

# HYDRAULIC CRAWLER CRANE

# KOBELCO

# CKE4000

**Max. Lifting Capacity: 350 t**  
**Max. Boom Length : 78.0 m**  
**Max. Luffing Jib Combination :**  
**72.0 + 54.0 m**

**PRELIMINARY**

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

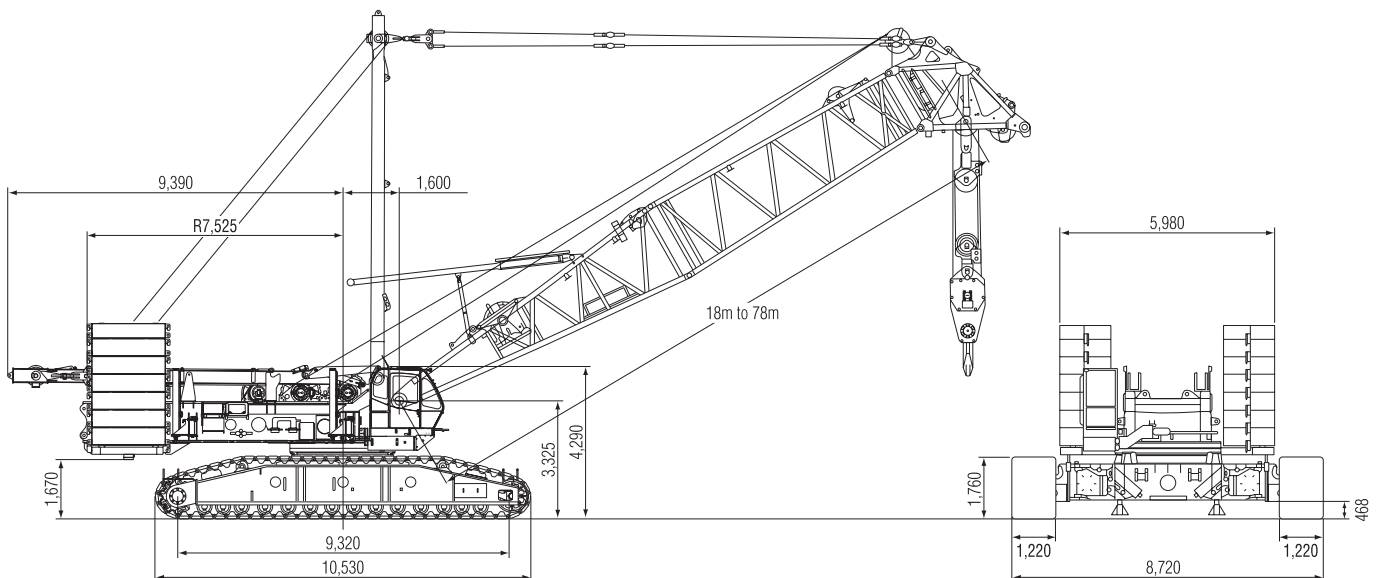
| Main Boom             |                                 |
|-----------------------|---------------------------------|
| Max. Lifting Capacity | 350 t /6.0 m                    |
| Luffing Jib           |                                 |
| Max. Lifting Capacity | 113.5 t/16.0 m                  |
| Max. Combination      | 66.0 m + 66.0 m/72.0 m + 54.0 m |
| Luffing Angle         | 66° ~ 86°                       |
| Main & Aux. Winch     |                                 |
| Max. Line Speed       | 130 m/min (5th layer)           |
| Rated Line Pull       | 132 kN (13.5 tf)                |
| Max. Line Pull        | 250 kN (25.5 tf)                |
| Wire Rope             | 28 mm                           |
| Wire Rope Length      | 790 m                           |
| Brake Type            | Wet-type multiple disc brake    |
| Free-Fall             | Option                          |
| Working Speed         |                                 |
| Swing Speed           | 1.3 min <sup>-1</sup> (rpm)     |
| Travel Speed          | 1.0/0.4 km/h                    |

| Power Plant             |                                      |
|-------------------------|--------------------------------------|
| Model                   | HINO K13C-UV                         |
| Engine Output           | 294 kW/2,000 min <sup>-1</sup> (rpm) |
| Fuel Tank Capacity      | 600 liters                           |
| Hydraulic System        |                                      |
| Main Pumps              | 6 variable displacement              |
| Max. Pressure           | 31.9 MPa (325 kgf/cm <sup>2</sup> )  |
| Hydraulic Tank Capacity | 870 liters                           |
| Self-Erection Device    |                                      |
|                         | Standard                             |
| Weight                  |                                      |
| Operating Weight        | Approx. 345 t                        |
| Counterweight           | 120 t (Upper), 41 t (Lower)          |
| Transport Weight        | 60.0 t (Main machine) *1             |
| Ground Pressure         | 150 kPa (1.52 kgf/cm <sup>2</sup> )  |

\* 1 with self-removal device  
with upper and lower removal device

## GENERAL DIMENSIONS

Unit: mm



**KOBELCO CRANES CO., LTD.**

Courtesy of Crane.Market

# MAIN BOOM LIFTING CAPACITY

**PRELIMINARY**

Rated loads in metric tons for 360° working area (Counterweight: 120.0 t, Carbody weight: 41.0 t)

Crawlers fully extended

| Boom length |        | 18.0 m    | 24.0 m    | 30.0 m    | 36.0 m    | 42.0 m    | 48.0 m    | 54.0 m    | 60.0 m    | 66.0 m    | 72.0 m     | 78.0 m     | Boom length |
|-------------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|-------------|
| Load radius | 5.0 m  | 5.0/350.0 |           |           |           |           |           |           |           |           |            |            | 5.0 m       |
|             | 6.0 m  | 350.0     | 350.0     |           |           |           |           |           |           |           |            |            | 6.0 m       |
|             | 7.0 m  | 320.7     | 318.5     | 316.6     | 313.6     | 7.4/273.2 |           |           |           |           |            |            | 7.0 m       |
|             | 8.0 m  | 269.4     | 267.6     | 265.8     | 263.8     | 248.8     | 8.0/233.3 | 8.6/202.7 |           |           |            |            | 8.0 m       |
|             | 9.0 m  | 231.8     | 230.4     | 228.8     | 226.9     | 216.8     | 204.9     | 193.9     | 9.3/178.1 | 9.9/158.4 |            |            | 9.0 m       |
|             | 10.0 m | 203.0     | 202.0     | 200.5     | 198.7     | 191.8     | 182.0     | 173.0     | 164.3     | 156.6     | 10.5/141.7 | 11.1/127.4 | 10.0 m      |
|             | 12.0 m | 160.8     | 160.8     | 160.1     | 158.5     | 155.1     | 148.1     | 141.5     | 135.0     | 129.4     | 123.7      | 118.1      | 12.0 m      |
|             | 14.0 m | 127.2     | 127.0     | 126.4     | 125.5     | 124.6     | 124.0     | 119.0     | 113.8     | 109.4     | 104.8      | 100.2      | 14.0 m      |
|             | 16.0 m | 104.8     | 104.4     | 103.5     | 102.7     | 101.6     | 101.1     | 100.7     | 97.7      | 94.1      | 90.2       | 86.4       | 16.0 m      |
|             | 18.0 m | 17.9/89.7 | 88.2      | 87.2      | 86.3      | 85.2      | 84.6      | 84.2      | 83.2      | 82.0      | 78.7       | 75.3       | 18.0 m      |
|             | 20.0 m |           | 76.0      | 75.0      | 74.0      | 72.8      | 72.3      | 71.7      | 70.8      | 70.4      | 69.3       | 66.3       | 20.0 m      |
|             | 22.0 m |           | 66.6      | 65.5      | 64.5      | 63.3      | 62.7      | 62.1      | 61.1      | 60.7      | 60.5       | 58.8       | 22.0 m      |
|             | 24.0 m |           | 23.1/62.3 | 57.9      | 56.8      | 55.6      | 55.0      | 54.4      | 53.3      | 52.9      | 52.7       | 51.8       | 24.0 m      |
|             | 26.0 m |           |           | 51.8      | 50.6      | 49.4      | 48.7      | 48.0      | 47.0      | 46.6      | 46.4       | 45.4       | 26.0 m      |
|             | 28.0 m |           |           | 47.4      | 45.5      | 44.2      | 43.5      | 42.8      | 41.7      | 41.3      | 41.1       | 40.0       | 28.0 m      |
|             | 30.0 m |           |           | 28.3/46.7 | 41.2      | 39.9      | 39.1      | 38.4      | 37.3      | 36.8      | 36.6       | 35.5       | 30.0 m      |
|             | 34.0 m |           |           |           | 33.5/35.3 | 33.0      | 32.1      | 31.3      | 30.2      | 29.7      | 29.4       | 28.3       | 34.0 m      |
|             | 38.0 m |           |           |           |           | 28.0      | 26.9      | 26.0      | 24.9      | 24.3      | 23.9       | 22.9       | 38.0 m      |
|             | 42.0 m |           |           |           |           | 38.7/27.3 | 22.9      | 21.9      | 20.7      | 20.0      | 19.6       | 18.3       | 42.0 m      |
|             | 46.0 m |           |           |           |           |           | 43.9/21.4 | 18.7      | 17.4      | 16.4      | 15.9       | 14.5       | 46.0 m      |
| 50.0 m      |        |           |           |           |           |           | 49.1/16.7 | 14.5      | 13.5      | 12.8      | 11.5       | 50.0 m     |             |
| 54.0 m      |        |           |           |           |           |           |           | 12.5      | 11.1      | 10.3      | 8.9        | 54.0 m     |             |
| 58.0 m      |        |           |           |           |           |           |           | 54.3/12.3 | 9.1       | 8.2       | 6.8        | 58.0 m     |             |
| 62.0 m      |        |           |           |           |           |           |           |           | 59.5/8.5  | 6.5       | 5.0        | 62.0 m     |             |
| 66.0 m      |        |           |           |           |           |           |           |           |           | 64.7/5.6  | 3.6        | 66.0 m     |             |
| 70.0 m      |        |           |           |           |           |           |           |           |           |           | 69.8/2.4   | 70.0 m     |             |

\* Designed and rated to comply with DIN 15018-3 and prEN13000.

# LUFFING JIB LIFTING CAPACITY

**PRELIMINARY**

(Counterweight: 120.0 t + 35.0 t, Carbody weight: 41.0 t)

(UNIT: METRIC TONS)

| Boom length | 30.0 m |      |        |      |        |      |        |      |        |      |        |      | 36.0 m |     |        |      |        |      |        |      |        |      |        |     |
|-------------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|-----|--------|------|--------|------|--------|------|--------|------|--------|-----|
|             | 24.0 m |      | 36.0 m |      | 42.0 m |      | 48.0 m |      | 60.0 m |      | 66.0 m |      | 30.0 m |     | 36.0 m |      | 42.0 m |      | 48.0 m |      | 60.0 m |      | 66.0 m |     |
| Boom Angle  | 86°    | 66°  | 86°    | 66°  | 86°    | 66°  | 86°    | 66°  | 86°    | 66°  | 86°    | 66°  | 86°    | 66° | 86°    | 66°  | 86°    | 66°  | 86°    | 66°  | 86°    | 66°  | 86°    | 66° |
| 14.0 m      | 113.5  |      |        |      |        |      |        |      |        |      |        |      |        |     |        |      |        |      |        |      |        |      |        |     |
| 16.0 m      | 113.5  |      |        |      |        |      |        |      |        |      |        |      | 113.5  |     |        |      |        |      |        |      |        |      |        |     |
| 18.0 m      | 104.6  |      | 102.8  |      |        |      |        |      |        |      |        |      | 102.2  |     |        |      |        |      |        |      |        |      |        |     |
| 20.0 m      | 91.9   |      | 90.2   |      | 89.5   |      |        |      |        |      |        |      | 89.7   |     | 88.7   |      | 88.0   |      |        |      |        |      |        |     |
| 22.0 m      | 81.8   |      | 80.2   |      | 79.8   |      | 78.7   |      |        |      |        |      | 79.8   |     | 78.8   |      | 78.4   |      | 77.3   |      |        |      |        |     |
| 24.0 m      | 73.6   |      | 72.0   |      | 71.6   |      | 71.1   |      |        |      |        |      | 71.7   |     | 70.8   |      | 70.3   |      | 69.8   |      |        |      |        |     |
| 26.0 m      | 66.8   |      | 65.3   |      | 64.8   |      | 64.3   |      | 61.4   |      |        |      | 65.0   |     | 64.1   |      | 63.6   |      | 63.1   |      | 60.9   |      |        |     |
| 28.0 m      | 61.0   |      | 59.6   |      | 59.1   |      | 58.5   |      | 57.8   |      | 53.0   |      | 59.4   |     | 58.5   |      | 58.0   |      | 57.4   |      | 56.7   |      | 53.3   |     |
| 30.0 m      |        |      | 54.7   |      | 54.2   |      | 53.6   |      | 52.8   |      | 50.5   |      | 54.5   |     | 53.6   |      | 53.1   |      | 52.6   |      | 51.8   |      | 50.8   |     |
| 34.0 m      |        | 41.3 | 46.8   |      | 46.3   |      | 45.7   |      | 44.8   |      | 43.9   |      | 46.7   |     | 45.9   |      | 45.4   |      | 44.8   |      | 43.9   |      | 43.0   |     |
| 38.0 m      |        | 36.0 | 40.8   |      | 40.2   |      | 39.6   |      | 38.6   |      | 37.8   |      | 32.4   |     | 39.9   |      | 39.4   |      | 38.8   |      | 37.8   |      | 36.9   |     |
| 42.0 m      |        |      |        | 29.7 | 35.4   |      | 34.8   |      | 33.7   |      | 32.9   |      | 28.5   |     | 27.3   |      | 34.6   |      | 34.0   |      | 33.0   |      | 32.1   |     |
| 46.0 m      |        |      |        | 26.4 | 31.6   | 25.6 | 30.8   | 24.7 | 29.7   |      | 28.9   |      | 25.4   |     | 24.2   | 30.8 | 23.4   | 30.1 |        | 29.0 |        | 28.2 |        |     |
| 50.0 m      |        |      |        | 23.7 |        | 22.9 | 27.6   | 22.0 | 26.4   |      | 25.6   |      |        |     | 21.6   |      | 20.8   | 26.9 | 19.9   | 25.8 |        | 24.9 |        |     |
| 54.0 m      |        |      |        |      |        | 20.6 |        | 19.7 | 23.7   | 18.2 | 22.8   |      |        |     |        |      | 18.6   |      | 17.7   | 23.0 |        | 22.2 |        |     |
| 58.0 m      |        |      |        |      |        |      |        | 17.7 | 21.3   | 16.2 | 20.5   | 15.3 |        |     |        |      | 16.8   |      | 15.9   | 20.7 | 14.4   | 19.9 |        |     |
| 62.0 m      |        |      |        |      |        |      |        | 16.1 | 19.3   | 14.5 | 18.5   | 13.6 |        |     |        |      |        | 14.3 | 18.8   | 12.8 | 17.9   | 11.8 |        |     |
| 66.0 m      |        |      |        |      |        |      |        |      |        | 13.1 | 16.2   | 12.1 |        |     |        |      |        |      |        | 11.4 | 16.2   | 10.4 |        |     |
| 70.0 m      |        |      |        |      |        |      |        |      |        | 11.8 |        | 10.8 |        |     |        |      |        |      |        | 10.2 | 14.8   | 9.2  |        |     |
| 74.0 m      |        |      |        |      |        |      |        |      |        | 10.7 |        | 9.7  |        |     |        |      |        |      |        | 9.2  |        | 8.2  |        |     |
| 78.0 m      |        |      |        |      |        |      |        |      |        |      | 8.8    |      |        |     |        |      |        |      |        |      |        | 7.3  |        |     |
| 82.0 m      |        |      |        |      |        |      |        |      |        |      |        |      |        |     |        |      |        |      |        |      |        |      | 6.6    |     |

\* Designed and rated to comply with DIN 15018-3 and prEN13000.



# BOOM & JIB ARRANGEMENT

## CRANE BOOM ARRANGEMENT

| Boom length | Boom arrangement                         |
|-------------|--|
| 18 m        | Base-B-Cap                               |
| 24 m        | Base-A-B-Cap                             |
| 30 m        | Base-A-A-B-Cap, Base-C-B-Cap             |
| 36 m        | Base-A-C-B-Cap                           |
| 42 m        | Base-A-A-C-B-Cap, Base-C-C-B-Cap         |
| 48 m        | Base-A-C-C-B-Cap                         |
| 54 m        | Base-A-A-C-C-B-Cap, Base-C-C-C-B-Cap     |
| 60 m        | Base-A-C-C-C-B-Cap                       |
| 66 m        | Base-A-A-C-C-C-B-Cap, Base-C-C-C-C-B-cap |
| 72 m        | Base-A-C-C-C-C-B-Cap                     |
| 78 m        | Base-A-A-C-C-C-C-B-Cap                   |

Base = 9.0 m , Cap (Heavy-duty Cap) = 1.2 m,  
 Inserts: A = 6.0 m, B (tapered boom)= 7.8 m, C = 12.0 m

## LUFFING BOOM ARRANGEMENT

| Boom length | Boom arrangement                     |
|-------------|--------------------------------------|
| 24 m        | Base-A-B-Cap                         |
| 30 m        | Base-A-A-B-Cap, Base-C-B-Cap         |
| 36 m        | Base-A-C-B-Cap                       |
| 42 m        | Base-A-A-C-B-Cap, Base-C-C-B-Cap     |
| 48 m        | Base-A-C-C-B-Cap                     |
| 54 m        | Base-A-A-C-C-B-Cap, Base-C-C-C-B-Cap |
| 60 m        | Base-A-C-C-C-B-Cap                   |
| 66 m        | Base-A-A-C-C-C-B-Cap                 |
| 72 m        | Base-A-C-C-C-C-B-Cap                 |
| 78 m        | Base-A-A-C-C-C-C-B-Cap               |

Base = 9.0 m , Cap (Heavy-duty Cap) = 1.2 m,  
 Inserts: A = 6.0 m, B (Tapered boom) = 7.8 m, C = 12.0 m

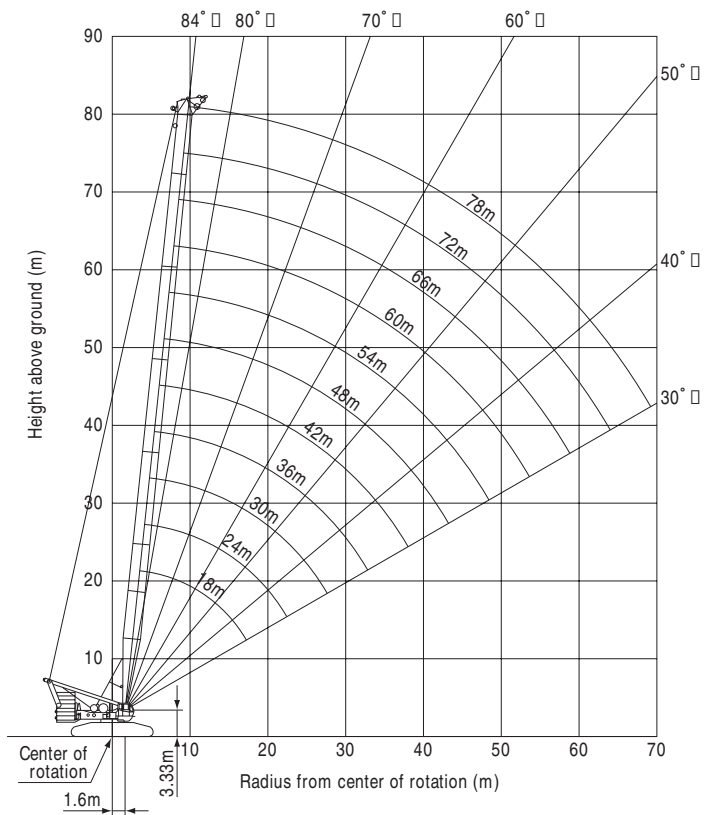
## LUFFING JIB ARRANGEMENT

| Boom length | Boom arrangement                         |
|-------------|--|
| 24 m        | Base-E-Jib tip                           |
| 30 m        | Base-E-E-Jib tip, Base-F-Jib tip         |
| 36 m        | Base-E-F-Jib tip                         |
| 42 m        | Base-E-E-F-Jib tip, Base-F-F-Jib tip     |
| 48 m        | Base-E-F-F-Jib tip                       |
| 54 m        | Base-E-E-F-F-Jib tip, Base-F-F-F-Jib tip |
| 60 m        | Base-E-F-F-F-Jib tip                     |
| 66 m        | Base-E-E-F-F-F-Jib tip                   |

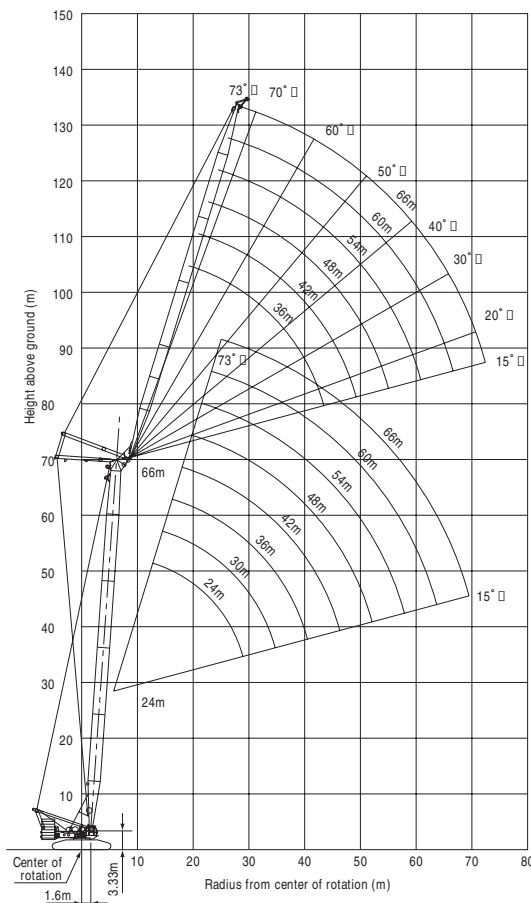
Base (jib base) = 9.0 m, Jib Tip (light-duty tip/Jib tip) = 9.0 m  
 Inserts (jib): E (luffing jib insert) = 6.0 m, F (luffing jib insert) = 12.0 m

# WORKING RADIUS

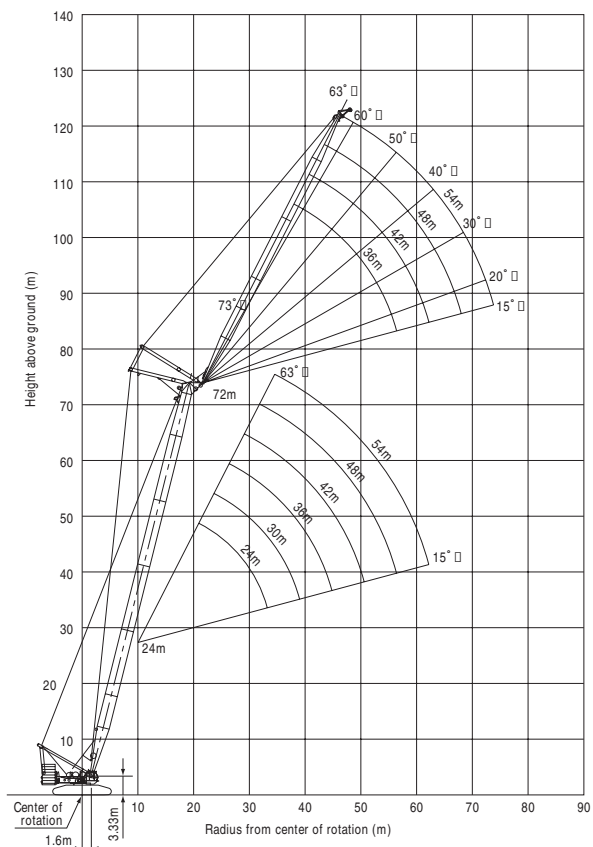
## CRANE BOOM



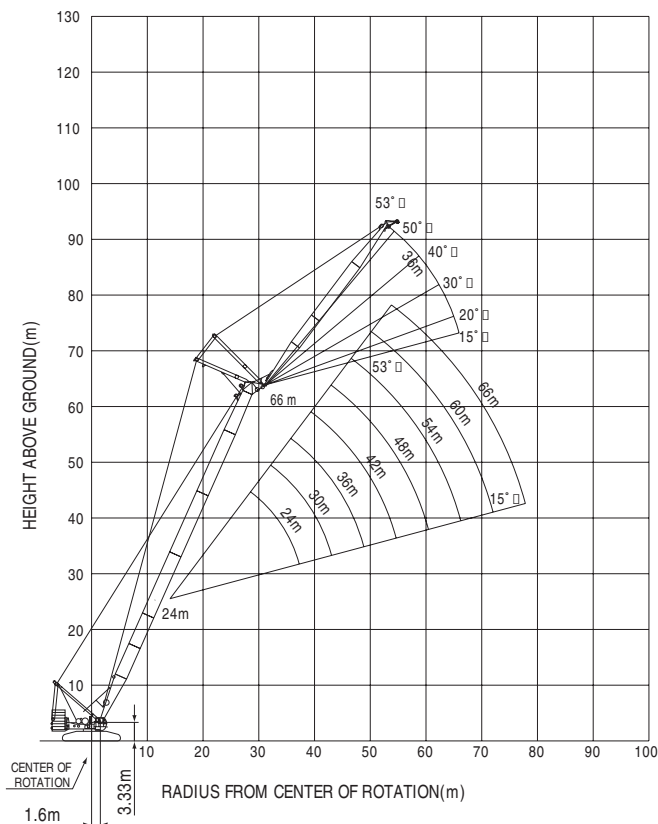
## LUFFING JIB Boom Angle: 86°



## Boom Angle: 76°



## Boom Angle: 66°

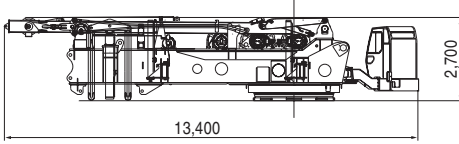


# SPECIFICATIONS OF PARTS AND ATTACHMENTS

Dimensions: mm Weight: kg

## Upper Frame (Base Machine)

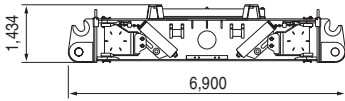
Weight: 60,000 kg x 1



Includes front winch, rear winch, boom hoist winch, mast, self-erection device, upper and lower removal device, upper Trans-lifter, and counterweight removal device.

## Carbody

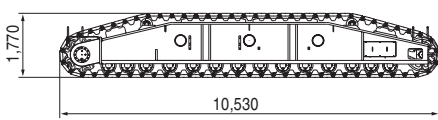
Weight: 26,000 kg x 1



Includes upper and lower removal device and lower Trans-lifter.

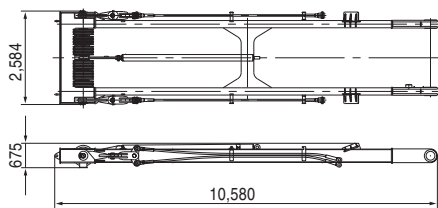
## Crawlers

Weight: 36,200 kg x each side



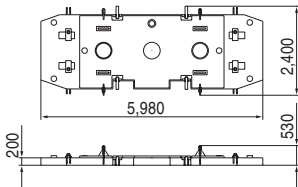
## Mast

Weight: 6,290 kg



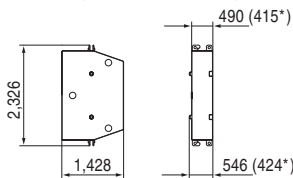
## Counterweight Base

Weight: 20,000 kg



## Counterweight

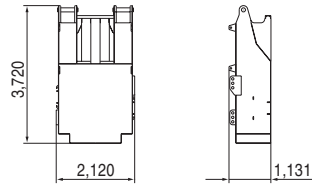
Weight: (A) 10,000 kg x 12 (B) 7,500 kg x 2



\* the counterweight (B) of figures

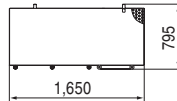
## Carbody Counterweight

Weight: 20,000 kg x 2



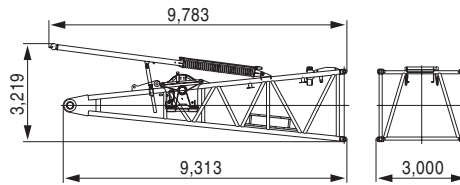
## Platform

Weight: 328 kg x 7



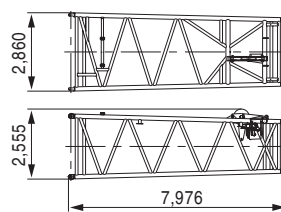
## Boom Base

Weight: 11,000 kg x 1



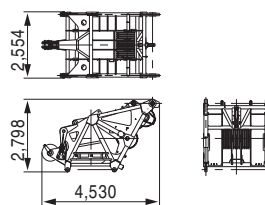
## Tapered Boom

Weight: 3,300 kg



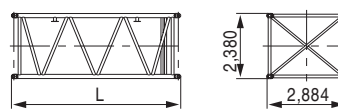
## Boom Top (1.2 m)

Weight: 5,888 kg



## Insert Boom

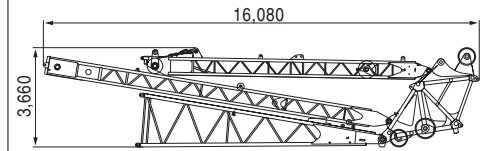
Weight: 5,888 kg



|        | L (mm) | Weight (kg) |
|--------|--------|-------------|
| 6.0 m  | 6,176  | 2,619       |
| 12.0 m | 12,176 | 4,000       |

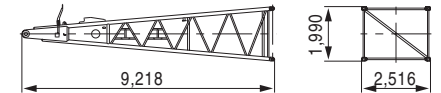
## Travel Kit

Weight: 12,000 kg



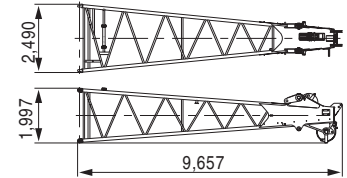
## Luffing Jib Base

Weight: 2,792 kg x 1

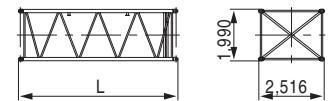


## Luffing Jib Top

Weight: 2,381 kg x 1



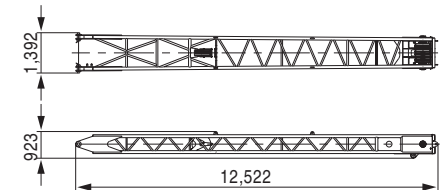
## Insert Luffing Jib



|        | L (mm) | Weight (kg) |
|--------|--------|-------------|
| 6.0 m  | 6,140  | 1,286       |
| 12.0 m | 12,140 | 2,382       |

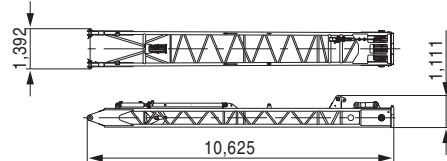
## Front Strut (Luffing Jib)

Weight: 2,754 kg x 1



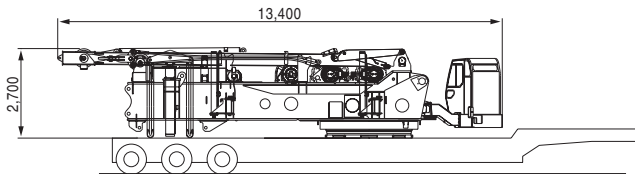
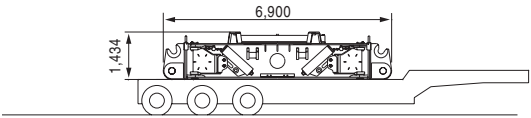
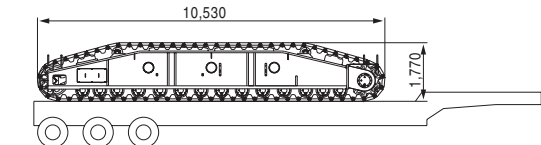
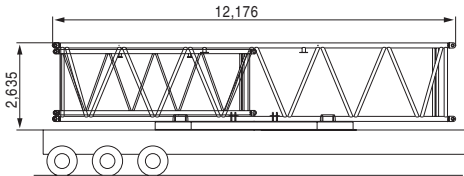
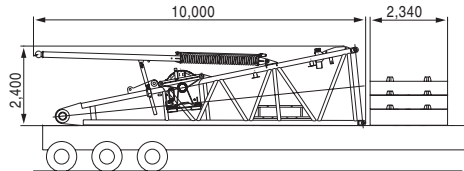
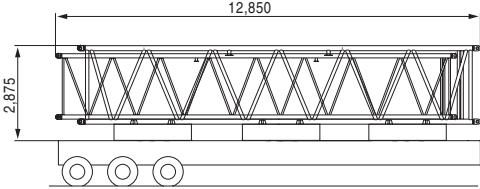
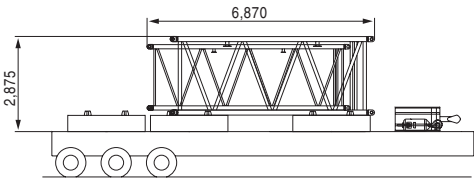
## Rear Strut (Luffing Jib)

Weight: 3,226 kg x 1



# TRANSPORTATION PLAN

(Main Boom 72.0 m + Luffing Jib 54.0 m)

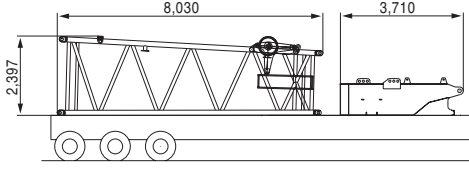
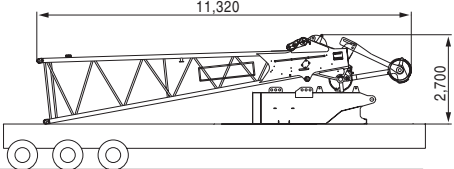
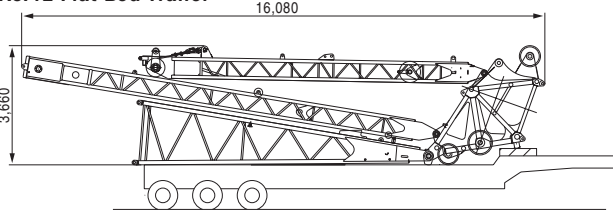
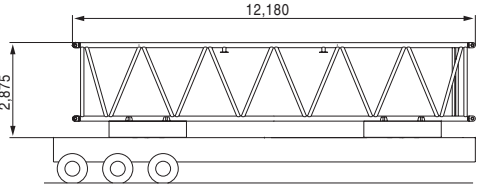
| Configuration  | Description  | Total Weight |
|--|--|--------------|
| <p><b>No.1 Low Loader</b></p>                      | <p>Base Machine<br/>with self removal device<br/>with upper and lower removal device</p>   | 60.0 ton     |
| <p><b>No.2 Flat Bed Trailer</b></p>               | Carbody =  | 26.0 ton     |
| <p><b>No.3 &amp; No.4 Flat Bed Trailer</b></p>   | Crawler =  | 36.0 ton     |
| <p><b>No.5 Flat Bed Trailer</b></p>             | <p>Counterweight Base x 1 = 20.0 ton<br/>12.0 m Main Boom Insert = 4.0 ton<br/>6.0 m Luffing Jib Insert = 1.3 ton<br/>Total = 25.3 ton</p>   |              |
| <p><b>No.6 Flat Bed Trailer</b></p>             | <p>Lower Boom = 11.0 ton<br/>Counterweight = 10.0 ton<br/>Counterweight (2 x 7.5 ton) = 15.0 ton<br/>Total = 36.0 ton</p>  |              |
| <p><b>No.7 &amp; No.8 Flat Bed Trailer</b></p>  | <p>Counterweight (3 x 10.0 ton) = 30.0 ton<br/>12.0 m Main Boom Insert = 4.0 ton<br/>12.0 m Luffing Jib Insert = 2.4 ton<br/>Total = 36.4 ton</p>  |              |
| <p><b>No.9 Flat Bed Trailer</b></p>             | <p>Counterweight (3 x 10.0 ton) = 30.0 ton<br/>6.0 m Main Boom Insert = 4.0 ton<br/>6.0 m Luffing Jib Insert = 1.3 ton<br/>120 Hook = 3.5 ton<br/>Ball Hook = 0.65 ton<br/>Total = 39.45 ton</p> |              |

**Note:** This transport plan depends on your specification of trailer and the areas or countries where you transport.

# TRANSPORTATION PLAN

# CKE4000

(Main Boom 72.0 m + Luffing Jib 54.0 m)

| Configuration   | Description  | Total Weight                          |
|---|--|---------------------------------------|
| <b>No. 10 Flat Bed Trailer</b><br>   | Carbody Counterweight =<br>7.8 m Tapered Boom Insert =<br><hr/> Total        | 20.5 ton<br>3.2 ton<br><hr/> 23.7 ton |
| <b>No. 11 Flat Bed Trailer</b><br>   | Carbody Counterweight =<br>Luffing Jib Top (with Aux.) =<br><hr/> Total      | 20.5 ton<br>3.0 ton<br><hr/> 23.5 ton |
| <b>No. 12 Flat Bed Trailer</b><br>   | Upper Boom Assembly =  | 12.0 ton                              |
| <b>No. 13 Flat Bed Trailer</b><br> | Counterweight (2 x 10.0 ton) =<br>12.0 m Main Boom Insert =<br><hr/> Total = | 20.0 ton<br>4.0 ton<br><hr/> 24.0 ton |

**Note:** This transport plan depends on your specification of trailer and the areas or countries where you transport.

## OTHER ATTACHMENTS

| Attachments     | Weight | Dimensions (L x W x H)     |
|-----------------|--------|----------------------------|
| Jib backstop    | 97 kg  | 3,365 mm                   |
| Jib aux. sheave | 424 kg | 2,408 mm x 809 mm x 773 mm |
| Upper spreader  | 763 kg | 1,598 mm x 870 mm x 671 mm |

**Note:** Due to our policy of continual product improvements all designs and specifications are subject to change without advance notice.



### KOBELCO CRANES CO., LTD.

17-1, Higashi-Gotanda 2-chome, Shinagawa-ku, TOKYO, 141-8626 JAPAN  
 Tel: ++81 (0) 3-5789-2130 Fax: ++81 (0) 3-5789-3372