

# XCT90BR Truck Crane

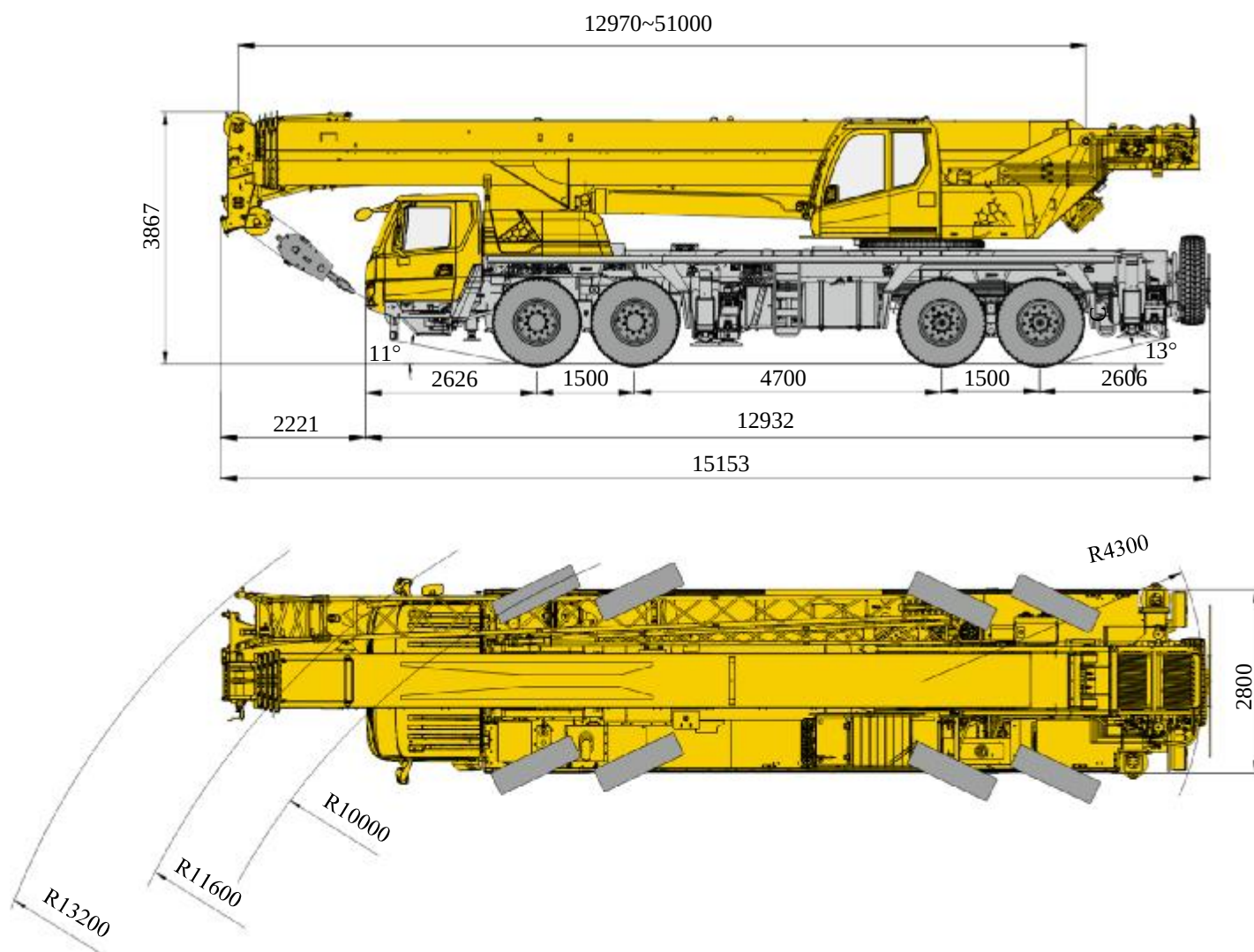
## Technical specifications



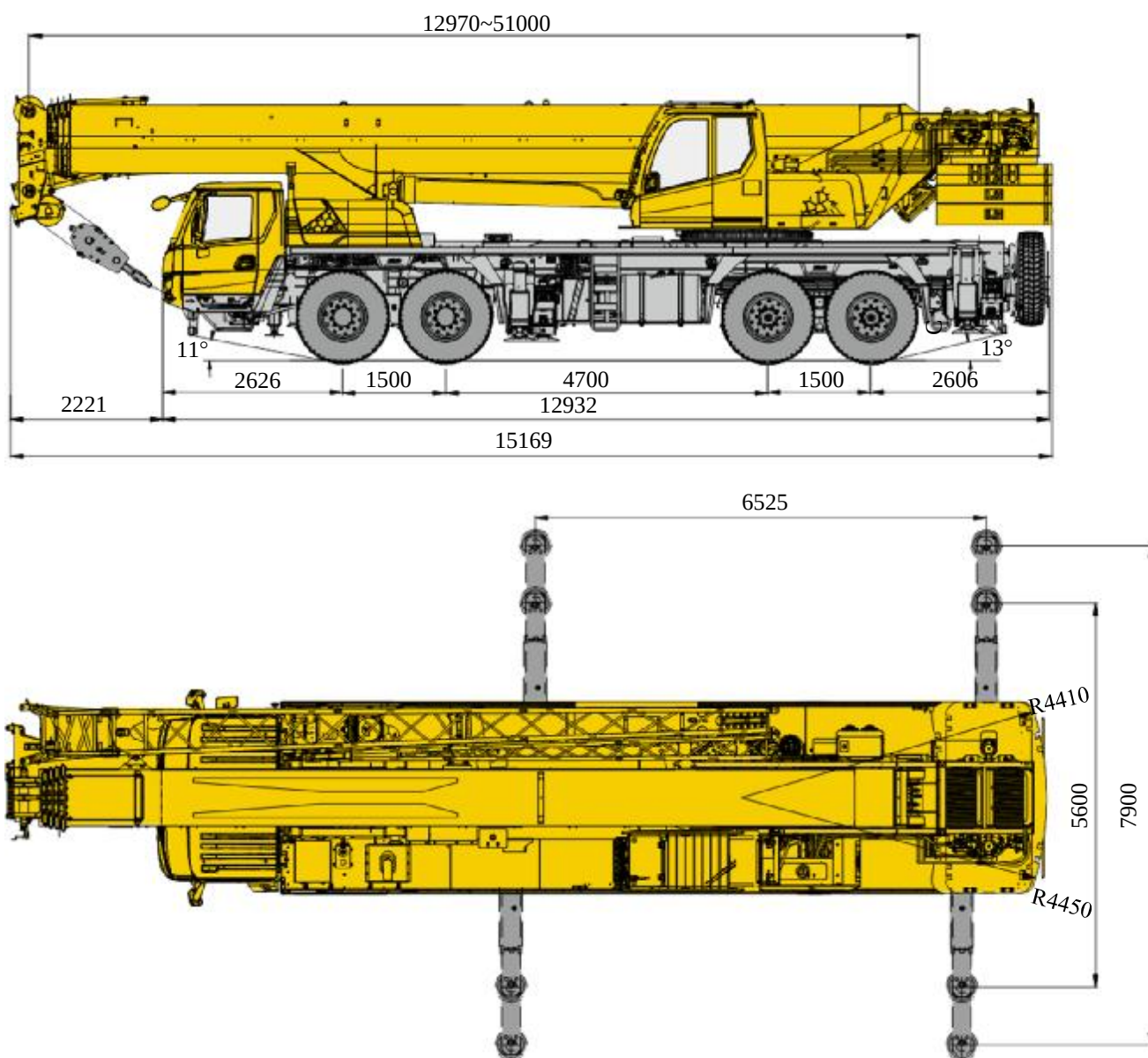
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## Dimensions



## Dimensions



# Technical specifications



## Chassis

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Frame</b>             | Designed and manufactured by XCMG, the frame is made of high strength steel with fully covered walking surface and anti-torsion box-typed structure.                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Outriggers</b>        | <p>Four outriggers arranged in H-shape are hydraulically controlled by control levers. There is an outrigger control station located at each side of the chassis, and there is a level gauge on each control station. The outrigger movements can be simultaneously or separately controlled at any side of the chassis. A fifth jack is available.</p> <p>Each jack cylinder is equipped with a double-way hydraulic lock.</p> <p>Outrigger float diameter: <math>\phi 450</math> mm.</p> <p>Reaction force of outrigger at maximum lifting capacity: 780 kN.</p> |
| <b>Engine</b>            | <p>WP12G375E300, in-line, 6 cylinders, water cooled, electric control diesel engine made by Weichai power.</p> <p>Engine displacement: 11.596 L.</p> <p>Engine emission standard: MAR-I;</p> <p>Maximum reference torque: 1948 N.m;</p> <p>Rated power 276 kW/1900 rpm</p> <p>Max. torque 1800 Nm/1000-1400 rpm</p> <p>Fuel tank capacity: 470 L.</p>                                                                                                                                                                                                              |
| <b>Transmission</b>      | FAST automatic transmission with hydraulic retarder brake; 12 forward gears, 2 reverse gears and retarder are available.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Safety devices</b>    | Outrigger pressure detector, driving beacon lights, backup camera, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Axles</b>             | High strength axles with two reducers, with disc brake for axles 1-2 and drum brake for axles 3-4. All-axle steering, and axles 3 and 4 for driving. Drive/steer mode: 8 $\times$ 8 $\times$ 4                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Suspension</b>        | <p>Front suspension: longitudinal leaf spring balanced suspension, with cylindrical shock absorber.</p> <p>Rear suspension: double trailing arm balanced suspension, V-type upper control arm.</p>                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Tire</b>              | <p>8 tires and 1 spare tire; Front axles and rear axles are equipped with single-tires.</p> <p>Tire specifications: 385/95R25.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Braking system</b>    | <p>Service brake: dual-circuit air pressure brake, acting on all wheels.</p> <p>Parking brake: spring-loaded brake, acting on the wheels of axles 2, 3 and 4.</p> <p>Auxiliary brake: engine exhaust brake and transmission retarder brake.</p>                                                                                                                                                                                                                                                                                                                    |
| <b>Steering</b>          | Mechanically steering mechanism with a hydraulic booster.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Driver's cab</b>      | The new full dimension steel structure cab is equipped with electric window lifters, large-view injection molded rearview mirror, mechanical shock-absorbing seat for the driver, and double-seat for co-driver, which can be unfolded into a sleeper. There are a brand-new combined central control panel, large screen color LCD display, audio system, fire extinguisher and HVAC system.                                                                                                                                                                      |
| <b>Electrical system</b> | <p>24V DC, two sets of 12V battery in series.</p> <p>Generator: 28 V-80 A.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

# Technical specifications



## Superstructure

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Structure</b>                   | Designed and manufactured by XCMG, made of high strength steel.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Hydraulic system</b>            | Large displacement dual-variable pump is used for lifting, luffing, and telescoping operations; while gear pump is used for slewing operation; The main valve integrates pilot oil supply module and adopts new pressure compensator to realize simultaneous operation between any actions; High power air-cooled hydraulic oil radiator effectively reduces system oil temperature.                                                                                                                                                                                                                                                     |
| <b>Control system</b>              | Hydraulic pilot control, stepless speed regulation, all movements of the crane is controlled by two levers at left and right sides and panel.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Main winch system</b>           | Hydraulic control is used for speed regulation. The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake, a counterbalance valve and a grooved drum equipped. The main and auxiliary winches can be operated independently. Wire rope has a rope head, which is directly installed in wedge socket.                                                                                                                                                                                                                                                                                      |
| <b>Auxiliary winch system</b>      | Hydraulic control is used for speed regulation. The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake, a counterbalance valve and a grooved drum equipped. The main and auxiliary winches can be operated separately.                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Slewing system</b>              | Single-row, four-point contact-ball external slewing ring, single slewing mechanism, driven by a planetary gear reducer, which is driven by a hydraulic motor, with constant-closed brake equipped, may continuously slew 360°. Power control and free swing function as well as stepless speed regulation are available. Joystick is furnished with a horn button.                                                                                                                                                                                                                                                                      |
| <b>Luffing system</b>              | Single luffing cylinder and the luffing counterbalance valve with the load compensation function. Gravity for lowering boom is used for boom luffing down.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Operator's cab</b>              | Steel fully-enclosed operator's cab can tilt backward about 20°, and features a spacious, panoramic, and multi storage layout. All-round view safety glass with an openable windshield. Push-pull sliding door, protective grilles, pull-out step, front and roof wipers are equipped. Stylish interior design. Sun screens for front, rear and side windows; double-layer sun screen for the roof window. Mechanical shock-absorbing, spacious adjustable seat; dual LED lights; electric fan. LMI, HMI control panel, display, armrests, engine accelerator pedal, engine start switch, etc. Heating & air conditioning are available. |
| <b>Safety devices</b>              | Hydraulic counterbalance valve, hydraulic relief valve, double-way hydraulic lock, LMI, length sensor, angle sensor, lowering limiter for preventing wire rope from over-releasing, anti-two block at boom head for preventing wire rope from over-winding and winch monitoring mirror.                                                                                                                                                                                                                                                                                                                                                  |
| <b>Electrical system</b>           | 24 V DC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Load moment indicator (LMI)</b> | When the actual load moment is approaching the overloading value, audible and visual warning will be sent out, and the dangerous operation will be automatically cut off before overloading occurs. Overload memory function (black box) and fault diagnosis function are available.                                                                                                                                                                                                                                                                                                                                                     |
| <b>Counterweight</b>               | Total weight is 18 t, with 11 counterweight combinations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Hook block</b>                  | 60 t, 7 t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Technical specifications



### Superstructure

**Boom**

5-section boom with U-shaped cross-section, welded structure. Dual-cylinder wire-rope-type telescoping system  
Boom length: 13 m ~ 51 m.

**Fixed jib**

Lattice jib structure. Jib offset angles may be changed with jib angle adjusting link, with 0°, 15° and 30° jib offset angles available. It is stowed at the side of boom.

Jib length: 10.5 m and 17.5 m.

**Auxiliary sheave**

Installed at the boom top, used for single line operation. Its lifting performance is the same with that of boom, but the maximum lifting capacity can not exceed 6.5 t.

## Configuration and optional equipment



### Function description

#### Standard

5-section boom of 51 m, fixed jib of 17.5 m.

Note: only standard configuration is available for this model.



### Component description

#### Hook block

90 t, 35 t

#### Boom extension

9 m

#### Independent jib head

Lattice welding structure, attached to boom head. Length of independent jib head: 2.9 m.

#### Monitoring system assembly

Winch monitor, counterweight attachment monitor, and boom head monitor are included.

#### Level gauge

Measures crane levelness to ensure stability and safety during crane installation, calibration, and operation.

#### Data recorder

Monitor and record various parameters of the crane operation.

## Weights

|  | 1      | 2      | 3      | 4      | Total weight       |
|-----------------------------------------------------------------------------------|--------|--------|--------|--------|--------------------|
| t                                                                                 | 11.875 | 11.875 | 11.875 | 11.875 | 47.5 <sup>1)</sup> |
| t                                                                                 | 14.175 | 14.175 | 18.575 | 18.575 | 65.5 <sup>2)</sup> |

### 1) Road travel configuration:

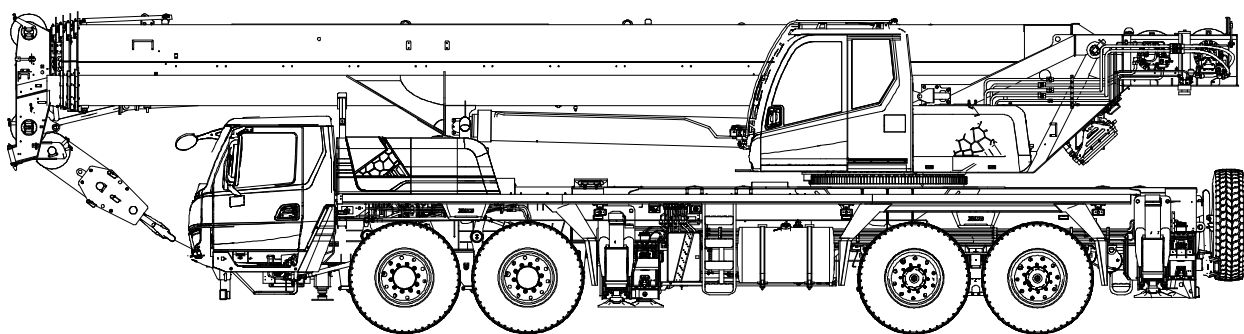
Superstructure: jib and 60 t hook block are carried.

Drive/steer mode: 8×8×4;

Max. travel speed: 80 km/h

Tire specifications: 385/95R25

Overall dimensions (mm): 15153×2800×3867



### 2) In the short-distance transfer configuration:

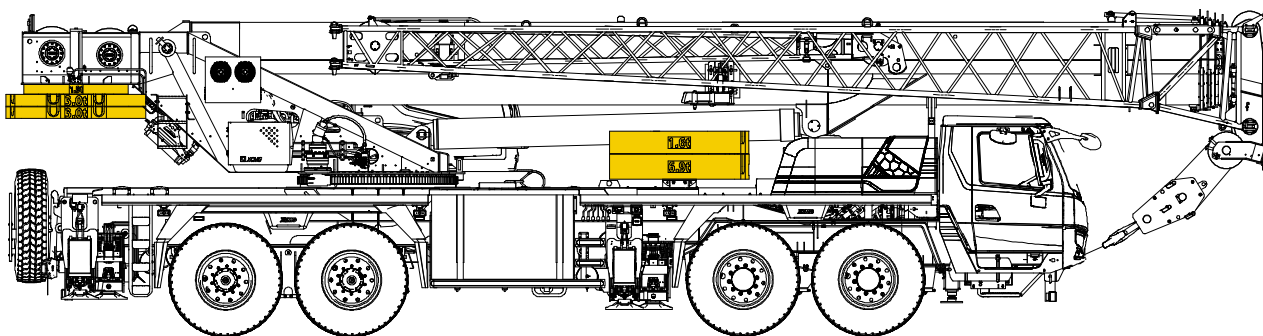
Superstructure: jib, 60 t hook block are carried; counterweight slabs of 7.9 t (3 t+3 t+1.9 t) are carried on the tail of turntable; counterweight slabs of 10.1 t (6.9 t+1.6 t+1.6 t) are carried in front of the frame.

Drive/steer mode: 8×8×4;

Max. travel speed: 20 km/h;

Tire specifications: 385/95R25.

Overall dimensions (mm): 15169×2800×3867



## Weights

|  | Parts of line | Hook block weight (kg) | Dimensions (mm) | Notes       |
|-----------------------------------------------------------------------------------|---------------|------------------------|-----------------|-------------|
| 90 t                                                                              | 13            | 700                    | 1735×625×520    | Single-hook |
| 60 t                                                                              | 8             | 470                    | 1481×478×471    | Single-hook |
| 35 t                                                                              | 5             | 370                    | 1375×570×318    | Single-hook |
| 7 t                                                                               | 1             | 210                    | 717×370×370     | Single-hook |

## Working speeds

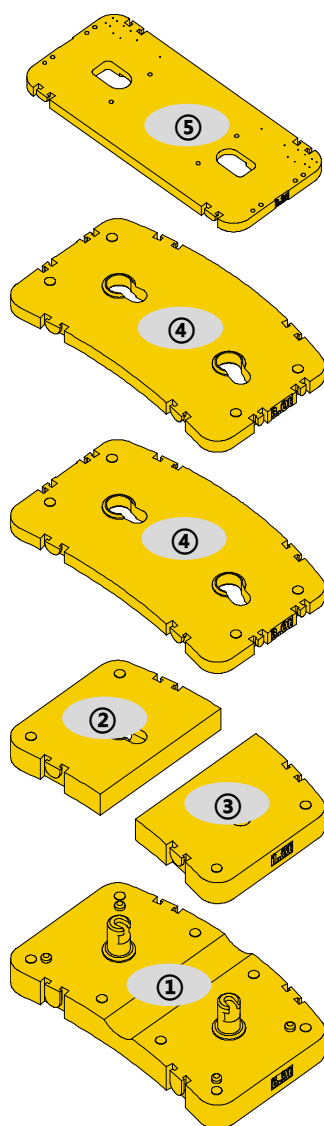


|           |    |     |
|-----------|----|-----|
|           |    |     |
| 385/95R25 | 80 | 48% |



|  |                                                    |       |       |       |
|--|----------------------------------------------------|-------|-------|-------|
|  |                                                    |       |       |       |
|  | 0-140 m/min, single line, no load                  | 7 t   | 20 mm | 250 m |
|  | 0-90 m/min, single line, no load                   | 6.5 t | 20 mm | 180 m |
|  | 0-1.5 r/min                                        |       |       |       |
|  | Approx. 55 s for boom luffing from -0.3° to 80.2°  |       |       |       |
|  | Approx. 130 s for boom extending from 13 m to 51 m |       |       |       |

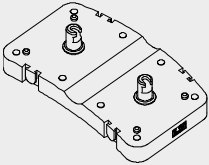
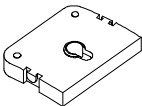
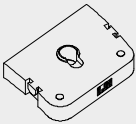
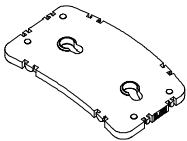
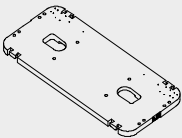
# Counterweight



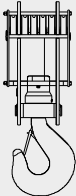
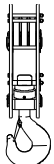
|  | ①             | ②             | ③             | ④             | ⑤             |
|-------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Dimensions<br>(L×W×H) (mm)                                                          | 2790×1674×670 | 1668×1170×303 | 1668×1170×303 | 2790×1674×179 | 2790×1250×110 |
| Weight (t)                                                                          | 6.9           | 1.6           | 1.6           | 3             | 1.9           |

| Operation<br>modes | 18 t            | 15 t          | 14.8 t  | 12 t        | 11.8 t | 8.8 t | 7.9 t | 6.9 t | 4.9 t | 1.9 t | 0 t |
|--------------------|-----------------|---------------|---------|-------------|--------|-------|-------|-------|-------|-------|-----|
| Combinations       | ①+②+③+<br>④×2+⑤ | ①+②+③+④<br>+⑤ | ①+④×2+⑤ | ①+②+③+<br>⑤ | ①+④+⑤  | ①+⑤   | ④×2+⑤ | ①     | ④+⑤   | ⑤     | —   |

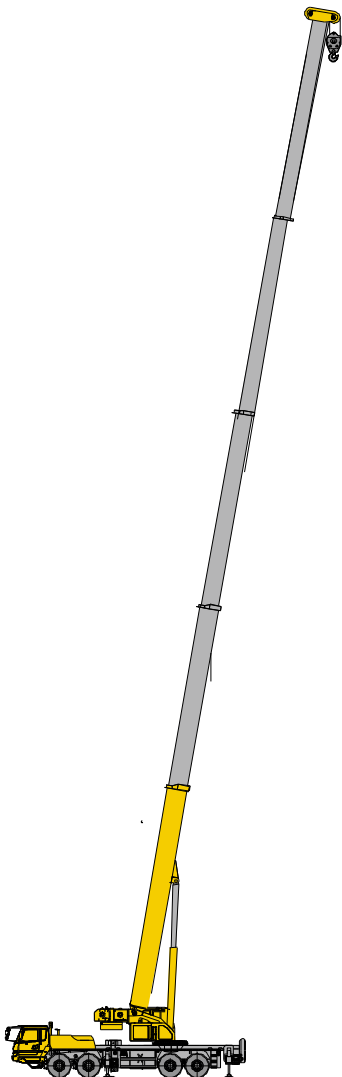
## Dimensions of parts to be transported

| Name                    | Illustration                                                                        | Single weight (kg) | Qty | Dimensions (mm) |
|-------------------------|-------------------------------------------------------------------------------------|--------------------|-----|-----------------|
| Counterweight slab<br>① |    | 6900               | 1   | 2790×1674×670   |
| Counterweight slab<br>② |    | 1600               | 1   | 1668×1170×303   |
| Counterweight slab<br>③ |    | 1600               | 1   | 1668×1170×303   |
| Counterweight slab<br>④ |  | 3000               | 2   | 2790×1674×179   |
| Counterweight slab<br>⑤ |  | 1900               | 1   | 2790×1250×110   |
| Independent jib head    |  | 470                | 1   | 3200×2300×1050  |
| Boom extension          |  | 620                | 1   | 9100×900×1500   |

## Dimensions of parts to be transported

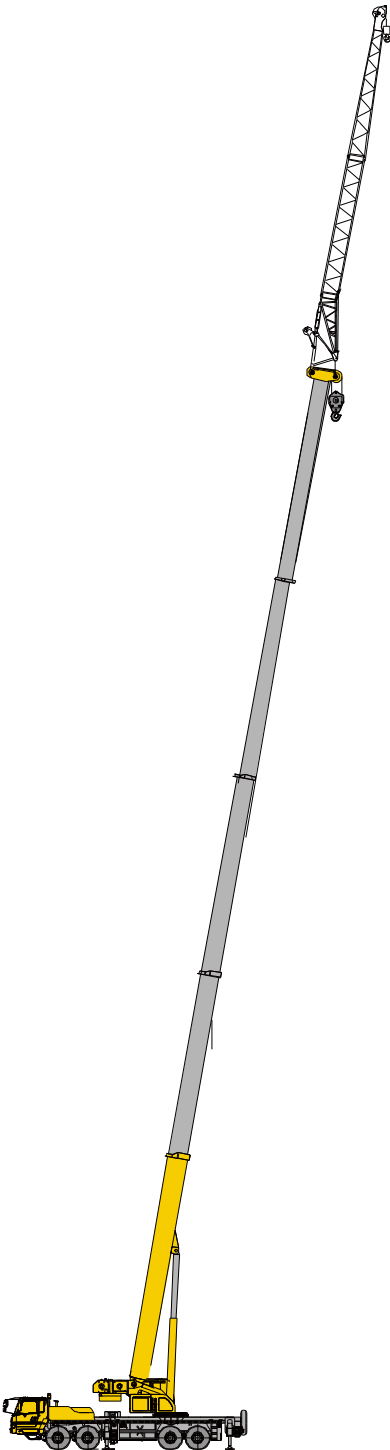
| Name            | Illustration                                                                       | Single weight (kg) | Qty | Dimensions (mm) |
|-----------------|------------------------------------------------------------------------------------|--------------------|-----|-----------------|
| 90 t hook block |   | 700                | 1   | 1735×625×520    |
| 35 t hook block |   | 370                | 1   | 1450×570×420    |
| 7 t hook block  |  | 210                | 1   | 717×370×370     |

# Boom/jib combinations



Boom

T: 13~51 m

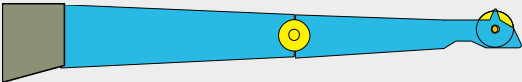


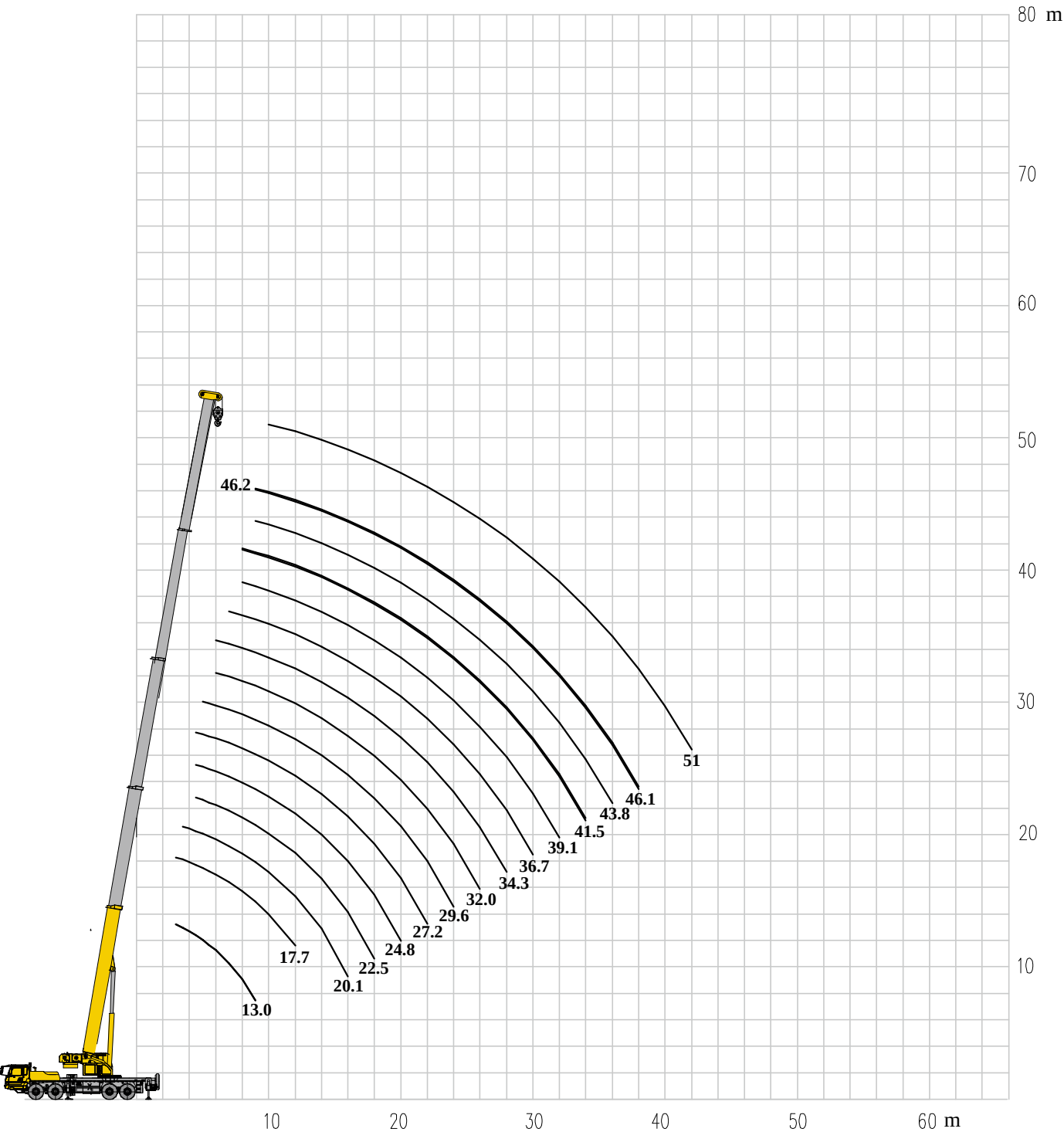
Jib

T: 51 m  
F: 10.5/17.5 m  
V: 7 m

## Boom/jib combinations

| Components         | Structure                                                                         | Length (m) |
|--------------------|-----------------------------------------------------------------------------------|------------|
| Boom extension     |  | 9.1        |
| Connecting bracket |  | 1.3        |
| 1st jib section    |  | 10         |
| 2nd jib section    |  | 7          |

|                               |                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------|
| Jib – 10.5 m                  |   |
| Jib – 17.5 m                  |  |
| Boom extension + jib - 26.5 m |  |



T 13~34.3 m

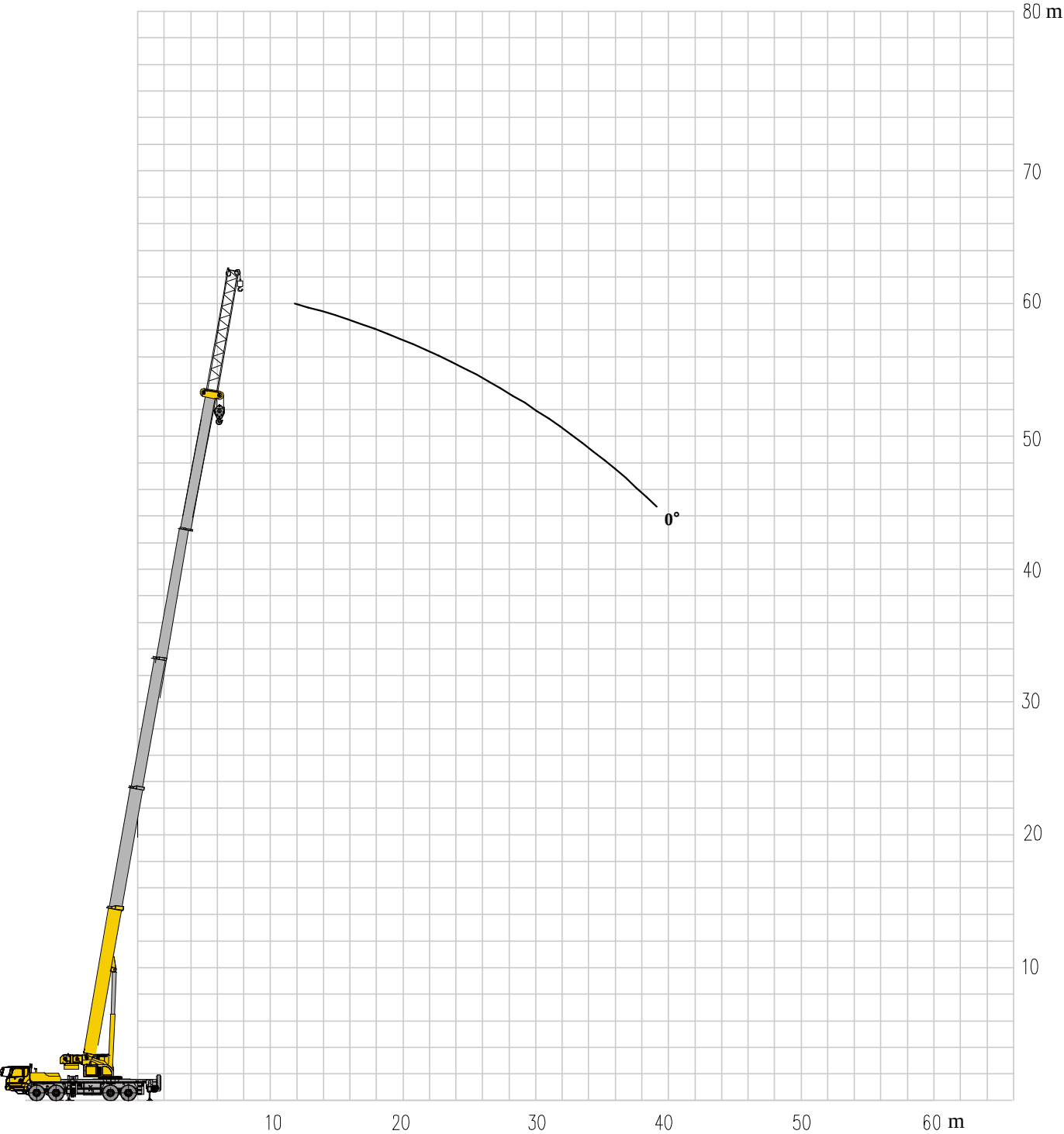


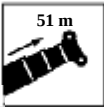
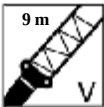
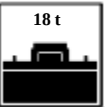
|  | 13.0 | 17.7 | 20.1 | 22.5 | 24.8 | 27.2 | 29.6 | 32.0 | 34.3 |  |
|----------------------------------------------------------------------------------|------|------|------|------|------|------|------|------|------|-------------------------------------------------------------------------------------|
| 3                                                                                | 90.0 | 70.0 |      |      |      |      |      |      |      | 3                                                                                   |
| 3.5                                                                              | 75.0 | 70.0 | 34.0 |      |      |      |      |      |      | 3.5                                                                                 |
| 4                                                                                | 70.0 | 67.0 | 34.5 |      |      |      |      |      |      | 4                                                                                   |
| 4.5                                                                              | 66.0 | 63.0 | 34.5 | 35.5 | 34.0 | 33.2 |      |      |      | 4.5                                                                                 |
| 5                                                                                | 60.0 | 60.0 | 35.0 | 36.9 | 34.2 | 33.2 | 34.0 |      |      | 5                                                                                   |
| 5.5                                                                              | 55.0 | 54.0 | 35.0 | 38.5 | 34.2 | 33.2 | 34.0 |      |      | 5.5                                                                                 |
| 6                                                                                | 50.0 | 49.0 | 35.0 | 40.2 | 35.0 | 35.5 | 34.2 | 33.8 | 21.7 | 6                                                                                   |
| 7                                                                                | 43.0 | 42.0 | 35.0 | 41.1 | 35.8 | 33.8 | 34.4 | 34.5 | 22.4 | 7                                                                                   |
| 8                                                                                | 37.0 | 35.0 | 35.0 | 36.5 | 36.0 | 31.9 | 30.9 | 33.7 | 22.5 | 8                                                                                   |
| 9                                                                                | 32.0 | 31.0 | 30.7 | 32.0 | 34.0 | 30.1 | 28.2 | 32.0 | 21.0 | 9                                                                                   |
| 10                                                                               |      | 27.0 | 28.5 | 28.0 | 30.0 | 28.6 | 25.8 | 30.2 | 19.7 | 10                                                                                  |
| 12                                                                               |      | 20.8 | 21.8 | 20.2 | 22.4 | 24.1 | 21.7 | 23.2 | 17.4 | 12                                                                                  |
| 14                                                                               |      |      | 18.0 | 15.1 | 17.1 | 18.7 | 16.5 | 17.9 | 15.5 | 14                                                                                  |
| 16                                                                               |      |      | 14.4 | 11.6 | 13.5 | 15.1 | 12.9 | 14.3 | 13.9 | 16                                                                                  |
| 18                                                                               |      |      |      | 9.0  | 10.9 | 12.4 | 10.3 | 11.7 | 12.5 | 18                                                                                  |
| 20                                                                               |      |      |      |      | 8.9  | 10.4 | 8.3  | 9.7  | 10.7 | 20                                                                                  |
| 22                                                                               |      |      |      |      |      | 8.8  | 6.8  | 8.1  | 9.1  | 22                                                                                  |
| 24                                                                               |      |      |      |      |      |      | 5.5  | 6.8  | 7.9  | 24                                                                                  |
| 26                                                                               |      |      |      |      |      |      |      | 5.8  | 6.8  | 26                                                                                  |
| 28                                                                               |      |      |      |      |      |      |      |      | 5.9  | 28                                                                                  |
| Cylinder I                                                                       | 0%   | 50%  | 0%   | 100% | 50%  | 0%   | 100% | 50%  | 0%   | Cylinder I                                                                          |
| Cylinder II                                                                      | 0%   | 0%   | 25%  | 0%   | 25%  | 50%  | 25%  | 50%  | 75%  | Cylinder II                                                                         |

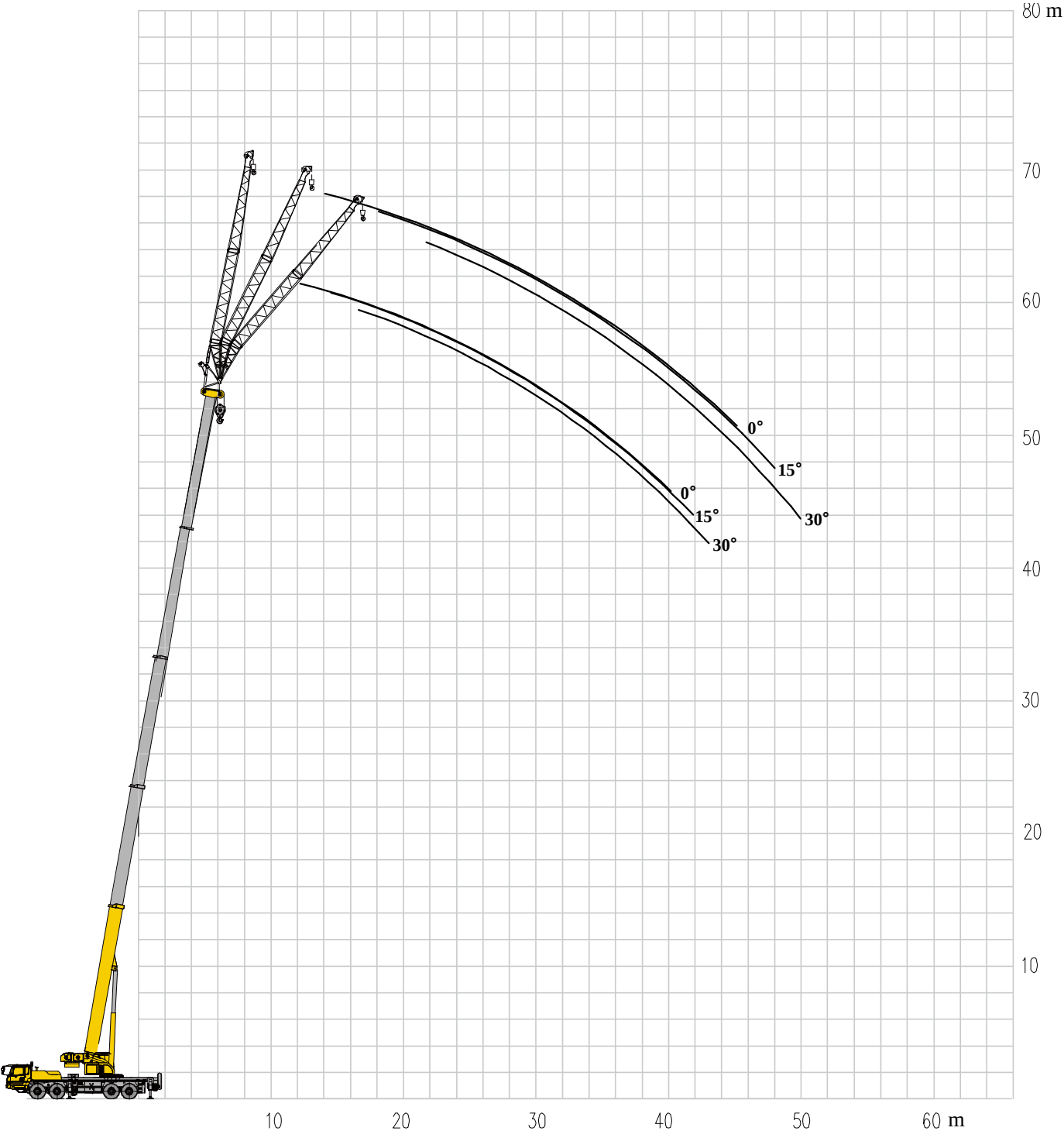
T 36.7~51 m



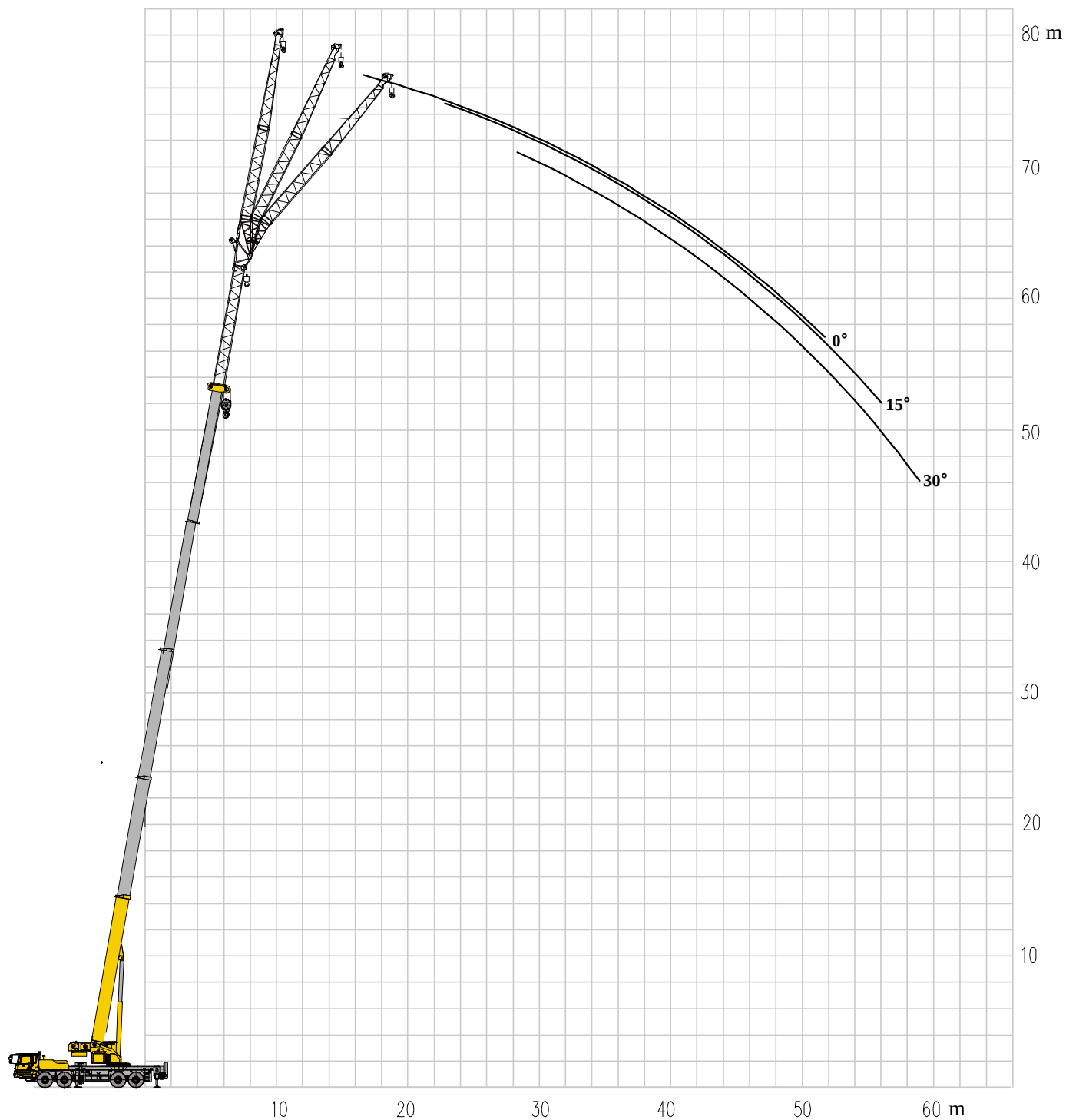
|  | 36.7 | 39.1 | 41.5 | 41.5 | 43.8 | 46.1 | 46.2 | 51.0 |  |
|----------------------------------------------------------------------------------|------|------|------|------|------|------|------|------|-------------------------------------------------------------------------------------|
| 7                                                                                | 28.3 |      |      |      |      |      |      |      | 7                                                                                   |
| 8                                                                                | 26.4 | 22.3 | 16.4 | 22.0 |      |      |      |      | 8                                                                                   |
| 9                                                                                | 24.6 | 21.2 | 16.9 | 20.7 | 19.9 | 17.2 | 15.9 |      | 9                                                                                   |
| 10                                                                               | 22.9 | 20.1 | 16.0 | 19.5 | 18.9 | 16.5 | 15.3 | 13.5 | 10                                                                                  |
| 12                                                                               | 19.6 | 17.9 | 14.4 | 17.5 | 17.0 | 15.1 | 14.1 | 13.2 | 12                                                                                  |
| 14                                                                               | 17.0 | 16.3 | 13.1 | 15.5 | 15.3 | 13.7 | 12.9 | 12.3 | 14                                                                                  |
| 16                                                                               | 13.7 | 14.8 | 12.0 | 14.0 | 13.5 | 12.4 | 11.9 | 11.5 | 16                                                                                  |
| 18                                                                               | 11.1 | 12.1 | 10.8 | 11.4 | 11.6 | 11.1 | 11   | 10.4 | 18                                                                                  |
| 20                                                                               | 9.1  | 10.1 | 9.7  | 9.4  | 9.6  | 9.7  | 10.2 | 9.4  | 20                                                                                  |
| 22                                                                               | 7.5  | 8.5  | 8.8  | 7.9  | 8.0  | 8.1  | 8.8  | 8.3  | 22                                                                                  |
| 24                                                                               | 6.3  | 7.2  | 8.1  | 6.6  | 6.7  | 6.8  | 7.5  | 7.1  | 24                                                                                  |
| 26                                                                               | 5.2  | 6.2  | 7.0  | 5.5  | 5.7  | 5.8  | 6.5  | 6    | 26                                                                                  |
| 28                                                                               | 4.3  | 5.3  | 6.1  | 4.6  | 4.8  | 4.9  | 5.6  | 5.1  | 28                                                                                  |
| 30                                                                               | 3.6  | 4.5  | 5.3  | 3.9  | 4.0  | 4.1  | 4.8  | 4.3  | 30                                                                                  |
| 32                                                                               |      | 3.9  | 4.7  | 3.2  | 3.4  | 3.5  | 4.1  | 3.7  | 32                                                                                  |
| 34                                                                               |      |      | 4.1  | 2.7  | 2.8  | 2.9  | 3.6  | 3.1  | 34                                                                                  |
| 36                                                                               |      |      |      |      | 2.3  | 2.4  | 3.1  | 2.6  | 36                                                                                  |
| 38                                                                               |      |      |      |      |      | 2.0  | 2.6  | 2.2  | 38                                                                                  |
| 40                                                                               |      |      |      |      |      |      |      | 1.8  | 40                                                                                  |
| 42                                                                               |      |      |      |      |      |      |      | 1.4  | 42                                                                                  |
| Cylinder I                                                                       | 100% | 50%  | 0%   | 100% | 100% | 100% | 50%  | 100% | Cylinder I                                                                          |
| Cylinder II                                                                      | 50%  | 75%  | 100% | 67%  | 75%  | 83%  | 100% | 100% | Cylinder II                                                                         |

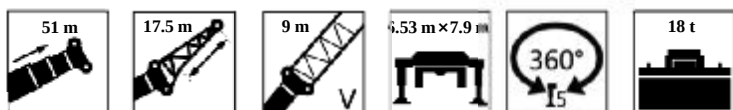


|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |  |                                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|----------------------------------------------------------------------------------|--|
| <div><div>51 m</div><div>9 m</div><div>6.53 m × 7.9 m</div><div>360°</div><div>18 t</div></div> |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |  | 9                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |  | 0°                                                                               |  |
| 80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6.5 |  | 80                                                                               |  |
| 78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6.5 |  | 78                                                                               |  |
| 75                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6.5 |  | 75                                                                               |  |
| 72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6.5 |  | 72                                                                               |  |
| 70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6.5 |  | 70                                                                               |  |
| 65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5.8 |  | 65                                                                               |  |
| 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4.2 |  | 60                                                                               |  |
| 55                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3.0 |  | 55                                                                               |  |
| 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2.2 |  | 50                                                                               |  |

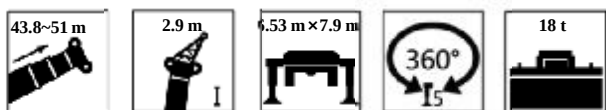


|                                                                                                                           |      |     |     |      |     |     |                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------|------|-----|-----|------|-----|-----|------------------------------------------------------------------------------------------------|
| <div><div><div>51 m</div><div>10.5/17.5 m</div><div>6.53 m × 7.9 m</div><div>360°<br/>I5</div><div>18 t</div></div></div> |      |     |     |      |     |     |                                                                                                |
| <div></div>                               | 10.5 |     |     | 17.5 |     |     | <div></div> |
|                                                                                                                           | 0°   | 15° | 30° | 0°   | 15° | 30° |                                                                                                |
| 80                                                                                                                        | 6.5  | 6.0 | 3.5 | 5.5  | 3.5 | 2.0 | 80                                                                                             |
| 78                                                                                                                        | 6.5  | 5.5 | 3.2 | 5.0  | 3.2 | 1.9 | 78                                                                                             |
| 75                                                                                                                        | 6.5  | 5.3 | 3.0 | 5.0  | 3.0 | 1.8 | 75                                                                                             |
| 72                                                                                                                        | 6.0  | 5.0 | 2.8 | 4.5  | 2.8 | 1.7 | 72                                                                                             |
| 70                                                                                                                        | 5.5  | 4.7 | 2.7 | 4.2  | 2.6 | 1.7 | 70                                                                                             |
| 65                                                                                                                        | 4.5  | 4.0 | 2.6 | 3.5  | 2.5 | 1.6 | 65                                                                                             |
| 60                                                                                                                        | 3.8  | 3.4 | 2.4 | 2.7  | 2.3 | 1.6 | 60                                                                                             |
| 55                                                                                                                        | 2.8  | 2.7 | 2.3 | 2.3  | 2.1 | 1.4 | 55                                                                                             |
| 50                                                                                                                        | 2.0  | 1.9 | 1.9 | 1.6  | 1.5 | 1.4 | 50                                                                                             |





|  | 9+17.5 |     |     |  |
|----------------------------------------------------------------------------------|--------|-----|-----|-------------------------------------------------------------------------------------|
|                                                                                  | 0°     | 15° | 30° |                                                                                     |
| 80                                                                               | 3.5    | 3.0 | 2.0 | 80                                                                                  |
| 78                                                                               | 3.5    | 3.0 | 1.8 | 78                                                                                  |
| 75                                                                               | 3.5    | 2.8 | 1.6 | 75                                                                                  |
| 72                                                                               | 3.2    | 2.8 | 1.5 | 72                                                                                  |
| 70                                                                               | 3.0    | 2.6 | 1.5 | 70                                                                                  |
| 65                                                                               | 2.8    | 2.4 | 1.4 | 65                                                                                  |
| 60                                                                               | 2.4    | 2.1 | 1.3 | 60                                                                                  |
| 55                                                                               | 1.6    | 1.4 | 1.3 | 55                                                                                  |
| 50                                                                               | 1.0    | 0.9 | 0.8 | 50                                                                                  |



|  | 43.8 | 46.1 | 46.2 | 51  |  |
|----------------------------------------------------------------------------------|------|------|------|-----|-------------------------------------------------------------------------------------|
|                                                                                  | 2.9  |      |      |     |                                                                                     |
|                                                                                  | 0°   |      |      |     |                                                                                     |
| 9                                                                                | 13.0 |      |      |     | 9                                                                                   |
| 10                                                                               | 13.0 | 13.0 | 13.0 |     | 10                                                                                  |
| 12                                                                               | 13.0 | 13.0 | 12.7 | 9.4 | 12                                                                                  |
| 14                                                                               | 13.0 | 13.0 | 11.9 | 9.5 | 14                                                                                  |
| 16                                                                               | 12.5 | 12.3 | 11.0 | 9.5 | 16                                                                                  |
| 18                                                                               | 10.1 | 10.2 | 10.0 | 9.4 | 18                                                                                  |
| 20                                                                               | 8.3  | 8.4  | 9.0  | 8.5 | 20                                                                                  |
| 22                                                                               | 6.9  | 7.0  | 7.6  | 7.2 | 22                                                                                  |
| 24                                                                               | 5.8  | 5.9  | 6.5  | 6.0 | 24                                                                                  |
| 26                                                                               | 4.9  | 5.0  | 5.5  | 5.1 | 26                                                                                  |
| 28                                                                               | 4.1  | 4.2  | 4.8  | 4.3 | 28                                                                                  |
| 30                                                                               | 3.4  | 3.5  | 4.1  | 3.7 | 30                                                                                  |
| 32                                                                               | 2.9  | 2.9  | 3.5  | 3.1 | 32                                                                                  |
| 34                                                                               | 2.4  | 2.4  | 3.0  | 2.6 | 34                                                                                  |
| 36                                                                               |      | 2.0  | 2.6  | 2.2 | 36                                                                                  |
| 38                                                                               |      |      |      | 1.8 | 38                                                                                  |
| 40                                                                               |      |      |      | 1.4 | 40                                                                                  |

## Table of main technical parameters

| Category   | Item                                        |        | Unit        | Parameters      |
|------------|---------------------------------------------|--------|-------------|-----------------|
| Dimensions | Dimensions (L×W×H)                          |        | mm          | 15153×2800×3867 |
|            | Axle spacing                                |        | mm          | 1500+4700+1500  |
|            | Track (front/rear)                          |        | mm          | 2400/2336       |
|            | Front overhang/rear overhang                |        | mm          | 2626/2606       |
|            | Front extension/rear extension              |        | mm          | 2221/0          |
| Weight     | Maximum permissible total weight            |        | kg          | 47500           |
|            | Axle load                                   | Axle 1 | kg          | 11875           |
|            |                                             | Axle 2 | kg          | 11875           |
|            |                                             | Axle 3 | kg          | 11875           |
|            |                                             | Axle 4 | kg          | 11875           |
| Power      | Engine model                                |        | —           | WP12G375E300    |
|            | Rated power/rpm                             |        | kW/(r/min)  | 276/1900        |
|            | Maximum net power/rpm                       |        | kW/(r/min)  | 274/1900        |
|            | Maximum output torque/rpm                   |        | N.m/(r/min) | 1800/1000-1400  |
| Travel     | Maximum travel speed                        |        | km/h        | 80              |
|            | Minimum stable travel speed                 |        | km/h        | 2.5~3           |
|            | Minimum turning diameter                    |        | m           | ≤20             |
|            | Minimum turning diameter at boom head       |        | m           | ≤26.4           |
|            | Minimum ground clearance                    |        | mm          | 370             |
|            | Approach angle                              |        | °           | 11              |
|            | Departure angle                             |        | °           | 13              |
|            | Braking distance (initial speed at 30 km/h) |        | m           | ≤10             |
|            | Maximum grade ability                       |        | %           | ≥48             |
|            | Fuel consumption per 100 km                 |        | L           | 45              |
| Noise      | Exterior noise level when accelerating      |        | dB(A)       | ≤84             |
|            | Noise level at seated position              |        | dB(A)       | ≤90             |

## Table of main technical parameters

| Category               | Item                                     |                           |            | Unit  | Parameters |
|------------------------|------------------------------------------|---------------------------|------------|-------|------------|
| Main performance       | Maximum rated total lifting capacity     |                           |            | t     | 90         |
|                        | Minimum rated working radius             |                           |            | m     | 3          |
|                        | Turning radius at turntable tail         | At counterweight          |            | mm    | 4450       |
|                        |                                          | At auxiliary winch        |            | mm    | 4300       |
|                        | Maximum load moment                      | Base boom section         |            | kN.m  | 2965       |
|                        |                                          | Fully-extended boom       |            | kN.m  | 1842       |
|                        |                                          | Fully-extended boom + jib |            | kN.m  | 1500       |
|                        | Outrigger span                           | Longitudinal              |            | m     | 6.525      |
|                        |                                          | Lateral                   |            | m     | 7.9/5.6    |
|                        | Lifting height                           | Base boom section         |            | m     | 13.3       |
|                        |                                          | Fully-extended boom       |            | m     | 51         |
|                        |                                          | Fully-extended boom + jib |            | m     | 77         |
|                        | Boom length                              | Base boom section         |            | m     | 13         |
|                        |                                          | Fully-extended boom       |            | m     | 51         |
|                        |                                          | Fully-extended boom + jib |            | m     | 77.5       |
|                        | Jib offset angle                         |                           |            | °     | 0, 15, 30  |
| Working speeds         | Time for raising boom                    |                           |            | s     | ≤55        |
|                        | Time for fully extending the boom        |                           |            | s     | ≤130       |
|                        | Maximum slewing speed                    |                           |            | r/min | ≥1.5       |
|                        | Time for extending/retracting outriggers | Outrigger beams           | Retracting | s     | ≤35        |
|                        |                                          |                           | Extending  | s     | ≤35        |
|                        |                                          | Outrigger jacks           | Retracting | s     | ≤45        |
|                        |                                          |                           | Extending  | s     | ≤45        |
|                        | Lifting speed<br>(Single line, no load)  | Main winch system         |            | m/min | ≥140       |
| Auxiliary winch system |                                          | m/min                     | ≥90        |       |            |
| Noise                  | Exterior noise level                     |                           |            | dB(A) | ≤109       |
|                        | At driver position                       |                           |            | dB(A) | ≤85        |

## Description of symbols

|                                                                                     |                                                   |
|-------------------------------------------------------------------------------------|---------------------------------------------------|
|    | Superstructure                                    |
|    | Rated lifting load                                |
|    | Counterweight                                     |
|    | Slewing radius of variable-position counterweight |
|    | Hook block                                        |
|    | Parts of line                                     |
|    | Boom length combination                           |
|   | Wind speed                                        |
|  | Configuration                                     |
|  | Optional equipment                                |
|  | Wire rope length                                  |
|  | Wire rope diameter                                |
|  | Breaking force of wire rope                       |
|  | Maximum working speed                             |
|  | Main winch                                        |
|  | Auxiliary winch                                   |

|                                                                                     |                          |
|-------------------------------------------------------------------------------------|--------------------------|
|    | Boom                     |
|    | Boom length              |
|    | Working radius           |
|    | Lifting height with boom |
|    | Boom angle               |
|    | Extension                |
|    | Independent jib head     |
|   | Simple jib head          |
|  | Fixed jib                |
|  | Fixed jib length         |
|  | Fixed jib offset angle   |
|  | Luffing jib              |
|  | Maximum lifting height   |
|  | Maximum working radius   |
|  | Super lift               |
|  | Wind power jib           |

## Description of symbols

|                                                                                    |                   |                                                                                     |                                     |
|------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|-------------------------------------|
|   | Chassis           |    | Luffing                             |
|   | Outrigger span    |    | Telescoping                         |
|   | Tire              |    | Slewing                             |
|   | Axle load         |    | 360° slewing                        |
|   | Grade ability     |    | 360° slewing with the 5th jack down |
|   | Travel speed      |    | Side and rear operation             |
|  | EN 13000 standard |   | Operation over front                |
|                                                                                    |                   |  | Operation over rear                 |

## Notes

1. The document is intended as reference only. It is only a guide and should not be used to operate the crane. See product manuals for correct operation instructions.
2. The total rated loads given in the load charts are the maximum lifting capacity (in tonne) under corresponding boom length and radius when the crane is set up on firm and level ground, which includes the weight of the hook block and rigging. The weight of above-mentioned devices should be deducted from the rated lifting load.
3. The working radius is the horizontal gravity center distance of the load from the rotational axis of the crane superstructure measured at the ground.
4. Observe the boom angle limit. Never operate the crane with the boom angle beyond the recommended limit even if a load is not being carried.
5. A lifting operation is permissible only when the wind force is below grade 5 (instantaneous wind speed of 14.1 m/s, wind pressure of 125 N/m<sup>2</sup>).



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