TELESCOPIC CRAWLER CRANE

TK350

Max. Lifting Capacity: 35.0 metric ton
Max. Boom Length: 24.0 m

SPECIFICATIONS

CRANE PERFORMANCE

Max. rated load
9.8 m boom 35.0 ton x 2.7 m (8-line)
16.90 m boom 19.0 ton x 4.5 m (5-line)
20.45 m boom 15.0 ton x 5.0 m (4-line)
24.0 m boom 12.5 ton x 5.5 m (4-line)
Aux. Sheave 5.0 ton (single-line)

Main boom length 9.8 m to 24.0 m
Main hook height 24.9 m
Main hook operating radius 22.0 m

Line Speed
Main 125 m/min at 4th layer
Aux. 110 m/min at 2nd layer
Third (Option) 110 m/min at 3rd layer

Rated Line Pull
Main 44.1 kN (4.5 ton)
Aux. 49.0 kN (5.0 ton)
Third (Option) 29.4 kN (3.0 ton)

Boom telescoping speed 94 sec/14.2 m
Boom raising speed 49 sec/0 to 82 Åã
Swing speed 2.6 min⁻¹ (rpm)

BOOM STRUCTURE

Main boom
Three section, box construction,
2nd independently and 3rd independently telescoping

Boom hoist device
Direct forced type by double acting hydraulic cylinder (one)

Boom telescoping device
Direct forced type by double acting hydraulic cylinders (two)

Load hoist device
Hydraulic motor drive with spur gear reduction with auto-
brace, independent 2 winches with free-fall function

Swing device
Hydraulic drive motor with planetary gear reduction with hand
brace, swing neutral-free or neutral–brake selector type

WIRE ROPE

Main winch
18 dia. X 140 m, IWRC 6 x WS (36) anti twist rope

Aux. winch
18 dia. X 80 m, 6 x WS (26) anti twist rope

Third. Winch (Option)
16 dia. X 80 m, 6 x Fi (29) anti twist rope

Hydraulic device
2 variable plunger pumps + 3 – pumps (2 variable plunger
pumps + 1 gear pump)

Hydraulic oil tank 455 liters

UPPERSTRUCTURE

Engine
Model MITSUBISHI 6D16-TLE1
Type Water cooled, 4 cycle, 6 cyls,
direct injection diesel with
turbocharger, intercooler

Total displacement 7,540 cc
Max. output 147 kW/2,000 min⁻¹ (rpm)
Max. torque 765 N.m/1,600 min⁻¹
(178 kgf.m/1,600 rpm)

Fuel tank 270 liters

LOWERSTRUCTURE

Propel system Hydraulic motors, planetary reducer,
direct drive, shoe-in type

Travel speed 1.3 km/h
Gradeability 30 % (16.7°)

OPERATING WEIGHT

Operating weight 40.98 tons
Ground pressure 61.2 kPa (0.625 kgf/cm²)

GENERAL DIMENSIONS

Unit: mm

KOBELECO CONSTRUCTION MACHINERY CO., LTD.
## LIFTING CAPACITY

### Rated loads in metric tons for 360° area with 10.2 ton counterweight

<table>
<thead>
<tr>
<th>Boom length (m)</th>
<th>9.80</th>
<th>16.90</th>
<th>20.45</th>
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### Working radius (m)

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### Min. boom angle

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## LIFTING CAPACITY

### Rated loads in metric tons for 36° area without counterweight (Optional setting)

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### Min. boom angle

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### Working radius (m)

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### Unit: metric ton
1. Rated load do not exceed 78% of the tipping loads with machine set horizontally on a firm and level ground, satisfy the specified stability over the front, and include weight of hook block(s) and other handling accessories. Ratings shown in are based on the machine's structural strength, and others are determined by the machine's stability.

2. Rated loads shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level. Operating speeds or any other condition that could be detrimental to the safe operation of this equipment, the operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.

3. Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity the load. Operating radius given in the charts allow for loaded boom deflection. Always operate the machine on the basis of actual operating radius.

4. Both crawlers should be fully extended.

5. Ratings of the auxiliary sheave are the same as main boom ratings, but should not exceed 3,500kg. Ratings of the auxiliary sheave are calculated by deducting 35-ton hook weight (300 kg) from main boom ratings.

6. To determine load ratings that fall between those shown in the charts, proceed as follows:
   a) For boom lengths not listed use rating for next longer boom length or next shorter boom length, whichever is smaller.
   b) For load radii not shown, use rating for next larger radius.

7. At radii and boom lengths where no ratings are shown on chart, operation is not intended or approved.

8. Standard hoist reeings are shown below. Rated single-line pull must not exceed 4,500 kg.

9. In order to prevent a load from falling down to mistake of operation, do not use free-fall in crane operation.

Notes:

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<thead>
<tr>
<th>Hooks</th>
<th>35-ton</th>
<th>5-ton</th>
<th>5-ton (ball hook)</th>
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<tbody>
<tr>
<td>Weight</td>
<td>300 kg</td>
<td>90 kg</td>
<td>40 kg</td>
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Note: 5-ton ball hook is option.
**STANDARD EQUIPMENT**

- Upper structure/Lower structure
  - Counterweight: 10.2 ton
  - 750 mm shoe crawlers
  - 170F51 battery
  - Electric hand throttle grip
  - Side deck (for cab): 300 mm (W) x 970 mm (L)
  - Step (equipped on left-side guard)
  - Anti-slip sheet
  - Step (equipped on crawlers)
  - Tools (for routine maintenance)
  - Lubrication device
  - Tool box (equipped on right-side guard)
  - Three front working lights
  - Two back mirrors

- **Cab**
  - Air conditioner
  - Convenient compartment
  - Cup holder
  - AM/FM Radio
  - Ashtray
  - Cigarette lighter
  - Intermittent windshield wiper with window washer (roof, front and lower front window)
  - Sun visor
  - Roof blind
  - Tinted glass
  - Foot mat (cloth)
  - Foot pedal cover (rubber)

- **Safety Device**
  - Over-load prevention device (auto stop function)
  - Release prevention key for hook-over-hoist prevention device
  - LCD Multi-display (shows gauges and warning signs)
  - Hook over-hoist auto-stop device
  - Safety lever lock
  - Lever lock switch (main, aux., boom hoist, and telescoping)
  - Propel lever lock
  - Manual drum safety pawl (main, aux. and boom hoist)
  - Negative brake in lever neutral-position
  - Service brake pedal lock (main, aux.)
  - Lamp for neutral-free/brake select switch (main, aux.)
  - Neutral-free/brake select switch (main, aux.)
  - Counterweight detection device
  - Neutral brake release prevention key (main, aux.)
  - Brake activating device for engine stop
  - Hydraulically safety valve
  - Boom telescoping default operation prevention device
  - Winch protection device
  - Propel protection device
  - Sling wire lock
  - Safety lock pin
  - Safety flashers
  - Safety warning buzzer
  - Level gauge

**OPTIONAL EQUIPMENT**

- **Third drum:** wire rope 16 dia. x 80 m, with free-fall
- **Uni-balance rope:** IWRC6 x Fi (29) 18 dia. 140 m for main/80 m for aux.
- **Outlet for Vibro:** Max. output 50 kW (68 PS)
  - Max. discharge pressure 27.5 MPa (280 kgf/cm²)
  - Max. discharge flow 110 liters/min
- **No.1 Outlet for Auger:** Max. output 70/45 kW (96/61 PS)
  - Max. discharge pressure 24.5 MPa (250 kgf/cm²)
  - Max. discharge flow 190/110 liters/min (with oil flow select switch)
- **No.2 Outlet for Auger:** Max. output 93/50 kW (126/68 PS)
  - Max. discharge pressure 24.5 MPa (250 kgf/cm²)
  - Max. discharge flow 300/150 liters/min (with oil flow select switch)
- **Lifting capacity set:** without counterweight
- **Swing neutral brake:** cannot select swing neutral free
- **5-ton light hook:** 40 kg
- **Wiring rope loose prevention device (main, aux., third)**
- **Counterweight self-removal device**
- **Foot acceleration:** right hand
- **Boom hoist pedal:** left hand (not available to equip with third-drum option)
- **Boom hoist pedal:** right hand (not available to equip with foot acceleration)
- **Engine rpm fix switch:** 4-steps
- **Cab roof guard**
- **Cab front upper/lower guard**
- **Side catwalk (without handrail):** 300 mm (W) x 3,330 mm (L) — right hand/
  - 4,090 mm (L) — left hand
- **Color monitoring camera (backward)**
- **Monitoring camera for main/aux. with lighting**
- **Overload alarm lamp:** (3 colors, square shape)
- **Voice alarm for travel/swing**
- **Electric fuel pump**
- **Tool box (equipped in lower frame):** not available to equip with TransLifter simultaneously
- **Fire extinguisher**
- **Electric fan**

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

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