length (m)		39.6			42.7			45.7	Boom length	(m)
	Jib length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	Jib length (r	n)
	12.0	7.0								12.0	
	14.0	7.0			7.0			7.0		14.0	1
	16.0	7.0	5.0		7.0			7.0		16.0	
	18.0	7.0	5.0		7.0	5.0		7.0	5.0	18.0	7
	20.0	6.6	5.0	3.2	6.6	5.0	3.2	6.6	5.0	20.0	
	22.0	5.9	5.0	3.2	5.9	5.0	3.2	5.8	5.0	22.0	]
Œ	24.0	5.2	5.0	3.2	5.1	5.0	3.2	5.0	5.0	24.0	8
	26.0	4.5	4.9	3.2	4.4	4.8	3.2	4.3	4.7	26.0	紊
radius	28.0	4.0	4.3	3.2	3.9	4.3	3.2	3.8	4.2	28.0	19
	30.0	3.5	3.8	3.2	3.4	3.8	3.2	3.3	3.7	30.0	Working radius
Working	32.0	3.1	3.4	3.2	3.0	3.3	3.2	2.9	3.2	32.0	s
N <sub>o</sub>	34.0	2.7	3.0	3.1	2.6	3.0	3.2	2.4	2.9	34.0	3
	36.0	2.3	2.7	2.9	2.2	2.6	2.8	2.1	2.5	36.0	
	38.0	2.0	2.4	2.6	1.9	2.3	2.5	1.7	2.1	38.0	1
	40.0		2.1	2.3	1.6	2.0	2.3	1.4	1.8	40.0	
	42.0		1.8	2.1		1.7	2.0	1.2	1.5	42.0	1
	44.0		1.5	1.8		1.4	1.7		1.3	44.0	1
	Reeves	1	1	1	1	1	1	1	1	Reeves	7

Note:

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.
- The weight of bucket, slings and all other load handling accessories shall be considered part of the lifted load.
- 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 the 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 12 parts of 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.
- · Crawlers must be fully extended for all crane operations.

#### (Clamshell bucket lifting)

- The total load that can be lifted is the value of the 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)	69
Maximum Loads (t)	7.0

#### Assembling the counterweight (standard type)

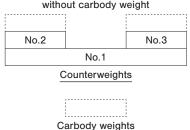
22.8 ton counterweight

	without carb	ody weigh	t
[			
	No	.3	
	No	.2	
	No	.1	
	Counter	weights	
	Carbody	weights	

#### Assembling the counterweight (optional type)

(Equipped with self removal device)

17.7 ton counterweight without carbody weight



 Although the total weight of the counterweight is different between machine equipped with self-removal device and machine not equipped with self-removal device, the lifting capacity is the same.

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

# **LIFTING CAPACITIES**

	Clamshell Rating Charts Crane Boom Capacities									
Boom			•		1		Unit: metric ton			
Load (m) radius (m)	9.1	12.2	15.2	18.3	21.3		length Load (m) radius (m			
5.0	7.0						5.0			
5.5	7.0						5.5			
6.0	7.0	7.0					6.0			
7.0	7.0	7.0	7.0				7.0			
8.0	7.0	7.0	7.0	7.0			8.0			
9.0	7.0	7.0	7.0	7.0	7.0		9.0			
10.0		7.0	7.0	7.0	7.0		10.0			
12.0			7.0	7.0	7.0		12.0			
14.0			7.0	7.0	7.0		14.0			
16.0				7.0	7.0		16.0			
18.0					7.0		18.0			
20.0							20.0			
22.0							22.0			
24.0							24.0			
26.0							26.0			
28.0							28.0			
30.0							30.0			
32.0							32.0			
34.0							34.0			
36.0							36.0			
38.0							38.0			
40.0							40.0			
42.0							42.0			
44.0							44.0			
Reeves	1	1	1	1	1		Reeves			

Note:

# SUPPLEMENTAL DATA FOR REDUCED WEIGHTS RATING CHART

- Ratings are calculated to comply with EN13000, ISO 4305 and include factors based on a 4 degree tipping angle.
- Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load
- The weight of hook block, slings, and all other load handling accessories shall be considered part of the lifted load.
- 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 the 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 12 parts of 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 based on structural competence.
- The minimum rated load is 1.1 t.
- · Crawlers must be fully extended for all crane operations.
- Ratings shown are based on allowable wind speed of 9.8 m/s or less.

The wind speed mentioned here means the instantaneous wind speed.

 Ratings shown are based on allowable travel speed of 0.1 m/s or less.

#### (Crane boom lifting)

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

#### Main hoist loads

No. of Parts of Line	1	2	3	4	5
Maximum Loads (kN)	78	157	235	314	392
Maximum Loads (t)	8.0	16.0	24.0	32.0	40.0

No. of Parts of Line	6	7	8	9	10
Maximum Loads (kN)	471	549	628	706	785
Maximum Loads (t)	48.0	56.0	64.0	72.0	80.0

#### **Auxiliary hoist loads**

No. of Parts of Line	1
Maximum Loads (kN)	69
Maximum Loads (t)	7.0

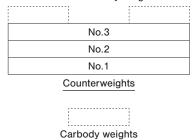
Weight of hook block					
Hook Block 80 t 50 t 32 t 19 t 7.0 t Ball Hook					7.0 t Ball Hook
Weight (t)	0.8	0.7	0.5	0.4	0.16

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

#### <Reference Information>

#### Assembling the counterweight (standard type)

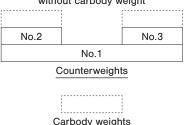
22.8 ton counterweight without carbody weight



#### Assembling the counterweight (optional type)

(Equipped with self removal device)

17.7 ton counterweight without carbody weight



 Although the total weight of the counterweight is different between machine equipped with self-removal device and machine not equipped with self-removal device, the lifting capacity is the same.

# **LIFTING CAPACITIES**

#### **Reduced Weights Rating Charts** Counterweight: 22.8 t **Without Carbody Weight Crawler Fully Extended Crane Boom Lifting Capacities** Unit: metric ton 12.2 15.2 21.3 24.4 27.4 30.5 36.6 39.6 Load radius (m 3.0m/73.8 3.0 3.0 3.5 68.7 3.6m/66.9 3.5 4.0 4.2m/58.4 4.0 4.5 55.4 55.4 53.3 4.7m/47.4 4.5 5.0 45.9 45.8 45.8 44.0 5.2m/38.9 5.0 5.7m/33.4 5.5 39.2 39.1 39.0 39.0 37.2 5.5 34.1 6.3m/29.2 6.8m/25.7 6.0 34.0 33.9 33.9 33.7 32.2 6.0 27.0 7.3m/22.7 7.9m/20.3 7.0 7.0 26.9 26.8 26.8 26.7 26.6 26.0 24.9 8.0 22.3 22.2 22.1 22.1 22.0 21.9 21.8 21.6 20.8 20.1 8.4m/18.4 8.0 9.0 19.0 18.9 18.7 18.7 18.6 18.5 18.4 18.3 18.3 17.7 17.1 9.0 10.0 9.2m/18.5 16.3 16.2 16.2 16.1 16.0 15.9 15.8 15.7 15.6 15.2 10.0 11.9m/12.9 12.6 12.5 12.4 12.3 12.2 12.2 12.0 12.0 12.0 12.0 12.7 14.0 10.3 10.3 10.2 10.1 10.0 9.8 9.8 9.7 9.6 14.0 16.0 14.5m/9.9 8.6 8.5 8.4 8.3 8.1 8.1 8.0 7.9 16.0 18.0 17.1m/7.9 7.2 7.1 7.0 6.9 6.8 6.7 6.6 18.0 19.8m/6.3 6.0 5.9 5.9 5.6 20.0 5.7 20.0 22.0 5.4 5.3 5.1 5.1 22.0 22.4m/5.3 24.0 4.6 4.5 4.4 4.3 4.2 24.0 26.0 25.1m/4.3 4.0 3.9 3.8 3.7 26.0 28.0 27.7m/3.5 3.5 3.2 28.0 3.3 30.0 2.9 2.8 30.0 30.3m/3.0 32.0 2.6 2.4 32.0 33.0m/2.3 2.1 34.0 34.0 36.0 35.0m/1.9 36.0

Boom length Load (m) radius (m)	40.7	45.7	48.8	51.8				Boom length (m) Load radius (m)
9.0	9.0m/16.5	9.4m/15.0						9.0
10.0	14.7	14.2	10.0m/13.7	10.5m/12.6				10.0
12.0	11.8	11.5	11.1	10.8				12.0
14.0	9.4	9.4	9.2	8.9				14.0
16.0	7.7	7.7	7.6	7.5				16.0
18.0	6.5	6.4	6.3	6.2				18.0
20.0	5.5	5.4	5.3	5.2				20.0
22.0	4.7	4.7	4.5	4.4				22.0
24.0	4.1	4.0	3.9	3.8				24.0
26.0	3.5	3.5	3.3	3.2				26.0
28.0	3.1	3.0	2.9	2.7				28.0
30.0	2.6	2.6	2.4	2.3				30.0
32.0	2.3	2.2	2.1	1.9				32.0
34.0	2.0	1.9	1.7	1.6				34.0
36.0	1.7	1.6	1.4	1.3				36.0
38.0	1.4	1.3	1.2	1.1				38.0
40.0	38.3m/1.3	1.1						40.0
42.0								42.0
44.0								44.0
46.0								46.0
48.0								48.0
50.0								50.0
Reeves	3	2	2	2				Reeves

5

4

4

3

3

3

Reeves



Reeves

10

9

8

6

5

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.

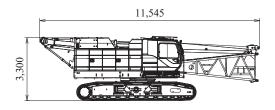
# TRANSPORTATION PLAN

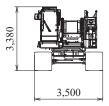
Name	Dimension		Weight (kg)
Base Machine Gantry Boom base Boom drum Wire rope (Front / rear / boom drum) Without self removal device (option) Gide catwalk Crawler Without translifter (option)	11,545	3,500	39,780
Base Machine Gantry Without boom base Boom drum Wire rope (Front / rear / boom drum) Without self removal device (option) Gide catwalk Crawler Without translifter (option)	8,215	3,500	37,800
Base Machine  Gantry  Boom base  Boom drum  Wire rope (Front / rear / boom drum)  Without self removal device (option)  Without side catwalk  Without crawler  Translifter (option)	11,545	2,990	26,660
Base Machine Gantry Without boom base Boom drum Wire rope (Front / rear / boom drum) Without self removal device (option) Without side catwalk Without crawler Translifter (option)	7,700	2,990	24,680
Crawler	6,280	1,020	7,130

# **PARTS AND ATTACHMENTS**

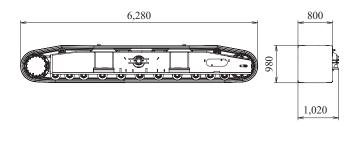
#### **Base Machine**

Boom base, Gantry, Crawler, Wire rope (Front/rear/boom drum) Weight: 39,780 kg Width: 3,500 mm





#### Crawler Weight: 7,130 kg



#### Backstop (1 piece)

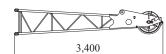
Weight: 245 kg



### Jib Tip

Weight: 145 kg





#### Jib Base

Weight: 125 kg

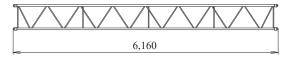




#### 6.1 m

Jib Insert

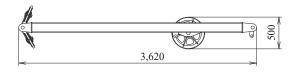
Weight: 140 kg





#### **Jib Strut**

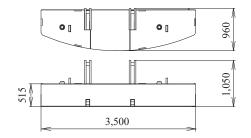
Weight: 190 kg





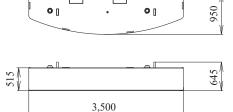
#### Counterweight No.1

Weight: 8,530 kg



#### Counterweight No.2

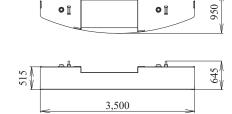
Weight: 7,860 kg



#### Counterweight No.3

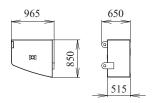
Weight: 6,410 kg

**o** [



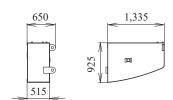
#### Counterweight No.4 (L)

Weight: 1,660 kg



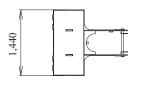
#### Counterweight No.5 (R)

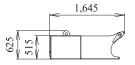
Weight: 2,740 kg



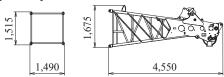
#### **Carbody Weight**

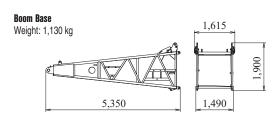
Weight: 3,250 kg / 1 piece



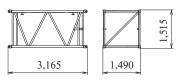




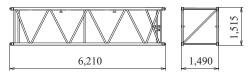




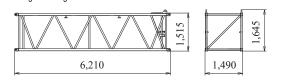
3.0 m **Boom Insert** Weight: 310 kg



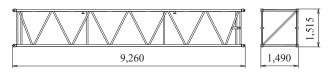
6.1 m **Boom Insert** Weight: 525 kg



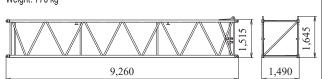




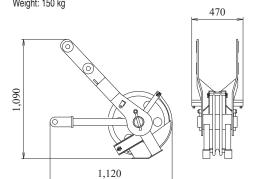
#### 9.1 m Boom Insert Weight: 745 kg



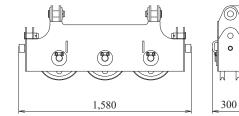
#### 9.1 m Boom Insert With Lug Weight: 770 kg



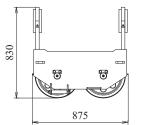
**Auxiliary Sheave** Weight: 150 kg



Upper Spreader Weight: 280 kg



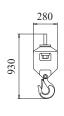
**Lower Spreader** Weight: 215 kg



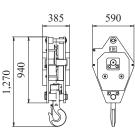
300

**Ball Hook** 

Weight: 160 kg

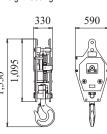


19 t Hook Weight: 400 kg

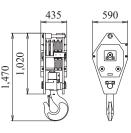


32 t Hook Weight: 500 kg

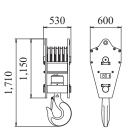
089



50 t Hook Weight: 650 kg



80 t Hook Weight: 800 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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