



HEAVY DUTY BASE MACHINE  
FOR FOUNDATION WORK

KOBELCO

BM700HD-2

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

BM800HD-2

Max. Lifting Capacity: 80 t  
Max. Boom Length: 54.9 m

S P E C I F I C A T I O N S

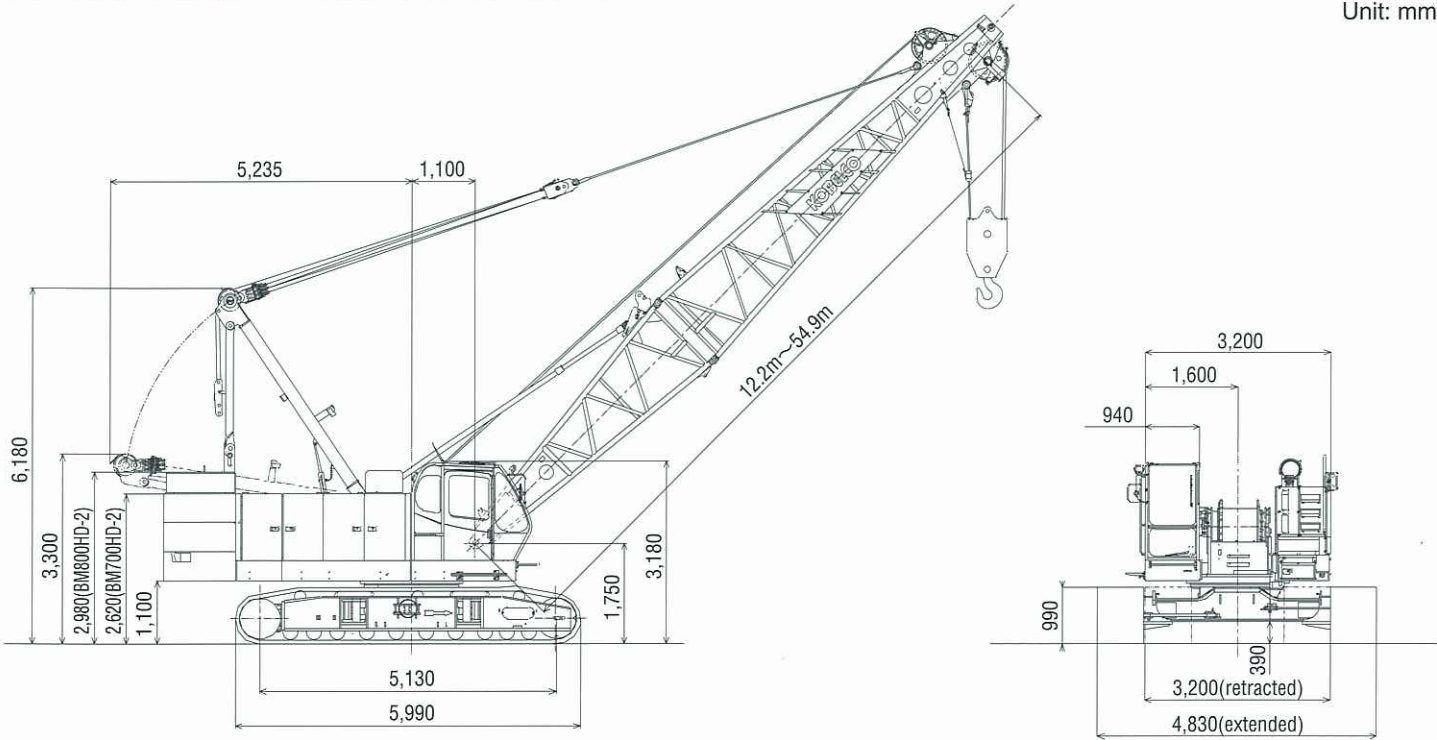
| Crane Boom            | BM700HD-2                      | BM800HD-2               |
|-----------------------|--------------------------------|-------------------------|
| Max. Lifting Capacity | 70 t/3.7 m                     | 80 t/3.7 m              |
| Max. Length           | 54.9 m                         | 54.9 m                  |
| Crane Jib             |                                |                         |
| Max. Lifting Capacity | 6.6 t                          | NA                      |
| Max. Length           | 18.3 mm                        | NA                      |
| Max. Combination      | 42.7 m+18.3 m                  | NA                      |
| Main & Aux. Winch     |                                |                         |
| Max. Line Speed       | 120 m/min (1st layer)          |                         |
| Rated Line Pull       | 108 kN (11 tf)                 |                         |
| Max. Line Pull *      | 196 kN (20 tf)                 |                         |
| Wire Rope             | 26 mm                          |                         |
| Wire Rope Length      | 170m (Main) 125m (Aux.)        | 170m (Main) 125m (Aux.) |
| Brake Type            | Wet-type multiple - disc brake |                         |
| Free-Fall             | Standard                       |                         |
| Working Speed         |                                |                         |
| Swing Speed           | 4.0 min <sup>-1</sup> (rpm)    |                         |
| Travel Speed          | 1.9/1.2 km/h                   |                         |

| Power Plant             | BM700HD-2                                  | BM800HD-2                          |
|-------------------------|--------------------------------------------|------------------------------------|
| Model                   | Mitsubishi 6D24-TLE2A                      |                                    |
| Engine Output           | 235 kW/2,000 min <sup>-1</sup> (rpm)       |                                    |
| Fuel Tank Capacity      | 400 liters                                 |                                    |
| Hydraulic System        |                                            |                                    |
| Main Pumps              | 3 variable displacement                    |                                    |
| Max. Pressure           | 30.9 MPa (315 kgf/cm <sup>2</sup> )        |                                    |
| Hydraulic Tank Capacity | 380 liters                                 |                                    |
| Weight                  |                                            |                                    |
| Operating Weight        | Approx. 69 t                               | Approx. 75 t                       |
| Counterweight           | 22.9 t                                     | 25.9 t                             |
| Transport Weight        | 43.9 t                                     | 44.2 t                             |
|                         | (Main machine with crawler and lower boom) |                                    |
| Ground Pressure         | 77 kPa (0.80 kgf/cm <sup>2</sup> )         | 82 kPa (0.84 kgf/cm <sup>2</sup> ) |

\*) Max. Line Pull is theoretical values and for reference only.

GENERAL DIMENSIONS

Unit: mm



KOBELCO CRANES CO., LTD.



BM7000HD-2

MAIN BOOM LIFTING CAPACITY

Rated loads in metric tons for 360° working area (Counterweight: 22.9 t)

Crawlers fully extended

| Boom length<br>m (ft) | 12.2<br>(40) | 15.2<br>(50) | 18.3<br>(60) | 21.3<br>(70) | 24.4<br>(80) | 27.4<br>(90) | 30.5<br>(100) | 33.5<br>(110) | 36.6<br>(120) | 39.6<br>(130) | 42.7<br>(140) | 45.7<br>(150) | 48.8<br>(160) | 51.8<br>(170) | 54.9<br>(180) |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 3.7                   | 70.0         |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| 4.0                   | 65.0         |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| 4.2                   | 65.0         | 64.2/4.3     | 57.2/4.8     |              |              |              |               |               |               |               |               |               |               |               |               |
| 5.0                   | 53.2         | 53.1         | 53.0         | 50.3/5.3     | 43.4/5.9     |              |               |               |               |               |               |               |               |               |               |
| 6.0                   | 41.3         | 41.2         | 41.1         | 41.1         | 41.0         | 38.0/6.4     | 33.5/6.9      |               |               |               |               |               |               |               |               |
| 7.0                   | 32.6         | 32.5         | 32.4         | 32.4         | 32.3         | 32.2         | 32.1          | 30.3/7.5      |               |               |               |               |               |               |               |
| 8.0                   | 26.9         | 26.8         | 26.7         | 26.7         | 26.6         | 26.5         | 26.4          | 26.3          | 26.1/8.0      | 24.3/8.5      |               |               |               |               |               |
| 9.0                   | 22.8         | 22.7         | 22.6         | 22.6         | 22.5         | 22.4         | 22.3          | 22.2          | 22.1          | 22.0          | 20.8/9.0      | 19.9/9.6      |               |               |               |
| 10.0                  | 19.7         | 19.6         | 19.5         | 19.5         | 19.4         | 19.3         | 19.2          | 19.1          | 19.0          | 18.9          | 18.8          | 18.7          | 17.7/10.1     | 16.3/10.6     | 13.2/11.2     |
| 12.0                  | 15.9/11.8    | 15.7         | 15.6         | 15.5         | 15.4         | 15.3         | 15.2          | 15.1          | 15.0          | 14.9          | 14.9          | 14.7          | 14.6          | 13.5          | 13.2          |
| 14.0                  |              | 12.9         | 12.8         | 12.6         | 12.5         | 12.4         | 12.3          | 12.2          | 12.1          | 12.0          | 11.8          | 11.7          | 11.6          | 11.5          | 11.1          |
| 16.0                  |              | 12.5/14.5    | 10.7         | 10.6         | 10.5         | 10.3         | 10.2          | 10.1          | 10.0          | 9.9           | 9.7           | 9.6           | 9.5           | 9.4           | 9.1           |
| 18.0                  |              |              | 9.7/17.1     | 9.0          | 8.9          | 8.8          | 8.7           | 8.6           | 8.5           | 8.3           | 8.2           | 8.1           | 7.9           | 7.8           | 7.8           |
| 20.0                  |              |              |              | 7.9/19.8     | 7.7          | 7.6          | 7.5           | 7.4           | 7.3           | 7.1           | 7.1           | 7.0           | 6.8           | 6.7           | 6.6           |
| 22.0                  |              |              |              |              | 6.8          | 6.7          | 6.5           | 6.4           | 6.3           | 6.2           | 6.1           | 6.0           | 5.8           | 5.7           | 5.6           |
| 24.0                  |              |              |              |              | 6.6/22.4     | 5.9          | 5.8           | 5.6           | 5.5           | 5.4           | 5.3           | 5.2           | 5.0           | 4.9           | 4.8           |
| 26.0                  |              |              |              |              | 5.5/25.0     | 5.1          | 5.1           | 5.0           | 4.9           | 4.7           | 4.7           | 4.5           | 4.4           | 4.3           | 4.2           |
| 28.0                  |              |              |              |              | 4.6/27.7     | 4.5          | 4.3           | 4.2           | 4.1           | 4.0           | 4.0           | 3.8           | 3.7           | 3.6           | 3.6           |
| 30.0                  |              |              |              |              |              | 4.0          | 3.9           | 3.7           | 3.7           | 3.5           | 3.3           | 3.2           | 3.2           | 3.1           | 3.1           |
| 32.0                  |              |              |              |              |              | 3.9/30.3     | 3.5           | 3.3           | 3.2           | 3.1           | 2.9           | 2.8           | 2.8           | 2.6           | 2.6           |
| 34.0                  |              |              |              |              |              |              | 3.2/33.0      | 3.0           | 2.9           | 2.7           | 2.5           | 2.4           | 2.2           | 2.2           | 2.2           |
| 36.0                  |              |              |              |              |              |              |               |               | 2.7/35.6      | 2.6           | 2.4           | 2.2           | 2.0           | 1.8           | 1.8           |
| 38.0                  |              |              |              |              |              |              |               |               |               | 2.2           | 2.0           | 1.9           | 1.7           | 1.5           | 1.5           |
| 40.0                  |              |              |              |              |              |              |               |               |               | 2.2/38.2      | 1.8           | 1.6           | 1.4           | 1.2           | 1.2           |
| 42.0                  |              |              |              |              |              |              |               |               |               |               | 1.6/40.9      | 1.3/42.0      | 1.1/42.0      | 1.1/41.0      | 1.1/41.0      |

Note: Rating do not exceed 78% of tipping load. Deduct the weight of main hook, and other load handling accessories from the ratings shown.

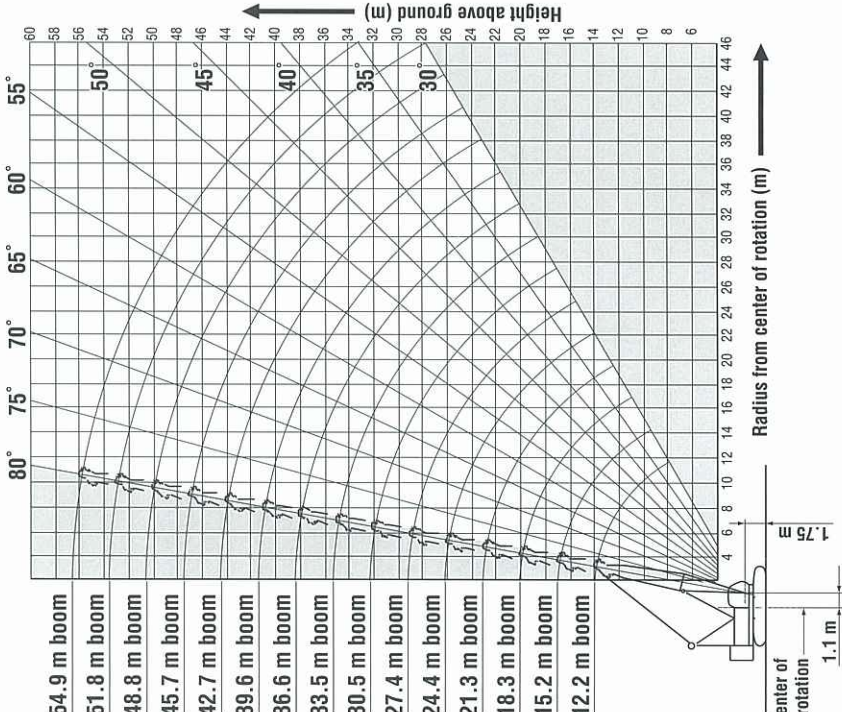
Rating shown in 

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

When actually operating the machine, strictly observe the instruction of the operator's manual.

WORKING RADIUS(BM8000HD-2)



BM8000HD-2

MAIN BOOM LIFTING CAPACITY

Rated loads in metric tons for 360° working area (Counterweight: 25.9 t)

Crawlers fully extended

| Boom length<br>m (ft) | 12.2<br>(40) | 15.2<br>(50) | 18.3<br>(60) | 21.3<br>(70) | 24.4<br>(80) | 27.4<br>(90) | 30.5<br>(100) | 33.5<br>(110) | 36.6<br>(120) | 39.6<br>(130) | 42.7<br>(140) | 45.7<br>(150) | 48.8<br>(160) | 51.8<br>(170) | 54.9<br>(180) |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 3.7                   | 80.0         |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| 4.0                   | 70.5         | 64.2/4.3     | 57.2/4.8     |              |              |              |               |               |               |               |               |               |               |               |               |
| 5.0                   | 56.5         | 56.4         | 56.3         | 51.2/5.3     | 45.9/5.9     |              |               |               |               |               |               |               |               |               |               |
| 6.0                   | 45.7         | 45.6         | 45.5         | 45.5         | 45.4         | 41.1/6.4     | 36.5/6.9      |               |               |               |               |               |               |               |               |
| 7.0                   | 36.3         | 36.2         | 36.1         | 36.1         | 36.0         | 35.9         | 35.8          | 32.4/7.5      |               |               |               |               |               |               |               |
| 8.0                   | 30.0         | 29.9         | 29.8         | 29.7         | 29.6         | 29.6         | 29.4          | 29.4          | 29.3          | 26.7/8.5      |               |               |               |               |               |
| 9.0                   | 25.5         | 25.4         | 25.3         | 25.2         | 25.1         | 25.0         | 24.9          | 24.9          | 24.8          | 24.7          | 22.0          | 19.9/9.6      |               |               |               |
| 10.0                  | 22.2         | 22.0         | 21.9         | 21.9         | 21.7         | 21.7         | 21.5          | 21.5          | 21.4          | 21.3          | 21.2          | 18.7          | 17.7/10.1     | 16.3/10.6     | 13.2/11.2     |
| 12.0                  | 15.9/11.8    | 17.3         | 17.2         | 17.1         | 17.0         | 16.9         | 16.8          | 16.7          | 16.6          | 16.5          | 16.5          | 16.4          | 16.2          | 13.5          | 13.2          |
| 14.0                  |              | 14.1         | 14.1         | 14.0         | 13.8         | 13.8         | 13.6          | 13.6          | 13.4          | 13.3          | 13.3          | 13.2          | 13.1          | 12.9          | 12.8          |
| 16.0                  |              | 13.0/14.5    | 11.9         | 11.8         | 11.6         | 11.5         | 11.4          | 11.3          | 11.2          | 11.1          | 11.0          | 10.9          | 10.8          | 10.7          | 10.6          |
| 18.0                  |              |              | 10.7/17.1    | 10.1         | 9.9          | 9.9          | 9.7           | 9.7           | 9.5           | 9.4           | 9.3           | 9.2           | 9.1           | 9.0           | 8.9           |
| 20.0                  |              |              |              | 9.0/19.8     | 8.6          | 8.6          | 8.4           | 8.3           | 8.2           | 8.1           | 8.0           | 7.9           | 7.8           | 7.7           | 7.5           |
| 22.0                  |              |              |              |              | 7.6          | 7.5          | 7.4           | 7.3           | 7.2           | 7.0           | 6.9           | 6.7           | 6.6           | 6.5           | 6.5           |
| 24.0                  |              |              |              |              | 7.5/22.4     | 6.7          | 6.5           | 6.5           | 6.3           | 6.2           | 6.1           | 6.0           | 5.9           | 5.8           | 5.6           |
| 26.0                  |              |              |              |              |              | 6.3/25.0     | 5.8           | 5.8           | 5.6           | 5.5           | 5.4           | 5.3           | 5.1           | 5.0           | 4.9           |
| 28.0                  |              |              |              |              |              |              | 5.3/27.7      | 5.2           | 5.0           | 4.9           | 4.8           | 4.7           | 4.5           | 4.4           | 4.3           |
| 30.0                  |              |              |              |              |              |              |               | 4.7           | 4.5           | 4.4           | 4.3           | 4.2           | 4.0           | 3.9           | 3.8           |
| 32.0                  |              |              |              |              |              |              |               | 4.6/30.3      | 4.1           | 3.9           | 3.8           | 3.7           | 3.6           | 3.5           | 3.3           |
| 34.0                  |              |              |              |              |              |              |               |               | 3.9/30.3      | 3.6           | 3.5           | 3.3           | 3.2           | 3.1           | 2.9           |
| 36.0                  |              |              |              |              |              |              |               |               |               | 3.3/35.6      | 3.1           | 3.0           | 2.9           | 2.7           | 2.5           |
| 38.0                  |              |              |              |              |              |              |               |               |               |               | 2.8           | 2.7           | 2.5           | 2.4           | 2.2           |
| 40.0                  |              |              |              |              |              |              |               |               |               |               | 2.8/38.2      | 2.4           | 2.2           | 2.1           | 1.9           |
| 42.0                  |              |              |              |              |              |              |               |               |               |               |               | 2.3/40.9      | 2.0           | 1.8           | 1.6           |
| 44.0                  |              |              |              |              |              |              |               |               |               |               |               |               | 1.8/43.5      | 1.5           | 1.3           |
| 46.0                  |              |              |              |              |              |              |               |               |               |               |               |               |               | 1.3           | 1.1           |

Note: Rating do not exceed 78% of tipping load. Deduct the weight of main hook, and other load handling accessories from the ratings shown.

Rating inside shown in 

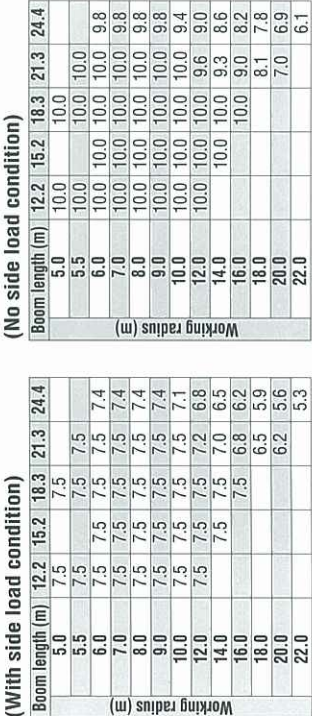
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 are determined by the strength of the boom or other structural components.

When actually operating the machine, strictly observe the instruction of the operator's manual.

CLAMSHELL

Clamshell ratings in metric tons for 360° working area (Crawler fully extended)



Note: 1. Total weight of bucket and materials must not exceed rated load.

Bucket capacity (m³) x Specified gravity of material (t/m³) + Bucket weight (t) ≤ Rated load

CLAMSHELL BUCKET (Reference only)

| Bucket capacity (m³) | Approximate weight (t) | Bucket dimensions (m) |
|----------------------|------------------------|-----------------------|
|                      |                        | A B C                 |
| 1.6                  | 3.2                    | 3.3 3.6 3.0           |
| 2.0                  | 3.8                    | 3.5 3.9 3.1           |
| 1.25                 | 3.6                    | 2.9 3.7 3.0           |
| 1.6                  | 4.6                    | 3.2 4.0 3.2           |

BOOM & JIB ARRANGEMENT

BOOM ARRANGEMENT CHART (BM7000HD-2/BM8000HD-2)

| Boom length<br>m (ft) | Boom arrangement                                           |
|-----------------------|------------------------------------------------------------|
| 12.2 (40)             | Base-Tip                                                   |
| 15.2 (50)             | Base-A-Tip                                                 |
| 18.3 (60)             | Base-A-Tip, Base-B-Tip                                     |
| 21.3 (70)             | Base-A-B-Tip, Base-C-Tip                                   |
| 24.4 (80)             | Base-A-B-Tip, Base-A-C-Tip, Base-B-B-Tip                   |
| 27.4 (90)             | Base-A-B-B-Tip, Base-B-C-Tip, Base-A-A-C-Tip               |
| 30.5 (100)            | Base-A-B-C-Tip, Base-C-C-Tip                               |
| 33.5 (110)            | Base-A-A-B-C-Tip, Base-B-B-C-Tip, Base-A-C-C-Tip           |
| 36.6 (120)            | Base-A-B-B-C-Tip, Base-B-C-C-Tip, Base-A-A-C-C-Tip         |
| 39.6 (130)            | Base-A-B-C-C-Tip, Base-C-C-C-Tip                           |
| 42.7 (140)            | Base-A-A-B-C-C-Tip, Base-B-B-C-C-Tip, Base-A-C-C-C-Tip     |
| 45.7 (150)            | Base-A-B-B-C-C-C-Tip, Base-A-A-C-C-C-Tip, Base-B-C-C-C-Tip |
| 48.8 (160)            | Base-A-B-C-C-C-Tip                                         |
| 51.8 (170)            | Base-A-A-B-C-C-C-Tip, Base-B-B-C-C-C-Tip                   |
| 54.9 (180)            | Base-A-B-B-C-C-C-Tip                                       |

Note:

Base = 6.1 m (20')

Tip = 6.1 m (20')

Insert Boom:

A = 3.0 m (10')

B = 6.1 m (20')

C = 9.1 m (30')

B = 6.1 m (20') with lug for jib

C = 9.1 m (30') with lug for jib

JIB ARRANGEMENT CHART(BM7000HD-2)

| Jib length<br>m (ft) | jib arrangement |
|----------------------|-----------------|
| 6.1 (20)             | Base-Tip        |
| 12.2 (40)            | Base-A-Tip      |
| 18.3 (60)            | Base-A-A-Tip    |

Note: Base = 3.0 m (10'), Tip = 3.0 m (10')

Insert Boom: A = 6.0 m (20')

1. Jib can be fitted to main boom between 30.5 m (100') and 45.7 m (150') in length.

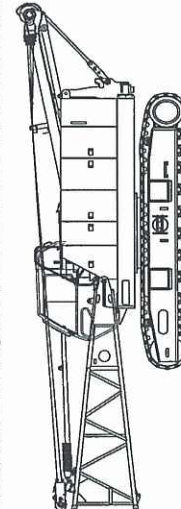
2. Fitting a jib requires 6.1 m (20') or 9.1 m (30') insert boom with lug.



# SPECIFICATIONS OF PARTS AND ATTACHMENTS

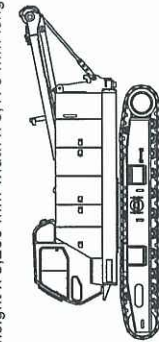
## Base Machine + Boom Base + Crawler

weight: 44,200 kg  
Dimensions: 3,300 mm height x 3,200 mm width x 11,690 mm length



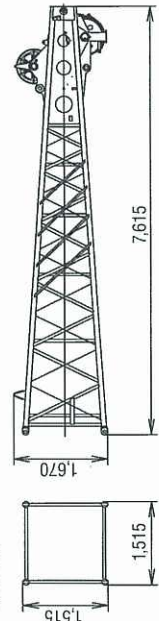
## Base Machine + Crawler

weight: 42,600 kg  
Dimensions: 3,300 mm height x 3,200 mm width x 8,170 mm length



## Upper Boom

weight: 1,340 kg



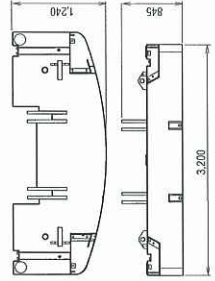
## Lower Boom

weight: 1,130 kg

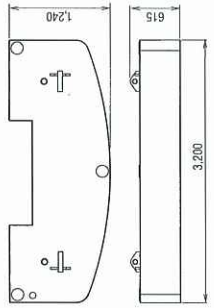


## Counterweight

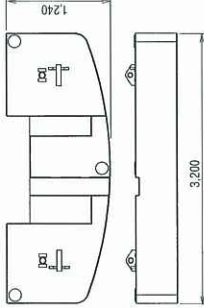
**No. 1 Counterweight**  
weight: 7,650 kg



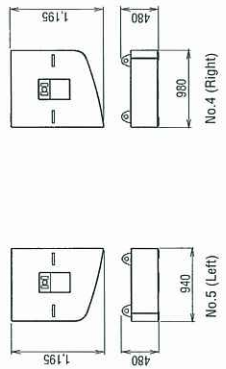
**No. 2 Counterweight**  
weight: 7,560 kg



**No. 3 Counterweight**  
weight: 7,560 kg



**No. 4, No. 5 Counterweight (BM800HD-2 only)**  
weight: 1,500 kg (1pc)



# OTHER ATTACHMENTS

| Attachment                           | Weight | Dimensions (L x W x H)         |
|--------------------------------------|--------|--------------------------------|
| 3.1 m (10 ft) insert boom            | 310 kg | 3,160 mm x 1,510 mm x 1,515 mm |
| 6.1 m (20 ft) insert boom            | 522 kg | 6,210 mm x 1,510 mm x 1,515 mm |
| 6.1 m (20 ft) insert boom with lug   | 545 kg | 6,210 mm x 1,510 mm x 1,645 mm |
| 9.1 m (30 ft) insert boom            | 742 kg | 9,260 mm x 1,510 mm x 1,515 mm |
| 9.1 m (30 ft) insert boom with lug   | 765 kg | 9,260 mm x 1,510 mm x 1,645 mm |
| Jib tip *                            | 180 kg | 3,475 mm x 675 mm x 625 mm     |
| Jib base *                           | 125 kg | 3,190 mm x 675 mm x 625 mm     |
| 6.1 m (20 ft) insert Jib *           | 140 kg | 6,160 mm x 675 mm x 625 mm     |
| Jib Strut *                          | 220 kg | 3,700 mm x 670 mm x 500 mm     |
| Auxiliary sheave                     | 138 kg | 1,010 mm x 1,310 mm            |
| Upper spreader                       | 280 kg | 1,580 mm x 300 mm x 680 mm     |
| Lower spreader                       | 170 kg | 870 mm x 300 mm x 610 mm       |
| 80-ton hook block **                 | 950 kg | 700 mm x 452 mm x 1,825 mm     |
| 70-ton hook block *                  | 900 kg | 700 mm x 370 mm x 1,780 mm     |
| 50-ton hook block                    | 700 kg | 700 mm x 370 mm x 1,696 mm     |
| 32-ton hook block                    | 660 kg | 700 mm x 364 mm x 1,570 mm     |
| 11-ton ball hook                     | 300 kg | ø 357 mm x 1,050 mm            |
| 11-ton ball hook (light weight type) | 100 kg | ø 300 mm x 815 mm              |

\* BM700HD-2 use only  
\*\* BM800HD-2 use only

**Note:** Due to our policy of continual product improvements all designs and specifications are subject to change without advance notice.  
**KOBELCO** is the corporate mark used by Kobe Steel on a variety of products and in the names of a number of Kobe Steel Group companies.

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