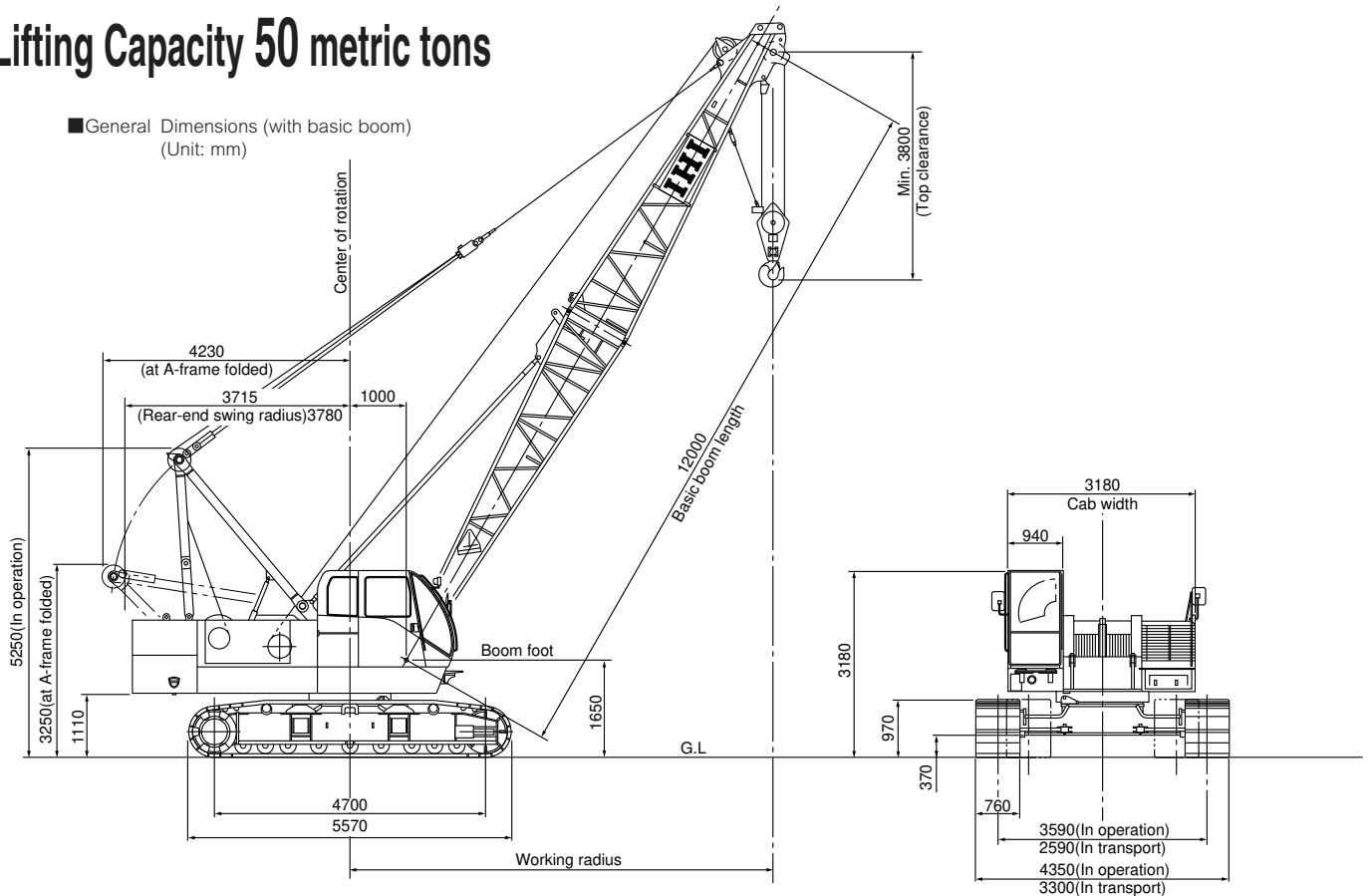


# CCH500-3II

## Fully Hydraulic Crawler Spanner Crane

Lifting Capacity 50 metric tons



### ■ Specification

| Performance                  |                                                                                                                 |
|------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Swing speed                  | 3.5rpm                                                                                                          |
| Travel speed                 | * 1.6km/h(1mph)                                                                                                 |
| Gradeability                 | 40%(Approx.22)                                                                                                  |
| Engine                       |                                                                                                                 |
| Make                         | Cummins Inc.                                                                                                    |
| Model                        | QSB6.7                                                                                                          |
| Type                         | Water cooled, 4-cycle, direct fuel injection turbocharged and charge air cooled                                 |
| Total piston displacement    | 6.7L                                                                                                            |
| Rated output                 | 149kW/2.100rpm                                                                                                  |
| Fuel tank capacity           | 240L                                                                                                            |
| Battery                      | 12V x 2pcs.                                                                                                     |
| Load hoist system(Main&Aux.) |                                                                                                                 |
| Hydraulic motor              | Variable displacement axial piston type                                                                         |
| Reduction gear               | One-stage planetary gear and single stage spur gear                                                             |
| Hoist drum                   | Dual drums on inline individual shaft, independent hydraulic motor driven, lagging type with lebus grooved drum |
| Clutch                       | Internal expanding band type                                                                                    |
| Brake                        | External contracting type                                                                                       |
| Drum lock                    | Ratchet lock                                                                                                    |
| Boom hoist system            |                                                                                                                 |
| Motor                        | Axial piston type                                                                                               |
| Reduction gear               | Two stage planetary gear                                                                                        |
| Hoist drum                   | Lebus grooved drum                                                                                              |
| Brake                        | Automatic spring-loaded hydraulically released wet type multi-disk                                              |
| Drum lock                    | Ratchet lock                                                                                                    |

\* Travel speed changes depending on the load.

### ■ Standard equipment

- Instrument**
  - Engine tachometer (Hour meter)
  - Hydraulic oil pressure gauge (for control circuit)
  - Fuel level gauge
  - Engine coolant thermo indicator
  - Engine oil pressure indicator
  - Hydraulic oil thermo indicator
- Lighting**
  - Work light 24v x 80w x 2
  - Room light 24v x 20w x 1
- Safety device**
  - Automatic stop for hook overwinding
  - Automatic stop for boom overwinding
  - Telescopic boom limit stop
  - Swing lock
  - Main and Aux. drum lock
  - Safety valve for hydraulic circuit
  - Counter balance valve
  - Control lever locking device
- Standard accessories**
  - Windshield wiper
  - Roof glass wiper
  - Survivor
  - Sun shade
  - Storage pouch
  - Reclining operator's seat
  - Floor mat
  - Steps for operator's cab (foldable type)
  - Radio
  - Cigarette lighter
  - Ash tray
- Other equipment:**
  - Rearview mirrors (R/L)
  - Horn
  - Swing warning flasher
  - Travel warning flasher
  - Low-noise cab
  - Bronze tinted glass
  - Electrical engine throttle control
  - Hydraulic assist brake (Main & Aux. winch)
  - Winch mode selector (main & Aux. winch)
  - Ultra low speed control
  - Wire mesh boom walkway (for inner boom)
  - Plug socket (24v)
  - Fuel filling pump
- A-frame (High gantry) erecting device**

## Crane specifications

|                                                      |                                      |                  |
|------------------------------------------------------|--------------------------------------|------------------|
| Max.lifting capacity(metric ton) x working radius(m) |                                      | 50 x 3.7         |
| Max.boom length,main(main+jib boom)(m)               |                                      | 51(42+15)        |
| Rope speed                                           | Main drum hoist/lowering(m/min)      | * 100/70 • 50/35 |
|                                                      | Aux.drums hoist/lowering(m/min)      | * 100/70 • 50/35 |
|                                                      | Boom drum hoist/lowering(m/min)      | * 60             |
| Part line                                            | Hook block capacity(ton) x part line | 50 x 10          |
|                                                      | Hook block capacity(ton) x part line | 5.8 x 1          |
|                                                      | Boom drum hoist/lowering part line   | 12               |
| Counterweight(ton)                                   |                                      | 16               |
| Total operating weight(ton)                          |                                      | 49.4             |
| Boom length(m)                                       |                                      | 12               |
| Hook block capacity(ton)                             |                                      | 50               |
| Average ground bearing pressure(kg/cm <sup>2</sup> ) |                                      | 0.64             |

\* The rope speed changes depending on the load.

## Combination of main boom and jib boom

| Jib boom length(m) | Main boom length(m) |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------------|---------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                    | 12                  | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 |
| 1                  | ●                   | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  |
| 6                  | ●                   | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  |
| 9                  | ●                   | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  |
| 12                 | ●                   | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  |
| 15                 | ●                   | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  |

●:Applicable combination

## Wire rope

| Place of use         | Rope diameter(mm)/Guaranteed strength(ton) | Rope type |
|----------------------|--------------------------------------------|-----------|
| Main drum            | 20.0/30.0                                  | A         |
| Aux.drums            | 20.0/30.0                                  | A         |
| Boom hoist           | 16.0/21.8                                  | B         |
| Boom suspension      | 31.5/74.9                                  | A         |
| Jib boom suspension  | 26.0/49.9                                  | A         |
| Jib strut suspension | 26.0/49.9                                  | A         |

Rope type A:6XFi(29)IWRC regular Z lay

B:6XWS(31)T IWRC regular Z lay

Length of wire rope to be decided according to the ordered boom length

## Boom composition

(Unit:m)

|          | Boom length | Boom composition      |
|----------|-------------|-----------------------|
| Standard | 12          | 6.5(inner)+5.5(outer) |
| Option   | 15          | 6.5+3+5.5             |
| Option   | 18          | 6.5+3+3+5.5           |
| Option   | 21          | 6.5+3+6+5.5           |
| Option   | 24          | 6.5+3+3+6+5.5         |
| Option   | 27          | 6.5+3+6+6+5.5         |
| Option   | 30          | 6.5+3+6+9+5.5         |
| Option   | 33          | 6.5+3+3+6+9+5.5       |
| Option   | 36          | 6.5+3+3+9+9+5.5       |
| Option   | 39          | 6.5+3+6+9+9+5.5       |
| Option   | 42          | 6.5+3+3+6+9+9+5.5     |
| Option   | 45          | 6.5+3+3+9+9+9+5.5     |
| Option   | 48          | 6.5+3+6+9+9+9+5.5     |
| Option   | 51          | 6.5+3+3+6+9+9+9+5.5   |

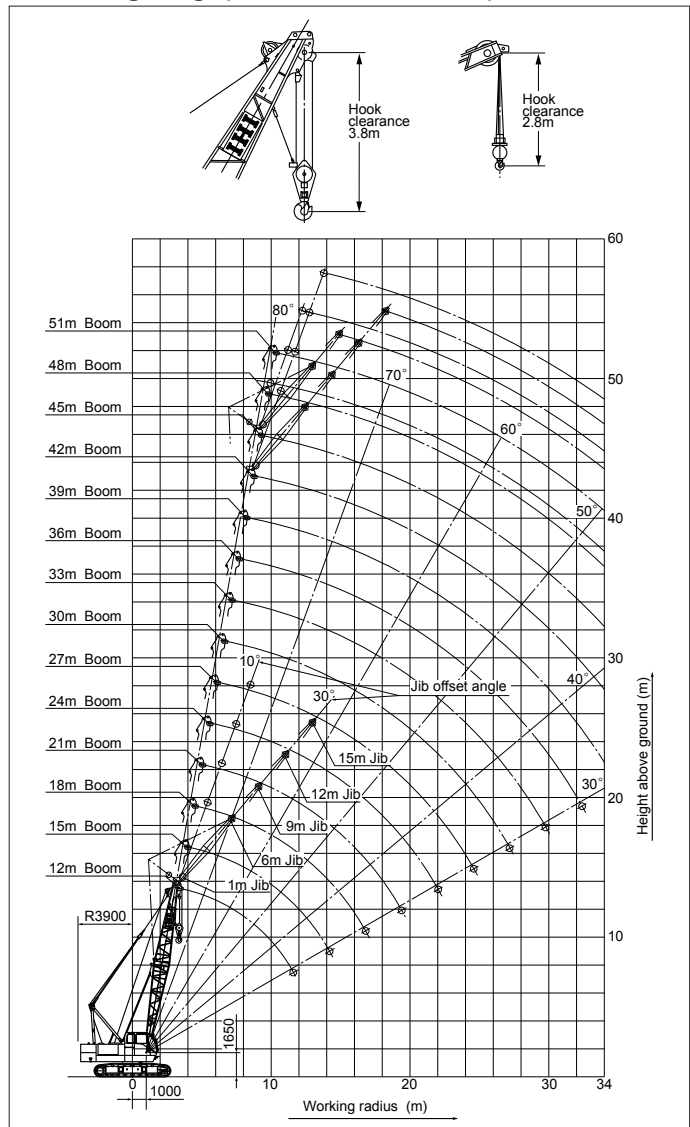
\*:Required middle suspension for boom length 39m and longer

## Jib Boom composition

(Unit:m)

| Jib Boom length | Jib Boom composition |
|-----------------|----------------------|
| 1               | 3(inner)+3(outer)    |
| 9               | 3+3+3                |
| 12              | 3+3+3+3              |
| 15              | 3+3+6+3              |

## Working range(No loaded condition)



## ■ Rated lifting loads

(Unit: metric ton)

| Boom length(m)<br>Working radius(m) | 12.00           | 15.00          | 18.00          | 21.00          | 24.00          | 27.00          | 30.00          | 33.00          | 36.00          | 39.00          | 42.00          | 45.00          | 48.00          | 51.00          |
|-------------------------------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 3.7                                 | 50.00           | 3.9mx<br>47.90 |                |                |                |                |                |                |                |                |                |                |                |                |
| 4.0                                 | 48.90           | 47.00          | 4.4mx<br>41.60 |                |                |                |                |                |                |                |                |                |                |                |
| 4.5                                 | 40.30           | 40.20          | 40.10          |                |                |                |                |                |                |                |                |                |                |                |
| 5.0                                 | 33.80           | 33.70          | 33.60          | 33.50          | 5.5mx<br>28.70 | 5.9mx<br>25.65 |                |                |                |                |                |                |                |                |
| 6.0                                 | 25.50           | 25.40          | 25.30          | 25.20          | 25.10          | 25.00          | 6.5mx<br>22.05 |                |                |                |                |                |                |                |
| 7.0                                 | 20.40           | 20.30          | 20.20          | 20.10          | 20.00          | 19.90          | 19.80          | 19.70          | 7.6mx<br>17.00 |                |                |                |                |                |
| 8.0                                 | 17.00           | 16.90          | 16.80          | 16.70          | 16.60          | 16.50          | 16.40          | 16.30          | 16.20          | 8.1mx<br>15.80 | 8.6mx<br>14.40 |                |                |                |
| 9.0                                 | 14.50           | 14.40          | 14.30          | 14.20          | 14.10          | 14.00          | 13.90          | 13.80          | 13.70          | 13.60          | 13.50          | 9.1mx<br>13.15 | 9.8mx<br>11.40 |                |
| 10.0                                | 12.60           | 12.50          | 12.40          | 12.30          | 12.20          | 12.10          | 12.00          | 11.90          | 11.80          | 11.70          | 11.60          | 11.50          | 11.20          | 10.3m<br>x8.50 |
| 12.0                                | 11.5m<br>x10.50 | 9.90           | 9.80           | 9.70           | 9.60           | 9.50           | 9.40           | 9.30           | 9.20           | 9.10           | 9.00           | 8.90           | 8.80           | 8.50           |
| 14.0                                |                 | 8.10           | 8.00           | 7.90           | 7.80           | 7.70           | 7.60           | 7.50           | 7.40           | 7.30           | 7.20           | 7.10           | 7.00           | 6.90           |
| 16.0                                |                 | 14.1m<br>x8.00 | 6.70           | 6.60           | 6.50           | 6.40           | 6.30           | 6.20           | 6.10           | 6.00           | 5.90           | 5.80           | 5.70           | 5.60           |
| 18.0                                |                 |                | 16.7m<br>x6.35 | 5.70           | 5.60           | 5.50           | 5.40           | 5.30           | 5.20           | 5.10           | 5.00           | 4.90           | 4.80           | 4.70           |
| 20.0                                |                 |                |                | 19.3m<br>x5.20 | 4.90           | 4.80           | 4.70           | 4.60           | 4.50           | 4.40           | 4.30           | 4.20           | 4.10           | 4.00           |
| 22.0                                |                 |                |                |                | 21.9m<br>x4.30 | 4.20           | 4.10           | 4.00           | 3.90           | 3.80           | 3.70           | 3.60           | 3.50           | 3.40           |
| 24.0                                |                 |                |                |                |                | 3.70           | 3.60           | 3.50           | 3.40           | 3.30           | 3.20           | 3.10           | 3.00           | 2.90           |
| 26.0                                |                 |                |                |                |                | 24.5m<br>x3.50 | 3.10           | 3.00           | 2.95           | 2.85           | 2.75           | 2.65           | 2.55           | 2.45           |
| 28.0                                |                 |                |                |                |                |                | 27.0m<br>x2.90 | 2.70           | 2.60           | 2.50           | 2.40           | 2.30           | 2.20           | 2.10           |
| 30.0                                |                 |                |                |                |                |                |                | 29.7m<br>x2.30 | 2.30           | 2.20           | 2.10           | 2.00           | 1.90           | 1.80           |
| 32.0                                |                 |                |                |                |                |                |                |                | 2.00           | 1.90           | 1.80           | 1.70           | 1.60           | 1.50           |
| 34.0                                |                 |                |                |                |                |                |                |                | 32.3m<br>x1.95 | 1.60           | 1.50           | 1.40           | 1.35           | 1.25           |
| No. of Part Line                    | 10              | 10             | 9              | 7              | 6              | 6              | 5              | 4              | 4              | 3              | 3              | 3              | 2              | 2              |

## Notes

- Above rated loads are based on firm level ground, within 78% of tipping load at any point 360° throughout and with front stability of 1.15 or more.
- Working radius is horizontal distance from center of rotation to a vertical line through the centerline of gravity of the load.
- The weight of the hook block and other lifting devices must be considered to be a part of the load.  
 50 ton hook block·····0.49ton  
 25 ton hook block·····0.35ton  
 15 ton hook block·····0.31ton
- Crawler frame and A frame (high gantry) should also be extended before working.
- When jib boom is fitted actual loads that can be lifted with the main hook block should reduce following weights from the above chart (the weights include that of the auxiliary hook block).

|                            |      |      |      |       |       |
|----------------------------|------|------|------|-------|-------|
| Jib boom length(m)         | 1.00 | 6.00 | 9.00 | 12.00 | 15.00 |
| Weight to be deducted(ton) | 0.30 | 0.75 | 0.95 | 1.20  | 1.45  |

- Depending on the number of part lines, rated lifting load is limited as follows,  
 1-part line·····up to 5.8 tons  
 2-part line·····up to 11.4 tons  
 3-part line·····up to 16.0 tons  
 4-part line·····up to 20.0 tons  
 5-part line·····up to 25.0 tons  
 6-part line·····up to 30.0 tons  
 7-part line·····up to 35.0 tons  
 8-part line·····up to 40.0 tons  
 9-part line·····up to 45.0 tons  
 10-part line·····up to 50.0 tons
- The hook block will not come down to ground level, if the rope part line is more than shown in above chart.

Jib rated lifting loads

(Unit:metric ton)

| Boom length(m)    | 12.0                                                                                                                                                                |                |               |               |                |                |                |      |                |                                                                                                                                                                     | 15.0           |                |                |                |                |                |                |                |  |  |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|---------------|----------------|----------------|----------------|------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|--|
| Jib length(m)     |                                                                                                                                                                     |                |               |               |                |                |                |      |                |                                                                                                                                                                     |                |                |                |                |                |                |                |                |  |  |
| Offset angle      | 1.0                                                                                                                                                                 | 6.0            |               | 9.0           |                | 12.0           |                | 15.0 |                | 1.0                                                                                                                                                                 | 6.0            |                | 9.0            |                | 12.0           |                | 15.0           |                |  |  |
| Working radius(m) |   | 10°            | 30°           | 10°           | 30°            | 10°            | 30°            | 10°  | 30°            |   | 10°            | 30°            | 10°            | 30°            | 10°            | 30°            | 10°            | 30°            |  |  |
| 4.0               | 5.80                                                                                                                                                                |                |               |               |                |                |                |      |                | 4.4mx<br>5.80                                                                                                                                                       |                |                |                |                |                |                |                |                |  |  |
| 4.5               | 5.80                                                                                                                                                                |                |               |               |                |                |                |      |                | 5.80                                                                                                                                                                |                |                |                |                |                |                |                |                |  |  |
| 5.0               | 5.80                                                                                                                                                                | 5.5mx<br>5.00  |               |               |                |                |                |      |                | 5.80                                                                                                                                                                |                |                |                |                |                |                |                |                |  |  |
| 6.0               | 5.80                                                                                                                                                                | 5.00           |               | 6.6mx<br>5.00 |                |                |                |      |                | 5.80                                                                                                                                                                | 5.00           |                |                |                |                |                |                |                |  |  |
| 7.0               | 5.80                                                                                                                                                                | 5.00           | 7.3mx<br>5.00 | 5.00          |                | 7.4mx<br>4.00  |                |      |                | 5.80                                                                                                                                                                | 5.00           | 7.8mx<br>5.00  | 7.1mx<br>5.00  |                |                |                |                |                |  |  |
| 8.0               | 5.80                                                                                                                                                                | 5.00           | 5.00          | 5.00          |                | 4.00           |                |      |                | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           |                | 4.00           |                | 2.60           |                |  |  |
| 9.0               | 5.80                                                                                                                                                                | 5.00           | 5.00          | 5.00          | 9.2mx<br>4.10  | 4.00           |                | 2.60 |                | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 9.7mx<br>4.10  | 4.00           |                | 2.60           |                |  |  |
| 10.0              | 5.80                                                                                                                                                                | 5.00           | 5.00          | 5.00          | 4.10           | 4.00           | 10.9mx<br>3.20 | 2.60 |                | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 11.4mx<br>3.20 | 2.60           |                |  |  |
| 12.0              | 5.80                                                                                                                                                                | 5.00           | 5.00          | 5.00          | 4.10           | 4.00           | 3.20           | 2.60 | 12.4mx<br>2.30 | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 12.9mx<br>2.30 |  |  |
| 14.0              | 12.4mx<br>5.80                                                                                                                                                      | 5.00           | 5.00          | 5.00          | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           |  |  |
| 16.0              |                                                                                                                                                                     | 5.00           | 5.00          | 5.00          | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           | 15.0mx<br>5.80                                                                                                                                                      | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           |  |  |
| 18.0              |                                                                                                                                                                     | 17.6mx<br>5.00 | 5.00          | 5.00          | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           |                                                                                                                                                                     | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           |  |  |
| 20.0              |                                                                                                                                                                     |                |               | 5.00          | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           |                                                                                                                                                                     | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           |  |  |
| 22.0              |                                                                                                                                                                     |                |               |               | 21.0mx<br>4.10 | 4.00           | 3.20           | 2.60 | 2.30           |                                                                                                                                                                     | 20.2mx<br>5.00 | 20.6mx<br>4.90 | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           |  |  |
| 24.0              |                                                                                                                                                                     |                |               |               |                | 23.2mx<br>4.00 | 3.20           | 2.60 | 2.30           |                                                                                                                                                                     |                |                | 23.0mx<br>4.25 | 23.6mx<br>4.10 | 4.00           | 3.20           | 2.60           | 2.30           |  |  |
| 26.0              |                                                                                                                                                                     |                |               |               |                |                | 25.8mx<br>2.60 |      | 2.30           |                                                                                                                                                                     |                |                |                |                | 25.8mx<br>3.50 | 3.20           | 2.60           | 2.30           |  |  |
| 28.0              |                                                                                                                                                                     |                |               |               |                |                |                |      | 27.0mx<br>2.30 |                                                                                                                                                                     |                |                |                |                |                | 26.6mx<br>3.20 | 2.60           | 2.30           |  |  |
| 30.0              |                                                                                                                                                                     |                |               |               |                |                |                |      |                |                                                                                                                                                                     |                |                |                |                |                |                | 28.4mx<br>2.60 | 29.6mx<br>2.30 |  |  |

| Boom length(m)    | 18.0                                                                                                                                                                |                |                |                |                |                |                |                |                |                                                                                                                                                                     | 21.0           |                |                |                |                |                |                |      |  |  |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|--|--|
| Jib length(m)     |                                                                                                                                                                     |                |                |                |                |                |                |                |                |                                                                                                                                                                     |                |                |                |                |                |                |                |      |  |  |
| Offset angle      | 1.0                                                                                                                                                                 | 6.0            |                | 9.0            |                | 12.0           |                | 15.0           |                | 1.0                                                                                                                                                                 | 6.0            |                | 9.0            |                | 12.0           |                | 15.0           |      |  |  |
| Working radius(m) |   | 10°            | 30°            | 10°            | 30°            | 10°            | 30°            | 10°            | 30°            |   | 10°            | 30°            | 10°            | 30°            | 10°            | 30°            | 10°            | 30°  |  |  |
| 5.0               | 5.80                                                                                                                                                                |                |                |                |                |                |                |                |                | 5.5mx<br>5.80                                                                                                                                                       |                |                |                |                |                |                |                |      |  |  |
| 6.0               | 5.80                                                                                                                                                                | 6.5mx<br>5.00  |                |                |                |                |                |                |                | 5.80                                                                                                                                                                |                |                |                |                |                |                |                |      |  |  |
| 7.0               | 5.80                                                                                                                                                                | 5.00           |                | 7.6mx<br>5.00  |                |                |                |                |                | 5.80                                                                                                                                                                | 7.1mx<br>5.00  |                |                |                |                |                |                |      |  |  |
| 8.0               | 5.80                                                                                                                                                                | 5.00           | 8.3mx<br>5.00  | 5.00           |                | 8.4mx<br>4.00  |                |                |                | 5.80                                                                                                                                                                | 5.00           | 8.3mx<br>5.00  | 8.2mx<br>5.00  |                |                |                |                |      |  |  |
| 9.0               | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           |                | 4.00           |                | 2.60           |                | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           |                | 4.00           |                | 9.5mx<br>2.60  |      |  |  |
| 10.0              | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 10.3mx<br>4.10 | 4.00           |                | 2.60           |                | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 10.8mx<br>4.10 | 4.00           |                | 2.60           |      |  |  |
| 12.0              | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           |                | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 12.5mx<br>3.20 | 2.60           |      |  |  |
| 14.0              | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 13.4mx<br>2.30 | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30 |  |  |
| 16.0              | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           | 5.80                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30 |  |  |
| 18.0              | 17.6mx<br>5.70                                                                                                                                                      | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           | 5.40                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30 |  |  |
| 20.0              |                                                                                                                                                                     | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           | 4.70                                                                                                                                                                | 5.00           | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30 |  |  |
| 22.0              |                                                                                                                                                                     | 4.45           | 4.45           | 4.45           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30           | 20.2mx<br>4.65                                                                                                                                                      | 4.35           | 4.35           | 4.35           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30 |  |  |
| 24.0              |                                                                                                                                                                     | 22.8mx<br>4.20 | 23.2mx<br>4.05 | 3.90           | 3.90           | 3.90           | 3.20           | 2.60           | 2.30           |                                                                                                                                                                     | 3.85           | 3.85           | 3.85           | 3.85           | 3.85           | 3.20           | 2.60           | 2.30 |  |  |
| 26.0              |                                                                                                                                                                     |                |                | 25.7mx<br>3.40 | 3.35           | 3.35           | 3.20           | 2.60           | 2.30           |                                                                                                                                                                     | 25.4mx<br>3.40 | 25.8mx<br>3.30 | 3.30           | 3.30           | 3.30           | 3.20           | 2.60           | 2.30 |  |  |
| 28.0              |                                                                                                                                                                     |                |                |                | 26.2mx<br>3.30 | 3.05           | 3.05           | 2.60           | 2.30           |                                                                                                                                                                     |                |                | 2.95           | 2.95           | 2.95           | 2.95           | 2.60           | 2.30 |  |  |
| 30.0              |                                                                                                                                                                     |                |                |                |                | 28.4mx<br>2.95 | 29.2mx<br>2.80 | 2.60           | 2.30           |                                                                                                                                                                     |                |                | 28.2mx<br>2.90 | 28.8mx<br>2.80 | 2.65           | 2.65           | 2.60           | 2.30 |  |  |
| 32.0              |                                                                                                                                                                     |                |                |                |                |                |                | 31.0mx<br>2.55 | 2.30           |                                                                                                                                                                     |                |                |                |                | 31.0mx<br>2.50 | 31.8mx<br>2.30 | 2.35           | 2.30 |  |  |
| 34.0              |                                                                                                                                                                     |                |                |                |                |                |                |                |                |                                                                                                                                                                     |                |                |                |                |                |                | 33.6mx<br>2.25 | 2.00 |  |  |

| Boom length(m)    | 24.0                                                                                                                                                                    |               |                |                |                |                |                |      |                |                                                                                                                                                                         | 27.0           |                |                |                |      |                |                |                |  |  |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|----------------|----------------|----------------|----------------|------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|------|----------------|----------------|----------------|--|--|
| Jib length(m)     |                                                                                                                                                                         |               |                |                |                |                |                |      |                |                                                                                                                                                                         |                |                |                |                |      |                |                |                |  |  |
| Offset angle      | 1.0                                                                                                                                                                     | 6.0           |                | 9.0            |                | 12.0           |                | 15.0 |                | 1.0                                                                                                                                                                     | 6.0            |                | 9.0            |                | 12.0 |                | 15.0           |                |  |  |
| Working radius(m) |   | 10°           | 30°            | 10°            | 30°            | 10°            | 30°            | 10°  | 30°            |   | 10°            | 30°            | 10°            | 30°            | 10°  | 30°            | 10°            | 30°            |  |  |
| 6.0               | 5.80                                                                                                                                                                    |               |                |                |                |                |                |      |                | 6.5mx<br>5.80                                                                                                                                                           |                |                |                |                |      |                |                |                |  |  |
| 7.0               | 5.80                                                                                                                                                                    | 7.6mx<br>5.00 |                |                |                |                |                |      |                | 5.80                                                                                                                                                                    |                |                |                |                |      |                |                |                |  |  |
| 8.0               | 5.80                                                                                                                                                                    | 5.00          |                | 8.7mx<br>5.00  |                |                |                |      |                | 5.80                                                                                                                                                                    | 8.1mx<br>5.00  |                |                |                |      |                |                |                |  |  |
| 9.0               | 5.80                                                                                                                                                                    | 5.00          | 9.3mx<br>5.00  | 5.00           |                | 9.5mx<br>4.00  |                |      |                | 5.80                                                                                                                                                                    | 5.00           |                | 9.2mx<br>5.00  |                |      |                |                |                |  |  |
| 10.0              | 5.80                                                                                                                                                                    | 5.00          | 5.00           | 5.00           | 11.3mx<br>4.10 | 4.00           |                | 2.60 |                | 5.80                                                                                                                                                                    | 5.00           | 5.00           | 5.00           | 11.8mx<br>4.10 | 4.00 |                | 10.5mx<br>2.60 |                |  |  |
| 12.0              | 5.80                                                                                                                                                                    | 5.00          | 5.00           | 5.00           | 4.10           | 4.00           | 13.0mx<br>3.20 | 2.60 |                | 5.80                                                                                                                                                                    | 5.00           | 5.00           | 5.00           | 4.10           | 4.00 |                | 2.60           |                |  |  |
| 14.0              | 5.80                                                                                                                                                                    | 5.00          | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60 | 14.5mx<br>2.30 | 5.80                                                                                                                                                                    | 5.00           | 5.00           | 5.00           | 4.10           | 4.00 | 13.5mx<br>3.20 | 2.60           | 15.0mx<br>2.30 |  |  |
| 16.0              | 5.80                                                                                                                                                                    | 5.00          | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           | 5.80                                                                                                                                                                    | 5.00           | 5.00           | 5.00           | 4.10           | 4.00 | 3.20           | 2.60           | 2.30           |  |  |
| 18.0              | 5.30                                                                                                                                                                    | 5.00          | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           | 5.20                                                                                                                                                                    | 5.00           | 5.00           | 5.00           | 4.10           | 4.00 | 3.20           | 2.60           | 2.30           |  |  |
| 20.0              | 4.60                                                                                                                                                                    | 4.90          | 4.90           | 4.90           | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           | 4.50                                                                                                                                                                    | 4.80           | 4.80           | 4.80           | 4.10           | 4.00 | 3.20           | 2.60           | 2.30           |  |  |
| 22.0              | 4.00                                                                                                                                                                    | 4.30          | 4.30           | 4.30           | 4.10           | 4.00           | 3.20           | 2.60 | 2.30           | 3.90                                                                                                                                                                    | 4.20           | 4.20           | 4.20           | 4.10           | 4.00 | 3.20           | 2.60           | 2.30           |  |  |
| 24.0              | 22.8mx<br>3.80                                                                                                                                                          | 3.75          | 3.75           | 3.75           | 3.75           | 3.75           | 3.20           | 2.60 | 2.30           | 3.40                                                                                                                                                                    | 3.70           | 3.70           | 3.70           | 3.70           | 3.70 | 3.20           | 2.60           | 2.30           |  |  |
| 26.0              |                                                                                                                                                                         | 3.25          | 3.25           | 3.25           | 3.25           | 3.25           | 3.20           | 2.60 | 2.30           | 25.4mx<br>2.95                                                                                                                                                          | 3.15           | 3.15           | 3.15           | 3.15           | 3.15 | 3.15           | 2.60           | 2.30           |  |  |
| 28.0              |                                                                                                                                                                         | 2.90          | 2.90           | 2.90           | 2.90           | 2.90           | 2.90           | 2.60 | 2.30           |                                                                                                                                                                         | 2.85           | 2.85           | 2.85           | 2.85           | 2.85 | 2.85           | 2.60           | 2.30           |  |  |
| 30.0              |                                                                                                                                                                         |               | 28.4mx<br>2.85 | 2.60           | 2.60           | 2.60           | 2.60           | 2.60 | 2.30           |                                                                                                                                                                         | 2.50           | 2.50           | 2.50           | 2.50           | 2.50 | 2.50           | 2.50           | 2.30           |  |  |
| 32.0              |                                                                                                                                                                         |               |                | 30.8mx<br>2.45 | 31.4mx<br>2.35 | 2.25           | 2.25           | 2.25 | 2.25           |                                                                                                                                                                         | 30.6mx<br>2.40 | 31.0mx<br>2.35 | 2.20           | 2.20           | 2.20 | 2.20           | 2.20           | 2.20           |  |  |
| 34.0              |                                                                                                                                                                         |               |                |                |                | 33.6mx<br>2.00 | 1.95           | 1.95 | 1.95           |                                                                                                                                                                         |                |                | 33.4mx<br>1.90 | 1.85           | 1.85 | 1.85           | 1.85           | 1.85           |  |  |

## Jib rated lifting loads

(Unit: metric ton)

| Boom length(m)    | 30.0 |                |                |               |                |      |                |      |                |                | 33.0          |               |                |                |                |                |                |                |       |     |
|-------------------|------|----------------|----------------|---------------|----------------|------|----------------|------|----------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-----|
| Jib length(m)     |      |                |                |               |                |      |                |      |                |                |               |               |                |                |                |                |                |                |       |     |
| Offset angle      | 1.0° |                | 6.0°           |               | 9.0°           |      | 12.0°          |      | 15.0°          |                | 1.0°          |               | 6.0°           |                | 9.0°           |                | 12.0°          |                | 15.0° |     |
| Working radius(m) | 10°  | 30°            | 10°            | 30°           | 10°            | 30°  | 10°            | 30°  | 10°            | 30°            | 10°           | 30°           | 10°            | 30°            | 10°            | 30°            | 10°            | 30°            | 10°   | 30° |
| 7.0               | 5.80 |                |                |               |                |      |                |      |                |                | 7.6mx<br>5.80 |               |                |                |                |                |                |                |       |     |
| 8.0               | 5.80 | 8.6mx<br>5.00  |                |               |                |      |                |      |                |                | 5.80          |               |                |                |                |                |                |                |       |     |
| 9.0               | 5.80 | 5.00           |                | 9.7mx<br>5.00 |                |      |                |      |                |                | 5.80          | 9.1mx<br>5.00 |                |                |                |                |                |                |       |     |
| 10.0              | 5.80 | 5.00           | 10.4mx<br>5.00 | 5.00          |                |      | 10.5mx<br>4.00 |      | 11.0mx<br>2.60 |                | 5.80          | 5.00          | 10.9mx<br>5.00 | 10.2mx<br>5.00 |                | 11.0mx<br>4.00 |                | 11.5mx<br>2.60 |       |     |
| 12.0              | 5.80 | 5.00           | 5.00           | 5.00          | 12.3mx<br>4.10 | 4.00 |                |      | 2.60           |                | 5.80          | 5.00          | 5.00           | 5.00           | 12.9mx<br>4.10 | 4.00           |                | 2.60           |       |     |
| 14.0              | 5.80 | 5.00           | 5.00           | 5.00          | 4.10           | 4.00 | 3.20           | 2.60 | 15.5mx<br>2.30 | 5.80           | 5.00          | 5.00          | 5.00           | 5.00           | 4.10           | 4.00           | 14.6mx<br>3.20 | 2.60           |       |     |
| 16.0              | 5.80 | 5.00           | 5.00           | 5.00          | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 5.80           | 5.00          | 5.00          | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30  |     |
| 18.0              | 5.10 | 5.00           | 5.00           | 5.00          | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 5.00           | 5.00          | 5.00          | 5.00           | 5.00           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30  |     |
| 20.0              | 4.40 | 4.70           | 4.70           | 4.70          | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 4.30           | 4.60          | 4.60          | 4.60           | 4.60           | 4.10           | 4.00           | 3.20           | 2.60           | 2.30  |     |
| 22.0              | 3.80 | 4.10           | 4.10           | 4.10          | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 3.70           | 4.00          | 4.00          | 4.00           | 4.00           | 4.00           | 4.00           | 3.20           | 2.60           | 2.30  |     |
| 24.0              | 3.30 | 3.60           | 3.60           | 3.60          | 3.60           | 3.60 | 3.20           | 2.60 | 2.30           | 3.20           | 3.50          | 3.50          | 3.50           | 3.50           | 3.50           | 3.50           | 3.20           | 2.60           | 2.30  |     |
| 26.0              | 2.80 | 3.10           | 3.10           | 3.10          | 3.10           | 3.10 | 3.10           | 2.60 | 2.30           | 2.70           | 3.00          | 3.00          | 3.00           | 3.00           | 3.00           | 3.00           | 3.00           | 2.60           | 2.30  |     |
| 28.0              | 2.50 | 2.80           | 2.80           | 2.80          | 2.80           | 2.80 | 2.80           | 2.60 | 2.30           | 2.40           | 2.70          | 2.70          | 2.70           | 2.70           | 2.70           | 2.70           | 2.70           | 2.60           | 2.30  |     |
| 30.0              |      | 2.45           | 2.45           | 2.45          | 2.45           | 2.45 | 2.45           | 2.45 | 2.30           | 2.05           | 2.35          | 2.35          | 2.35           | 2.35           | 2.35           | 2.35           | 2.35           | 2.35           | 2.30  |     |
| 32.0              |      | 2.15           | 2.15           | 2.15          | 2.15           | 2.15 | 2.15           | 2.15 | 2.15           | 30.6mx<br>1.90 | 2.05          | 2.05          | 2.05           | 2.05           | 2.05           | 2.05           | 2.05           | 2.05           | 2.05  |     |
| 34.0              |      | 33.2mx<br>1.90 | 33.6mx<br>1.85 | 1.80          | 1.80           | 1.80 | 1.80           | 1.80 | 1.80           |                | 1.75          | 1.75          | 1.75           | 1.75           | 1.75           | 1.75           | 1.75           | 1.75           | 1.75  |     |

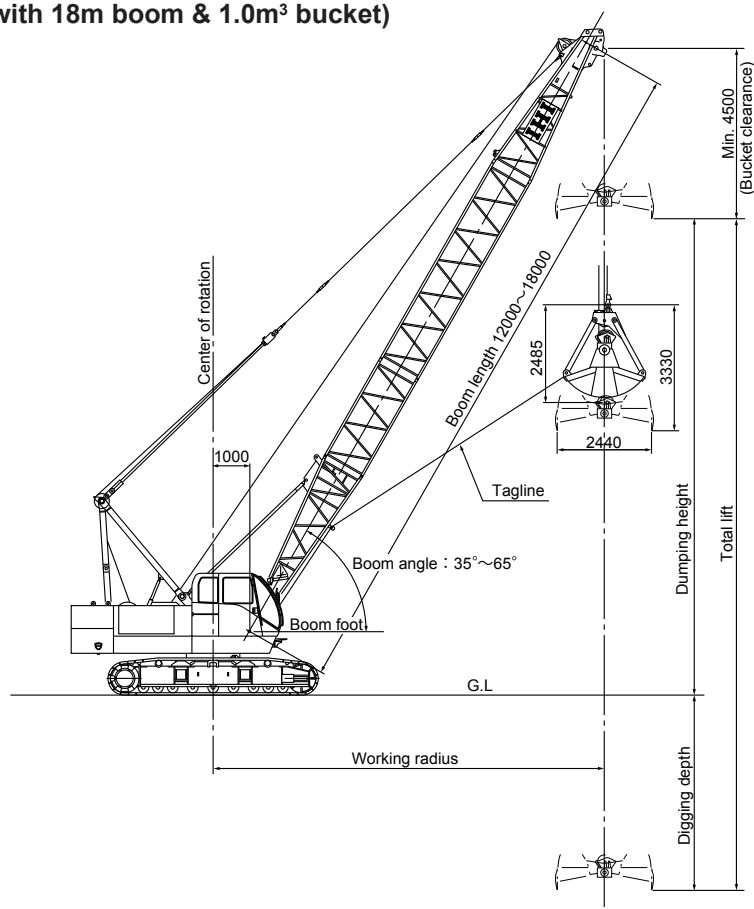
| Boom length(m)    | 36.0           |               |                |                |                |      |                |      |                |      | 39.0          |                |      |                |      |                |                |                |                |     |
|-------------------|----------------|---------------|----------------|----------------|----------------|------|----------------|------|----------------|------|---------------|----------------|------|----------------|------|----------------|----------------|----------------|----------------|-----|
| Jib length(m)     |                |               |                |                |                |      |                |      |                |      |               |                |      |                |      |                |                |                |                |     |
| Offset angle      | 1.0°           |               | 6.0°           |                | 9.0°           |      | 12.0°          |      | 15.0°          |      | 1.0°          |                | 6.0° |                | 9.0° |                | 12.0°          |                | 15.0°          |     |
| Working radius(m) | 10°            | 30°           | 10°            | 30°            | 10°            | 30°  | 10°            | 30°  | 10°            | 30°  | 10°           | 30°            | 10°  | 30°            | 10°  | 30°            | 10°            | 30°            | 10°            | 30° |
| 8.0               | 8.1mx<br>5.80  |               |                |                |                |      |                |      |                |      | 8.6mx<br>5.80 |                |      |                |      |                |                |                |                |     |
| 9.0               | 5.80           | 9.7mx<br>5.00 |                |                |                |      |                |      |                |      | 5.80          |                |      |                |      |                |                |                |                |     |
| 10.0              | 5.80           | 5.00          | 11.4mx<br>5.00 | 10.8mx<br>5.00 |                |      | 11.6mx<br>4.00 |      |                |      | 5.80          | 10.2mx<br>5.00 |      | 11.3mx<br>5.00 |      |                |                |                |                |     |
| 12.0              | 5.80           | 5.00          | 5.00           | 5.00           | 13.4mx<br>4.10 | 4.00 |                |      | 12.1mx<br>2.60 |      | 5.80          | 5.00           | 5.00 | 5.00           |      | 12.1mx<br>4.00 |                | 12.6mx<br>2.60 |                |     |
| 14.0              | 5.80           | 5.00          | 5.00           | 5.00           | 4.10           | 4.00 | 15.1mx<br>3.20 | 2.60 |                |      | 5.80          | 5.00           | 5.00 | 5.00           | 4.10 | 4.00           | 15.6mx<br>3.20 | 2.60           |                |     |
| 16.0              | 5.80           | 5.00          | 5.00           | 5.00           | 4.10           | 4.00 | 3.20           | 2.60 | 16.5mx<br>2.30 | 5.70 | 5.00          | 5.00           | 5.00 | 5.00           | 4.10 | 4.00           | 3.20           | 2.60           | 17.1mx<br>2.30 |     |
| 18.0              | 4.90           | 5.00          | 5.00           | 5.00           | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 4.80 | 5.00          | 5.00           | 5.00 | 5.00           | 4.10 | 4.00           | 3.20           | 2.60           | 2.30           |     |
| 20.0              | 4.20           | 4.50          | 4.50           | 4.50           | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 4.10 | 4.40          | 4.40           | 4.40 | 4.40           | 4.10 | 4.00           | 3.20           | 2.60           | 2.30           |     |
| 22.0              | 3.60           | 3.90          | 3.90           | 3.90           | 3.90           | 3.90 | 3.20           | 2.60 | 2.30           | 3.50 | 3.80          | 3.80           | 3.80 | 3.80           | 3.80 | 3.80           | 3.20           | 2.60           | 2.30           |     |
| 24.0              | 3.10           | 3.40          | 3.40           | 3.40           | 3.40           | 3.40 | 3.20           | 2.60 | 2.30           | 3.00 | 3.30          | 3.30           | 3.30 | 3.30           | 3.30 | 3.30           | 3.20           | 2.60           | 2.30           |     |
| 26.0              | 2.65           | 2.95          | 2.95           | 2.95           | 2.95           | 2.95 | 2.95           | 2.60 | 2.30           | 2.55 | 2.85          | 2.85           | 2.85 | 2.85           | 2.85 | 2.85           | 2.85           | 2.60           | 2.30           |     |
| 28.0              | 2.30           | 2.60          | 2.60           | 2.60           | 2.60           | 2.60 | 2.60           | 2.60 | 2.30           | 2.20 | 2.50          | 2.50           | 2.50 | 2.50           | 2.50 | 2.50           | 2.50           | 2.50           | 2.30           |     |
| 30.0              | 2.00           | 2.30          | 2.30           | 2.30           | 2.30           | 2.30 | 2.30           | 2.30 | 2.30           | 1.90 | 2.20          | 2.20           | 2.20 | 2.20           | 2.20 | 2.20           | 2.20           | 2.20           | 2.20           |     |
| 32.0              | 1.70           | 2.00          | 2.00           | 2.00           | 2.00           | 2.00 | 2.00           | 2.00 | 2.00           | 1.60 | 1.90          | 1.90           | 1.90 | 1.90           | 1.90 | 1.90           | 1.90           | 1.90           | 1.90           |     |
| 34.0              | 33.2mx<br>1.50 | 1.70          | 1.70           | 1.70           | 1.70           | 1.70 | 1.70           | 1.70 | 1.70           | 1.30 | 1.60          | 1.60           | 1.60 | 1.60           | 1.60 | 1.60           | 1.60           | 1.60           | 1.60           |     |

| Boom length(m)    | 42.0          |      |                |      |                |      |                |      |                |      | 45.0          |      |                |                |                |     | 48.0           |
|-------------------|---------------|------|----------------|------|----------------|------|----------------|------|----------------|------|---------------|------|----------------|----------------|----------------|-----|----------------|
| Jib length(m)     |               |      |                |      |                |      |                |      |                |      |               |      |                |                |                |     |                |
| Offset angle      | 1.0°          |      | 6.0°           |      | 9.0°           |      | 12.0°          |      | 15.0°          |      | 1.0°          |      | 6.0°           |                | 9.0°           |     | 1.0°           |
| Working radius(m) | ⊠             | ⌢    | 10°            | 30°  | 10°            | 30°  | 10°            | 30°  | 10°            | 30°  | ⊠             | ⌢    | 10°            | 30°            | 10°            | 30° | ⌢              |
| 9.0               | 9.1mx<br>5.80 |      |                |      |                |      |                |      |                |      | 9.7mx<br>5.80 |      |                |                |                |     |                |
| 10.0              | 5.80          |      | 10.7mx<br>5.00 |      | 11.8mx<br>5.00 |      |                |      |                |      | 5.80          |      | 11.2mx<br>5.00 |                |                |     | 10.2mx<br>5.80 |
| 12.0              | 5.80          | 5.00 | 12.5mx<br>5.00 | 5.00 |                |      | 12.6mx<br>4.00 |      | 13.1mx<br>2.60 |      | 5.80          | 5.00 | 13.0mx<br>5.00 | 12.4mx<br>5.00 |                |     | 5.80           |
| 14.0              | 5.80          | 5.00 | 5.00           | 5.00 | 14.4mx<br>4.10 | 4.00 |                |      | 2.60           |      | 5.80          | 5.00 | 5.00           | 5.00           | 15.0mx<br>4.10 |     | 5.80           |
| 16.0              | 5.60          | 5.00 | 5.00           | 5.00 | 4.10           | 4.00 | 16.1mx<br>3.20 | 2.60 | 17.6mx<br>2.30 | 5.50 | 5.00          | 5.00 | 5.00           | 5.00           | 4.10           |     | 5.40           |
| 18.0              | 4.70          | 5.00 | 5.00           | 5.00 | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 4.60 | 4.90          | 4.90 | 4.90           | 4.90           | 4.10           |     | 4.50           |
| 20.0              | 4.00          | 4.30 | 4.30           | 4.30 | 4.10           | 4.00 | 3.20           | 2.60 | 2.30           | 3.90 | 4.20          | 4.20 | 4.20           | 4.20           | 4.10           |     | 3.80           |
| 22.0              | 3.40          | 3.70 | 3.70           | 3.70 | 3.70           | 3.70 | 3.20           | 2.60 | 2.30           | 3.30 | 3.60          | 3.60 | 3.60           | 3.60           | 3.60           |     | 3.20           |
| 24.0              | 2.90          | 3.10 | 3.10           | 3.10 | 3.10           | 3.10 | 3.20           | 2.60 | 2.30           | 2.80 | 3.10          | 3.10 | 3.10           | 3.10           | 3.10           |     | 2.70           |
| 26.0              | 2.45          | 2.75 | 2.75           | 2.75 | 2.75           | 2.75 | 2.75           | 2.60 | 2.30           | 2.35 | 2.65          | 2.65 | 2.65           | 2.65           | 2.65           |     | 2.25           |
| 28.0              | 2.10          | 2.40 | 2.40           | 2.40 | 2.40           | 2.40 | 2.40           | 2.40 | 2.30           | 2.00 | 2.30          | 2.30 | 2.30           | 2.30           | 2.30           |     | 1.90           |
| 30.0              | 1.80          | 2.10 | 2.10           | 2.10 | 2.10           | 2.10 | 2.10           | 2.10 | 2.10           | 1.70 | 2.00          | 2.00 | 2.00           | 2.00           | 2.00           |     | 1.60           |
| 32.0              | 1.50          | 1.80 | 1.80           | 1.80 | 1.80           | 1.80 | 1.80           | 1.80 | 1.80           | 1.40 | 1.70          | 1.70 | 1.70           | 1.70           | 1.70           |     | 1.30           |
| 34.0              | 1.50          | 1.50 | 1.50           | 1.50 | 1.50           | 1.50 | 1.50           | 1.50 | 1.50           | 1.10 | 1.40          | 1.40 | 1.40           | 1.40           | 1.40           |     | 1.05           |

## Notes

- Above rated loads are based on firm level ground, within 78% of tipping load at any point 360 throughout with front stability of 1.15 or more.
- Working radius is horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- When main hook block installed actual loads that can be lifted with the jib hook should reduced following weights from the above chart.  
50ton hook block.....0.49ton  
25ton hook block.....0.35ton  
15ton hook block.....0.31ton  
5.8ton hook block.....0.12ton
- One part line jib hook lifting.
- Crawler frame and "A" frame should also be extended before working.
- Jib boom can only be used crane operations.
- Main boom can only be used for crane operations when equipped with 6.0m~15.0m jib.
- All rated loads are based on structural strength factors.  
Make sure to prevent overloading.

## ■ Working range(with 18m boom & 1.0m<sup>3</sup> bucket) (Unit: mm)



## ■ Clamshell specifications

|                                                                                                                   |                                      |                                           |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------|
| Max.lift above ground(m)                                                                                          |                                      | 13.3(18m boom + 1.0m <sup>3</sup> bucket) |
| Rope speed                                                                                                        | Bucket closing<br>(m/min)            | * 100/70 • 50/35                          |
|                                                                                                                   | Bucket holding<br>(m/min)            | * 100/70 • 50/35                          |
|                                                                                                                   | Bucket hoist and lowering<br>(m/min) | * 60                                      |
| Part line                                                                                                         | Bucket closing                       | 6(for all types bucket)                   |
|                                                                                                                   | Bucket holding                       | 1(for all types bucket)                   |
|                                                                                                                   | Boom hoist                           | 12                                        |
| Rated lifting load(Bucket+load) (ton)                                                                             |                                      | 5                                         |
| Counterweight (ton)                                                                                               |                                      | 16                                        |
| Total operating weight (ton)<br>(Boom length 18m)<br>(Bucket capacity 1.0m <sup>3</sup> )                         |                                      | 51.3                                      |
| Average ground bearing pressure(kg/cm <sup>2</sup> )<br>(Boom length 18m)<br>(Bucket capacity 1.0m <sup>3</sup> ) |                                      | 0.65                                      |

\*: The rope speed changes depending on the load.

## ■ Clamshell bucket specifications

| Classification | Type | Capacity(m <sup>3</sup> ) | Weight(ton) |
|----------------|------|---------------------------|-------------|
| Option         | HD   | 0.6                       | 3.0         |
| Option         | GP   | 0.8                       | 2.22        |
| Standard       | GP   | 1.0                       | 2.5         |
| Option         | WR   | 1.0                       | 2.0         |
| Option         | WR   | 1.25                      | 1.6         |

Bucket type(purpose)

HD : Heavyduty (civill engineering, construction)

GP : General purpose (heavy load handling)

WR : Wide rehandling (medium load rehandling)

## ■ Wire rope

| Place of use    | Rope diameter(mm)/Guaranteed strength(ton) | Rope type |
|-----------------|--------------------------------------------|-----------|
| Bucket closing  | 20.0/30.0                                  | A         |
| Bucket holding  | 20.0/30.0                                  | A         |
| Boom hoist      | 16.0/21.8                                  | B         |
| Boom suspension | 31.5/74.9                                  | A         |
| Tagline         | 10.0/5.5                                   | C         |

Rope type A : 6xFi(29)IWRC regular Z lay

B : 6xWS(31)T IWRC regular Z lay

C : 6x(19)fiber core regular Z lay

Length of wire rope to be decided according to the ordered boom length.

## ■ Working range and rated loads

| Boom length (m)                 | 12.0 |      |      |      | 15.0 |      |      |      | 18.0 |      |      |      |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Boom angle                      | 35°  | 45°  | 55°  | 65°  | 35°  | 45°  | 55°  | 65°  | 35°  | 45°  | 55°  | 65°  |
| Working radius (m)              | 11.1 | 9.8  | 8.3  | 6.5  | 13.6 | 12.0 | 10.0 | 7.7  | 16.1 | 14.1 | 11.7 | 9.0  |
| Rated lifting load (metric ton) | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  |
| Total lift (m)                  | 23.0 | 23.0 | 23.0 | 23.0 | 20.0 | 20.0 | 20.0 | 20.0 | 17.0 | 17.0 | 17.0 | 17.0 |
| Max.dumping height              | 3.8  | 5.4  | 6.8  | 7.9  | 5.5  | 7.5  | 9.2  | 10.6 | 7.2  | 9.6  | 11.7 | 13.3 |
| Max.digging depth               | 19.2 | 17.6 | 16.2 | 15.1 | 14.5 | 12.5 | 10.8 | 9.4  | 9.8  | 7.4  | 5.3  | 3.7  |

Notes

1. Rated loads are the upper limit of the "bucket weight+load" during clamshell work. Use a bucket suitable for the kind of the load required so that the rated load figures in the table are not exceeded.

2. The maximum digging height is for a standard 1.0 m<sup>3</sup> bucket.

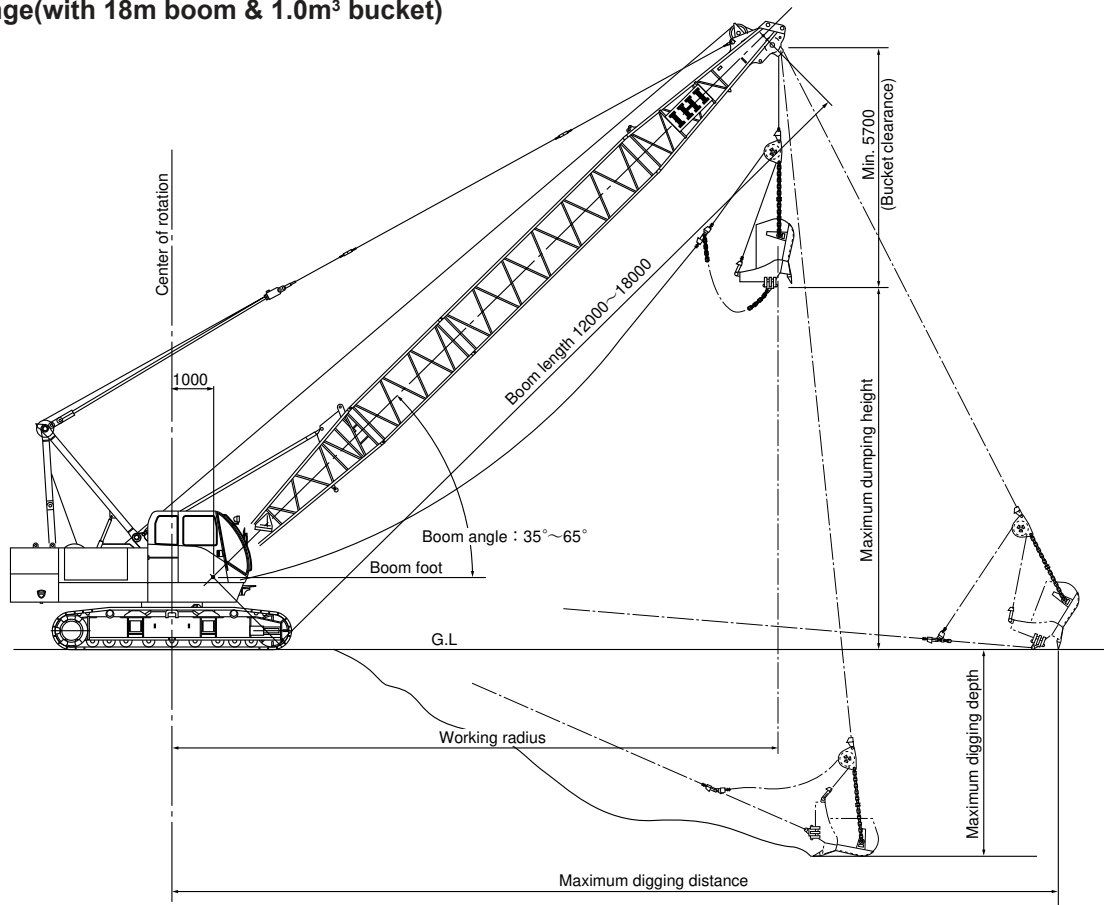
3. The maximum digging depth is for standard wire rope length as follows.

Closing ..... 85m

Holding ..... 83m

Tagline ..... 80m

## ■ Working range(with 18m boom & 1.0m<sup>3</sup> bucket) (Unit: mm)



## ■ Dragline specifications

|                                                                                         |                                    |                               |
|-----------------------------------------------------------------------------------------|------------------------------------|-------------------------------|
| Max.digging distance(m)                                                                 |                                    | 21.7(18m boom + 1.0m³ bucket) |
| Max.dumping height(m)                                                                   |                                    | 10.9(18m boom + 1.0m³ bucket) |
| Max.digging depth(m)                                                                    |                                    | 9.6(18m boom + 1.0m³ bucket)  |
| Rope speed                                                                              | Bucket hoist(m/min)                | * 100/70 • 50/35              |
|                                                                                         | Bucket digging(m/min)              | * 100/70 • 50/35              |
|                                                                                         | Boom hoist and lowering<br>(m/min) | * 60                          |
| Part line                                                                               | Bucket hoist                       | 1                             |
|                                                                                         | Bucket digging                     | 1                             |
|                                                                                         | Boom hoist                         | 12                            |
| Counterweight (ton)                                                                     |                                    | 16.0                          |
| Total operating weight (ton)<br>(Boom length 18m)<br>(Bucket capacity 1.0m³)            |                                    | 50.4                          |
| Average ground bearing pressure(kg/cm²)<br>(Boom length 18m)<br>(Bucket capacity 1.0m³) |                                    | 0.63                          |

\*: The rope speed changes depending on the load.

## ■ Dragline bucket specifications

| Classification | Type | Capacity(m <sup>3</sup> ) | Weight(ton) |
|----------------|------|---------------------------|-------------|
| Option         | GP   | 0.6                       | 0.93        |
| Option         | GP   | 0.8                       | 1.17        |
| Standard       | GP   | 1.0                       | 1.40        |
| Option         | LD   | 1.2                       | 1.60        |

GP : General purpose digging  
LD : Light digging, scraping

## ■ Wire rope

| Place of use    | Rope diameter(mm)/Guaranteed strength(ton) | Rope type |
|-----------------|--------------------------------------------|-----------|
| Hoist rope      | 20.0/30.0                                  | A         |
| Drag rope       | 20.0/30.0                                  | C         |
| Boom hoist      | 16.0/21.8                                  | B         |
| Boom suspension | 31.5/74.9                                  | A         |
| Dump rope       | 16.0/19.2                                  | A         |

Rope type A : 6xFi(29)IWRC regular Z lay  
B : 6xWS(31)T IWRC regular Z lay  
C : T7x7+Fi(29)Toughsuper

Length of wire rope to be decided according to the ordered boom length.  
One (1) Sheave type boom point is recommended to dragline work.

## ■ Working range and rated loads

| Boom length (m)                 | 12.0 |      |      | 15.0 |      |      | 18.0 |      |      |
|---------------------------------|------|------|------|------|------|------|------|------|------|
| Boom angle                      | 30°  | 40°  | 50°  | 30°  | 40°  | 50°  | 30°  | 40°  | 50°  |
| Working radius (m)              | 11.7 | 10.5 | 9.1  | 14.3 | 12.8 | 11.0 | 16.9 | 15.1 | 12.9 |
| Rated lifting load (metric ton) | 4.5  | 4.5  | 4.5  | 4.5  | 4.5  | 4.5  | 4.5  | 4.5  | 4.5  |
| Max.digging distance(m)         | 15.1 | 14.8 | 14.1 | 18.4 | 18.0 | 17.1 | 21.7 | 21.2 | 20.1 |
| Max.digging depth(m)            | 8.6  | 8.3  | 7.7  | 10.8 | 10.8 | 10.1 | 10.8 | 10.8 | 10.8 |
| Max.digging height(m)           | 1.7  | 3.5  | 5.0  | 3.2  | 5.4  | 7.3  | 4.7  | 7.3  | 9.6  |

### Notes

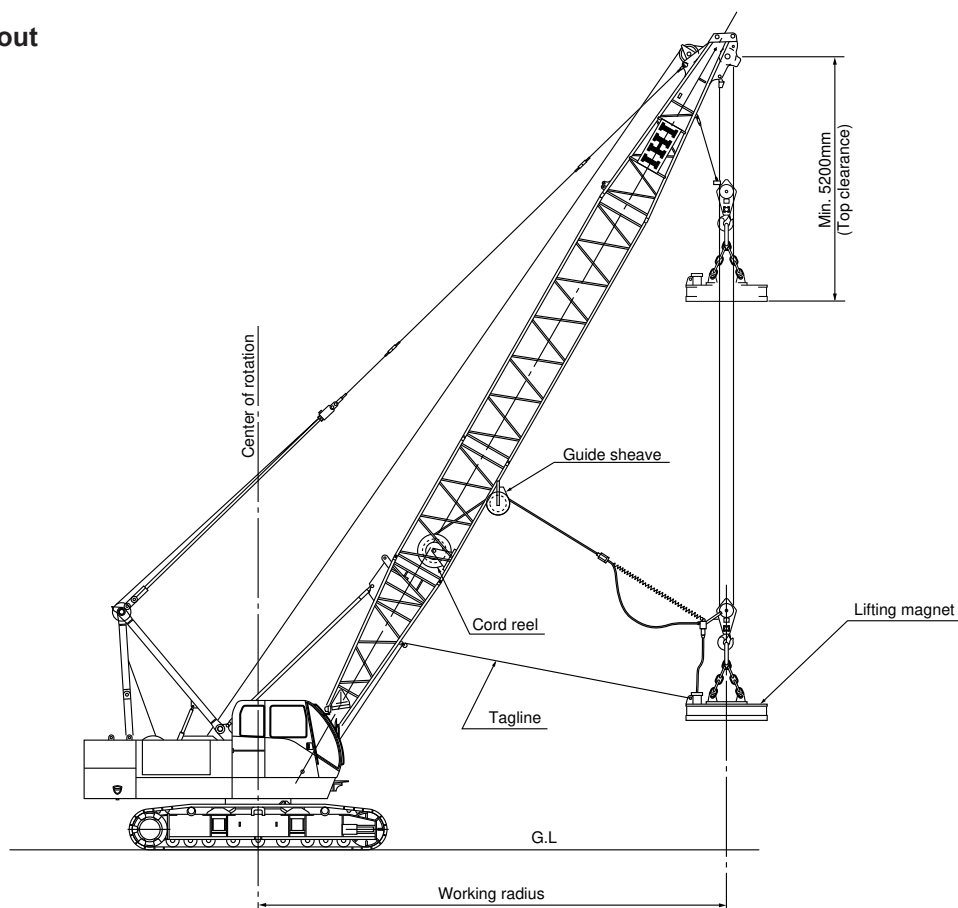
- Rated loads is the total of the bucket's deadweight and grabbed load's weight. The total weight of this must not exceed the value in the table above.
- Above capacities are based on 1.0m<sup>3</sup> standard bucket.
- The reach of bucket and digging depth differ according to the bucket size and type. in addition to the operational conditions.
- Above working range is based on standard wire rope length as follows.  
Drag rope.....28m  
Hoist rope.....40m
- Selection of the bucket type must be made according to the soil conditions. In particular do not use 1.2m<sup>3</sup> bucket for solid soil or clay soil.



# Lifting magnet

CCH500-3II

## ■ General layout



## ■ Lifting magnet crane specifications

|                                                            |               |         |           |
|------------------------------------------------------------|---------------|---------|-----------|
| Max. lifting capacity (metric ton) x working radius (m)    |               | 25 x 3  |           |
| Boom length (m)                                            |               | 12~21   |           |
| Magnet diameter (mm)                                       |               | 1500    | 1800      |
| Weight (ton)                                               |               | 2.7     | 4.2       |
| Voltage                                                    |               | DC-220V | DC-220V   |
| Generator capacity (kW/rpm)                                |               | 20/1800 | 25/1800   |
| Lifting capacity (ton)                                     | Ingot         | 18      | 18        |
|                                                            | Punched scrap | 0.5~0.9 | 0.175~1.3 |
|                                                            | Scrap         | 1.2~1.9 | 1.65~2.8  |
|                                                            | Pig iron      | 1.3~1.9 | 1.8~2.8   |
| Operating weight with 18m boom and 1500mm dia.magnet (ton) |               | 52.2    | 53.7      |
| Counterweight (ton)                                        |               | 16      | 16        |
| Average ground bearing pressure (kg/cm <sup>2</sup> )      |               | 0.66    | 0.68      |

## ■ Wire rope

| Place of use    | Rope diameter(mm)/Guaranteed strength(ton) | Rope type |
|-----------------|--------------------------------------------|-----------|
| Load hoist      | 20.0/30.0                                  | A         |
| Boom hoist      | 16.0/21.8                                  | B         |
| Boom suspension | 31.5/74.9                                  | A         |
| Tagline         | 10.0/5.5                                   | C         |

Rope type A : 6xFi(29)IWRC regular Z lay  
 B : 6xWS(31)T IWRC regular Z lay  
 C : 6x(19)fiber core regular Z lay

Length of wire rope to be decided according to the ordered boom length.



# Lifting magnet

CCH500-3II

## ■Lifting magnet crane rated lifting loads.

(Unit:metric ton)

| Boom length(m)<br>Working radius(m) |  | 12.0         | 15.0         | 18.0         | 21.0          |
|-------------------------------------|--|--------------|--------------|--------------|---------------|
| <input type="checkbox"/> 3.7        |  | 25.00        | 3.9m x 25.00 |              |               |
| <input type="checkbox"/> 4.0        |  | 25.00        | 25.00        | 4.4m x 25.00 |               |
| <input type="checkbox"/> 4.5        |  | 25.00        | 25.00        | 25.00        |               |
| <input type="checkbox"/> 5.0        |  | 25.00        | 25.00        | 25.00        | 25.00         |
| <input type="checkbox"/> 6.0        |  | 22.95        | 22.85        | 22.75        | 22.65         |
| <input type="checkbox"/> 7.0        |  | 18.35        | 18.25        | 18.15        | 18.05         |
| <input type="checkbox"/> 8.0        |  | 15.30        | 15.20        | 15.10        | 15.00         |
| <input type="checkbox"/> 9.0        |  | 13.10        | 13.00        | 12.90        | 12.80         |
| <input type="checkbox"/> 10.0       |  | 11.30        | 11.20        | 11.10        | 11.00         |
| <input type="checkbox"/> 12.0       |  | 11.5m x 9.45 | 8.90         | 8.80         | 8.70          |
| <input type="checkbox"/> 14.0       |  |              | 7.30         | 7.20         | 7.10          |
| <input type="checkbox"/> 16.0       |  |              | 14.1m x 7.20 | 6.00         | 5.90          |
| <input type="checkbox"/> 18.0       |  |              |              | 16.7m x 5.70 | 5.10          |
| <input type="checkbox"/> 20.0       |  |              |              |              | 19.3m x 04.60 |
| No. of Part Line                    |  | 5            | 5            | 5            | 5             |

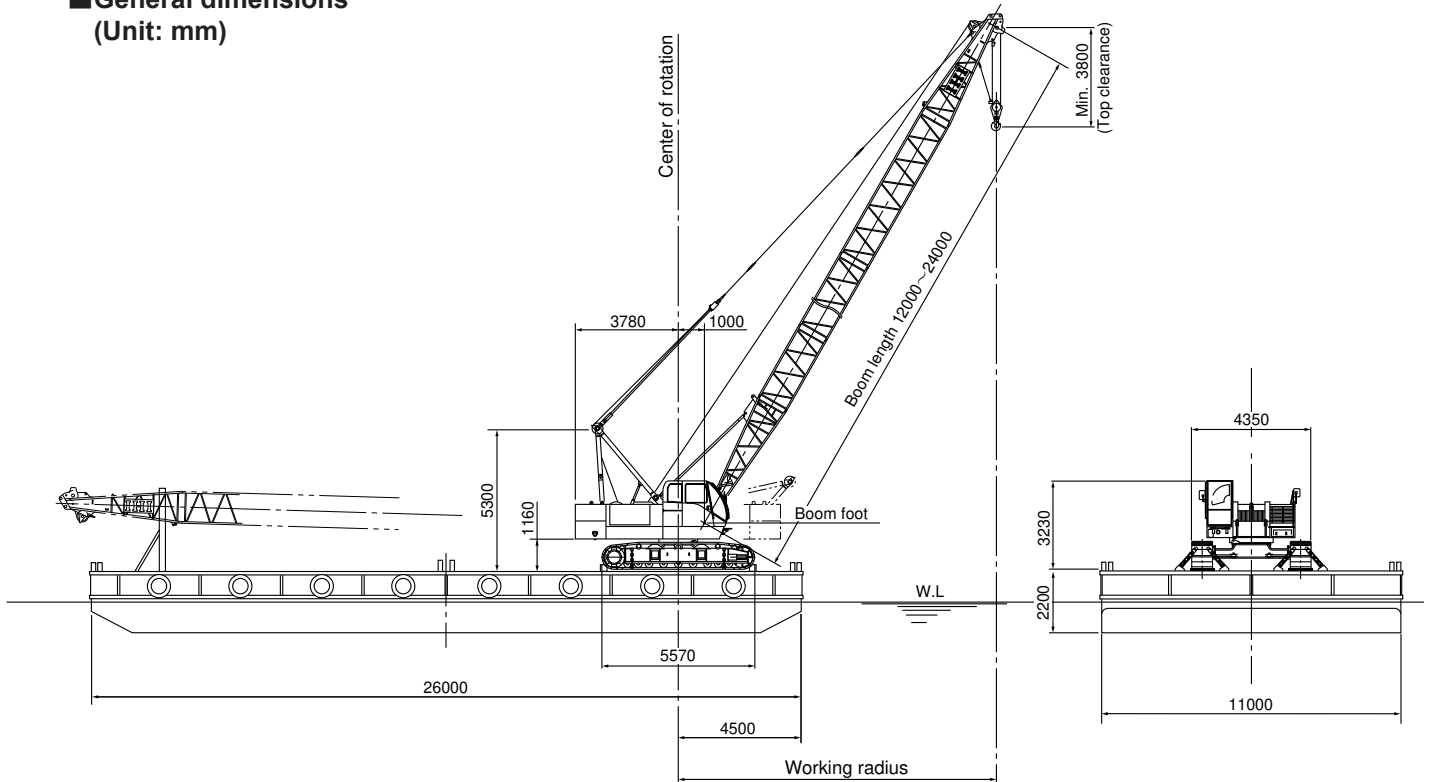
### Notes

- Above rated loads are based on firm level ground within 78% of tipping load at any point 360° throughout and with front stability of 1.15 or more.
- Crawler frame and A frame (High gantry) should also be extended before working.
- The weight of the hook block, magnet and other lifting devices must be considered to be a part of the load.  
Hook block weight.  
35 ton·····0.35ton  
25 ton·····0.35ton  
15 ton·····0.31ton
- Depending on the number of part line, rated lifting load is limited as follows.  
2-part line·····up to 11.4 tons  
3-part line·····up to 16.0 tons  
4-part line·····up to 20.0 tons  
5-part line·····up to 25.0 tons

# Pontoon mounted crane

CCH500-3II

## General dimensions (Unit: mm)



Above figure is for reference when mounted crawler crane on pontoon as floating crane.

## Pontoon mounted crane specifications

|                                                                                |                          |                       |
|--------------------------------------------------------------------------------|--------------------------|-----------------------|
| Max.lifting capacity(metric ton)<br>x working radius(m)                        |                          | 35 x 4.8              |
| Max.boom length                                                                |                          | 24m                   |
| Rope speed                                                                     | Main drum hoist/lowering | * 100/70 • 50/35m/min |
|                                                                                | Aux.drums hoist/lowering | * 100/70 • 50/35m/min |
|                                                                                | Boom drum hoist/lowering | * 60m/min             |
| Part line                                                                      | Hook Block capacity(ton) | 35 x 7                |
|                                                                                | x part line(m)           | 5.8 x 1               |
|                                                                                | Boom drum hoist/lowering | 12                    |
| Counterweight(ton)                                                             |                          | 16                    |
| Total operating weight with 12m boom<br>(including crawler fixing device)(ton) |                          | 50.0                  |
| Average ground bearing pressure(kg/cm <sup>2</sup> )                           |                          | 0.64                  |

\* : The rope speed changes depending on the load.

## Wire rope

| Place of use    | Rope diameter(mm)/Guaranteed strength(ton) | Rope type |
|-----------------|--------------------------------------------|-----------|
| Main drum       | 20.0/30.0                                  | A         |
| Aux.drums       | 20.0/30.0                                  | A         |
| Boom hoist      | 16.0/21.8                                  | B         |
| Boom suspension | 31.5/74.9                                  | A         |

Rope type A : 6xFi(29)IWRC regular Z lay

B : 6xWS(31)T IWRC regular Z lay

Length of wire rope to be decided according to the ordered boom length.

# Pontoon mounted crane

**CCH500-3II**

## ■ Pontoon mounted crane rated lifting loads.(Throughout 360° )

(Unit:metric ton)

| Boom length(m)<br>Working radius(m) | 12.0          | 15.0         | 18.0         | 21.0         | 24.0         |
|-------------------------------------|---------------|--------------|--------------|--------------|--------------|
| □ 3.7                               | 35.00         | 3.9m x 30.00 |              |              |              |
| □ 4.0                               | 35.00         | 30.00        | 4.4m x 25.00 |              |              |
| □ 4.5                               | 4.8m x 35.00  | 30.00        | 25.00        |              |              |
| □ 5.0                               | 33.80         | 5.3m x 30.00 | 25.00        | 25.00        | 5.5m x 25.00 |
| □ 6.0                               | 25.50         | 25.40        | 6.1m x 25.00 | 25.00        | 25.00        |
| □ 7.0                               | 20.40         | 20.30        | 20.20        | 20.10        | 20.00        |
| □ 8.0                               | 17.00         | 16.90        | 16.80        | 16.70        | 16.60        |
| □ 9.0                               | 14.50         | 14.40        | 14.30        | 14.20        | 14.10        |
| □ 10.0                              | 12.60         | 12.50        | 12.40        | 12.30        | 12.20        |
| □ 12.0                              | 11.5m x 10.50 | 9.90         | 9.80         | 9.70         | 9.60         |
| □ 14.0                              |               | 8.10         | 8.00         | 7.90         | 7.80         |
| □ 16.0                              |               | 14.1m x 8.00 | 6.70         | 6.60         | 6.50         |
| □ 18.0                              |               |              | 16.7m x 6.35 | 5.70         | 5.60         |
| □ 20.0                              |               |              |              | 19.3m x 5.20 | 4.90         |
| □ 22.0                              |               |              |              |              | 21.9m x 4.30 |
| No. of Part Line                    | 7             | 6            | 5            | 5            | 5            |

### Notes

1. The working radius is horizontal distance from center of rotation to vertical line through the center line of gravity of the load.
2. The weight of the hook block and other lifting devices must be considered to be a part of the load.  
50ton hook block.....0.49ton  
35ton hook block.....0.35ton  
15ton hook block.....0.31ton  
5.8ton hook block.....0.12ton
3. Do not exceed 3° of trim angle of pontoon on loaded condition.
4. Depending on the number of part lines, rated lifting is limited as follows.  
1-part line.....up to 5.8 tons  
2-part line.....up to 11.4 tons  
3-part line.....up to 15.0 tons  
4-part line.....up to 20.0 tons  
5-part line.....up to 25.0 tons  
6-part line.....up to 30.0 tons  
7-part line.....up to 35.0 tons
5. When 1 m jib installed, actual load that can be lifted with main hook block should be reduced 0.3 ton from above chart.
6. The 1 m jib lifting load should be reduced (0.3ton+main hook block weight) from above chart. However do not exceed 5.8tons.
7. Bucket operation can not be performed by 1 m jib.
8. Maximum boom length is 18m on bucket work.
9. The rated lifting load is 5ton on bucket work.  
Do not exceed 5ton for "bucket weight + load" during bucket work.

## ■ Optional equipment

- Moment limiter(overload prevention)
- Yellow rotary light
- Wireless phone
- Bullhorn
- Combustion type heater
- Defroster
- Spark arrester
- Digging depth/Lift indicator  
(with bucket opening angle indicator)
- Electrical type level indicator
- Level vail
- Fire extinguisher
- Monitor TV (watching rear, left and drum)
- Engine throttle pedal
- Drum rotation roller

- Drum mirror
- Catwalk
- Large size tool box (installed on car body)
- Third drum (with clutch and brake:type A)
- Third drum (automatic brake:type B)
- Reeving winch
- Hydraulic power take off  
(A Spec.) 300kg/cm<sup>2</sup> x 225L/min
- Hydraulic power take off  
(B Spec.) 210kg/cm<sup>2</sup> x 125L/min
- Anemometer
- Drum light
- Work light on boom
- Work light for rear direction
- Rope guard for boom top surface

- 3m, 6m, 9m, insert boom with pendant rope
- 6m basic jib boom
- 3m, 6m, jib insert boom with pendant rope
- 1m jib
- 35ton hook block (3 sheaves)
- 25ton hook block (3 sheaves)
- 15ton hook block (1 sheaves)
- 5.8ton hook block
- Fulcrum plate for raising of attachment  
(standard accessory for longer than 39m boom)
- Crawler frame fixing device to pontoon
- Airconditioner



## IHI Construction Machinery Limited

Kishi-Tokai Bldg.,8-4-4, Nishikamata, Ota-ku, Tokyo 144-8577, JAPAN  
Phone: 81-3-5714-8844 Fax: 81-3-5714-8840, 8841

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