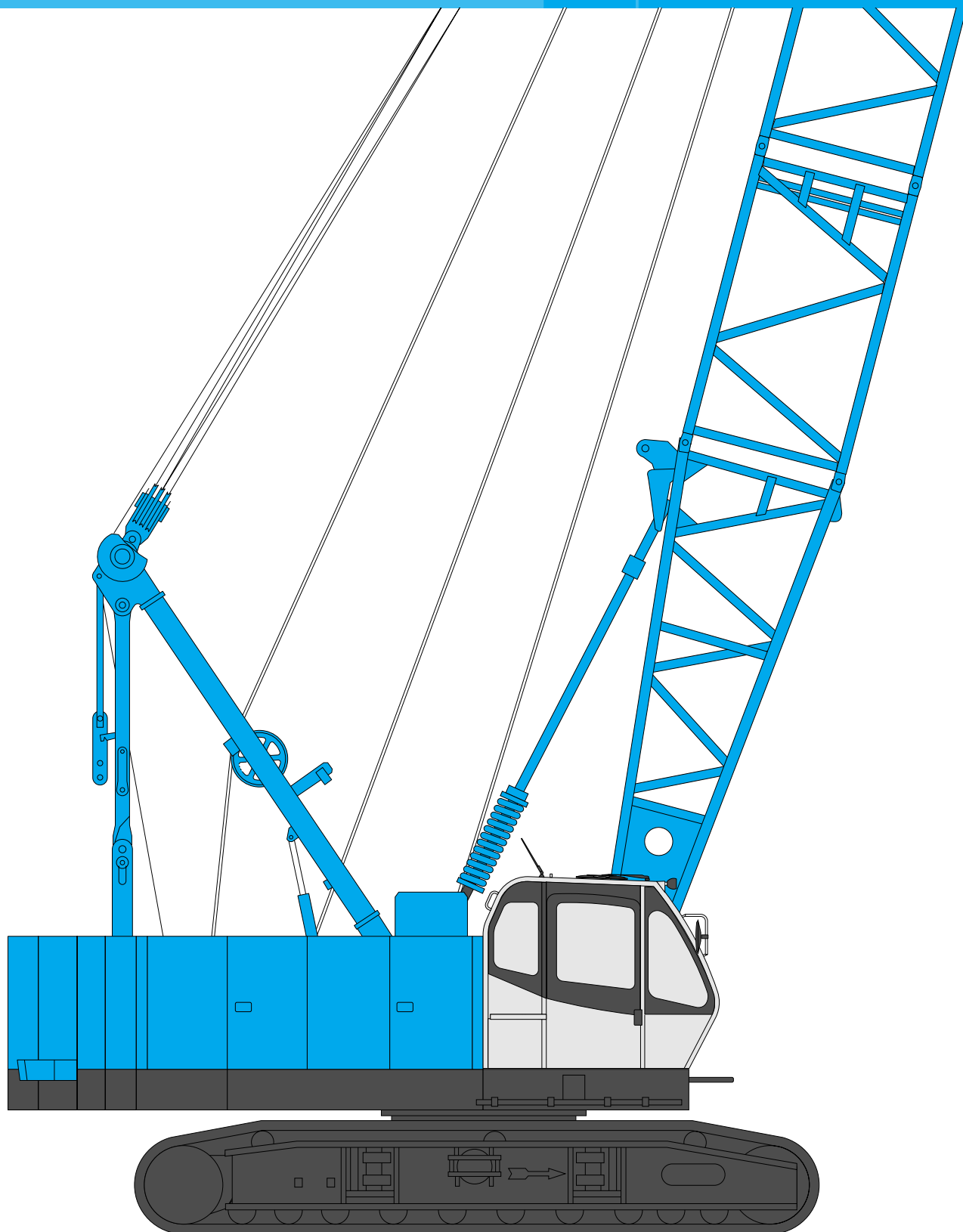


HEAVY DUTY BASE MACHINE  
FOR FOUNDATION WORK

**KOBELCO**

# **BME800HD**

Model: BME800HD

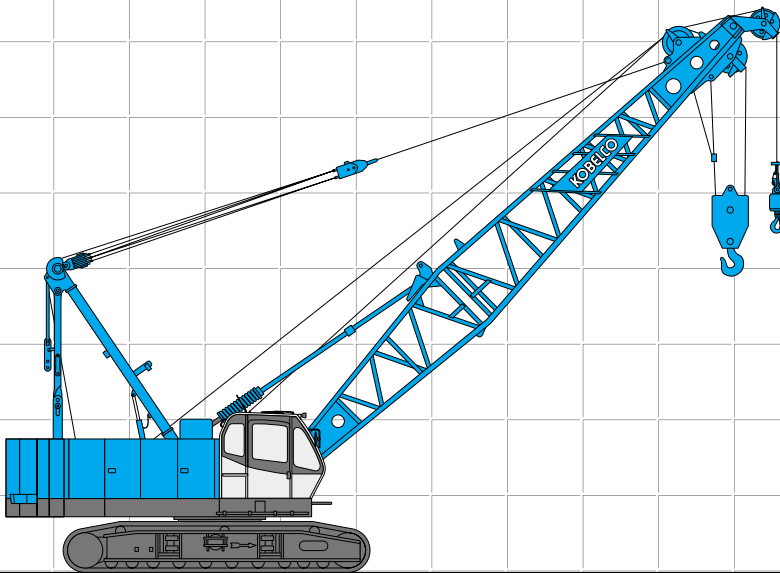


**Max. Lifting Capacity: 80 t x 3.6 m**  
**Max. Crane Boom Length: 54.9 m**

# CONFIGURATION

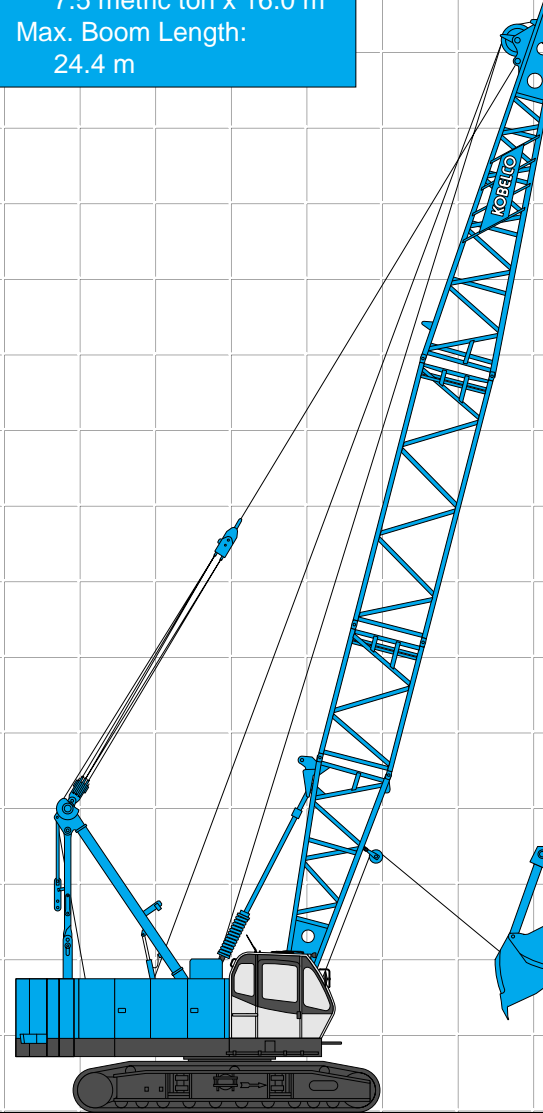
## Crane Boom

Max. Lifting Capacity:  
80 metric ton x 3.6 m  
Max. Boom Length:  
54.9 m



## Clamshell

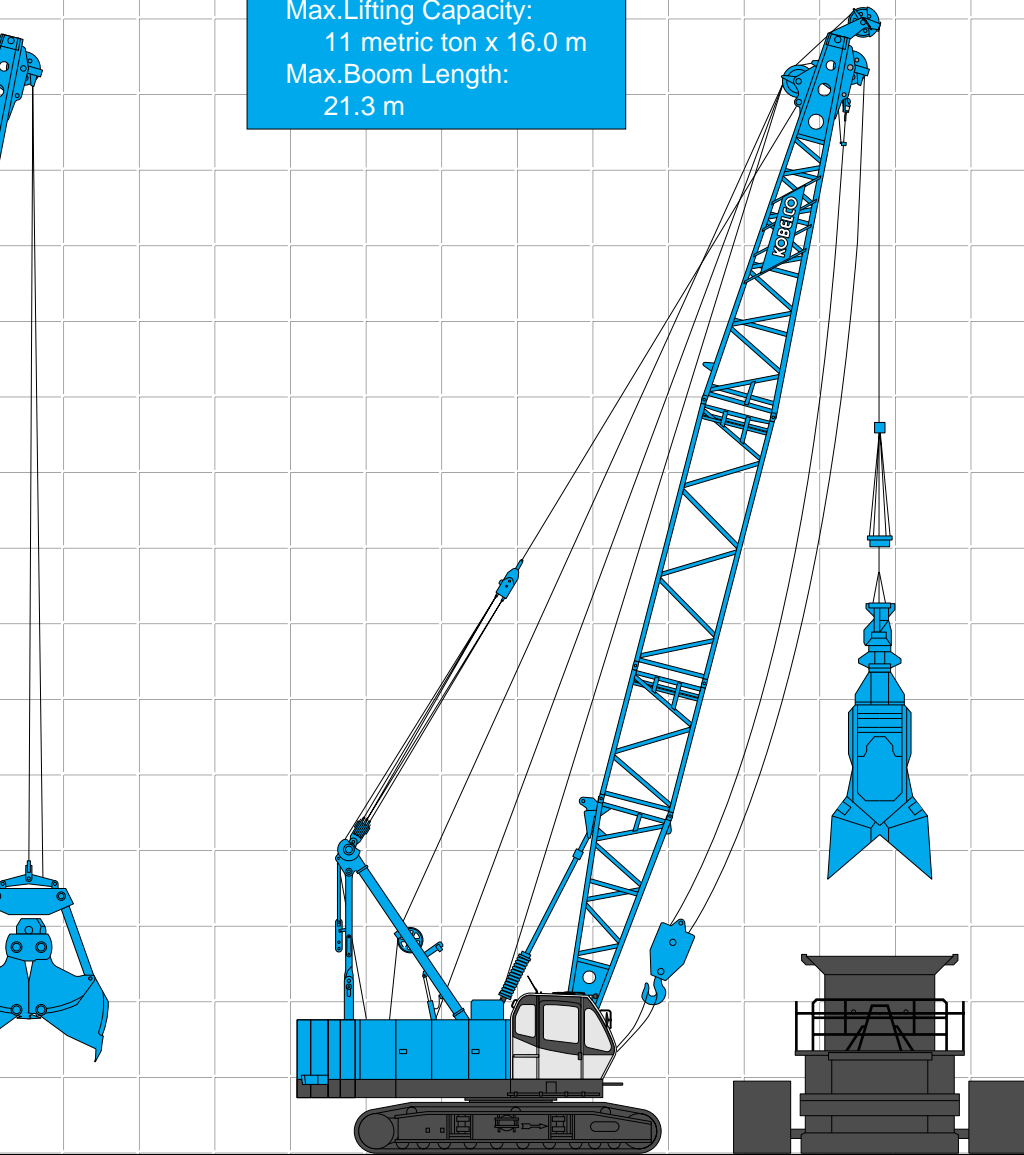
Max. Lifting Capacity:  
7.5 metric ton x 16.0 m  
Max. Boom Length:  
24.4 m



# HEAVY DUTY BASE MACHINE FOR FOUNDATION WORK BME800 HD

## Hammer Grab

Max. Lifting Capacity:  
11 metric ton x 16.0 m  
Max. Boom Length:  
21.3 m



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# SPECIFICATIONS



## Power Plant

**Model:** Hino diesel engine P11C-UN  
**Type:** Water-cooled, direct fuel injection, with turbocharger  
Complies with NRMM (Europe) stage IIIA and US EPA Tier III.  
**Displacement:** 10.520 liters  
**Rated Power:** 247 kW/2,000 min<sup>-1</sup> {rpm} (ISO)  
**Max. torque:** 1,300 N·m/1,500 min<sup>-1</sup>  
**Cooling system:** Liquid, recirculating bypass  
**Starter:** 24 V/6.0 kW  
**Radiator:** Corrugated type core, thermostatically controlled  
**Air cleaner:** Dry type with replaceable paper element  
**Throttle:** Electric throttle control, twist grip type  
**Fuel filter:** Replaceable paper element  
**Batteries:** Two 12V, 170 Ah/20HR capacity batteries, series connected.  
**Fuel tank capacity:** 400 liters



## Hydraulic System

Three variable displacement piston pumps are driven by heavy-duty pump drive. Two of variable displacement pumps are used in the main hook hoist circuit, boom hoist circuit, auxiliary hook hoist circuit and each propel circuit. The other is used in the swing circuit.

**Control:** Full-flow hydraulic control system for infinitely variable pressure to front and rear drums, boom hoist brakes and clutches. Controls respond instantly to the touch, delivering smooth function operation.

**Cooling:** Oil-to-air heat exchanger (plate-fin type)

**Filtration:** Full-flow and bypass type with replaceable element

**Electrical system:** All wiring corded for easy servicing, individual fused branch circuits.

### Max. relief valve pressure:

#### Load hoist, boom hoist and propel system:

31.9 MPa {325 kgf/cm<sup>2</sup>}

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

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

**Reservoir capacity:** 440 liters

Powered by a hydraulic motor through a planetary reducer.



## Boom Hoisting System

**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 18 mm dia. wire rope.

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

**Hoisting/Lowering:** 70 to 2 m/min

### Diameter of wire ropes

**Boom guy line:** 30 mm

**Boom hoist reeving:** 12 parts of 18 mm dia. high strength wire rope

**Boom backstops:** Required for all boom length



## Load Hoist System

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

**Positive & Negative Brake:** Forced-circulation oil-cooled wet-type multi-disc brake, each using positive and negative actuation. The drums are manually locked by the control cable. Both positive and negative brake systems are available in lever neutral position.

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

### Drums:

#### Front drum:

614 mm P.C.D. x 617 mm wide drum, grooved for 26 mm wire rope. Rope capacity is 170 m working length and 242 m storage length.

#### Rear drum:

614 mm P.C.D. x 617 mm wide drum, grooved for 26 mm wire rope. Rope capacity is 125 m working length and 242 m storage length.

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

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

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

**Line Pull (Single-line):**

**Max. line pull:** 196 kN {20 tf} (1st layer)

**Rated line pull:** 108 kN {11 tf}

Note: Max. line pull is theoretical values under certain test condition.



## Swing System

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

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

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

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

**Swing speed:** 4.0 min<sup>-1</sup> {rpm}



## Upper Structure

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

**Counterweight:** 25.7 ton

# HEAVY DUTY BASE MACHINE FOR FOUNDATION WORK BME800HD



## Cab & Control

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

### Cab fittings:

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

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



## Lower Structure

Steel-welded carbody with axles. Crawler assemblies 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:** 6.7 ton

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

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

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

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

**Shoes (flat):** 59 shoes, 800 mm wide each crawler

**Max. travel speed:** 1.9/1.2 km/h

**Max. gradeability:** 30%



## Weight

Including upper and lower machine, 25.7 ton counterweight and 6.7 ton carbody weight, 12.2 m basic boom hook, and other accessories.

| Specification | Weight          | Ground pressure                    |
|---------------|-----------------|------------------------------------|
| Crane boom    | Approx. 81 ton, | 97 kPa {0.99 kgf/cm <sup>2</sup> } |



## Attachment

### Boom

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

### Boom Length

|            | Min. length<br>(Min. Combination) | Max. length<br>(Max. Combination) |
|------------|-----------------------------------|-----------------------------------|
| Crane boom | 12.2 m                            | 54.9 m                            |

## Main Specifications (Model: BME800HD)

| Crane Boom                      |   |
|---------------------------------|---|
| Max. Lifting Capacity           | 80 t/3.6 m  |
| Max. Length                     | 54.9 m  |
| Main & Aux. Winch               |   |
| Line Speed                      | 120 to 3 m/min (1st layer)  |
| Max. line pull (Single-line)*** | 196 kN {20 tf} (1st layer)  |
| Rated Line Pull (Single-line)   | 108 kN {11 tf}  |
| Wire Rope                       | 26 mm   |
| Wire Rope Length                | 170 m (Main) 125 m (Aux.)   |
| Brake Type                      | Forced-circulation oil-cooled wet-type multi-disc brake (Positive & Negative) |
| Working Speed                   |   |
| Swing Speed                     | 4.0 min <sup>-1</sup> {rpm}   |
| Travel Speed                    | 1.9/1.2 km/h  |
| Power Plant                     |   |
| Model                           | Hino P11C-UN  |
| Engine Output                   | 247 kW/2,000 min <sup>-1</sup> {rpm}  |
| Fuel Tank Capacity              | 400 liters  |

### Hydraulic System

| Main Pumps              | 3 variable displacement            |
|-------------------------|------------------------------------|
| Max. Pressure           | 31.9MPa {325 kgf/cm <sup>2</sup> } |
| Hydraulic Tank Capacity | 440 liters                         |
| Self-Removal device     | Standard counterweight removal     |
| Weight                  |                                    |
| Operating Weight*       | Approx. 81 t                       |
| Ground Pressure*        | 97 kPa {0.99 kgf/cm <sup>2</sup> } |
| Counterweight           | 25.7 t (Upper), 6.7 t (Lower)      |
| Transport Weight**      | Approx. 45 t                       |

Units are SI units. { } indicates conventional units.

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

\* Including upper and lower machine, 25.7 ton counterweight and 6.7 ton carbody-weight, 12.2m basic boom, hook and other accessories.

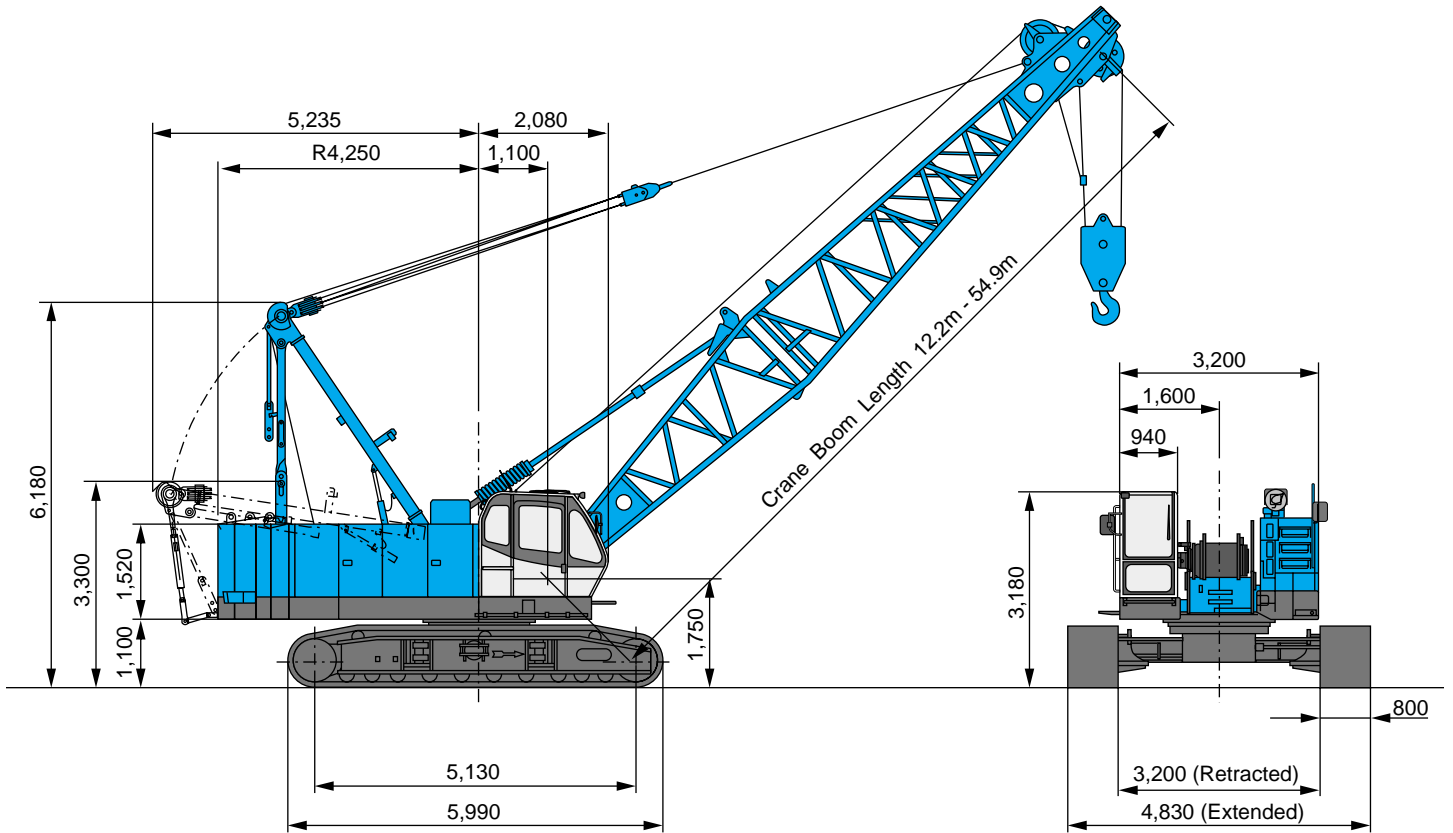
\*\* Base machine with gantry, carbody, crawlers, wire ropes for main aux.whiches, lower spreader (Refer to notes P12).

\*\*\* Max. line pull is theoretical values under certain test condition.

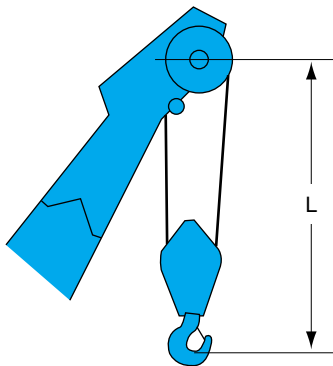
# GENERAL DIMENSIONS

## Crane Boom

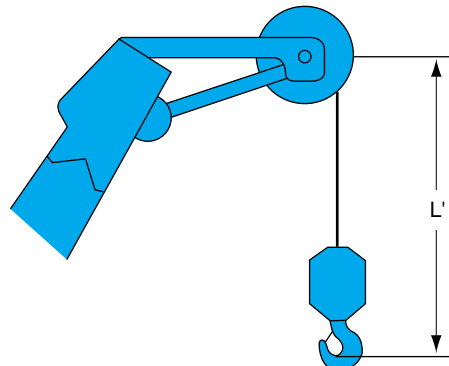
(Unit: mm)



## Limit of Hook Lifting




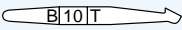
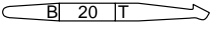
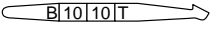
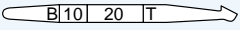
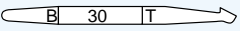
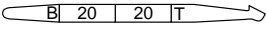
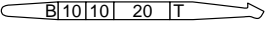
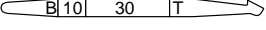
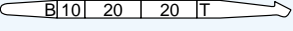
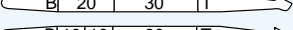
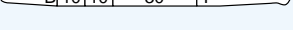
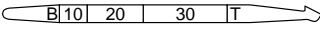
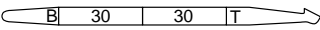
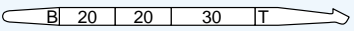
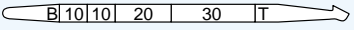
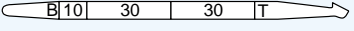
| Hook      | L     |
|-----------|-------|
| 80 t hook | 4.3 m |
| 50 t hook | 4.1 m |
| 32 t hook | 4.1 m |

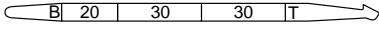
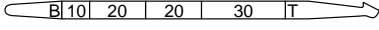
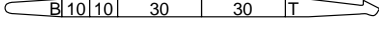
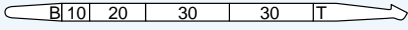
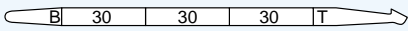
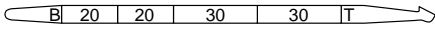
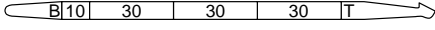
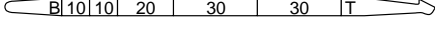
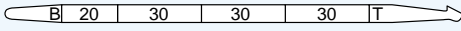
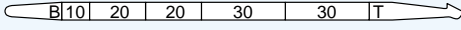

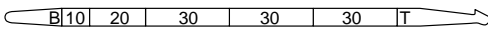
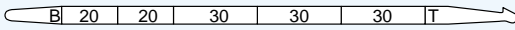
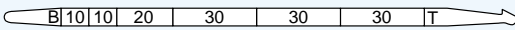
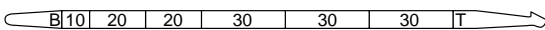







| Hook           | L'    |
|----------------|-------|
| 11 t ball hook | 4.2 m |

# BOOM ARRANGEMENTS

## HEAVY DUTY BASE MACHINE FOR FOUNDATION WORK BME800 HD

| Boom length m (ft) | Boom arrangement  |
|--------------------|---|
| 12.2 (40)          |    |
| 15.2 (50)          |    |
| 18.3 (60)          | <br>  |
| 21.3 (70)          | <br>  |
| 24.4 (80)          | <br><br>  |
| 27.4 (90)          | <br><br> |
| 30.5 (100)         | <br>  |
| 33.5 (110)         | <br><br> |

| Boom length m (ft) | Boom arrangement   |
|--------------------|--|
| 36.6 (120)         | <br><br> |
| 39.6 (130)         | <br>   |
| 42.7 (140)         | <br><br> |
| 45.7 (150)         | <br><br> |
| 48.8 (160)         |    |
| 51.8 (170)         | <br>   |
| 54.9 (180)         |    |

| Symbol  | Boom Length | Remarks     |
|---|-------------|-------------|
|  | 5.2 m       | Boom Base   |
|  | 7.0 m       | Boom Top    |
|  | 3.0 m       | Insert Boom |
|  | 6.1 m       | Insert Boom |
|  | 9.1 m       | Insert Boom |

mark shows the standard boom arrangement which enables each boom length of less than that boom length to be configured.



## Hook Blocks

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

| Hooks            | Weight (kg) | No. of sheaves | No. of lines and max. rated loads (tons) |      |      |      |      |      |      |      |
|------------------|-------------|----------------|--|------|------|------|------|------|------|------|
|                  |             |                | 1  | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
| 80-ton           | 950         | 4              | —  | —    | 33.0 | 44.0 | 55.0 | 66.0 | 77.0 | 80.0 |
| 50-ton           | 700         | 3              | —  | 22.0 | 33.0 | 44.0 | 50.0 | —    | —    | —    |
| 32-ton           | 550         | 1              | —  | 22.0 | 32.0 | —    | —    | —    | —    | —    |
| 11-ton ball hook | 300         | 0              | 11.0                                     | —    | —    | —    | —    | —    | —    | —    |

## Symbols for Attachments:



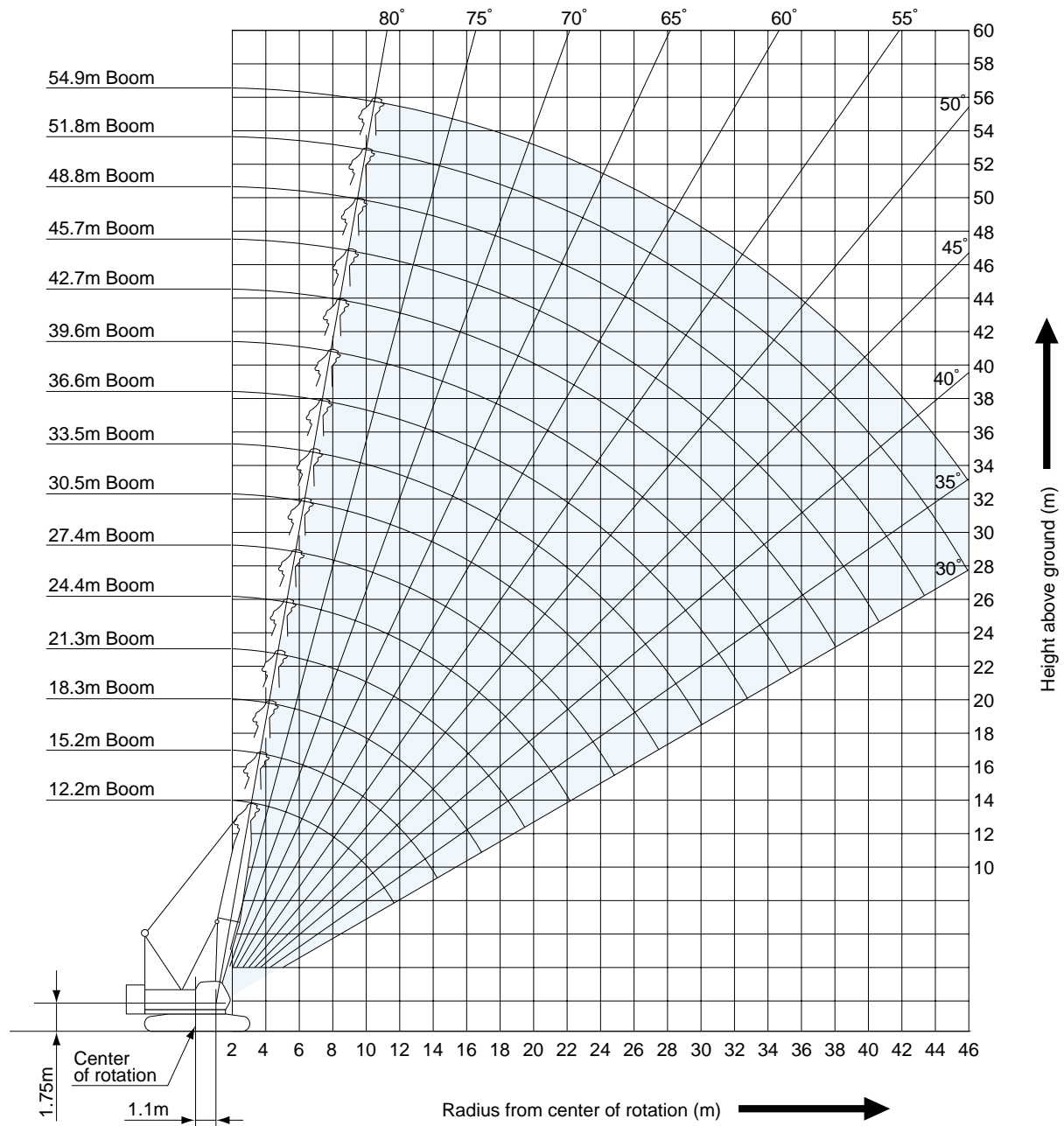
Crane Boom

Auxiliary Sheave  
for Crane Boom



# WORKING RANGES AND LIFTING CAPACITIES

## Crane Boom Working Ranges



### NOTES:

1. Ratings according to EN13000.
2. Ratings in metric tons for 360° working area.
3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
4. Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
6. Ratings are for operation on a firm and level surface, up to 1% gradient.
7. At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.
8. Boom inserts and guy lines must be arranged as shown in the "Operator's Manual".
9. Boom hoist reeving is 12 part line.
10. Gantry must be in raised position for all conditions.
11. Boom backstops are required for all boom lengths.
12. Crawler frames must be fully extended for all crane operations.
13. Ratings shown in   are determined by the strength of the boom or other structural component.
14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
15. Crane boom ratings: Deduct weight of main hook block, slings, and all other load handling accessories from main boom ratings shown.
16. Auxiliary sheave ratings for crane boom: Deduct weight of ball hook, slings, and all other load handling accessories from auxiliary sheave ratings shown.
17. Crane boom lengths for auxiliary sheave mounting are 12.2 m to 51.8 m.



# Crane Boom Lifting Capacity

Unit: metric ton

**Counterweight : 25.7tons, Carbodyweight : 6.7tons**

| Working radius(m) | Boom Length (m) | 12.2       | 15.2       | 18.3      | 21.3      | 24.4      | 27.4      | 30.5      | 33.5      | 36.6      | 39.6      | 42.7      | 45.7 | Boom Length (m) | Working radius(m) |
|-------------------|-----------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|-----------------|-------------------|
|                   |                 |            |            |           |           |           |           |           |           |           |           |           |      |                 |                   |
| 3.0               | 3.6m/80.0       |            |            |           |           |           |           |           |           |           |           |           |      |                 | 3.0               |
| 4.0               | 69.5            | 4.3m/63.2  | 4.8m/56.0  |           |           |           |           |           |           |           |           |           |      |                 | 4.0               |
| 5.0               | 56.2            | 56.4       | 53.4       | 5.3m/47.3 | 5.9m/40.2 |           |           |           |           |           |           |           |      |                 | 5.0               |
| 6.0               | 44.7            | 45.4       | 43.2       | 41.4      | 39.6      | 6.4m/35.4 | 6.9m/31.5 |           |           |           |           |           |      |                 | 6.0               |
| 7.0               | 36.0            | 37.8       | 36.2       | 34.8      | 33.5      | 32.3      | 31.1      | 7.5m/27.9 |           |           |           |           |      |                 | 7.0               |
| 8.0               | 29.8            | 31.8       | 31.1       | 30.0      | 28.9      | 28.0      | 27.0      | 26.2      | 25.3      | 8.5m/23.1 |           |           |      |                 | 8.0               |
| 9.0               | 25.3            | 27.0       | 26.8       | 26.3      | 25.4      | 24.6      | 23.9      | 23.2      | 22.4      | 21.8      | 21.2      | 9.6m/19.2 |      |                 | 9.0               |
| 10.0              | 22.0            | 23.4       | 23.2       | 23.2      | 22.6      | 22.0      | 21.3      | 20.7      | 20.1      | 19.5      | 19.0      | 18.4      |      |                 | 10.0              |
| 12.0              | 11.8m/17.4      | 18.4       | 18.2       | 18.1      | 18.0      | 17.9      | 17.4      | 17.0      | 16.5      | 16.0      | 15.6      | 15.2      |      |                 | 12.0              |
| 14.0              |                 | 15.1       | 14.9       | 14.8      | 14.7      | 14.6      | 14.5      | 14.3      | 13.9      | 13.5      | 13.2      | 12.8      |      |                 | 14.0              |
| 16.0              |                 | 14.5m/14.4 | 12.5       | 12.4      | 12.3      | 12.2      | 12.1      | 12.0      | 11.9      | 11.6      | 11.3      | 11.0      |      |                 | 16.0              |
| 18.0              |                 |            | 17.1m/11.5 | 10.6      | 10.5      | 10.4      | 10.3      | 10.2      | 10.1      | 9.9       | 9.8       | 9.5       |      |                 | 18.0              |
| 20.0              |                 |            |            | 19.8m/9.4 | 9.1       | 9.0       | 8.9       | 8.8       | 8.7       | 8.5       | 8.5       | 8.3       |      |                 | 20.0              |
| 22.0              |                 |            |            |           | 8.0       | 7.9       | 7.8       | 7.7       | 7.5       | 7.4       | 7.4       | 7.2       |      |                 | 22.0              |
| 24.0              |                 |            |            |           | 22.4m/7.8 | 7.0       | 6.9       | 6.8       | 6.6       | 6.5       | 6.4       | 6.3       |      |                 | 24.0              |
| 26.0              |                 |            |            |           |           | 25.0m/6.6 | 6.1       | 6.0       | 5.9       | 5.8       | 5.7       | 5.6       |      |                 | 26.0              |
| 28.0              |                 |            |            |           |           |           | 27.7m/5.6 | 5.4       | 5.2       | 5.1       | 5.0       | 4.9       |      |                 | 28.0              |
| 30.0              |                 |            |            |           |           |           |           | 4.8       | 4.7       | 4.6       | 4.5       | 4.4       |      |                 | 30.0              |
| 32.0              |                 |            |            |           |           |           |           | 30.3m/4.8 | 4.2       | 4.1       | 4.0       | 3.9       |      |                 | 32.0              |
| 34.0              |                 |            |            |           |           |           |           |           | 33.0m/4.0 | 3.7       | 3.6       | 3.5       |      |                 | 34.0              |
| 36.0              |                 |            |            |           |           |           |           |           |           | 35.6m/3.4 | 3.2       | 3.1       |      |                 | 36.0              |
| 38.0              |                 |            |            |           |           |           |           |           |           |           | 2.9       | 2.8       |      |                 | 38.0              |
| 40.0              |                 |            |            |           |           |           |           |           |           |           | 38.2m/2.9 | 2.5       |      |                 | 40.0              |
| 42.0              |                 |            |            |           |           |           |           |           |           |           |           | 40.9m/2.4 |      |                 | 42.0              |
| Reeves            | 8               | 6          | 6          | 5         | 4         | 4         | 3         | 3         | 3         | 3         | 2         | 2         |      | Reeves          |                   |

| Working radius(m) | Boom Length (m) | 48.8       | 51.8       | 54.9 | Boom Length (m) | Working radius(m) |
|-------------------|-----------------|------------|------------|------|-----------------|-------------------|
|                   |                 |            |            |      |                 |                   |
| 10.0              | 10.1m/17.7      | 10.6m/16.3 | 11.2m/15.0 |      |                 | 10.0              |
| 12.0              | 14.8            | 14.3       | 13.9       |      |                 | 12.0              |
| 14.0              | 12.5            | 12.1       | 11.7       |      |                 | 14.0              |
| 16.0              | 10.7            | 10.3       | 10.0       |      |                 | 16.0              |
| 18.0              | 9.2             | 8.9        | 8.6        |      |                 | 18.0              |
| 20.0              | 8.1             | 7.8        | 7.5        |      |                 | 20.0              |
| 22.0              | 7.1             | 6.8        | 6.6        |      |                 | 22.0              |
| 24.0              | 6.2             | 6.1        | 5.8        |      |                 | 24.0              |
| 26.0              | 5.4             | 5.3        | 5.2        |      |                 | 26.0              |
| 28.0              | 4.8             | 4.6        | 4.5        |      |                 | 28.0              |
| 30.0              | 4.2             | 4.1        | 4.0        |      |                 | 30.0              |
| 32.0              | 3.8             | 3.6        | 3.5        |      |                 | 32.0              |
| 34.0              | 3.3             | 3.2        | 3.1        |      |                 | 34.0              |
| 36.0              | 3.0             | 2.8        | 2.7        |      |                 | 36.0              |
| 38.0              | 2.7             | 2.5        | 2.4        |      |                 | 38.0              |
| 40.0              | 2.4             | 2.2        | 2.1        |      |                 | 40.0              |
| 42.0              | 2.1             | 2.0        | 1.8        |      |                 | 42.0              |
| 44.0              | 43.5m/1.9       | 1.7        | 1.6        |      |                 | 44.0              |
| 46.0              |                 | 1.5        | 1.4        |      |                 | 46.0              |
| 48.0              |                 | 46.2m/1.5  | 1.2        |      |                 | 48.0              |
| 50.0              |                 |            | 48.8m/1.1  |      |                 | 50.0              |
| Reeves            | 2               | 2          | 2          |      |                 | Reeves            |

**NOTES:**

Ratings according to EN13000.

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

Refer to notes P8.



# HEAVY DUTY BASE MACHINE FOR FOUNDATION WORK BME800 HD

## Auxiliary Sheave Lifting Capacity for Crane Boom (With 32 t Main Hook)

Unit: metric ton

Counterweight : 25.7tons, Carbodyweight : 6.7tons

| Working radius(m) | Boom Length (m) | 12.2       | 15.2      | 18.3      | 21.3      | 24.4      | 27.4      | 30.5      | 33.5      | 36.6      | 39.6      | 42.7      | 45.7       | Boom Length (m) | Working radius(m) |
|-------------------|-----------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------------|-------------------|
|                   |                 | 5.0        | 11.0      | 11.0      | 5.4m/11.0 | 5.9m/11.0 |           |           |           |           |           |           |            |                 |                   |
| 6.0               | 11.0            | 11.0       | 11.0      | 11.0      | 6.4m/11.0 |           |           |           |           |           |           |           |            |                 | 6.0               |
| 7.0               | 11.0            | 11.0       | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 7.5m/11.0 |           |           |           |           |            |                 | 7.0               |
| 8.0               | 11.0            | 11.0       | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 8.6m/11.0 |           |           |            |                 | 8.0               |
| 9.0               | 11.0            | 11.0       | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 9.1m/11.0 | 9.6m/11.0 |            |                 | 9.0               |
| 10.0              | 11.0            | 11.0       | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 10.1m/11.0 |                 | 10.0              |
| 12.0              | 11.0            | 11.0       | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0       |                 | 12.0              |
| 14.0              | 13.0m/11.0      | 11.0       | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0       |                 | 14.0              |
| 16.0              |                 | 15.6m/11.0 | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 11.0      | 10.9      | 10.6      | 10.3      | 10.0       |                 | 16.0              |
| 18.0              |                 |            | 9.1       | 9.6       | 9.5       | 9.4       | 9.3       | 9.2       | 9.1       | 8.9       | 8.8       | 8.8       | 8.5        |                 | 18.0              |
| 20.0              |                 |            | 18.3m/8.7 | 7.8       | 8.1       | 8.0       | 7.9       | 7.8       | 7.7       | 7.5       | 7.5       | 7.5       | 7.3        |                 | 20.0              |
| 22.0              |                 |            |           | 20.9m/6.9 | 7.0       | 6.9       | 6.8       | 6.7       | 6.5       | 6.4       | 6.4       | 6.4       | 6.2        |                 | 22.0              |
| 24.0              |                 |            |           |           | 23.6m/6.1 | 6.0       | 5.9       | 5.8       | 5.6       | 5.5       | 5.4       | 5.3       | 5.3        |                 | 24.0              |
| 26.0              |                 |            |           |           |           | 5.1       | 5.1       | 5.0       | 4.9       | 4.8       | 4.7       | 4.6       | 4.6        |                 | 26.0              |
| 28.0              |                 |            |           |           |           | 26.2m/5.0 | 4.3       | 4.4       | 4.2       | 4.1       | 4.0       | 3.9       | 3.9        |                 | 28.0              |
| 30.0              |                 |            |           |           |           |           | 28.8m/3.9 | 3.8       | 3.7       | 3.6       | 3.5       | 3.4       | 3.4        |                 | 30.0              |
| 32.0              |                 |            |           |           |           |           |           | 31.5m/3.3 | 3.2       | 3.1       | 3.0       | 2.9       | 2.9        |                 | 32.0              |
| 34.0              |                 |            |           |           |           |           |           |           | 2.7       | 2.7       | 2.6       | 2.5       | 2.5        |                 | 34.0              |
| 36.0              |                 |            |           |           |           |           |           |           | 34.1m/2.6 | 2.3       | 2.2       | 2.1       | 2.1        |                 | 36.0              |
| 38.0              |                 |            |           |           |           |           |           |           |           | 36.7m/2.1 | 1.9       | 1.8       | 1.8        |                 | 38.0              |
| 40.0              |                 |            |           |           |           |           |           |           |           |           | 39.4m/1.6 | 1.5       | 1.5        |                 | 40.0              |
| 42.0              |                 |            |           |           |           |           |           |           |           |           |           | 1.2       | 1.2        |                 | 42.0              |
| Reeves            |                 | 1          | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1          |                 | Reeves            |

| Working radius(m) | Boom Length (m) | 48.8 | 51.8       | Boom Length (m) | Working radius(m) |
|-------------------|-----------------|------|------------|-----------------|-------------------|
|                   |                 | 10.0 | 10.7m/11.0 |                 |                   |
| 12.0              | 11.0            | 11.0 | 12.0       |                 |                   |
| 14.0              | 11.0            | 11.0 | 14.0       |                 |                   |
| 16.0              | 9.7             | 9.3  | 16.0       |                 |                   |
| 18.0              | 8.2             | 7.9  | 18.0       |                 |                   |
| 20.0              | 7.1             | 6.8  | 20.0       |                 |                   |
| 22.0              | 6.1             | 5.8  | 22.0       |                 |                   |
| 24.0              | 5.2             | 5.1  | 24.0       |                 |                   |
| 26.0              | 4.4             | 4.3  | 26.0       |                 |                   |
| 28.0              | 3.8             | 3.6  | 28.0       |                 |                   |
| 30.0              | 3.2             | 3.1  | 30.0       |                 |                   |
| 32.0              | 2.8             | 2.6  | 32.0       |                 |                   |
| 34.0              | 2.3             | 2.2  | 34.0       |                 |                   |
| 36.0              | 2.0             | 1.8  | 36.0       |                 |                   |
| 38.0              | 1.7             | 1.5  | 38.0       |                 |                   |
| 40.0              | 1.4             | 1.2  | 40.0       |                 |                   |
| 42.0              | 1.1             |      | 42.0       |                 |                   |
| Reeves            | 1               | 1    | Reeves     |                 |                   |

### NOTES:

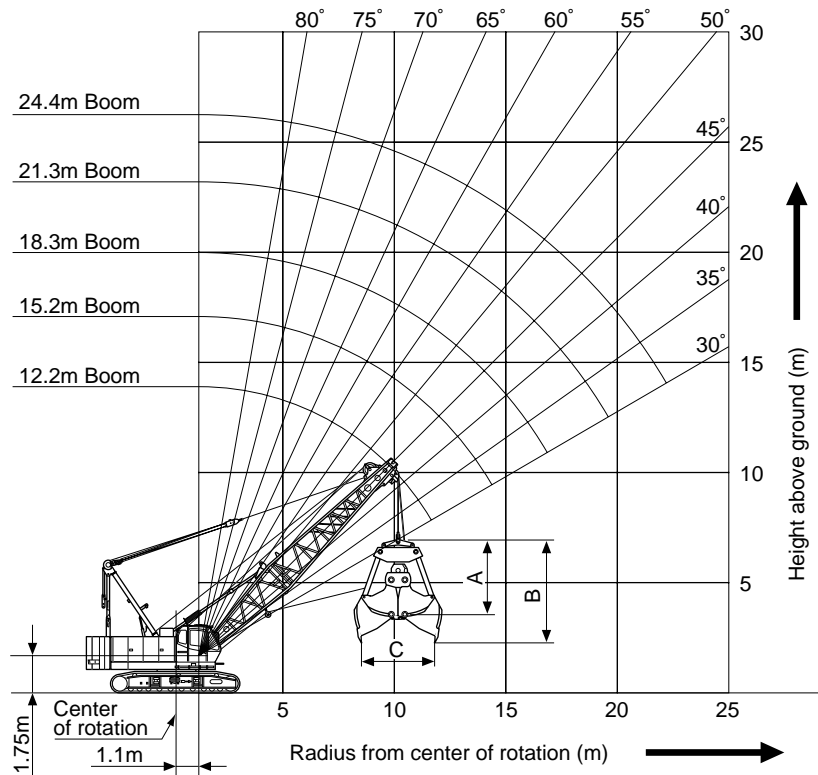
Ratings according to EN13000.

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

Refer to notes P8.

# CLAMSHELL

## Working Ranges



## Clamshell Bucket Lifting Capacity

Unit: metric ton

| Working radius(m) | Boom Length (m) |      |      |      |      | Working radius(m) |
|-------------------|-----------------|------|------|------|------|-------------------|
|                   | 12.2            | 15.2 | 18.3 | 21.3 | 24.4 |                   |
| 5.0               | 7.5             |      |      |      |      | 5.0               |
| 5.5               | 7.5             | 7.5  |      |      |      | 5.5               |
| 6.0               | 7.5             | 7.5  |      |      |      | 6.0               |
| 7.0               | 7.5             | 7.5  | 7.5  |      |      | 7.0               |
| 8.0               | 7.5             | 7.5  | 7.5  | 7.5  | 7.2  | 8.0               |
| 9.0               | 7.5             | 7.5  | 7.5  | 7.5  | 7.2  | 9.0               |
| 10.0              | 7.5             | 7.5  | 7.5  | 7.5  | 7.2  | 10.0              |
| 11.0              |                 | 7.5  | 7.5  | 7.5  | 7.2  | 11.0              |
| 12.0              |                 | 7.5  | 7.5  | 7.5  | 7.2  | 12.0              |
| 13.0              |                 | 7.5  | 7.5  | 7.5  | 7.2  | 13.0              |
| 14.0              |                 |      | 7.5  | 7.5  | 7.2  | 14.0              |
| 15.0              |                 |      | 7.5  | 7.5  | 7.1  | 15.0              |
| 16.0              |                 |      | 7.5  | 7.5  | 6.9  | 16.0              |
| 17.0              |                 |      |      | 7.1  | 6.7  | 17.0              |
| 18.0              |                 |      |      | 6.6  | 6.5  | 18.0              |
| 19.0              |                 |      |      |      | 6.0  | 19.0              |
| 20.0              |                 |      |      |      | 5.6  | 20.0              |
| 21.0              |                 |      |      |      | 5.2  | 21.0              |

**Counterweight : 25.7tons, Carbodyweight : 6.7tons**

## Clamshell Bucket Specification (Reference)

| Bucket Capacity (m³) | Bucket Weight (t) | Dimension (m) |     |     | Use     |
|----------------------|-------------------|---------------|-----|-----|---------|
|                      |                   | A             | B   | C   |         |
| 1.25                 | 3.6               | 2.9           | 3.7 | 3.0 | Digging |
| 1.6                  | 4.6               | 3.2           | 4.0 | 3.2 | Digging |
| 2.0                  | 3.8               | 3.5           | 3.9 | 3.1 | Scoop   |

### NOTES:

- 1) Working radius is the horizontal distance between the center of rotation and the bucket's center of gravity.
- 2) Total weight of bucket and materials must not exceed rated load.
- 3) Optimal bucket should be required according to material.  
 $\text{Bucket capacity (m}^3\text{)} \times \text{Specified gravity of material (ton/m}^3\text{)} + \text{Bucket weight (ton)} = \text{Rated load}$   
 Material: sand, gravel, lime (apparent specific gravity: approx. 1 to 1.8)  
 Ex.) Bucket capacity: 2.0 m³, Bucket weight 3.8 tons  
 $2.0 \text{ m}^3 \times 1.8 + 3.8 \text{ tons} = 7.4 \text{ tons}$
- 4) Bucket weight must also be decreased according to operating cycle and bucket lowering height.
- 5) Rated loads are determined by stability and boom strength.

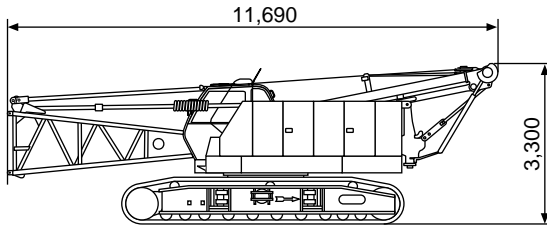
# PARTS AND ATTACHMENTS

# HEAVY DUTY BASE MACHINE FOR FOUNDATION WORK BME800 HD

Dimensions: mm

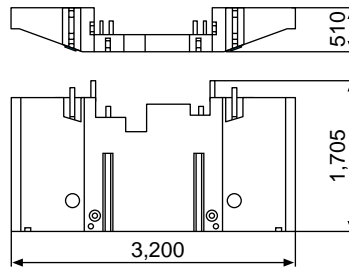
## Base Machine

With gantry, boom base, carbody, crawlers, wire ropes for main and aux. winches, lower spreader and upper spreader.  
Weight: 46,600 kg Width: 3,200 mm



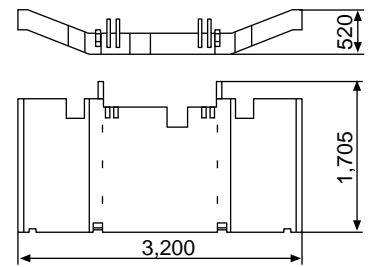
## Counterweight A

Weight: 8,990 kg



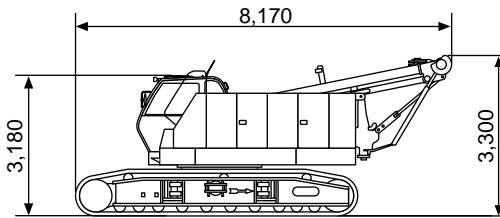
## Counterweight B

Weight: 7,370 kg



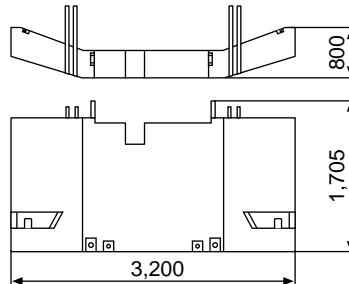
## Base Machine

With gantry, carbody, crawlers, wire ropes for main and aux. winches and lower spreader.  
Weight: 45,000 kg Width: 3,200 mm



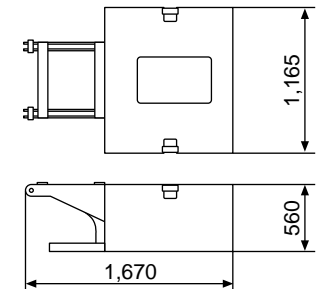
## Counterweight C

Weight: 9,350 kg



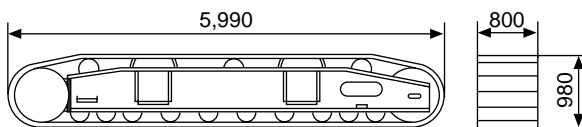
## Carbodyweight

Weight: 3,340 kg x 2 pieces



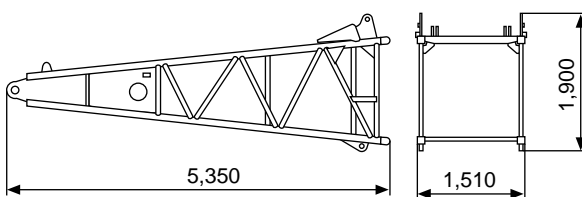
## Crawler

Weight: 7,000 kg



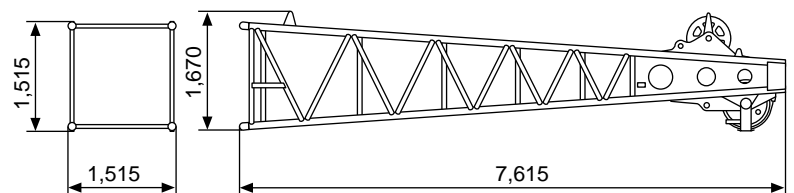
## Boom Base

Weight: 1,130 kg

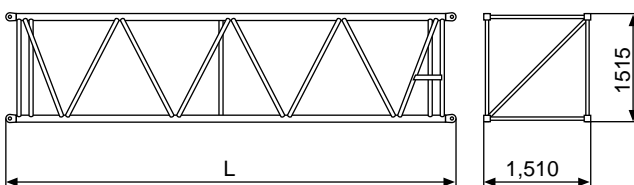


## Boom Top

Weight: 1,480 kg (with guy cables)



## Insert Boom



|      | L (mm) | Weight (kg)* |
|------|--------|--------------|
| 3.0m | 3,160  | 380          |
| 6.1m | 6,210  | 620          |
| 9.1m | 9,260  | 860          |

\*with guy cables

## Other Attachments

| Attachments                  | Weight   | Dimensions (L x W x H)       |
|------------------------------|----------|------------------------------|
| Auxiliary sheave             | 330 kg   | 1,450 mm x 1,075 mm x 755 mm |
| Upper spreader               | 280 kg   | 1,580 mm x 300 mm x 680 mm   |
| Gantry (with Lower spreader) | 1,500 kg | 4,550 mm x 1,450 mm x 800 mm |
| Crane backstop               | 700 kg   | 4,280 mm x 230 mm x 280 mm   |
| 11-ton ball hook             | 300 kg   | 1,050 mm x 360 mm dia.       |
| 32-ton hook block            | 550 kg   | 700 mm x 360 mm x 1,570 mm   |
| 50-ton hook block            | 700 kg   | 700 mm x 370 mm x 1,700 mm   |
| 80-ton hook block            | 950 kg   | 700 mm x 450 mm x 1,825 mm   |







HEAVY DUTY BASE MACHINE  
FOR FOUNDATION WORK

**BME800HD**

## Standard Equipment

### Upper structure/Lower structure

Counterweight: 25.7 ton (total weight)  
 Carbody weight: 6.7 ton (total weight)  
 800 mm shoe crawlers  
 Batteries (170 Ah / 20 HR)  
 Gantry raising/lowering cylinder  
 Electric hand throttle grip  
 Variable boom hoist speed controller  
 Variable main/aux. hoist speed controller  
 Side deck for cab  
 Steps (crawlers)  
 Two front working lights  
 Tools (for routine maintenance)  
 Two rear view mirrors  
 Electric fuel pump  
 Counterweight self removal  
 Cable roller (for boom)  
 Upper spreader storage guide

### Cab/Control

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

### Safety Device

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

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

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