



# SCX400

HYDRAULIC CRAWLER CRANE

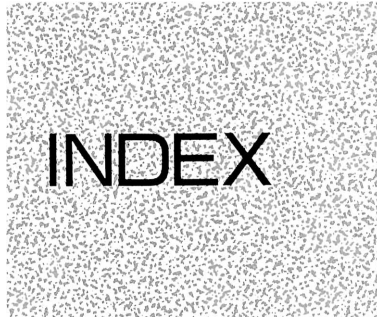
## **S**pecifications

**EUROPEAN ISSUE**

**HITACHI SUMITOMO**

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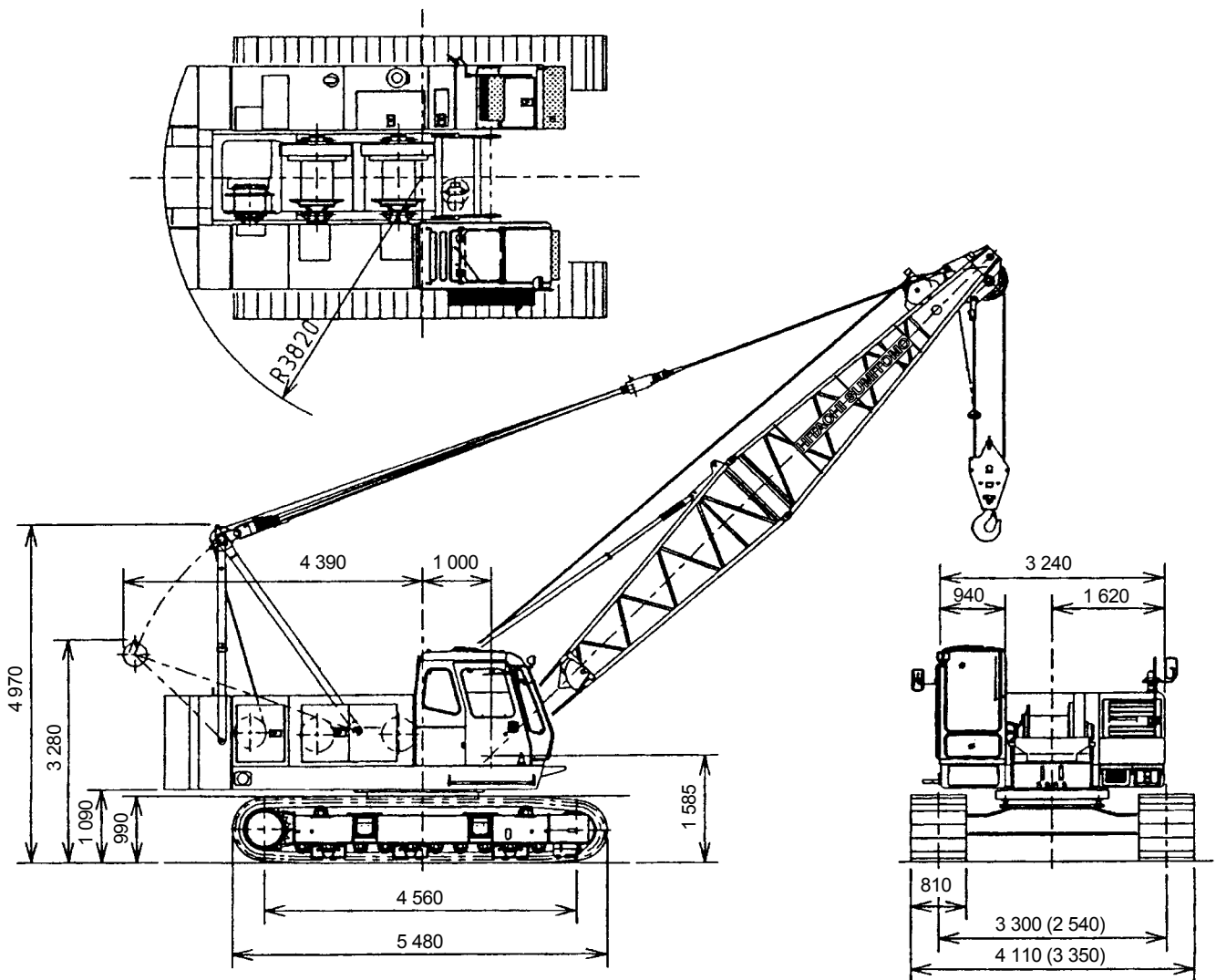


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Note: All "ton" described in this catalog represent metric tons.

## ■Dimensions

Unit: mm



Notes : Dimensions shown in ( ) are with crawlers fully retracted.

## ■Specifications

|                                    |                           |                                   |
|------------------------------------|---------------------------|-----------------------------------|
| Maximum Lifting Load × Load Radius | ton × m                   | 40×3.7                            |
| Basic Boom Length                  | m                         | 10                                |
| Maximum Boom Length                | m                         | 46                                |
| Main/Aux. Hoisting Wire Rope Speed | m/min                     | * 74/37                           |
| Main/Aux. Lowering Wire Rope Speed | m/min                     | * 74/37                           |
| Boom Hoisting Wire Rope Speed      | m/min                     | * 60                              |
| Boom Lowering Wire Rope Speed      | m/min                     | 60                                |
| Swing Speed                        | min <sup>-1</sup> (rpm)   | 3.8 (3.8)                         |
| Travel Speed                       | km/h                      | * 1.9                             |
| Gradeability                       | deg.(%) °                 | 21.8 (40)                         |
| Ground Pressure                    | kPa(kgf/cm <sup>2</sup> ) | 52.8 (0.54)                       |
| Engine Model                       |                           | ISUZU BB-6HK1T                    |
| Engine Rated Power                 | kW/min <sup>-1</sup>      | 136/2 000                         |
| Operating Weight                   | ton                       | 42.8 (with 10 m Boom + 40 t Hook) |

Notes: 1.Data expressed above are in SI units (International System of Unit), followed by data in conventional units in ( ).

2.\* Data will vary with the load.

## ■ Technical Description



### Superstructure

#### Engine

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Model.....                | ISUZU BB-6HK1T                                                              |
| Type .....                | Water-cooled, 4-cycle, 6-cylinder, direct fuel injection type diesel engine |
| Rated power .....         | 136 kW (185 PS) at 2 000 min <sup>-1</sup><br>(DIN 6 271, net) (2 000 rpm)  |
| Maximum torque.....       | 735 N·m(75 kgf·m) at 1600 min <sup>-1</sup><br>(1 600 rpm)                  |
| Piston displacement ..... | 7.79 L                                                                      |
| Fuel tank capacity.....   | 300 L                                                                       |
| Electric system .....     | DC 24 V                                                                     |

#### Main and Auxiliary Hoist Mechanism

- The Hitachi CX400 is equipped with dual hoist mechanisms, each consisting of independent main and auxiliary hoist drums driven by a hydraulic motor.
- Hoisting and lowering the load is achieved by forward/reverse rotation of the hydraulic motor.
- Power lowering is carried out with a hydraulic brake.
- Hoisting and lowering can be carried out at two speeds, fast and slow, to suit job requirements.
- Each drum is fitted with a friction band-type brake. This allows free fall (rapid lowering) of the bucket.
- Main and auxiliary hoist drums are each fitted with a pawl-type drum lock to positively hold the load in the air.
- The drum brake is an external contracting friction band-type using durable non-asbestos lining.
- The brake is controlled by the hydraulic servo system to reduce control force. With the hoist lever in neutral, auto braking or foot braking can be selected.

|                            | <u>Main Drum</u> | <u>Aux. Drum</u> |
|----------------------------|------------------|------------------|
| Max. line pull             | 15 600 kgf       | 15 600 kgf       |
| Drum diameter (P.C.D)      | 500 mm           | 500 mm           |
| Rope diameter              | 22 mm            | 22 mm            |
| Max. line speed            | 74 m/min         | 74 m/min         |
| Rope length at first layer | 38 m             | 38 m             |

#### Boom Hoist Mechanism

- Boom hoisting/lowering is done by forward/reverse rotation of a hydraulic motor. Boom lowering is made by power lowering through a hydraulic brake.
- Both hydraulic brake and spring-set/hydraulic-released multiplate disc type brake offer positive stopping of the boom. When the boom is hoisted or lowered, brakes are automatically released.
- Boom hoist drum is fitted with a pawl-type drum lock.

|                 | <u>Boom Drum</u> |
|-----------------|------------------|
| Max. line pull  | 8000 kgf         |
| Rope diameter   | 16 mm            |
| Max. line speed | 60 m/min         |

#### Swing Mechanism

- Independent operation separated from other functions.
- Driven by a hydraulic motor through reduction gear. Swing speeds are freely controllable from zero to maximum speed with a single lever.

##### Swing Brake

The disc-type swing brake can be hydraulically applied by the brake switch on the swing lever.

##### Swing Lock

Manual mechanical-lock with a rod tip engaged in the holder of the track frame for transportation.

##### Swing Circle

Single-row shear-type ball bearing with heat-treated internal gear.

#### Revolving Frame

All welded steel construction, stress-relieved, precision-machined for rigidity and strength.

##### Gantry

Lowerable for transportation.

##### Counterweight

Total weight: 12 500 kg

Consisting of 2 sections: One 5 200 kg  
One 7 250 kg



## Boom

### Tubular Chord Crane Boom

1 150 mm wide by 1 150 mm deep at connection, lattice construction using high-tensile steel tubular chords.

Basic boom.....Total length 10.0 m, 2-piece construction; upper section 4.5 m and lower section 5.5 m.

Boom point .....Offset boom point, 3 sheaves (462 mm PCD) mounted on anti-friction bearings on boom top.

Boom inserts .....3.0 m and 6.0 m long available.

Connection type.....Pin-connected.

Boom backstop.....Dual-rail, telescopic tubular construction with spring damper.

Boom hoist bridle.....Serves as connection between pendants and boom hoist wire rope reeving, equipped with 6 sheaves (340 mm PCD) for 12-part boom hoist wire rope reeving.

### Crane Jib

550 mm wide by 480 mm deep at connection, lattice construction using high-tensile steel tubular chords.

Basic jib .....Total length 6.0 m, 2-piece construction; upper section 3.0 m and lower section 3.0 m.

Jib point .....1 sheave (462 mm PCD) mounted on anti-friction bearings on jib top.

Jib insert .....3.0 m long available.

Connection type.....Pin-connected.

Auxiliary jib .....Optional. Attachable to the main boom top to hoist the light load quickly with a single rope.

**Note** : Boom insert, crane jib, or auxiliary jib can be attached to the basic boom when needed. However, both crane jib and auxiliary jib cannot be attached simultaneously to the boom.



## Operator's Cab

All-weather, well-ventilated, roomy operator's cab with good visibility. The independent cab is insulated against noise and vibration.



## Hydraulic System

- 2 variable displacement piston pumps allow both independent and combined operations of all functions.
- Variable displacement piston pumps control working speeds, and make effective use of engine horsepower.

|                         | Pump-1                                 | Pump-2                                 |
|-------------------------|----------------------------------------|----------------------------------------|
| <b>Type of pump</b>     | Variable displacement                  |                                        |
| <b>Pressure setting</b> | 29.4 MPa<br>(300 kgf/cm <sup>2</sup> ) | 29.4 MPa<br>(300 kgf/cm <sup>2</sup> ) |
| <b>Max. Oil flow *</b>  | 216 L/min                              | 216 L/min                              |

|                         | Pump-3                                 | Pump-4                               |
|-------------------------|----------------------------------------|--------------------------------------|
| <b>Type of pump</b>     | Variable displacement                  | Gear                                 |
| <b>Pressure setting</b> | 23.0 MPa<br>(235 kgf/cm <sup>2</sup> ) | 4.9 MPa<br>(50 kgf/cm <sup>2</sup> ) |
| <b>Max. Oil flow *</b>  | 135 L/min                              | 32 L/min                             |

\* with non-loaded condition

### Main and Auxiliary Hoist Motors

Axial piston motors with counterbalance valves.

### Boom Hoist Motor

Axial piston motor with counterbalance valve.

### Swing Motor

Axial piston motor.

### Travel Motors

Axial piston motors with brake valve and spring-set/hydraulic-released multiplate disc brake.

### Relief and Brake Valves

- Each hydraulic circuit incorporates large-capacity relief valves to protect circuit from overload and shock load.
- Counterbalance valves, provided for hoist motor, compensate load lowering and prevent accidental load drop if hydraulic power is suddenly reduced.
- Brake valves (consisting of relief valve and counterbalance valve) are provided for travel circuit.

### Pressure Settings

Main Circuit

- Main relief valves

Hoist (main and aux.) ..... 29.4 Mpa (300 kgf/cm<sup>2</sup>)  
 Swing.....23.0 MPa (235 kgf/cm<sup>2</sup>)

- Overload relief valves

Hoist (main and aux.) circuits .....31.4 MPa (320 kgf/cm<sup>2</sup>)  
 Boom hoist circuit .....30.4 MPa (310 kgf/cm<sup>2</sup>)  
 Travel circuit .....29.4 MPa (300 kgf/cm<sup>2</sup>)

Pilot Circuit

- Main relief valve.....4.9 MPa (50 kgf/cm<sup>2</sup>)

### Line Filters

High-filtration 10 μm full-flow filter element is incorporated in the return line. Pilot filter and suction filter are provided in each circuit.

## Undercarriage

### Traction mechanism

- Each track is driven by an axial piston motor through reduction gear. This mechanism allows counter-rotation of tracks for maneuverability in close quarters.
- When the lever is in neutral position, both hydraulic brake and spring-set / hydraulic-released multiplate disc brake are automatically applied for stopping.

### Track Frame

All-welded, stress-relieved, box-section construction.

### Side Frames

Side frames of all-welded construction can be retracted for transportation.

### Side Frame Extending/ Retracting Device

- Side frames are extended and retracted with a hydraulic cylinder located inside the track frame. Hydraulic power source for a hydraulic cylinder is separated from other systems to allow combined operation of travel and side frame.
- The side frames are extended and retracted quickly without need for piping.

### Track Shoes

Track shoes with triple grouser mode of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

|                                        |        |
|----------------------------------------|--------|
| No. of upper rollers (each side) ..... | 2      |
| No. of lower rollers (each side) ..... | 10     |
| No. of track shoes (each side) .....   | 56     |
| Shoe width .....                       | 810 mm |

## Controls

### Boom, Main and Auxiliary Hoist, Swing and Travel

Remote controlled hydraulic servo. Working speed can be precisely controlled according to lever stroke.

#### ● Engine Accelerator

Engine power can be controlled by two ways; the accelerator lever and accelerator pedal.

#### ● Monitor Telling Machine Conditions

With the monitor, the operator can check, at a glance, engine oil pressure, water temperature and fuel level, as well as levels of hydraulic oil, engine oil and coolant. The red light turns on and/or the buzzer sounds in the event of an abnormality.

## Safety Device

### Boom Angle Indicator

Mechanical-type boom angle indicator is provided at boom foot.

### Counterbalance Valves (Brake Valves)

Counterbalance valves are each incorporated in travel motors, boom hoist motor, and main and auxiliary hoist motors. If the hydraulic line is broken, this valve is automatically actuated to prevent motor rotation.

### Spring-Set/Hydraulic-Released Multiplate Disc Type Travel Brakes

### Swing Lock and Swing Parking Brake

### Drum Locks

The pawl-type drum locks are provided at main drum, auxiliary drum and boom drum.

### Devices for Crane Operation

#### ● Moment Limiter

On the moment limiter, analog displays and pictorial load indications are functionally arranged for easy reading.

#### ● Hook Overhoist Prevention Device

When the hook reaches its hoist limit, the bell sounds and the auto-stop automatically actuates at the same time.

#### ● Boom Overhoist Prevention Device

When the boom reaches its angle limit, the buzzer alarm sounds and boom hoisting automatically stops at the same time. The telescopic-type boom backstop is also provided.

#### ● Secondary Boom Overhoist Prevention Device

In addition to the hook overhoist prevention device and boom overhoist prevention device, the secondary boom overhoist prevention device is provided.

#### ● Pilot Control Shut-off Lever

The pilot control shut-off lever shuts out the hydraulic pilot pressure to pilot control valves. With the pilot control shut-off lever in the LOCK position, the machine will not operate even if the lever is accidentally shifted.

#### ● Fail-safe mechanism

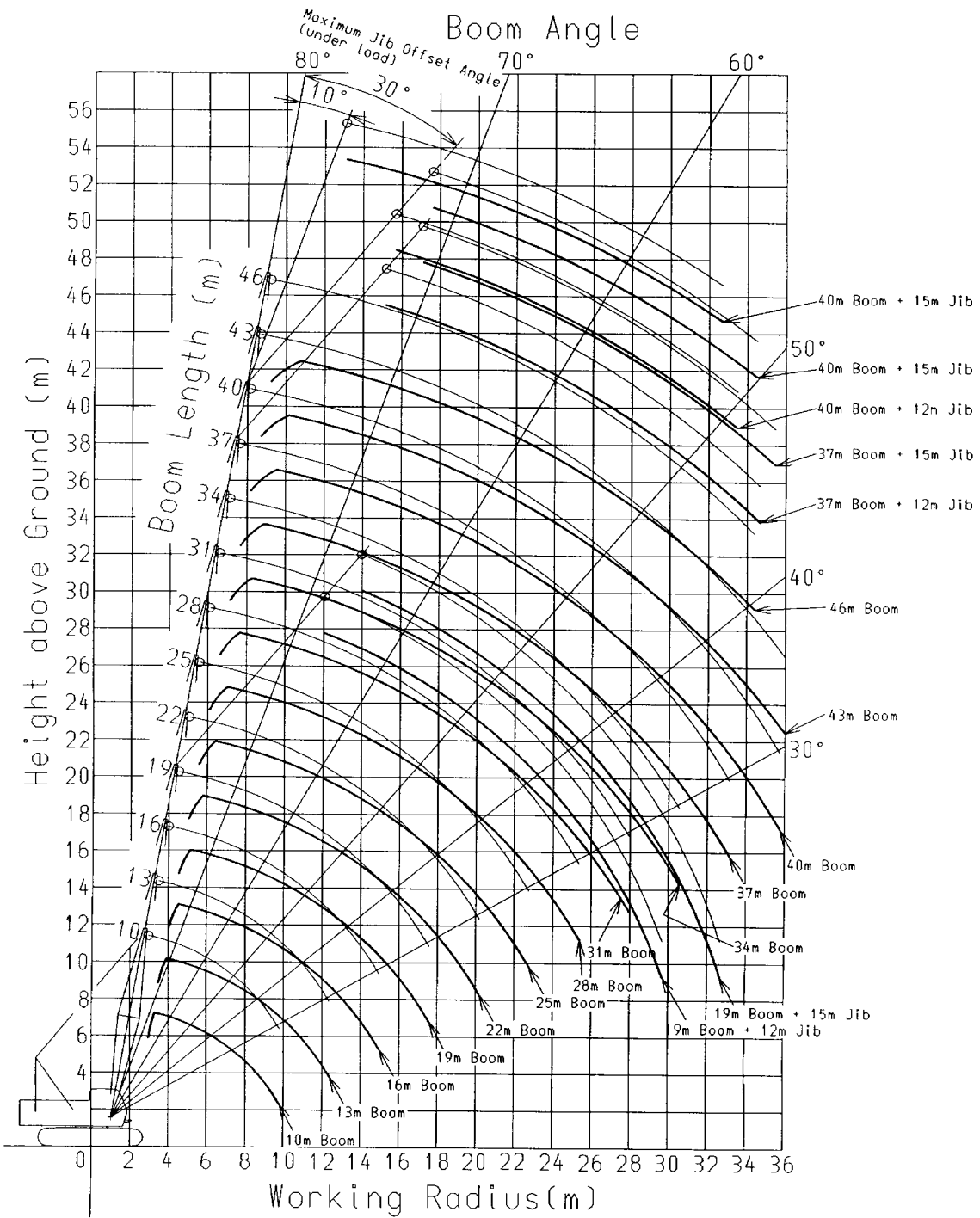
The related movements stop automatically if an electric wire is broken.



## Service Refill Capacities

|                                                 | Liter  |
|-------------------------------------------------|--------|
| Fuel tank .....                                 | 300    |
| Engine coolant .....                            | 25     |
| Engine oil .....                                | 36     |
| Pump transmission .....                         | 2      |
| Boom hoist reduction device .....               | 9.5    |
| Winch hoist reduction device .....              | 12.5×2 |
| Swing reduction device .....                    | 8      |
| Travel reduction device .....                   | 11.5×2 |
| Hydraulic system, including tank capacity ..... | 305    |
| Hydraulic tank .....                            | 225    |

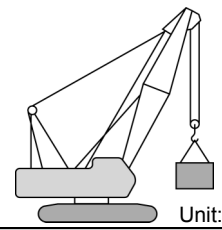
■ Working Ranges



■ Correlation between the number of rope falls, maximum rated loads, hook weight are shown in the table below.

| Hook Capacity (ton) | Hook Weight (ton) | Maximum rated loads (ton) |      |      |      |      |     |
|---------------------|-------------------|---------------------------|------|------|------|------|-----|
|                     |                   | 6                         | 5    | 4    | 3    | 2    | 1   |
| 40.0                | 0.41              | 40.0                      | 32.5 | 26.0 | 19.5 | 13.0 | —   |
| 15.0                | 0.32              | —                         | —    | —    | 15.0 | 13.0 | —   |
| 6.5                 | 0.18              | —                         | —    | —    | —    | —    | 6.5 |



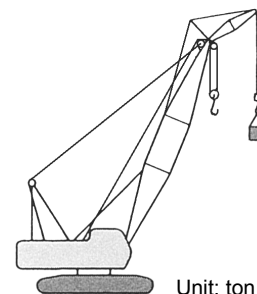


■ Rated Loads for Main Boom (EN rating)

| Working Radius (m) | Boom length (m) |             |             |             |             |             |             |
|--------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                    | 10              | 13          | 16          | 19          | 22          | 25          | 28          |
| 3.5                | 40.00           |             |             |             |             |             |             |
| 3.7                | 40.00           | 40.00       |             |             |             |             |             |
| 4.0                | 35.45           | 35.40       | 4.2m×32.65t |             |             |             |             |
| 4.5                | 29.45           | 29.35       | 29.30       | 4.7m×27.35t |             |             |             |
| 5.0                | 25.15           | 25.05       | 25.00       | 24.95       | 5.3m×22.85t |             |             |
| 5.5                | 21.90           | 21.80       | 21.75       | 21.70       | 21.65       | 5.8m×20.00t |             |
| 6.0                | 19.40           | 19.30       | 19.20       | 19.15       | 19.10       | 19.05       | 6.4m×17.35t |
| 7.0                | 15.70           | 15.65       | 15.55       | 15.50       | 15.45       | 15.35       | 15.30       |
| 8.0                | 13.20           | 13.10       | 13.00       | 12.95       | 12.90       | 12.80       | 12.75       |
| 9.0                | 11.35           | 11.25       | 11.10       | 11.05       | 11.00       | 10.95       | 10.85       |
| 10.0               | 9.7m×10.30t     | 9.80        | 9.70        | 9.65        | 9.55        | 9.50        | 9.45        |
| 12.0               |                 | 7.80        | 7.65        | 7.60        | 7.55        | 7.45        | 7.40        |
| 14.0               |                 | 12.3m×7.55t | 6.30        | 6.20        | 6.15        | 6.05        | 6.00        |
| 16.0               |                 |             | 14.9m×5.80t | 5.25        | 5.15        | 5.05        | 5.00        |
| 18.0               |                 |             |             | 17.5m×4.65t | 4.40        | 4.30        | 4.20        |
| 20.0               |                 |             |             |             | 3.80        | 3.70        | 3.60        |
| 22.0               |                 |             |             |             | 20.1m×3.75t | 3.20        | 3.10        |
| 24.0               |                 |             |             |             |             | 22.7m×3.05t | 2.70        |
| 26.0               |                 |             |             |             |             |             | 25.3m×2.50t |

| Working Radius (m) | Boom length (m) |             |             |             |            |             |
|--------------------|-----------------|-------------|-------------|-------------|------------|-------------|
|                    | 31              | 34          | 37          | 40          | 43         | 46          |
| 6.9                | 15.55           |             |             |             |            |             |
| 7.0                | 15.25           | 7.5m×13.75t |             |             |            |             |
| 8.0                | 12.65           | 12.60       | 11.95       | 8.6m×10.40t |            |             |
| 9.0                | 10.80           | 10.70       | 10.70       | 10.25       | 9.1m×9.05t | 9.7m×7.80t  |
| 10.0               | 9.35            | 9.25        | 9.25        | 9.15        | 8.80       | 7.75        |
| 12.0               | 7.30            | 7.20        | 7.20        | 7.10        | 7.00       | 6.90        |
| 14.0               | 5.90            | 5.80        | 5.80        | 5.65        | 5.60       | 5.50        |
| 16.0               | 4.90            | 4.80        | 4.75        | 4.65        | 4.55       | 4.45        |
| 18.0               | 4.10            | 4.00        | 3.95        | 3.85        | 3.75       | 3.65        |
| 20.0               | 3.50            | 3.40        | 3.35        | 3.25        | 3.15       | 3.05        |
| 22.0               | 3.00            | 2.90        | 2.85        | 2.75        | 2.65       | 2.55        |
| 24.0               | 2.60            | 2.50        | 2.45        | 2.35        | 2.25       | 2.15        |
| 26.0               | 2.30            | 2.15        | 2.10        | 2.00        | 1.90       | 1.80        |
| 28.0               | 27.9m×2.00t     | 1.90        | 1.80        | 1.70        | 1.60       | 1.50        |
| 30.0               |                 | 1.65        | 1.55        | 1.45        | 1.35       | 1.25        |
| 32.0               |                 | 30.5m×1.60t | 1.35        | 1.25        | 1.15       | 1.05        |
| 34.0               |                 |             | 33.1m×1.25t | 1.05        | 0.95       | 0.85        |
| 36.0               |                 |             |             | 35.7m×0.90t | 0.80       | 34.4m×0.80t |

- Notes: 1. The rated loads are determined according to prEN13000 rating on the condition that the machine is stationed on firm, level ground.  
 2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.  
 3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.  
 4. The counterweight is 12.5 ton.  
 5. Be sure to fully extend the side frames before operating the machine.  
 6. Rated line pull is 6 500 kgf when 22 mm dia. wire rope is used.  
 7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).



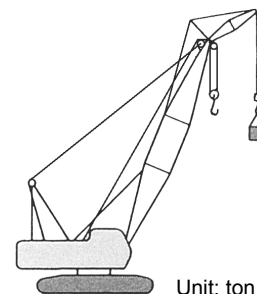
Unit: ton

■Rated Loads for Jib Boom (EN rating) (1)

| Main Boom Length (m)                   | 19          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 6.9                                    | 6.50        |             |             |             |             |             |             |             |
| 7.0                                    | 6.50        |             | 7.9m×6.50t  |             |             |             |             |             |
| 8.0                                    | 6.50        | 8.7m×6.50t  | 6.50        |             |             |             |             |             |
| 9.0                                    | 6.50        | 6.50        | 6.50        |             | 6.50        |             |             |             |
| 10.0                                   | 6.50        | 6.50        | 6.50        | 10.6m×6.25t | 6.50        |             | 5.90        |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 5.95        | 6.50        | 12.6m×4.80t | 5.70        |             |
| 14.0                                   | 6.20        | 6.30        | 6.30        | 5.50        | 6.35        | 4.50        | 5.45        | 14.5m×3.65t |
| 16.0                                   | 5.15        | 5.25        | 5.25        | 5.15        | 5.30        | 4.15        | 5.10        | 3.45        |
| 18.0                                   | 4.40        | 4.40        | 4.40        | 4.60        | 4.50        | 3.85        | 4.50        | 3.15        |
| 20.0                                   | 3.80        | 3.85        | 3.85        | 3.95        | 3.90        | 3.60        | 3.95        | 2.95        |
| 22.0                                   | 3.30        | 3.30        | 3.35        | 3.40        | 3.40        | 3.40        | 3.45        | 2.75        |
| 24.0                                   | 23.5m×2.95t | 23.9m×2.90t | 2.95        | 3.00        | 3.00        | 3.05        | 3.00        | 2.60        |
| 26.0                                   |             |             | 2.60        | 2.60        | 2.65        | 2.70        | 2.65        | 2.45        |
| 28.0                                   |             |             | 26.3m×2.55t | 26.9m×2.50t | 2.30        | 2.40        | 2.30        | 2.35        |
| 30.0                                   |             |             |             |             | 29.1m×2.20t | 29.9m×2.15t | 2.15        | 2.20        |
| 32.0                                   |             |             |             |             |             |             | 31.9m×1.90t | 1.95        |
| 34.0                                   |             |             |             |             |             |             |             | 32.9m×1.85t |

| Main Boom Length (m)                   | 22          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 7.4                                    | 6.50        |             |             |             |             |             |             |             |
| 8.0                                    | 6.50        |             | 8.5m×6.50t  |             |             |             |             |             |
| 9.0                                    | 6.50        | 9.2m×6.50t  | 6.50        |             | 9.5m×6.50t  |             |             |             |
| 10.0                                   | 6.50        | 6.50        | 6.50        | 11.2m×6.25t | 6.50        |             | 10.6m×5.90t |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 6.05        | 6.50        | 13.1m×4.80t | 5.75        |             |
| 14.0                                   | 6.10        | 6.25        | 6.20        | 5.70        | 6.25        | 4.65        | 5.55        | 15.1m×3.65t |
| 16.0                                   | 5.05        | 5.20        | 5.15        | 5.35        | 5.20        | 4.30        | 5.25        | 3.55        |
| 18.0                                   | 4.30        | 4.40        | 4.35        | 4.50        | 4.40        | 4.00        | 4.45        | 3.25        |
| 20.0                                   | 3.65        | 3.75        | 3.75        | 3.85        | 3.80        | 3.75        | 3.85        | 3.05        |
| 22.0                                   | 3.15        | 3.20        | 3.25        | 3.35        | 3.30        | 3.45        | 3.35        | 2.85        |
| 24.0                                   | 2.75        | 2.80        | 2.80        | 2.90        | 2.85        | 3.00        | 2.90        | 2.70        |
| 26.0                                   | 2.40        | 2.45        | 2.45        | 2.55        | 2.50        | 2.60        | 2.55        | 2.55        |
| 28.0                                   | 26.1m×2.40t | 26.5m×2.35t | 2.20        | 2.20        | 2.20        | 2.30        | 2.25        | 2.30        |
| 30.0                                   |             |             | 28.9m×2.05t | 29.5m×2.00t | 1.95        | 2.00        | 2.00        | 2.15        |
| 32.0                                   |             |             |             |             | 31.7m×1.80t | 1.80        | 1.80        | 1.85        |
| 34.0                                   |             |             |             |             |             | 32.5m×1.75t | 1.60        | 1.65        |
| 35.5                                   |             |             |             |             |             |             | 34.5m×1.55t | 1.50        |

- Notes: 1. The rated loads are determined according to prEN13000 rating on the condition that the machine is stationed on firm, level ground.  
 2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks.  
 3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.  
 4. The offset angles shown are of jib boom offset angle against the main boom, under load.  
 5. The counterweight is 12.5 ton.  
 6. Be sure to fully extend the side frames before operating the machine.  
 7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).



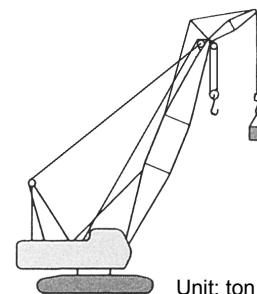
## Rated Loads for Jib Boom (EN rating) (2)

Unit: ton

| Main Boom Length (m)                   | 25          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 8.0                                    | 6.50        |             |             |             |             |             |             |             |
| 9.0                                    | 6.50        | 9.8m×6.50t  | 6.50        |             |             |             |             |             |
| 10.0                                   | 6.50        | 6.50        | 6.50        | 11.7m×6.25t | 10.1m×6.50t |             | 11.1m×5.90t |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 6.20        | 6.50        | 13.7m×4.80t | 5.80        |             |
| 14.0                                   | 6.00        | 6.15        | 6.10        | 5.80        | 6.15        | 4.75        | 5.60        | 15.6m×3.65t |
| 16.0                                   | 5.00        | 5.10        | 5.05        | 5.25        | 5.10        | 4.40        | 5.20        | 3.60        |
| 18.0                                   | 4.20        | 4.30        | 4.25        | 4.40        | 4.35        | 4.10        | 4.40        | 3.35        |
| 20.0                                   | 3.55        | 3.65        | 3.65        | 3.80        | 3.70        | 3.85        | 3.75        | 3.15        |
| 22.0                                   | 3.05        | 3.10        | 3.10        | 3.25        | 3.20        | 3.35        | 3.20        | 2.95        |
| 24.0                                   | 2.65        | 2.70        | 2.70        | 2.80        | 2.75        | 2.90        | 2.80        | 2.80        |
| 26.0                                   | 2.30        | 2.30        | 2.30        | 2.45        | 2.40        | 2.55        | 2.45        | 2.60        |
| 28.0                                   | 2.00        | 2.05        | 2.05        | 2.15        | 2.15        | 2.20        | 2.15        | 2.30        |
| 30.0                                   | 28.7m×1.95t | 29.0m×1.90t | 1.80        | 1.85        | 1.85        | 1.95        | 1.90        | 2.00        |
| 32.0                                   |             |             | 31.5m×1.65t | 1.65        | 1.65        | 1.70        | 1.65        | 1.75        |
| 34.0                                   |             |             |             |             | 1.45        | 1.50        | 1.50        | 1.55        |
| 36.0                                   |             |             |             |             | 34.3m×1.45t | 35.0m×1.40t | 1.30        | 1.35        |
| 38.0                                   |             |             |             |             |             |             | 37.1m×1.25t | 1.20        |

| Main Boom Length (m)                   | 28          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 8.5                                    | 6.50        |             |             |             |             |             |             |             |
| 9.0                                    | 6.50        |             | 9.6m×6.50t  |             |             |             |             |             |
| 10.0                                   | 6.50        | 10.3m×6.50t | 6.50        |             | 10.6m×6.50t |             | 11.7m×5.90t |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 12.3m×6.25t | 6.50        |             | 5.85        |             |
| 14.0                                   | 5.95        | 6.10        | 6.00        | 5.95        | 6.10        | 14.2m×4.80t | 5.65        |             |
| 16.0                                   | 4.90        | 5.05        | 5.00        | 5.20        | 5.05        | 4.50        | 5.10        | 16.2m×3.65t |
| 18.0                                   | 4.10        | 4.25        | 4.15        | 4.35        | 4.25        | 4.25        | 4.30        | 3.45        |
| 20.0                                   | 3.45        | 3.55        | 3.55        | 3.70        | 3.60        | 3.85        | 3.65        | 3.20        |
| 22.0                                   | 2.95        | 3.05        | 3.00        | 3.15        | 3.10        | 3.30        | 3.15        | 3.05        |
| 24.0                                   | 2.55        | 2.60        | 2.60        | 2.75        | 2.65        | 2.85        | 2.70        | 2.85        |
| 26.0                                   | 2.20        | 2.25        | 2.25        | 2.30        | 2.30        | 2.45        | 2.30        | 2.55        |
| 28.0                                   | 1.90        | 1.95        | 1.95        | 2.05        | 2.00        | 2.15        | 2.05        | 2.20        |
| 30.0                                   | 1.65        | 1.70        | 1.70        | 1.75        | 1.75        | 1.85        | 1.80        | 1.95        |
| 32.0                                   | 31.3m×1.50t | 31.6m×1.50t | 1.50        | 1.55        | 1.55        | 1.60        | 1.55        | 1.70        |
| 34.0                                   |             |             | 1.30        | 1.35        | 1.35        | 1.40        | 1.35        | 1.45        |
| 36.0                                   |             |             | 34.1m×1.30t | 34.6m×1.30t | 1.20        | 1.20        | 1.20        | 1.30        |
| 38.0                                   |             |             |             |             | 36.9m×1.10t | 37.6m×1.10t | 37.0m×1.10t | 1.10        |

- Notes:
1. The rated loads are determined according to prEN13000 rating on the condition that the machine is stationed on firm, level ground.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks.
  3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
  4. The offset angles shown are of jib boom offset angle against the main boom, under load.
  5. The counterweight is 12.5 ton.
  6. Be sure to fully extend the side frames before operating the machine.
  7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).



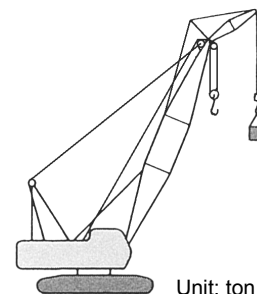
Unit: ton

### Rated Loads for Jib Boom (EN rating) (3)

| Main Boom Length (m)                   | 31          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 9.1                                    | 6.50        |             |             |             |             |             |             |             |
| 10.0                                   | 6.50        | 10.9m×6.50t | 10.1m×6.50t |             | 11.2m×6.50t |             |             |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 12.8m×6.25t | 6.50        |             | 12.2m×5.90t |             |
| 14.0                                   | 5.85        | 6.05        | 5.95        | 6.05        | 6.00        | 14.8m×4.80t | 5.70        |             |
| 16.0                                   | 4.80        | 4.90        | 4.90        | 5.15        | 4.90        | 4.60        | 5.00        | 16.7m×3.65t |
| 18.0                                   | 4.00        | 4.15        | 4.05        | 4.30        | 4.15        | 4.35        | 4.20        | 3.50        |
| 20.0                                   | 3.35        | 3.45        | 3.45        | 3.60        | 3.50        | 3.75        | 3.55        | 3.30        |
| 22.0                                   | 2.85        | 2.95        | 2.90        | 3.10        | 3.00        | 3.20        | 3.05        | 3.10        |
| 24.0                                   | 2.45        | 2.50        | 2.50        | 2.65        | 2.55        | 2.75        | 2.60        | 2.85        |
| 26.0                                   | 2.15        | 2.15        | 2.15        | 2.25        | 2.20        | 2.30        | 2.25        | 2.45        |
| 28.0                                   | 1.80        | 1.85        | 1.85        | 1.95        | 1.90        | 2.05        | 1.95        | 2.15        |
| 30.0                                   | 1.55        | 1.60        | 1.60        | 1.70        | 1.65        | 1.75        | 1.70        | 1.85        |
| 32.0                                   | 1.35        | 1.35        | 1.40        | 1.45        | 1.45        | 1.55        | 1.45        | 1.60        |
| 34.0                                   | 33.9m×1.15t | 1.15        | 1.20        | 1.25        | 1.25        | 1.30        | 1.25        | 1.40        |
| 36.0                                   |             | 34.2m×1.15t | 35.0m×1.10t | 35.1m×1.10t | 35.1m×1.10t | 1.15        | 1.10        | 1.20        |
| 37.0                                   |             |             |             |             |             | 36.4m×1.10t |             | 1.10        |

| Main Boom Length (m)                   | 34          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 9.6                                    | 6.50        |             |             |             |             |             |             |             |
| 10.0                                   | 6.50        | 11.4m×6.50t | 10.7m×6.50t |             | 11.7m×6.50t |             |             |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 13.4m×6.20t | 6.50        |             | 12.8m×5.85t |             |
| 14.0                                   | 5.75        | 5.95        | 5.85        | 6.10        | 5.90        | 15.3m×4.80t | 5.75        |             |
| 16.0                                   | 4.65        | 4.85        | 4.75        | 5.05        | 4.85        | 4.70        | 4.90        | 17.3m×3.65t |
| 18.0                                   | 3.85        | 4.05        | 3.95        | 4.20        | 4.05        | 4.35        | 4.10        | 3.55        |
| 20.0                                   | 3.25        | 3.35        | 3.30        | 3.55        | 3.40        | 3.65        | 3.45        | 3.35        |
| 22.0                                   | 2.70        | 2.85        | 2.80        | 3.00        | 2.85        | 3.10        | 2.90        | 3.20        |
| 24.0                                   | 2.30        | 2.40        | 2.40        | 2.55        | 2.45        | 2.65        | 2.50        | 2.75        |
| 26.0                                   | 1.95        | 2.05        | 2.05        | 2.15        | 2.15        | 2.30        | 2.15        | 2.40        |
| 28.0                                   | 1.65        | 1.75        | 1.75        | 1.85        | 1.80        | 1.95        | 1.85        | 2.05        |
| 30.0                                   | 1.40        | 1.45        | 1.50        | 1.60        | 1.55        | 1.65        | 1.55        | 1.75        |
| 32.0                                   | 1.20        | 1.25        | 1.25        | 1.35        | 1.30        | 1.45        | 1.35        | 1.50        |
| 34.0                                   | 33.0m×1.10t | 33.1m×1.10t | 33.1m×1.10t | 1.15        | 1.10        | 1.20        | 1.15        | 1.30        |
| 36.0                                   |             |             |             | 34.4m×1.10t |             | 35.0m×1.10t | 34.5m×1.10t | 1.10        |

- Notes:
1. The rated loads are determined according to prEN13000 rating on the condition that the machine is stationed on firm, level ground.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks.
  3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
  4. The offset angles shown are of jib boom offset angle against the main boom, under load.
  5. The counterweight is 12.5 ton.
  6. Be sure to fully extend the side frames before operating the machine.
  7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).



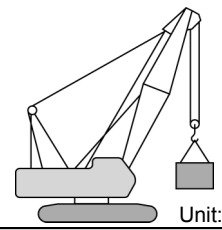
### Rated Loads for Jib Boom (EN rating) (4)

Unit: ton

| Main Boom Length (m)                   | 37          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 10.2                                   | 6.50        |             | 11.2m×6.50t |             |             |             |             |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 13.9m×5.45t | 12.3m×6.50t |             | 13.3m×5.75t |             |
| 14.0                                   | 5.70        | 5.90        | 5.70        | 5.40        | 5.70        | 15.9m×4.30t |             | 5.60        |
| 16.0                                   | 4.60        | 4.80        | 4.75        | 5.00        | 4.80        | 4.30        | 4.80        | 17.8m×3.55t |
| 18.0                                   | 3.80        | 4.00        | 3.90        | 4.15        | 3.95        | 4.05        | 4.05        | 3.55        |
| 20.0                                   | 3.15        | 3.30        | 3.25        | 3.50        | 3.30        | 3.65        | 3.40        | 3.35        |
| 22.0                                   | 2.65        | 2.80        | 2.75        | 2.95        | 2.80        | 3.05        | 2.85        | 3.15        |
| 24.0                                   | 2.25        | 2.30        | 2.30        | 2.50        | 2.40        | 2.60        | 2.45        | 2.70        |
| 26.0                                   | 1.90        | 2.00        | 1.95        | 2.15        | 2.00        | 2.20        | 2.05        | 2.30        |
| 28.0                                   | 1.60        | 1.70        | 1.65        | 1.80        | 1.70        | 1.90        | 1.75        | 2.00        |
| 30.0                                   | 1.35        | 1.40        | 1.40        | 1.50        | 1.45        | 1.60        | 1.50        | 1.70        |
| 32.0                                   | 1.15        | 1.20        | 1.20        | 1.30        | 1.25        | 1.35        | 1.25        | 1.45        |
| 34.0                                   | 32.4m×1.10t | 33.0m×1.10t | 33.0m×1.10t | 33.3m×1.10t | 33.1m×1.10t | 1.15        | 1.10        | 1.25        |
| 35.1                                   |             |             |             |             |             | 34.4m×1.10t |             | 1.10        |

| Main Boom Length (m)                   | 40          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 10.2                                   | 10.7m×6.50t |             | 11.8m×6.50t |             |             |             |             |             |
| 12.0                                   | 6.50        | 12.5m×5.90t | 6.50        |             | 12.8m×5.70t |             | 13.9m×4.95t |             |
| 14.0                                   | 5.50        | 5.60        | 5.50        | 14.5m×4.45t | 5.45        |             | 4.90        |             |
| 16.0                                   | 4.50        | 4.75        | 4.60        | 4.30        | 4.60        | 16.4m×3.55t |             | 4.55        |
| 18.0                                   | 3.70        | 3.90        | 3.80        | 4.05        | 3.85        | 3.40        | 3.95        | 18.4m×2.90t |
| 20.0                                   | 3.05        | 3.20        | 3.15        | 3.40        | 3.20        | 3.20        | 3.30        | 2.75        |
| 22.0                                   | 2.55        | 2.70        | 2.65        | 2.85        | 2.70        | 3.00        | 2.75        | 2.60        |
| 24.0                                   | 2.15        | 2.25        | 2.20        | 2.40        | 2.25        | 2.50        | 2.30        | 2.45        |
| 26.0                                   | 1.80        | 1.90        | 1.85        | 2.00        | 1.90        | 2.15        | 1.95        | 2.25        |
| 28.0                                   | 1.50        | 1.55        | 1.55        | 1.70        | 1.60        | 1.80        | 1.65        | 1.90        |
| 30.0                                   | 1.25        | 1.30        | 1.30        | 1.40        | 1.35        | 1.50        | 1.40        | 1.60        |
| 32.0                                   |             | 1.10        | 31.3m×1.10t | 1.20        | 1.10        | 1.30        | 1.15        | 1.35        |
| 34.0                                   |             |             |             | 32.7m×1.10t |             | 33.3m×1.10t | 32.4m×1.10t | 1.15        |
| 35.1                                   |             |             |             |             |             |             |             | 34.4m×1.10t |

- Notes:
1. The rated loads are determined according to prEN13000 rating on the condition that the machine is stationed on firm, level ground.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks.
  3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
  4. The offset angles shown are of jib boom offset angle against the main boom, under load.
  5. The counterweight is 12.5 ton.
  6. Be sure to fully extend the side frames before operating the machine.
  7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).

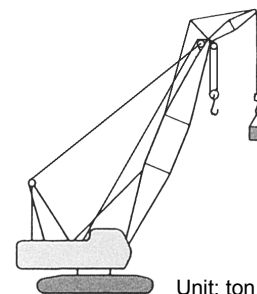


**Rated Loads for Main Boom (BS rating)**

| Working Radius (m) | Boom length (m) |             |             |             |             |             |             |
|--------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                    | 10              | 13          | 16          | 19          | 22          | 25          | 28          |
| 3.5                | 40.00           | 3.7m×40.00t |             |             |             |             |             |
| 4.0                | 35.45           | 35.40       | 4.2m×32.65t |             |             |             |             |
| 4.5                | 29.45           | 29.35       | 29.30       | 4.7m×27.35t |             |             |             |
| 5.0                | 25.15           | 25.05       | 25.00       | 24.95       | 5.3m×22.85t |             |             |
| 5.5                | 21.90           | 21.80       | 21.75       | 21.70       | 21.65       | 5.8m×20.00t |             |
| 6.0                | 19.40           | 19.30       | 19.20       | 19.15       | 19.10       | 19.05       | 6.4m×17.35t |
| 7.0                | 15.70           | 15.65       | 15.55       | 15.50       | 15.45       | 15.35       | 15.30       |
| 8.0                | 13.20           | 13.10       | 13.00       | 12.95       | 12.90       | 12.80       | 12.75       |
| 9.0                | 11.35           | 11.25       | 11.10       | 11.05       | 11.00       | 10.95       | 10.85       |
| 10.0               | 9.7m×10.30t     | 9.80        | 9.70        | 9.65        | 9.55        | 9.50        | 9.45        |
| 12.0               |                 | 7.80        | 7.65        | 7.60        | 7.55        | 7.45        | 7.40        |
| 14.0               |                 | 12.3m×7.55t | 6.30        | 6.20        | 6.15        | 6.05        | 6.00        |
| 16.0               |                 |             | 14.9m×5.80t | 5.25        | 5.15        | 5.05        | 5.00        |
| 18.0               |                 |             |             | 17.5m×4.65t | 4.40        | 4.30        | 4.20        |
| 20.0               |                 |             |             |             | 3.80        | 3.70        | 3.60        |
| 22.0               |                 |             |             |             | 20.1m×3.75t | 3.20        | 3.10        |
| 24.0               |                 |             |             |             |             | 22.7m×3.05t | 2.70        |
| 26.0               |                 |             |             |             |             |             | 25.3m×2.50t |

| Working Radius (m) | Boom length (m) |             |             |             |            |             |
|--------------------|-----------------|-------------|-------------|-------------|------------|-------------|
|                    | 31              | 34          | 37          | 40          | 43         | 46          |
| 6.9                | 15.55           |             |             |             |            |             |
| 7.0                | 15.25           | 7.5m×13.75t |             |             |            |             |
| 8.0                | 12.65           | 12.60       | 11.20       | 8.6m×9.30t  |            |             |
| 9.0                | 10.80           | 10.70       | 10.70       | 9.20        | 9.1m×7.75t | 9.7m×6.45t  |
| 10.0               | 9.35            | 9.25        | 9.25        | 8.90        | 7.55       | 6.30        |
| 12.0               | 7.30            | 7.20        | 7.20        | 7.10        | 7.00       | 5.90        |
| 14.0               | 5.90            | 5.80        | 5.80        | 5.65        | 5.60       | 5.50        |
| 16.0               | 4.90            | 4.80        | 4.75        | 4.65        | 4.55       | 4.40        |
| 18.0               | 4.10            | 4.00        | 3.95        | 3.85        | 3.75       | 3.65        |
| 20.0               | 3.50            | 3.40        | 3.35        | 3.25        | 3.15       | 3.05        |
| 22.0               | 3.00            | 2.90        | 2.85        | 2.75        | 2.65       | 2.55        |
| 24.0               | 2.60            | 2.50        | 2.45        | 2.30        | 2.25       | 2.15        |
| 26.0               | 2.30            | 2.15        | 2.15        | 2.00        | 1.90       | 1.80        |
| 28.0               | 27.9m×2.00t     | 1.90        | 1.80        | 1.70        | 1.60       | 1.50        |
| 30.0               |                 | 1.65        | 1.55        | 1.45        | 1.35       | 1.25        |
| 32.0               |                 | 30.5m×1.60t | 1.35        | 1.25        | 1.15       | 1.00        |
| 34.0               |                 |             | 33.1m×1.25t | 1.00        | 0.95       | 0.85        |
| 36.0               |                 |             |             | 35.7m×0.90t | 0.80       | 34.5m×0.80t |

- Notes:
1. The rated loads are determined according to BS rating (British Standard; 1986) on the condition that the machine is stationed on firm, level ground.
  2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.
  3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.
  4. The counterweight is 12.5 ton.
  5. Be sure to fully extend the side frames before operating the machine.
  6. Rated line pull is 6 500 kgf when 22 mm dia. wire rope is used.
  7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).



Unit: ton

■ Rated Loads for Jib Boom (BS rating) (1)

| Main Boom Length (m)                   | 19          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 6.9                                    | 6.50        |             |             |             |             |             |             |             |
| 7.0                                    | 6.50        |             | 7.9m×6.50t  |             |             |             |             |             |
| 8.0                                    | 6.50        | 8.7m×6.50t  | 6.50        |             |             |             |             |             |
| 9.0                                    | 6.50        | 6.50        | 6.50        |             | 6.50        |             |             |             |
| 10.0                                   | 6.50        | 6.50        | 6.50        | 10.6m×6.25t | 6.40        |             | 5.00        |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 5.95        | 6.15        | 12.6m×4.80t | 4.70        |             |
| 14.0                                   | 6.20        | 6.30        | 6.30        | 5.50        | 5.90        | 4.50        | 4.50        | 14.5m×3.65t |
| 16.0                                   | 5.15        | 5.25        | 5.25        | 5.15        | 5.30        | 4.15        | 4.35        | 3.45        |
| 18.0                                   | 4.40        | 4.45        | 4.45        | 4.60        | 4.50        | 3.85        | 4.20        | 3.15        |
| 20.0                                   | 3.75        | 3.85        | 3.85        | 3.95        | 3.90        | 3.60        | 3.95        | 2.95        |
| 22.0                                   | 3.30        | 3.30        | 3.35        | 3.40        | 3.40        | 3.40        | 3.40        | 2.75        |
| 24.0                                   | 23.5m×2.95t | 23.9m×2.90t | 2.95        | 3.00        | 2.95        | 3.05        | 3.00        | 2.60        |
| 26.0                                   |             |             | 2.60        | 2.60        | 2.60        | 2.70        | 2.65        | 2.45        |
| 28.0                                   |             |             | 26.3m×2.55t | 26.9m×2.45t | 2.35        | 2.40        | 2.35        | 2.35        |
| 30.0                                   |             |             |             |             | 29.1m×2.20t | 29.9m×2.10t | 2.10        | 2.15        |
| 32.0                                   |             |             |             |             |             |             | 31.9m×1.90t | 1.95        |
| 34.0                                   |             |             |             |             |             |             |             | 32.9m×1.85t |

| Main Boom Length (m)                   | 22          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 7.4                                    | 6.50        |             |             |             |             |             |             |             |
| 8.0                                    | 6.50        |             | 8.5m×6.50t  |             |             |             |             |             |
| 9.0                                    | 6.50        | 9.2m×6.50t  | 6.50        |             | 9.5m×6.50t  |             |             |             |
| 10.0                                   | 6.50        | 6.50        | 6.50        | 11.2m×6.25t | 6.40        |             | 10.6m×5.00t |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 6.05        | 6.15        | 13.1m×4.80t | 4.70        |             |
| 14.0                                   | 6.10        | 6.25        | 6.20        | 5.70        | 5.90        | 4.65        | 4.50        | 15.1m×3.65t |
| 16.0                                   | 5.05        | 5.20        | 5.15        | 5.35        | 5.20        | 4.30        | 4.35        | 3.55        |
| 18.0                                   | 4.30        | 4.40        | 4.35        | 4.50        | 4.40        | 4.00        | 4.20        | 3.25        |
| 20.0                                   | 3.65        | 3.75        | 3.75        | 3.85        | 3.80        | 3.75        | 3.85        | 3.05        |
| 22.0                                   | 3.15        | 3.20        | 3.20        | 3.35        | 3.30        | 3.45        | 3.30        | 2.85        |
| 24.0                                   | 2.75        | 2.80        | 2.80        | 2.90        | 2.85        | 3.00        | 2.90        | 2.70        |
| 26.0                                   | 2.40        | 2.45        | 2.45        | 2.50        | 2.50        | 2.60        | 2.55        | 2.55        |
| 28.0                                   | 26.1m×2.40t | 26.5m×2.35t | 2.20        | 2.20        | 2.20        | 2.30        | 2.25        | 2.35        |
| 30.0                                   |             |             | 28.9m×2.05t | 29.5m×2.00t | 1.95        | 2.00        | 2.00        | 2.10        |
| 32.0                                   |             |             |             |             | 31.7m×1.80t | 1.80        | 1.75        | 1.85        |
| 34.0                                   |             |             |             |             |             | 32.5m×1.75t | 1.60        | 1.65        |
| 35.5                                   |             |             |             |             |             |             | 34.5m×1.55t | 1.50        |

Notes: 1. The rated loads are determined according to BS rating (British Standard; 1986) on the condition that the machine is stationed on firm, level ground.

2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.

Hook Weight

|            |        |
|------------|--------|
| 40 t Hook  | 0.41 t |
| 15 t Hook  | 0.32 t |
| 6.5 t Hook | 0.18 t |

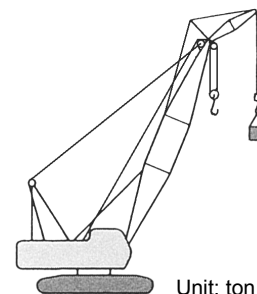
3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.

4. The offset angles shown are of jib boom offset angle against the main boom, under load.

5. The counterweight is 12.5 ton.

6. Be sure to fully extend the side frames before operating the machine.

7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).



Unit: ton

### Rated Loads for Jib Boom (BS rating) (2)

| Main Boom Length (m)                   | 25          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 8.0                                    | 6.50        |             |             |             |             |             |             |             |
| 9.0                                    | 6.50        | 9.8m×6.50t  | 6.50        |             |             |             |             |             |
| 10.0                                   | 6.50        | 6.50        | 6.50        | 11.7m×6.25t | 10.1m×6.50t |             | 11.1m×5.00t |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 6.20        | 6.15        | 13.7m×4.80t | 4.70        |             |
| 14.0                                   | 6.00        | 6.15        | 6.10        | 5.80        | 5.90        | 4.75        | 4.50        | 15.6m×3.65t |
| 16.0                                   | 4.95        | 5.10        | 5.05        | 5.25        | 5.10        | 4.40        | 4.35        | 3.60        |
| 18.0                                   | 4.15        | 4.30        | 4.25        | 4.45        | 4.30        | 4.10        | 4.20        | 3.35        |
| 20.0                                   | 3.55        | 3.65        | 3.60        | 3.75        | 3.70        | 3.85        | 3.75        | 3.15        |
| 22.0                                   | 3.05        | 3.10        | 3.10        | 3.25        | 3.15        | 3.35        | 3.20        | 2.95        |
| 24.0                                   | 2.65        | 2.70        | 2.70        | 2.80        | 2.75        | 2.90        | 2.80        | 2.80        |
| 26.0                                   | 2.30        | 2.35        | 2.35        | 2.45        | 2.40        | 2.50        | 2.45        | 2.60        |
| 28.0                                   | 2.00        | 2.05        | 2.05        | 2.10        | 2.10        | 2.20        | 2.15        | 2.30        |
| 30.0                                   | 28.7m×1.90t | 29.0m×1.90t | 1.80        | 1.85        | 1.85        | 1.95        | 1.90        | 2.00        |
| 32.0                                   |             |             | 31.5m×1.65t | 1.60        | 1.65        | 1.70        | 1.65        | 1.75        |
| 34.0                                   |             |             |             |             | 1.45        | 1.50        | 1.45        | 1.55        |
| 36.0                                   |             |             |             |             | 34.3m×1.40t | 35.0m×1.40t | 1.30        | 1.35        |
| 38.0                                   |             |             |             |             |             |             | 37.1m×1.20t | 1.20        |

| Main Boom Length (m)                   | 28          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 8.5                                    | 6.50        |             |             |             |             |             |             |             |
| 9.0                                    | 6.50        |             | 9.6m×6.50t  |             |             |             |             |             |
| 10.0                                   | 6.50        | 10.3m×6.50t | 6.50        |             | 10.6m×6.50t |             | 11.7m×5.00t |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 12.3m×6.25t | 6.15        |             | 4.70        |             |
| 14.0                                   | 5.95        | 6.10        | 6.00        | 5.95        | 5.90        | 14.2m×4.80t | 4.50        |             |
| 16.0                                   | 4.90        | 5.05        | 4.95        | 5.20        | 5.05        | 4.50        | 4.35        | 16.2m×3.65t |
| 18.0                                   | 4.10        | 4.20        | 4.15        | 4.35        | 4.25        | 4.25        | 4.20        | 3.45        |
| 20.0                                   | 3.45        | 3.55        | 3.55        | 3.70        | 3.60        | 3.85        | 3.65        | 3.20        |
| 22.0                                   | 2.95        | 3.05        | 3.00        | 3.15        | 3.10        | 3.30        | 3.15        | 3.05        |
| 24.0                                   | 2.55        | 2.60        | 2.60        | 2.70        | 2.65        | 2.85        | 2.70        | 2.85        |
| 26.0                                   | 2.20        | 2.25        | 2.25        | 2.35        | 2.30        | 2.45        | 2.35        | 2.55        |
| 28.0                                   | 1.90        | 1.95        | 1.95        | 2.05        | 2.00        | 2.15        | 2.05        | 2.20        |
| 30.0                                   | 1.65        | 1.70        | 1.70        | 1.75        | 1.75        | 1.85        | 1.80        | 1.95        |
| 32.0                                   | 31.3m×1.50t | 31.6m×1.50t | 1.50        | 1.55        | 1.55        | 1.60        | 1.55        | 1.70        |
| 34.0                                   |             |             | 1.30        | 1.35        | 1.35        | 1.40        | 1.35        | 1.45        |
| 36.0                                   |             |             | 34.1m×1.30t | 34.6m×1.25t | 1.15        | 1.20        | 1.20        | 1.30        |
| 38.0                                   |             |             |             |             | 36.9m×1.10t | 37.6m×1.10t | 37.3m×1.10t | 1.10        |

Notes: 1. The rated loads are determined according to BS rating (British Standard; 1986) on the condition that the machine is stationed on firm, level ground.

2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.

Hook Weight

|            |        |
|------------|--------|
| 40 t Hook  | 0.41 t |
| 15 t Hook  | 0.32 t |
| 6.5 t Hook | 0.18 t |

3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.

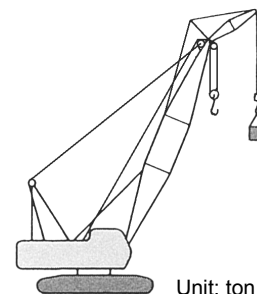
4. The offset angles shown are of jib boom offset angle against the main boom, under load.

5. The counterweight is 12.5 ton.

6. Be sure to fully extend the side frames before operating the machine.

7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).





Unit: ton

### Rated Loads for Jib Boom (BS rating) (3)

| Main Boom Length (m)                   | 31          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 9.1                                    | 6.50        |             |             |             |             |             |             |             |
| 10.0                                   | 6.50        | 10.9m×6.50t | 10.1m×6.50t |             | 11.2m×6.50t |             |             |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 12.8m×6.25t | 6.30        |             | 12.2m×5.00t |             |
| 14.0                                   | 5.85        | 6.05        | 5.95        | 6.05        | 5.90        | 14.8m×4.80t | 4.80        |             |
| 16.0                                   | 4.80        | 4.95        | 4.85        | 5.15        | 4.95        | 4.60        | 4.50        | 16.7m×3.65t |
| 18.0                                   | 3.95        | 4.10        | 4.05        | 4.30        | 4.15        | 4.35        | 4.20        | 3.50        |
| 20.0                                   | 3.35        | 3.45        | 3.40        | 3.60        | 3.50        | 3.75        | 3.55        | 3.30        |
| 22.0                                   | 2.85        | 2.95        | 2.90        | 3.10        | 3.00        | 3.20        | 3.05        | 3.10        |
| 24.0                                   | 2.40        | 2.50        | 2.50        | 2.65        | 2.55        | 2.75        | 2.60        | 2.85        |
| 26.0                                   | 2.10        | 2.15        | 2.15        | 2.25        | 2.20        | 2.35        | 2.25        | 2.45        |
| 28.0                                   | 1.80        | 1.85        | 1.85        | 1.95        | 1.90        | 2.05        | 1.95        | 2.15        |
| 30.0                                   | 1.55        | 1.60        | 1.60        | 1.70        | 1.65        | 1.75        | 1.70        | 1.85        |
| 32.0                                   | 1.35        | 1.35        | 1.40        | 1.45        | 1.40        | 1.50        | 1.45        | 1.60        |
| 34.0                                   | 33.9m×1.15t | 1.15        | 1.20        | 1.25        | 1.25        | 1.30        | 1.25        | 1.40        |
| 36.0                                   |             | 34.2m×1.15t | 35.2m×1.10t | 35.5m×1.10t | 35.5m×1.10t | 1.10        | 1.10        | 1.20        |
| 37.0                                   |             |             |             |             |             |             |             | 1.10        |

| Main Boom Length (m)                   | 34          |             |             |             |             |             |             |             |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6           |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10          | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 9.6                                    | 6.50        |             |             |             |             |             |             |             |
| 10.0                                   | 6.50        | 11.4m×6.50t | 10.7m×6.50t |             | 11.7m×6.50t |             |             |             |
| 12.0                                   | 6.50        | 6.50        | 6.50        | 13.4m×6.20t | 6.40        |             | 12.8m×5.00t |             |
| 14.0                                   | 5.75        | 5.95        | 5.85        | 6.10        | 5.90        | 15.3m×4.80t | 4.80        |             |
| 16.0                                   | 4.65        | 4.85        | 4.75        | 5.05        | 4.85        | 4.70        | 4.50        | 17.3m×3.65t |
| 18.0                                   | 3.85        | 4.00        | 3.95        | 4.20        | 4.05        | 4.35        | 4.10        | 3.55        |
| 20.0                                   | 3.25        | 3.35        | 3.30        | 3.50        | 3.40        | 3.65        | 3.45        | 3.35        |
| 22.0                                   | 2.70        | 2.85        | 2.80        | 3.00        | 2.85        | 3.10        | 2.90        | 3.20        |
| 24.0                                   | 2.30        | 2.40        | 2.40        | 2.55        | 2.45        | 2.65        | 2.50        | 2.75        |
| 26.0                                   | 1.95        | 2.05        | 2.05        | 2.15        | 2.10        | 2.25        | 2.15        | 2.35        |
| 28.0                                   | 1.65        | 1.75        | 1.75        | 1.85        | 1.80        | 1.95        | 1.85        | 2.05        |
| 30.0                                   | 1.40        | 1.45        | 1.45        | 1.55        | 1.50        | 1.65        | 1.55        | 1.75        |
| 32.0                                   | 1.20        | 1.25        | 1.25        | 1.35        | 1.30        | 1.40        | 1.35        | 1.50        |
| 34.0                                   | 33.0m×1.10t | 33.5m×1.10t | 33.5m×1.10t | 1.15        | 1.10        | 1.20        | 1.15        | 1.30        |
| 36.0                                   |             |             |             | 34.5m×1.10t |             | 35.0m×1.10t | 34.5m×1.10t | 1.10        |

Notes: 1. The rated loads are determined according to BS rating (British Standard; 1986) on the condition that the machine is stationed on firm, level ground.

2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.

Hook Weight

|            |        |
|------------|--------|
| 40 t Hook  | 0.41 t |
| 15 t Hook  | 0.32 t |
| 6.5 t Hook | 0.18 t |

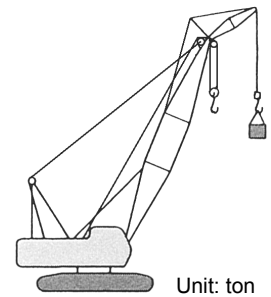
3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.

4. The offset angles shown are of jib boom offset angle against the main boom, under load.

5. The counterweight is 12.5 ton.

6. Be sure to fully extend the side frames before operating the machine.

7. Figures described as ○○m×○○t in the tables indicate working radius (m) × rated load (ton).



### Rated Loads for Jib Boom (BS rating) (4)

Unit: ton

| Main Boom Length (m)                   | 37   |             |             |             |             |             |             |             |
|----------------------------------------|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6    |             | 9           |             | 12          |             | 15          |             |
| Offset Angle (°)<br>Working Radius (m) | 10   | 30          | 10          | 30          | 10          | 30          | 10          | 30          |
| 10.2                                   | 6.50 |             | 11.2m×6.50t |             |             |             |             |             |
| 12.0                                   | 6.50 | 6.50        | 6.50        | 13.9m×5.45t | 12.3m×6.50t |             | 13.3m×5.00t |             |
| 14.0                                   | 5.65 | 5.90        | 5.80        | 5.40        | 5.90        | 15.9m×4.30t | 4.85        |             |
| 16.0                                   | 4.60 | 4.80        | 4.70        | 5.00        | 4.80        | 4.30        | 4.50        | 17.8m×3.55t |
| 18.0                                   | 3.80 | 3.95        | 3.90        | 4.15        | 3.95        | 4.05        | 4.05        | 3.55        |
| 20.0                                   | 3.15 | 3.30        | 3.25        | 3.45        | 3.30        | 3.60        | 3.40        | 3.35        |
| 22.0                                   | 2.65 | 2.80        | 2.75        | 2.95        | 2.80        | 3.05        | 2.85        | 3.15        |
| 24.0                                   | 2.25 | 2.35        | 2.30        | 2.50        | 2.35        | 2.60        | 2.40        | 2.70        |
| 26.0                                   | 1.90 | 2.00        | 1.95        | 2.10        | 2.00        | 2.20        | 2.05        | 2.30        |
| 28.0                                   | 1.60 | 1.65        | 1.65        | 1.80        | 1.70        | 1.90        | 1.75        | 2.00        |
| 30.0                                   | 1.35 | 1.40        | 1.40        | 1.50        | 1.45        | 1.60        | 1.50        | 1.70        |
| 32.0                                   | 1.10 | 1.20        | 1.20        | 1.25        | 1.25        | 1.35        | 1.25        | 1.45        |
| 34.0                                   |      | 33.0m×1.10t | 33.0m×1.10t | 33.5m×1.10t | 33.5m×1.10t | 1.15        | 33.5m×1.10t | 1.25        |
| 35.5                                   |      |             |             |             |             | 34.5m×1.10t |             | 1.10        |

| Main Boom Length (m)                   | 40   |             |             |             |             |             |
|----------------------------------------|------|-------------|-------------|-------------|-------------|-------------|
| Jib Boom Length (m)                    | 6    |             | 9           |             | 12          |             |
| Offset Angle (°)<br>Working Radius (m) | 10   | 30          | 10          | 30          | 10          | 30          |
| 10.7                                   | 6.50 |             | 11.8m×6.50t |             |             |             |
| 12.0                                   | 6.50 | 12.5m×5.90t | 6.50        |             | 12.8m×5.70t |             |
| 14.0                                   | 5.55 | 5.60        | 5.70        | 14.5m×4.45t | 5.50        |             |
| 16.0                                   | 4.50 | 4.70        | 4.60        | 4.30        | 4.70        | 16.4m×3.55t |
| 18.0                                   | 3.70 | 3.90        | 3.80        | 4.05        | 3.85        | 3.40        |
| 20.0                                   | 3.05 | 3.20        | 3.15        | 3.40        | 3.20        | 3.20        |
| 22.0                                   | 2.55 | 2.70        | 2.60        | 2.85        | 2.70        | 3.00        |
| 24.0                                   | 2.10 | 2.25        | 2.20        | 2.40        | 2.25        | 2.50        |
| 26.0                                   | 1.75 | 1.90        | 1.85        | 2.00        | 1.90        | 2.15        |
| 28.0                                   | 1.50 | 1.55        | 1.55        | 1.70        | 1.60        | 1.80        |
| 30.0                                   | 1.20 | 1.30        | 1.30        | 1.40        | 1.35        | 1.50        |
| 32.0                                   |      | 31.6m×1.10t | 31.6m×1.10t | 1.15        | 1.10        | 1.25        |
| 34.0                                   |      |             |             | 32.5m×1.10t |             | 33.5m×1.10t |

Notes: 1. The rated loads are determined according to BS rating (British Standard; 1986) on the condition that the machine is stationed on firm, level ground.

2. To calculate the maximum load that can actually be lifted, deduct weight of all lifting accessories, such as main and aux. hooks, from figures shown above.

Hook Weight

|            |        |
|------------|--------|
| 40 t Hook  | 0.41 t |
| 15 t Hook  | 0.32 t |
| 6.5 t Hook | 0.18 t |

3. Working radius is the horizontal distance from the swing center to the center of gravity of a lifted load.

4. The offset angles shown are of jib boom offset angle against the main boom, under load.

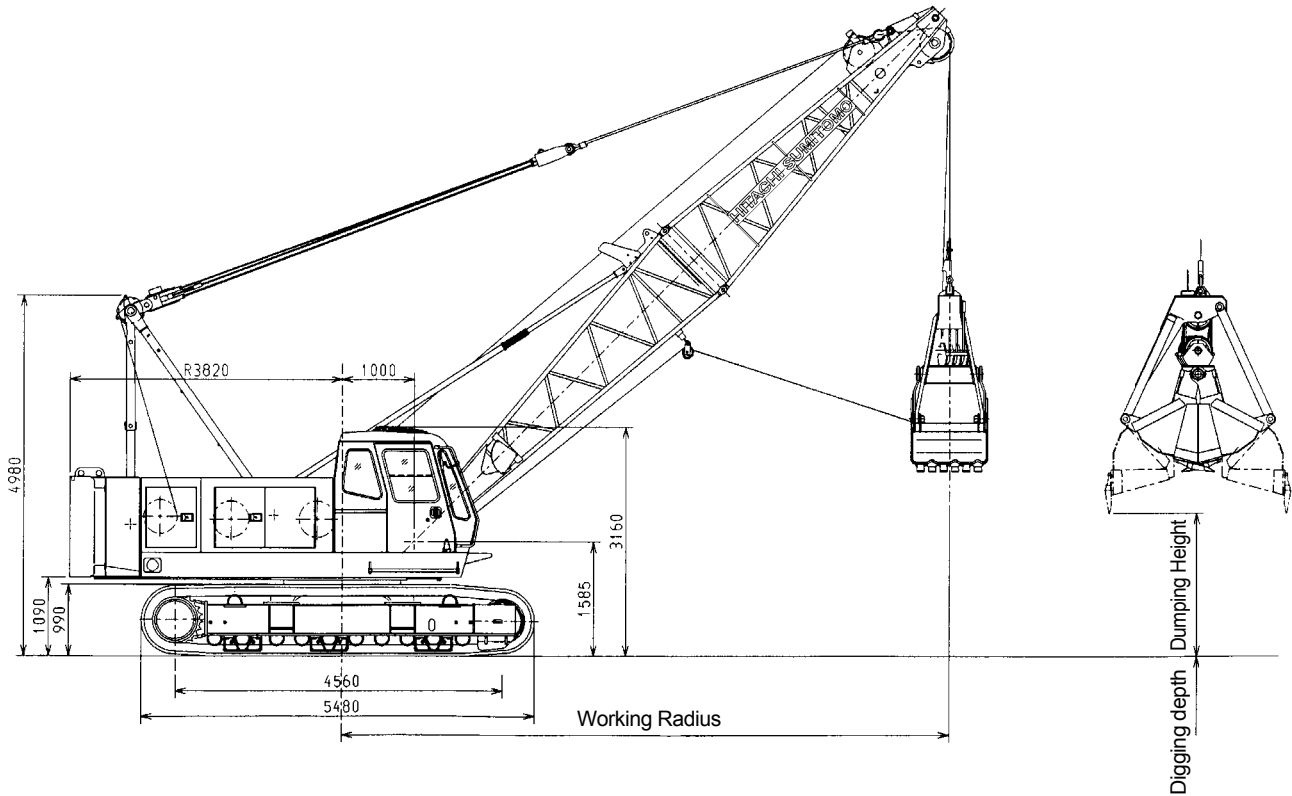
5. The counterweight is 12.5 ton.

6. Be sure to fully extend the side frames before operating the machine.

7. Figures described as  $\text{OOm} \times \text{OOt}$  in the tables indicate working radius (m)  $\times$  rated load (ton).

## ■Dimensions

Unit: mm



## ■Specifications

|                                      |                            |                                              |                |
|--------------------------------------|----------------------------|----------------------------------------------|----------------|
| Bucket capacity                      | m <sup>3</sup>             | 0.8/1.0/1.2                                  |                |
| Allowable clamshell gross weight     | ton                        | 6.0                                          |                |
| Max. bare line pull (1st drum layer) | ton                        | 15.6                                         |                |
| Boom length                          | m                          | 10 - 19                                      |                |
| Max. digging depth                   | m                          | 36                                           |                |
| Suspend line speeds                  | m/min                      | * 74/37                                      | Rope 22 m dia. |
| Open/close line speeds               | m/min                      | * 74/37                                      | Rope 22 m dia. |
| Boom hoist/lower line speeds         | m/min                      | *.60                                         | Rope 16 m dia. |
| Travel speeds                        | km/h                       | * 1.9                                        |                |
| Ground pressure                      | kPa (kgf/cm <sup>2</sup> ) | 55.8 (0.57)                                  |                |
| Operating weight                     | ton                        | 45.1 (10 m boom + 1.0 m <sup>3</sup> bucket) |                |

## ■Clamshell Bucket

| Capacity (m <sup>3</sup> ) | Weight (ton) | Use                        |
|----------------------------|--------------|----------------------------|
| 0.8                        | 2.00         | Excavation                 |
| 1.0                        | 2.45         | Excavation                 |
| 1.2                        | 2.40         | Excavation (Light service) |

- Notes: 1.Data is expressed in SI units, along with conventional units in ( ).  
 2.Other specifications, not shown, are similar to those for the crawler crane.  
 3.Data marked with an asterisk (\*) will vary with the load.

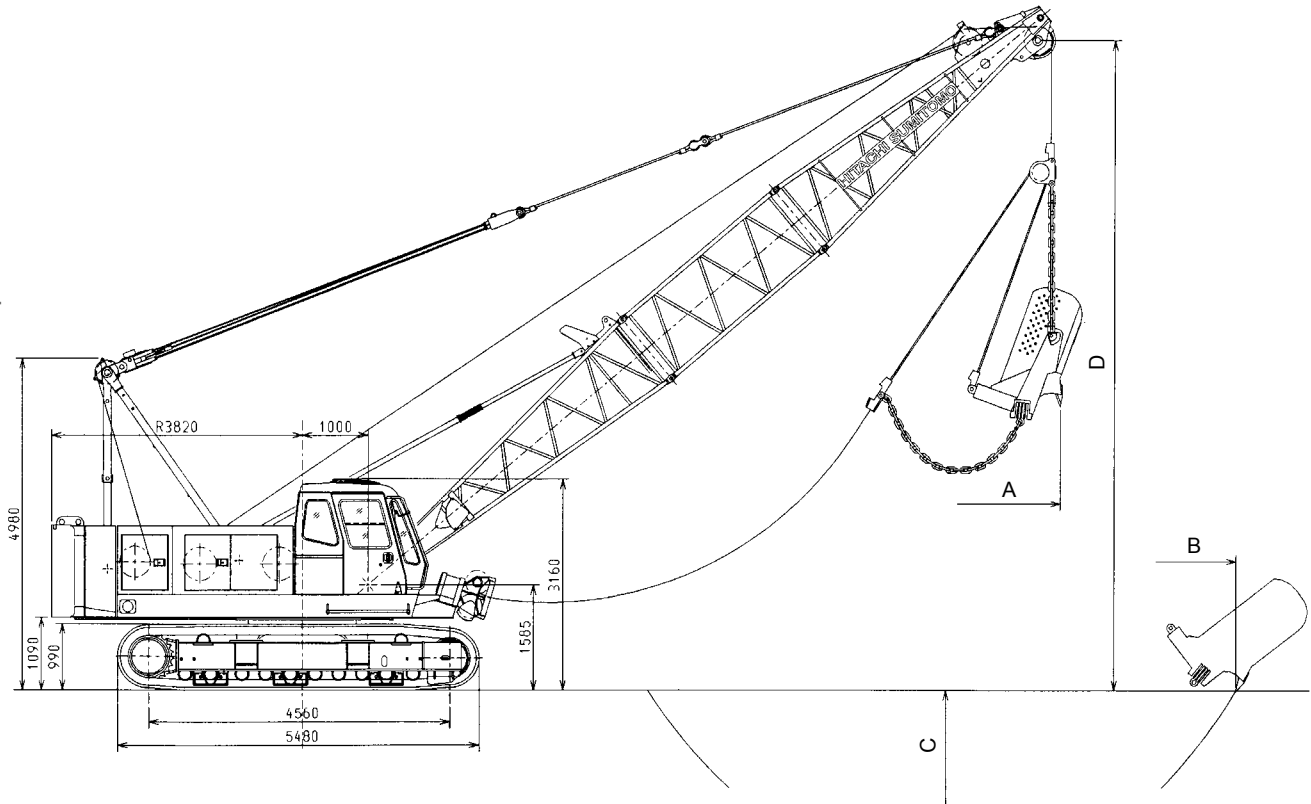
## ■Working Ranges

| Boom length               | m      | 10   |      |      |      | 13   |      |      |      | 16   |      |      |      | 19   |      |      |      |
|---------------------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Boom angle                | degree | 35   | 45   | 55   | 65   | 35   | 45   | 55   | 65   | 35   | 45   | 55   | 65   | 35   | 45   | 55   | 65   |
| Working radius            | m      | 9.5  | 8.5  | 7.1  | 5.7  | 12.0 | 10.6 | 8.9  | 6.9  | 14.5 | 12.7 | 10.6 | 8.2  | 16.9 | 14.8 | 12.3 | 9.5  |
| Rated load                | ton    | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 5.42 | 6.00 | 6.00 | 6.00 | 4.40 | 5.23 | 6.00 | 6.00 |
| Bucket dumping height     | m      | 2.0  | 3.3  | 4.5  | 5.4  | 3.7  | 5.5  | 7.0  | 8.1  | 5.4  | 7.6  | 9.4  | 10.8 | 7.1  | 9.7  | 11.9 | 13.6 |
| 0.8 m <sup>3</sup> bucket | m      | 1.8  | 3.1  | 4.3  | 5.2  | 3.5  | 5.3  | 6.8  | 7.9  | 5.2  | 7.4  | 9.2  | 10.6 | 6.9  | 9.5  | 11.7 | 13.4 |
| 1.0 m <sup>3</sup> bucket | m      | 1.6  | 2.9  | 4.1  | 5.0  | 3.3  | 5.1  | 6.6  | 7.7  | 5.0  | 7.2  | 9.0  | 10.4 | 6.7  | 9.3  | 11.5 | 13.2 |
| 1.2 m <sup>3</sup> bucket | m      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

- Notes: 1.Rated loads for clamshell do not exceed 90% those for crane.  
 2.The rated loads shown are upper limits determined by the following equation. Please select a bucket in such a manner that its rated load does not exceed the rated load shown above, according to kinds of the loads handled.  
 Rated load = Bucket capacity (m<sup>3</sup>) × Specific gravity of load (ton/m<sup>3</sup>) + Bucket weight (ton)  
 Be careful that brake will be overheated if the bucket is too heavy even within the rated loads.  
 3.Working radius is the horizontal distance from the swing center to the center of gravity of lifted load.  
 4.The bucket weight is 2.45 ton max.  
 5.The counterweight is 12.5 ton.  
 6.Be sure to fully extend the side frames before operating the machine.  
 7.Free fall using brake will vary with operating conditions such as bucket weight and work cycle, but its height should be within 10 m.

## ■Dimensions

Unit: mm



## ■Specifications

|                                      |                           |                                               |                             |
|--------------------------------------|---------------------------|-----------------------------------------------|-----------------------------|
| Bucket capacity                      | m <sup>3</sup>            | 0.97/1.35/1.54                                |                             |
| Max. bare line pull (1st drum layer) | ton                       | 15.6                                          |                             |
| Boom length                          | m                         | 13 - 19                                       |                             |
| Suspend line speeds                  | m/min                     | * 74/37                                       | Rope 22 m dia. (Opt. 24 mm) |
| Drag line speeds                     | m/min                     | * 74/37                                       | Rope 22 m dia. (Opt. 24 mm) |
| Boom hoist/lower line speed          | m/min                     | 60                                            | Rope 16 m dia.              |
| Travel speeds                        | km/h                      | * 1.9                                         |                             |
| Swing speeds                         | min <sup>-1</sup> (rpm)   | * 3.8 (3.8)                                   |                             |
| Ground pressure                      | kPa(kgf/cm <sup>2</sup> ) | 54.7 (0.56)                                   |                             |
| Operating weight                     | ton                       | 44.2 (10 m boom + 1.35 m <sup>3</sup> bucket) |                             |

## ■Clamshell Bucket

| Capacity (m <sup>3</sup> ) | Weight (ton) | Use            |
|----------------------------|--------------|----------------|
| 0.97                       | 1.18         | Heavy duty     |
| 1.35                       | 1.54         | Medium service |
| 1.54                       | 1.45         | Light service  |

Notes: 1.Data is expressed in SI units, along with conventional units in ( ).  
 2.Other specifications, not shown, are similar to those for the crawler crane.  
 3.Data marked with an asterisk (\*) will vary with the load.

## ■Working Ranges

| Boom length           | m   | 13   |      |      | 16   |      |      | 19   |      |      |
|-----------------------|-----|------|------|------|------|------|------|------|------|------|
|                       |     | 30   | 40   | 50   | 30   | 40   | 50   | 30   | 40   | 50   |
| A. Working radius     | m   | 12.5 | 11.3 | 9.8  | 15.1 | 13.6 | 11.7 | 17.7 | 15.9 | 13.6 |
| Rated load            | ton | 5.00 | 5.81 | 6.95 | 3.85 | 4.45 | 5.46 | 3.05 | 3.53 | 4.40 |
| B. Max. digging reach | m   | 16.0 | 15.7 | 14.9 | 19.3 | 18.9 | 17.8 | 22.6 | 22.0 | 20.8 |
| C. Max. digging depth | m   | 8.7  | 8.4  | 7.8  | 11.1 | 10.8 | 10.0 | 13.6 | 13.2 | 12.2 |
| D. Boom point height  | m   | 7.9  | 9.8  | 11.4 | 9.4  | 11.7 | 13.7 | 10.9 | 13.6 | 16.0 |

Notes: 1.The size of the bucket has to be determined according to local conditions.  
 2.The rated loads shown are upper limits determined by the following equation. Please select a bucket in such a manner that its rated load does not exceed the rated load shown above, according to kinds of the loads handled.  

$$\text{Rated load} = \text{Bucket capacity (m}^3\text{)} \times \text{Specific gravity of load (ton/m}^3\text{)} + \text{Bucket weight (ton)}$$
 Be careful that brake will be overheated if the bucket is too heavy even within the rated loads.  
 3.Working radius is the horizontal distance from the swing center to the center of gravity of lifted load.  
 4.Maximum digging reach/depth may vary considerable depending on digging condition and the skill of the operator.  
 5.The counterweight is 12.5 ton.  
 6.Be sure to fully extend the crawlers before operating the machine.

## ■ STANDARD EQUIPMENT

### BASIC MACHINE

#### Undercarriage

- Bulldozer shoe type undercarriage (with 810 mm shoes)
- Side frame extend cylinder (1 pc)

#### Superstructure

- Front lights (2 pcs)
- Rearview mirrors (left and right)
- Hoist drum check mirror
- Centralized lubrication system (for gantry and swing circle)
- Electric refuel device
- Under-cover (at superstructure bottom)
- Cab entrance steps
- Fine speed controller
- 12.5 ton counterweight
- Standard tool kit

#### Cab

- Intermittent-wipers (front and roof windows)
- Washers (front and roof windows)
- Rolled sunshade (roof window)
- Sunvisor
- Floor mat
- Room light
- Cigarette lighter
- Ashtray
- Auto-tuning clock radio (AM/FM)
- Brake mode selector switch (interlocked)
- Work mode selector (interlocked)
- Electric tilt-type right side stand

#### Safety Devices

- Swing lock
- Drum pawl lock (main and auxiliary hoist, and boom hoist)
- Swing alarm
- Fail safe brake system
- Pilot control shut-off lever
- Before-work check monitor

## ■ FRONT ATTACHMENTS

### Crane

- 10 m basic boom (lower 5.5 m, upper 4.5 m)
- Boom back stop
- Boom angle indicator
- 40 ton hook
- Main hoist rope (22 mm dia. × 145 m)
- Boom hoist rope (16 mm dia. × 145 m)
- Moment limiter
- Overhoist prevention device (main hook, boom hoist, secondary)

### Clamshell

- 10 m basic boom (lower 5.5 m, upper 4.5 m)
  - Boom back stop
  - Boom angle indicator
  - Open/close and suspend rope disengagement prevention device (for tubular chord boom)
  - Open/close rope (22 mm dia. × 67 m) \*
  - Suspend rope (22 mm dia. × 60 m) \*
  - Hydraulic tagline (10 mm dia. × 45 m rope included)
  - Boom hoist rope (16 mm dia. × 145 m)
- \* open/close and suspend ropes are determined based on 19 m boom length and 12 m digging depth.

### Dragline

- 13 m boom (lower 5.5 m, insert 3 m, upper 4.5 m and wide-angle sheaves)
- Boom back stop
- Boom angle indicator
- Hoist rope (22 mm dia. × 50 m)
- Drag rope (22 mm dia. × 60 m)
- Boom hoist rope (16 mm dia. × 145 m)
- Fair-lead
- Overhoist prevention device (for boom hoist and secondary hoist)

### ■Crane Boom Construction

| Booms Length (m) | 10 | 13 | 16 | 19      | 22 | 25 | 28 | 31 | 34 | 37 | 40 | 43 | 46 |   |
|------------------|----|----|----|---------|----|----|----|----|----|----|----|----|----|---|
| Lower Boom 5.5 m | 1  | 1  | 1  | 1       | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |   |
| Upper Boom 4.5 m | 1  | 1  | 1  | 1       | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |   |
| 3 m Boom Insert  |    | 1  | 2  | 1       | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  |   |
| 6 m Boom Insert  |    |    |    | 1       | 1  | 2  | 2  | 3  | 3  | 4  | 4  | 5  | 5  |   |
| Available Jib    | —  | —  | —  | ←—————→ |    |    |    |    |    |    |    |    | —  | — |

Boom inserts combination:

6 m boom insert can be replaced with two 3 m boom inserts.

### ■Crane Jib Construction

| Jib Length (m) | 6 | 9 | 12 | 15 |
|----------------|---|---|----|----|
| Lower Jib 3 m  | 1 | 1 | 1  | 1  |
| Upper Jib 3 m  | 1 | 1 | 1  | 1  |
| 3 m Jib Insert |   | 1 | 2  | 3  |

### ■Component Weights and Dimensions for Transport

| Components    |                 | Weight (ton)       | Length × Width × Height (m) | Remarks                                       |
|---------------|-----------------|--------------------|-----------------------------|-----------------------------------------------|
| Basic Machine | Basic Machine   | 27.9               | 7.10 × 3.35 × 3.28          | Excluding lower boom, ropes and counterweight |
|               | Counterweight   | 7.25               | 3.24 × 1.49 × 0.47          | Inner                                         |
|               | Counterweight   | 5.20               | 3.24 × 1.51 × 0.50          | Outer                                         |
| Crane Front   | Lower Boom      | 0.68               | 5.56 × 1.23 × 1.41          |                                               |
|               | Upper Boom      | 0.82               | 4.90 × 1.23 × 1.30          |                                               |
|               | Bridle          | 0.25               | 1.46 × 0.61 × 0.28          |                                               |
|               | 3 m Boom Insert | 0.24               | 3.10 × 1.23 × 1.30          |                                               |
|               | 6 m Boom Insert | 0.42               | 6.10 × 1.23 × 1.30          |                                               |
|               | Lower Jib       | 0.14               | 3.20 × 0.60 × 0.54          |                                               |
|               | Upper Jib       | 0.16               | 3.30 × 0.60 × 0.59          |                                               |
|               | 3 m Jib Insert  | 0.08               | 3.06 × 0.60 × 0.59          |                                               |
|               | Jib Mast        | 0.18               | 3.10 × 0.72 × 0.62          |                                               |
|               | 40 ton Hook     | 0.41               | 1.59 × 0.62 × 0.29          |                                               |
|               | 15 ton Hook     | 0.32               | 1.36 × 0.62 × 0.29          |                                               |
| 6.5 ton Hook  | 0.27            | 0.84 × 0.42 × 0.42 |                             |                                               |



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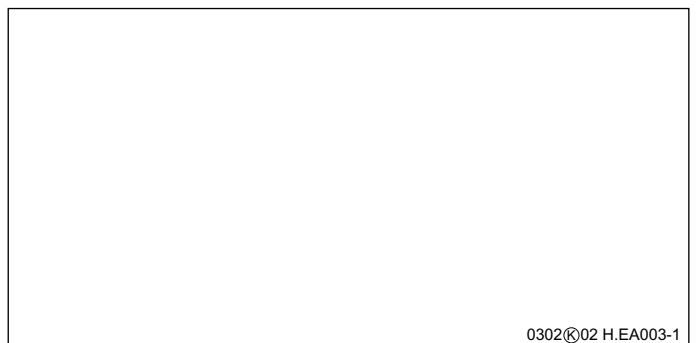
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*These specifications are subject to change without notice.*



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