

# Hydraulic Crawler Crane

# CKE

EU Stage V  
Engine

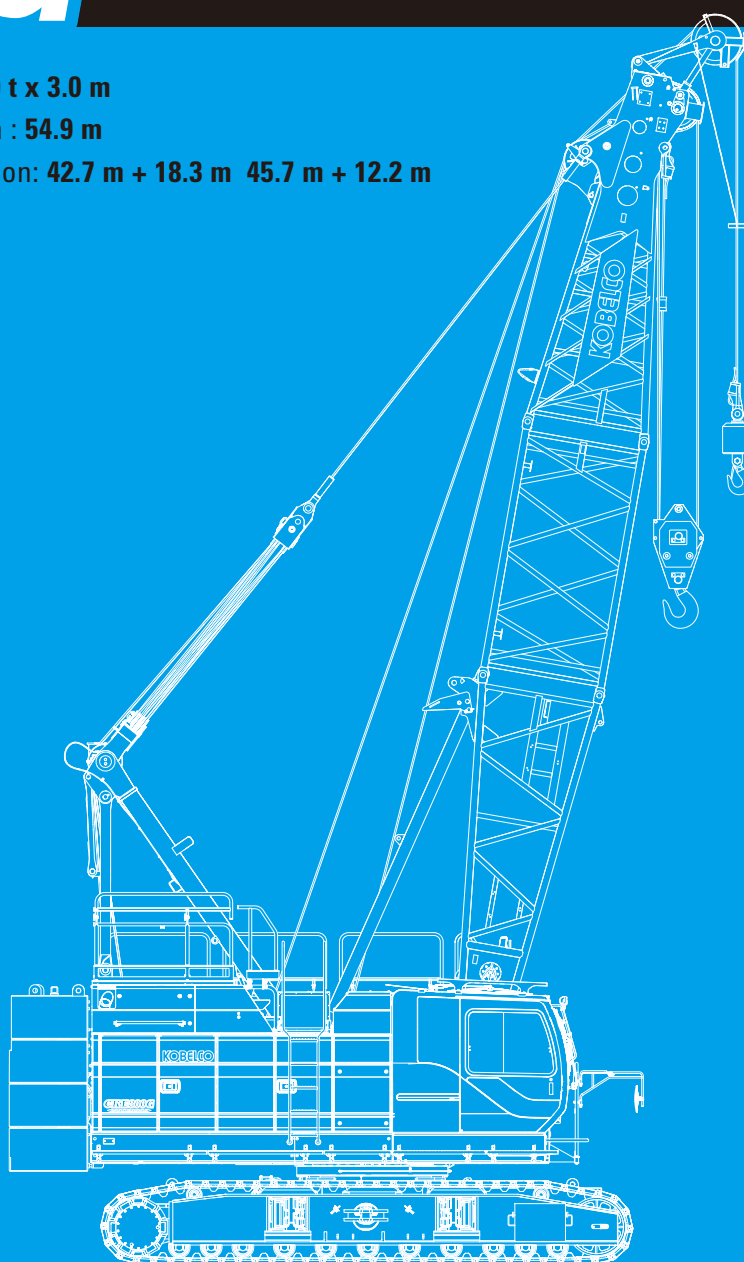
# 800G

Model : CKE800G-3

Max. Lifting Capacity : **80 t x 3.0 m**

Max. Crane Boom Length : **54.9 m**

Max. Fixed Jib Combination: **42.7 m + 18.3 m 45.7 m + 12.2 m**



# KOBELCO

# CONFIGURATION

## Fixed Jib

Max. Lifting Capacity:  
7.0 metric ton x 20.0 m

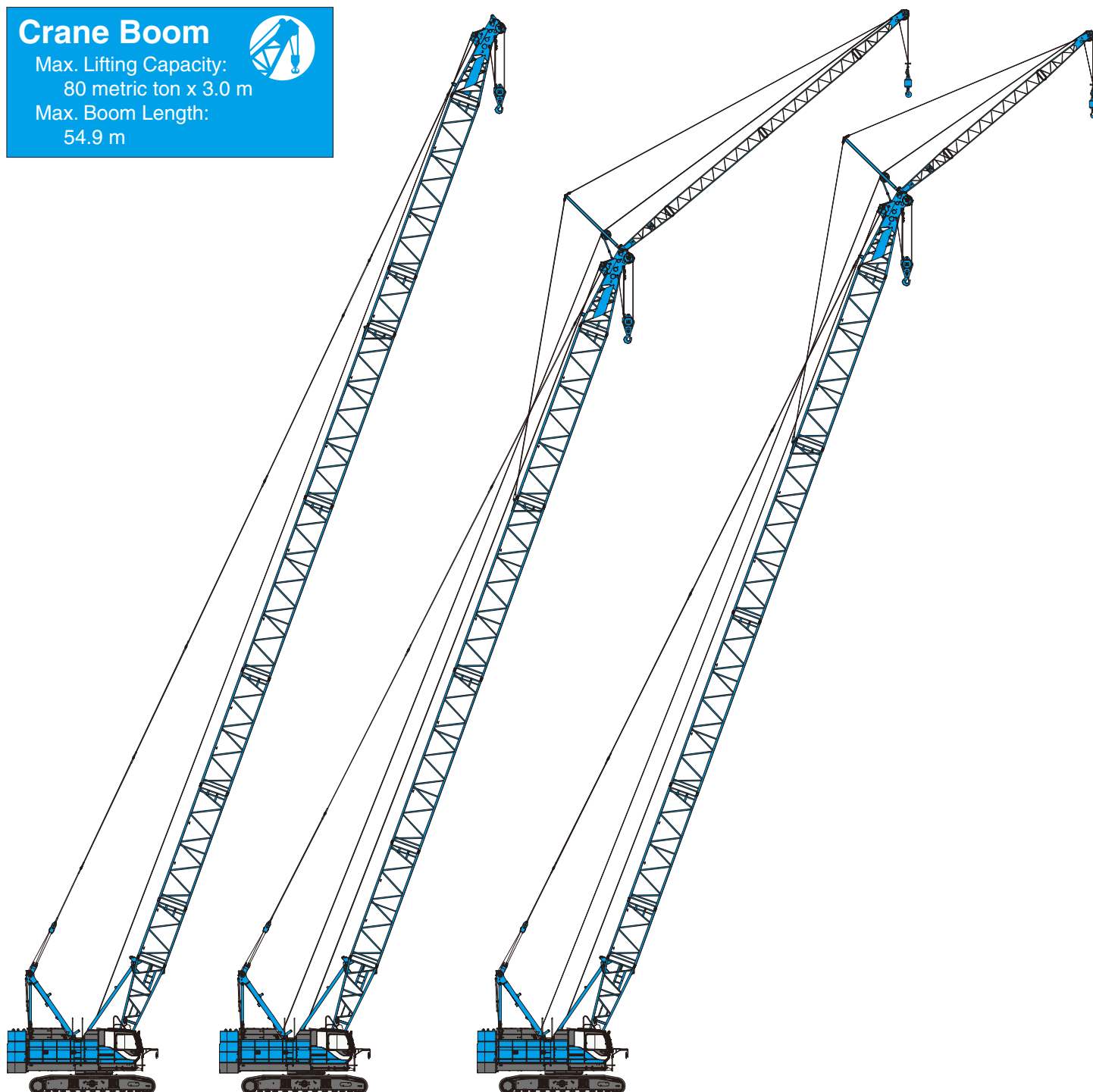
Max. Combination:  
42.7 m + 18.3 m    45.7 m + 12.2 m



## Crane Boom

Max. Lifting Capacity:  
80 metric ton x 3.0 m

Max. Boom Length:  
54.9 m



# **CKE800G-3**

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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 liters

**Rated power:** 213 kW/2100 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:** 30 liters



## 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

**Hydraulic Tank 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 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 multiple-disc 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



## Swing System

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

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

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

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

**Swing Speed:** 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.

**Counter weight:** 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 retracted for 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, 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
Wire 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/2100 min <sup>-1</sup>
Fuel Tank	400 liters
AdBlue <sup>®</sup> Tank	30 liters

### Hydraulic System

Main Pumps	3 variable displacement
Max. Pressure	31.9 Mpa {325 kg/cm <sup>2</sup> }
Hydraulic Tank Capacity	440 liters

### Self-Removal Device

	Counterweight/self-removal device(option)
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### Weight

Operating Weight	75.7 t <sup>*1</sup>
Ground Pressure	84.8 kPa
Counterweight	27,180 kg
Transport Weight	39,780 kg <sup>*2</sup>

Units are SI units. { } indicates conventional units.

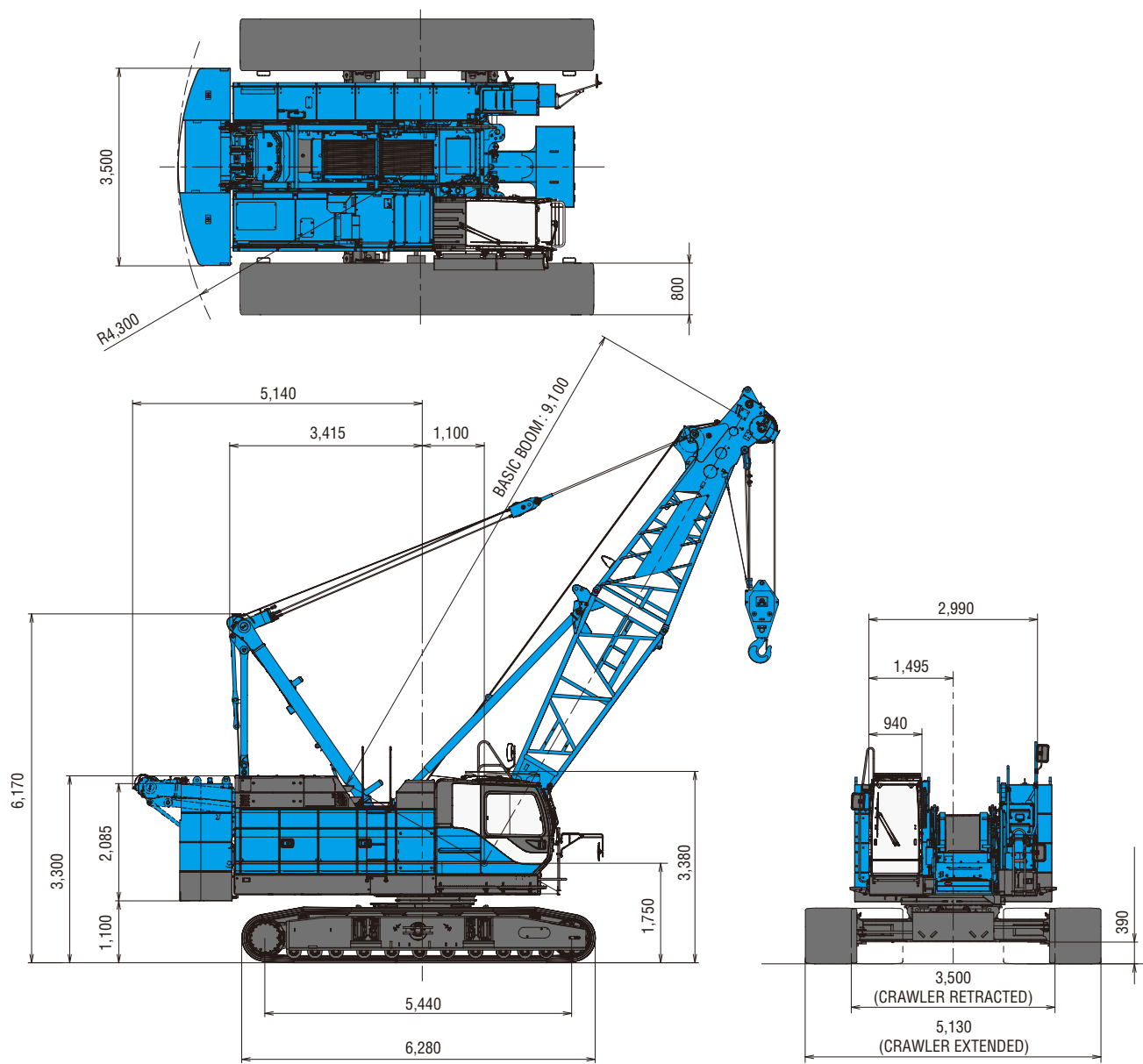
Line speeds in table are for light loads. Line speed varies with load.

<sup>\*1</sup> Including upper and lower machine, 27.2 ton counterweight, 6.5 ton carbody weight, basic boom, hook, and other accessories.

<sup>\*2</sup> Base machine with boom base, gantry, crawlers, and wire ropes (front/rear/boom hoist)

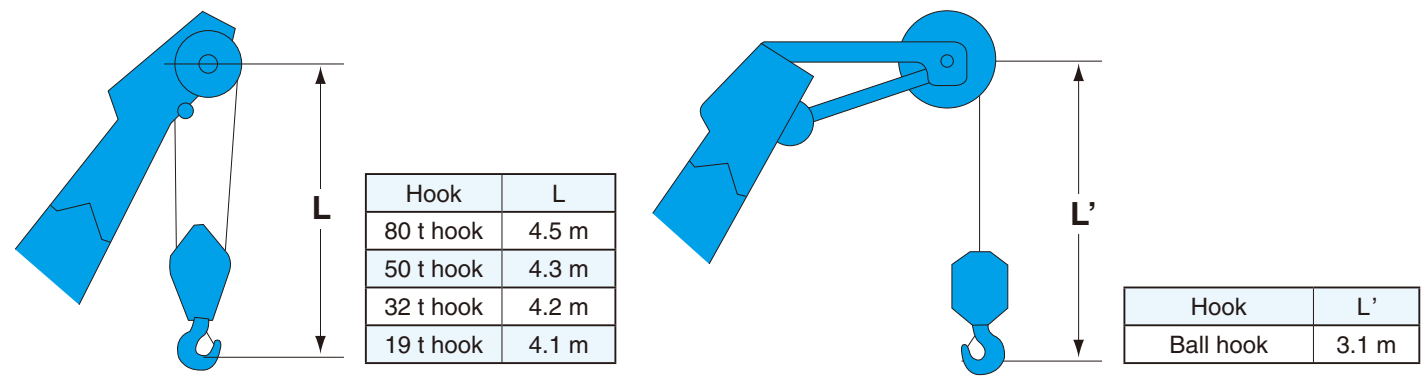
# GENERAL DIMENSIONS

(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

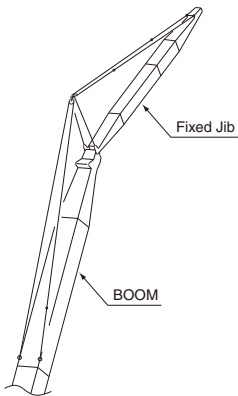
Boom length m (ft)	Boom arrangement
9.1 (30)	※
12.2 (40)	※
15.2 (50)	 ※
18.3 (60)	※ 
21.3 (70)	  ※
24.4 (80)	※  
27.4 (90)	※  
30.5 (100)	  ※
33.5 (110)	   ※
36.6 (120)	※  

Boom length m (ft)	Boom arrangement
39.6 (130)	  ※ 
42.7 (140)	  ※ 
45.7 (150)	※ 
48.8 (160)	 ※
51.8 (170)	※ 
54.9 (180)	※ 

Symbol	Boom Length	Remarks
	5.2 m	Boom Base
	3.9 m	Boom Top
	3.0 m	Insert Boom
	6.1 m	Insert Boom
	6.1 m	Insert Boom with lug
	9.1 m	Insert Boom
	9.1 m	Insert Boom with lug

↗ mark shows the guy line installing position when the fixed jib is used.  
※ indicates the most flexible combination of insert luffing booms, which can be modified to form all shorter luffing boom arrangements.

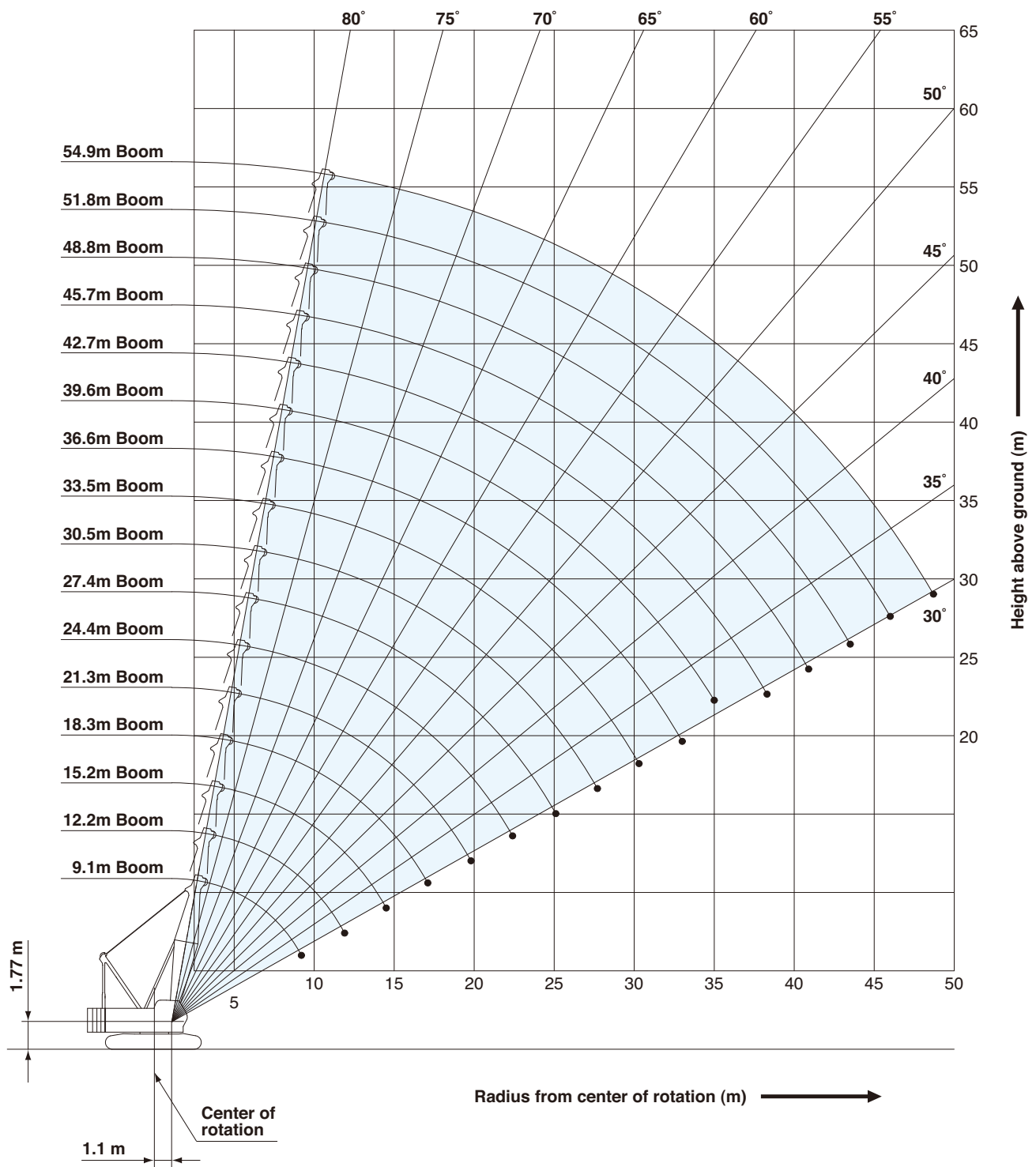
## Fixed Jib Arrangements



Crane boom length	Jib length m (ft)	Jib arrangement
30.5 m ~ 45.7 m	6.1 (20)	
	12.2 (40)	
30.5 m ~ 42.7 m	18.3 (60)	

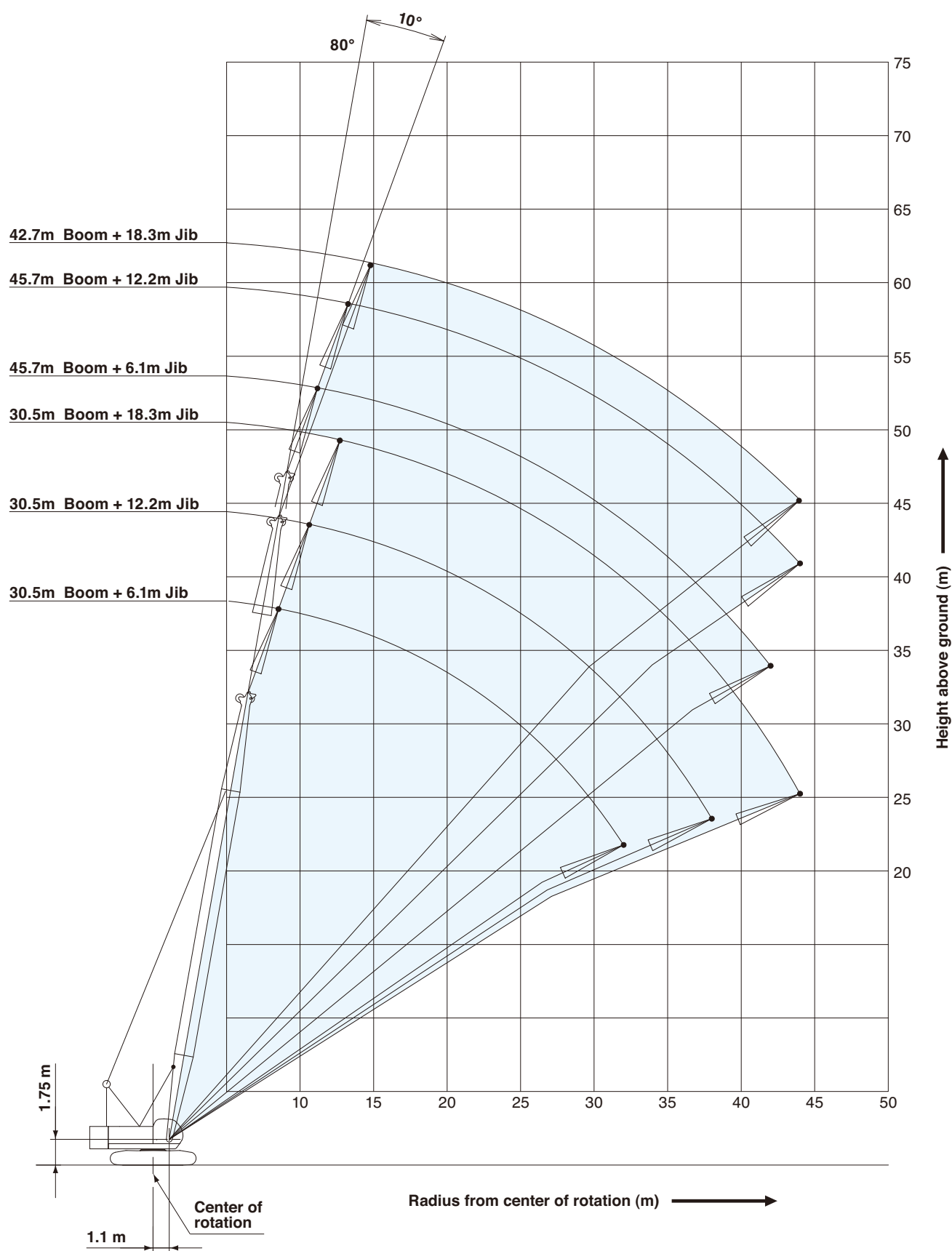
Symbol	Jib Length	Remarks
	3.0 m	Jib Base
	3.0 m	Jib Top
	6.1 m	Insert Jib

## Crane Boom

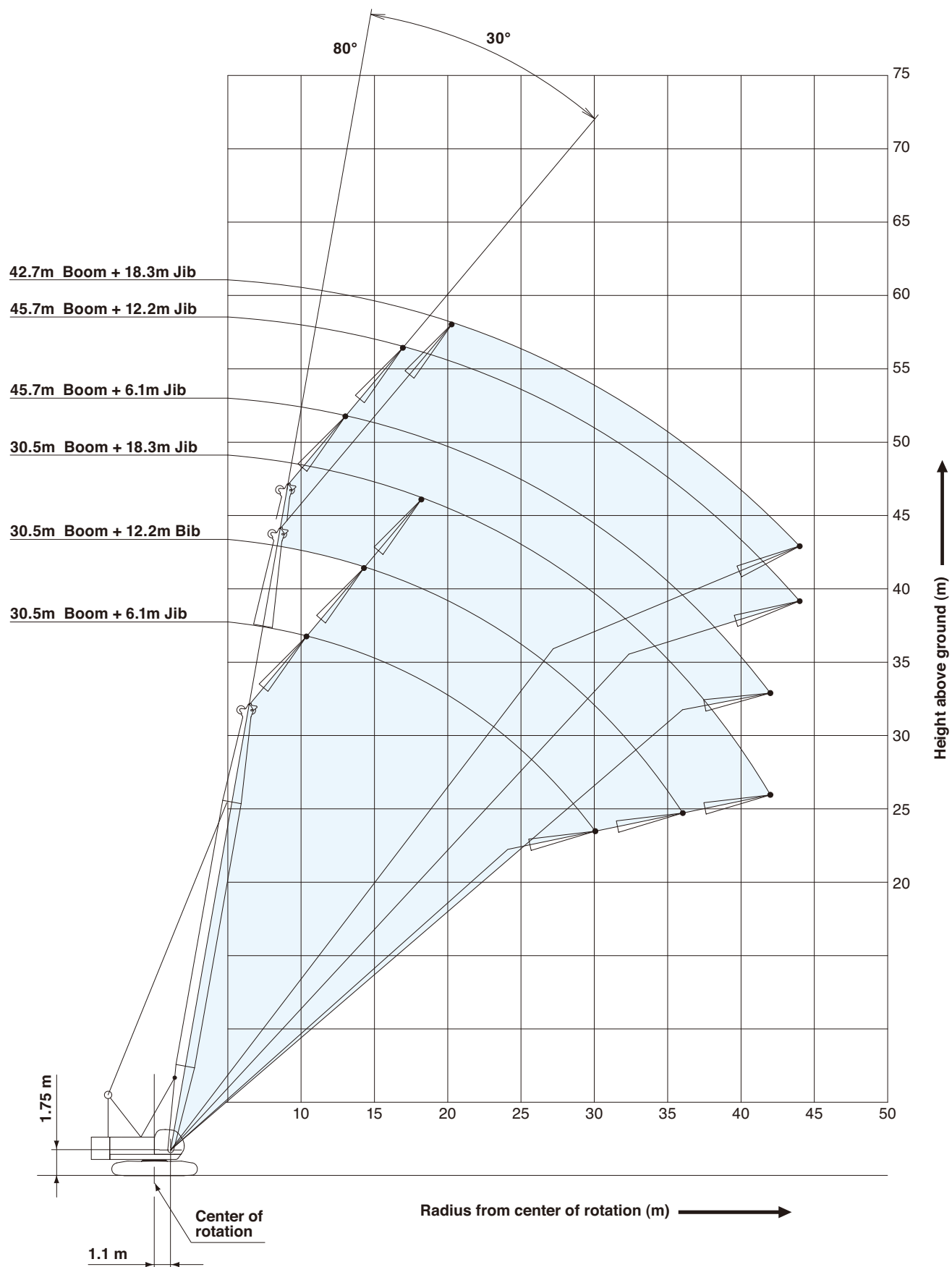





Fixed Jib 10°



## 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 or less.

## (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.4		No.5
No.3		
No.2		
No.1		

Counterweights



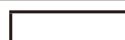
Carbody weights

## Assembling the counterweight (optional type)

(Equipped with self removal device)  
26.1 ton counterweight  
6.5 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



## Crane Boom Lifting Capacities

Counterweight: 27.2 t  
Carbody Weight: 6.5 t

Unit: metric ton

Working radius (m) \ Boom Length (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	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.

Please refer rated chart in operator's cabin.



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

Counterweight: 27.2 t  
Carbody Weight: 6.5 t

Unit: metric ton

Boom length (m)		30.5			33.5			36.6			Boom length (m)
Jib length (m)		6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	Jib length (m)
Working radius (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
	22.0	6.1	6.4	4.5	6.0	6.2	4.5	5.9	6.2	4.5	22.0
	24.0	5.4	5.6	4.5	5.2	5.5	4.5	5.1	5.4	4.5	24.0
	26.0	4.7	5.0	4.5	4.6	4.8	4.5	4.5	4.8	4.5	26.0
	28.0	4.2	4.4	4.5	4.1	4.3	4.4	4.0	4.2	4.3	28.0
	30.0	3.8	4.0	4.1	3.6	3.8	3.9	3.5	3.7	3.9	30.0
	32.0	3.4	3.6	3.7	3.2	3.4	3.5	3.1	3.3	3.5	32.0
	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

Boom 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 (m)
Working radius (m)	10.0	7.0									10.0
	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
	24.0	5.0	5.3	4.5	4.9	5.2	4.5	4.8	5.1		24.0
	26.0	4.4	4.6	4.5	4.3	4.5	4.5	4.2	4.4		26.0
	28.0	3.9	4.1	4.2	3.8	4.0	4.1	3.6	3.9		28.0
	30.0	3.4	3.6	3.7	3.3	3.5	3.6	3.2	3.4		30.0
	32.0	3.0	3.2	3.3	2.9	3.1	3.2	2.7	3.0		32.0
	34.0	2.6	2.9	3.0	2.5	2.8	2.9	2.3	2.6		34.0
	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.

Please refer rated chart in operator's cabin.

# LIFTING CAPACITIES



## Fixed Jib Lifting Capacities (Jib Offset Angle : 30°)

Counterweight: 27.2 t  
Carbody Weight: 6.5 t

Unit: metric ton

Boom length (m)		30.5			33.5			36.6			Boom length (m)
Jib length (m)		6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	Jib length (m)
Working radius (m)	12.0	7.0			7.0			7.0			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
	20.0	6.9	5.0	3.2	6.8	5.0	3.2	6.8	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	22.0
	24.0	5.5	5.0	3.2	5.4	5.0	3.2	5.3	5.0	3.2	24.0
	26.0	4.8	4.9	3.2	4.7	5.0	3.2	4.6	5.0	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	3.0	3.3	3.6	3.0	3.2	3.5	3.1	32.0
	34.0		3.3	2.8		3.2	2.9	2.9	3.1	3.0	34.0
	36.0		3.0	2.7		2.9	2.8		2.8	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	1	1	1	1	1	1	Reeves

Boom 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 (m)
Working radius (m)	12.0	7.0									12.0
	14.0	7.0			7.0			7.0			14.0
	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
	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
	24.0	5.2	5.0	3.2	5.1	5.0	3.2	5.0	5.0		24.0
	26.0	4.5	4.9	3.2	4.4	4.8	3.2	4.3	4.7		26.0
	28.0	4.0	4.3	3.2	3.9	4.3	3.2	3.8	4.2		28.0
	30.0	3.5	3.8	3.2	3.4	3.8	3.2	3.3	3.7		30.0
	32.0	3.1	3.4	3.2	3.0	3.3	3.2	2.9	3.2		32.0
	34.0	2.7	3.0	3.1	2.6	3.0	3.2	2.4	2.9		34.0
	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
	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
	44.0		1.5	1.8		1.4	1.7		1.3		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.

Please refer rated chart in operator's cabin.

# 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.  
 $\text{Bucket capacity (m}^3\text{)} \times \text{specified gravity of material (ton/m}^3\text{)} + \text{bucket weight (ton)} = \text{rated load.}$
- 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.

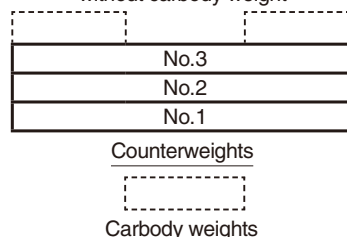
## <Reference Information>

### Main hoist loads

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

### Assembling the counterweight (standard type)

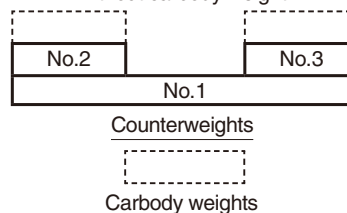
22.8 ton counterweight  
without carbody weight



### 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.

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

# LIFTING CAPACITIES

<div><div></div><div><div>Clamshell Rating Charts</div><div>Crane Boom Capacities</div></div></div> <div><div>Counterweight: 22.8 t</div><div>Without Carbody Weight</div><div>Crawler Fully Extended</div><div>Unit: metric ton</div></div>									
<div>Load radius (m)</div> <div>Boom length (m)</div>	9.1	12.2	15.2	18.3	21.3				<div>Boom length (m)</div> <div>Load radius (m)</div>
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:  
Please refer rated chart in operator's cabin.



# 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

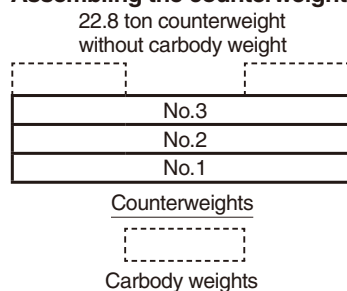
No. of Parts of Line	1
Maximum Loads (kN)	69
Maximum Loads (t)	7.0

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

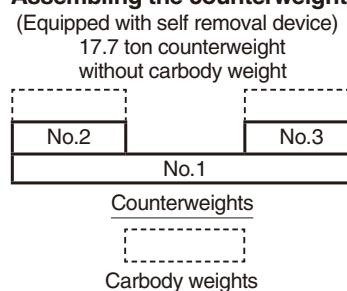
Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.

## <Reference Information>

### Assembling the counterweight (standard type)



### Assembling the counterweight (optional type)



- 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 Crane Boom Lifting Capacities

Counterweight: 22.8 t  
Without Carbody Weight  
Crawler Fully Extended  
Unit: metric ton

Load radius (m)	Boom length (m)	9.1	12.2	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	Boom length (m)	Load radius (m)
3.0	3.0m/73.8													3.0
3.5	68.7	3.6m/66.9												3.5
4.0	64.4	63.1	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
5.5	39.2	39.1	39.0	39.0	37.2	5.7m/33.4								5.5
6.0	34.1	34.0	33.9	33.9	33.7	32.2	6.3m/29.2	6.8m/25.7						6.0
7.0	27.0	26.9	26.8	26.8	26.7	26.6	26.0	24.9	7.3m/22.7	7.9m/20.3				7.0
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
12.0		11.9m/12.9	12.7	12.6	12.5	12.4	12.3	12.2	12.2	12.0	12.0			12.0
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
20.0					19.8m/6.3	6.2	6.0	5.9	5.9	5.7	5.6			20.0
22.0						5.4	5.3	5.1	5.1	4.9	4.8			22.0
24.0						22.4m/5.3	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	3.3	3.2			28.0
30.0									3.1	2.9	2.8			30.0
32.0									30.3m/3.0	2.6	2.4			32.0
34.0										33.0m/2.3	2.1			34.0
36.0											35.0m/1.9			36.0
Reeves	10	9	8	6	5	5	4	4	3	3	3	Reeves		

Load radius (m)	Boom length (m)	42.7m	45.7m	48.8m	51.8m								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	

Note:

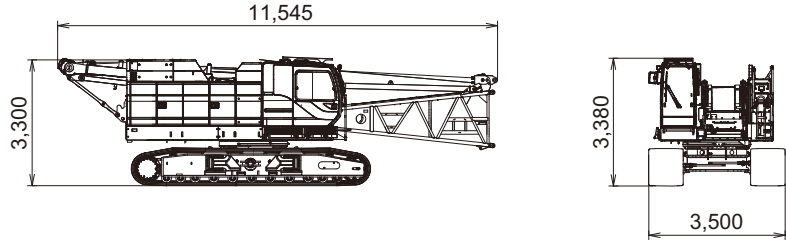
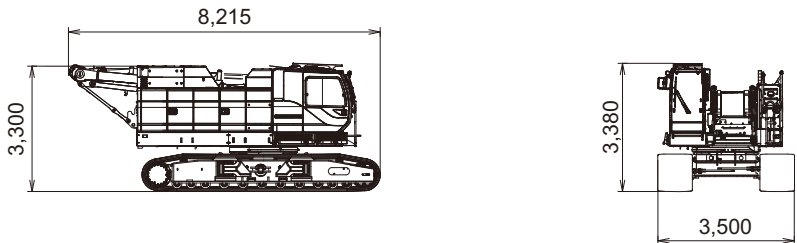
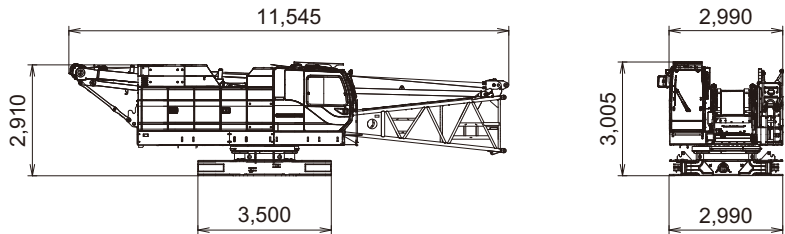
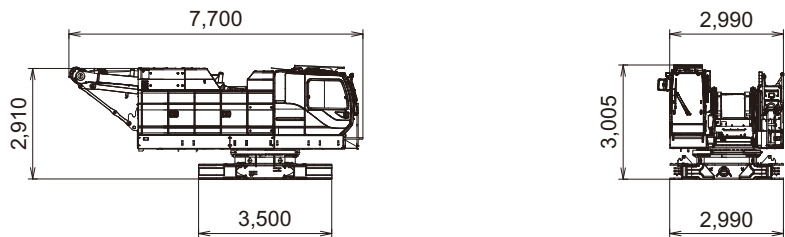
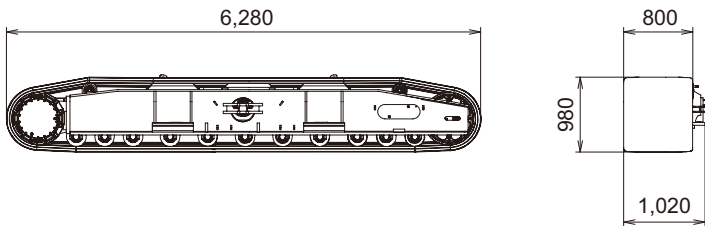
Ratings according to EN13000.

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.

Please refer rated chart in operator's cabin.

# TRANSPORTATION PLAN

Name	Dimension	Weight (kg)
<b>Base Machine</b> <ul style="list-style-type: none"> <li>• Boom base</li> <li>• Gantry</li> <li>• Crawler</li> <li>• Wire rope (Front / rear / boom hoist)</li> </ul>		39,780
<b>Base Machine</b> <ul style="list-style-type: none"> <li>• Gantry</li> <li>• Crawler</li> <li>• Wire rope (Front / rear / boom hoist)</li> </ul>		37,800
<b>Base Machine</b> <ul style="list-style-type: none"> <li>• Boom base</li> <li>• Gantry</li> <li>• Wire rope (Front / rear / boom hoist)</li> <li>• Without crawler</li> <li>• Without translifter</li> </ul>		25,500
<b>Base Machine</b> <ul style="list-style-type: none"> <li>• Gantry</li> <li>• Wire rope (Front / rear / boom hoist)</li> <li>• Without crawler</li> <li>• Without translifter</li> </ul>		23,520
Crawler		7,130

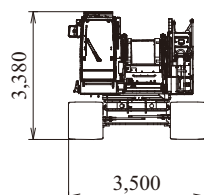
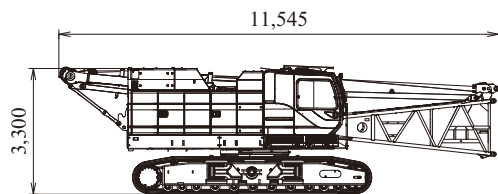
[illegible]

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# PARTS AND ATTACHMENTS

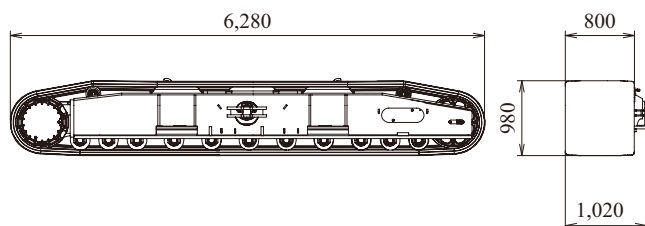
## Base Machine

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



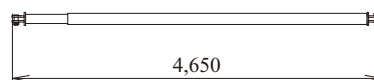
## Crawler

Weight: 7,130 kg



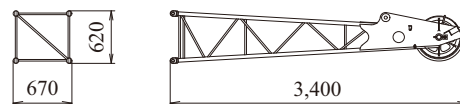
## Backstop

Weight: 245 kg



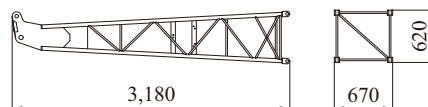
## Jib Tip

Weight: 145 kg



## Jib Base

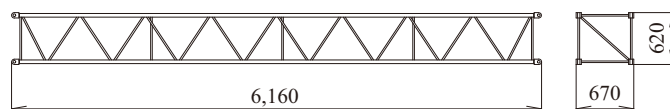
Weight: 125 kg



## 6.1 m

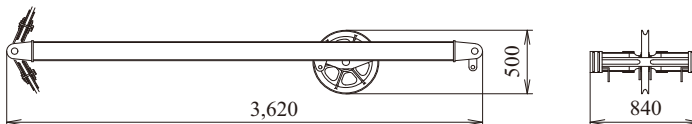
## Jib Insert

Weight: 140 kg



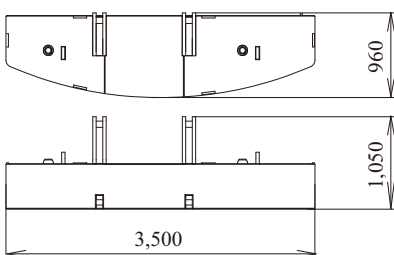
## Jib Strut

Weight: 190 kg



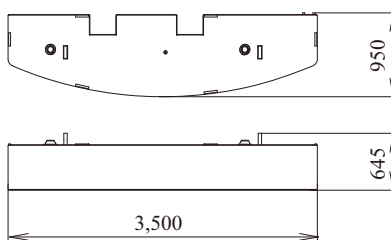
## Counterweight No.1

Weight: 8,530 kg



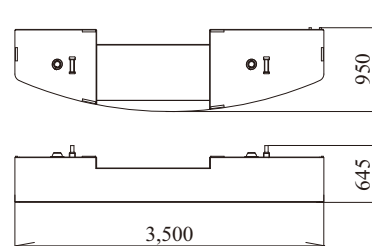
## Counterweight No.2

Weight: 7,860 kg



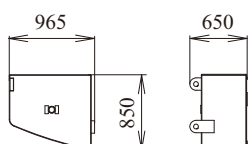
## Counterweight No.3

Weight: 6,410 kg



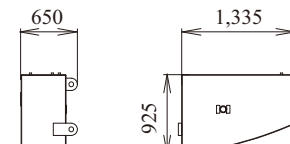
## Counterweight No.4 (L)

Weight: 1,660 kg



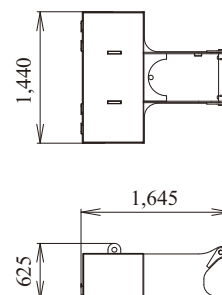
## Counterweight No.4 (R)

Weight: 2,740 kg



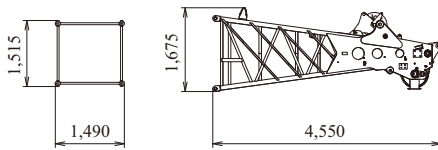
## Carbody Weight

Weight: 3,250 kg / 1 piece

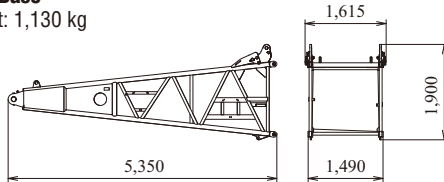


**Boom Tip**

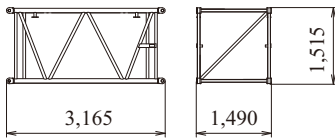
Weight: 1,110 kg

**Boom Base**

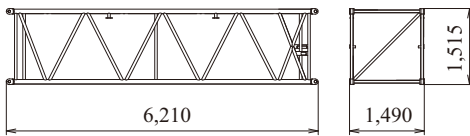
Weight: 1,130 kg

**3.0 m****Boom Insert**

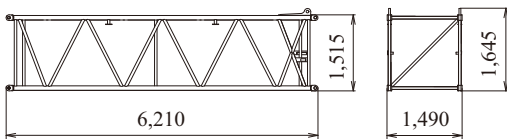
Weight: 310 kg

**6.1 m****Boom Insert**

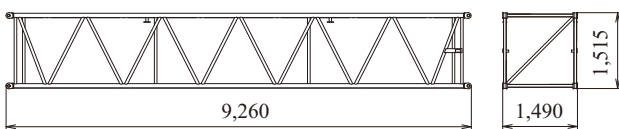
Weight: 525 kg

**6.1 m****Boom Insert With Lug**

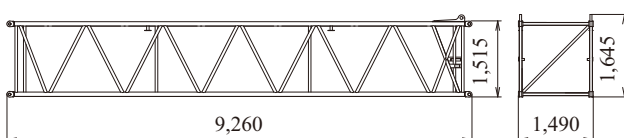
Weight: 550 kg

**9.1 m****Boom Insert**

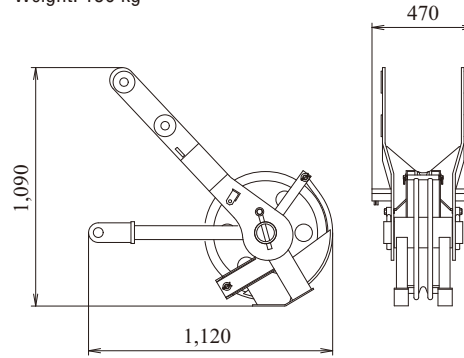
Weight: 745 kg

**9.1 m****Boom Insert With Lug**

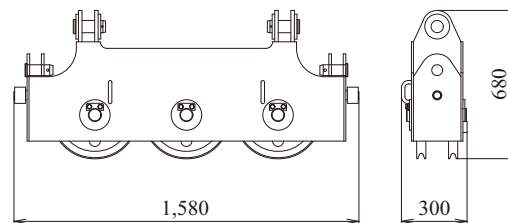
Weight: 770 kg

**Auxiliary Sheave**

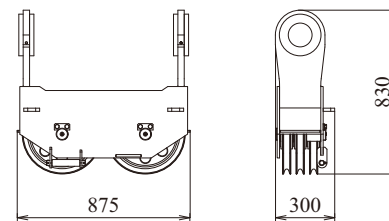
Weight: 150 kg

**Upper Spreader**

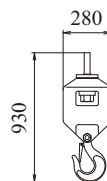
Weight: 280 kg

**Lower Spreader**

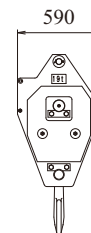
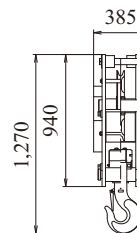
Weight: 215 kg

**Ball Hook**

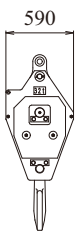
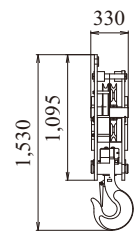
Weight: 160 kg

**19 t Hook**

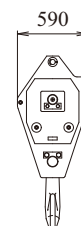
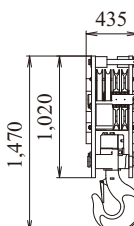
Weight: 400 kg

**32 t Hook**

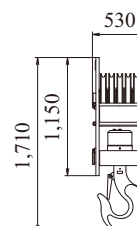
Weight: 500 kg

**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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