ZOOMLION

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website:en.zoomlion.com 2023.06.13

# ZOOMLION
# ROUGH TERRAIN CRANE
# ZRT400V452


ZOOMLION
NORTH AWERICA

4.0
PRODUCTS

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## PRODUCT INTRODUCTION

ZRT400 rough terrain crane is adapted to narrow work space through its wide tread, high stability, short wheelbase and small turning radius.

It provides a 360° slewing function, "on-tires" lifts and pick-and-carry operations.

It can be widely used in construction building sites, oil fields, warehouses, freight yards, and logistics bases etc., to carry out lifting work, short distance transportation and pick-and-carry operations in narrow working areas.

ZRT400 rough terrain crane consists of a superstructure and a special purpose chassis, including a power system, drive system, suspension system, steering system, braking system, hoist mechanism, derricking mechanism, slewing mechanism, boom system, turntable, chassis frame, outrigger, hydraulic system, electric system and cab etc.

Its distinguishing characteristics include:

-Four steering modes:

-2-wheel steering (front wheels), 2-wheel steering (rear wheels), 4-wheel steering and crab steering.

-Max. rated lifting capacity: 40 t at 2.5 m working radius.

-Max. lifting height: 47.8m.

-Max. driving speed: 38 km/h.

-Overall dimensions: 12360×2690×3650mm.

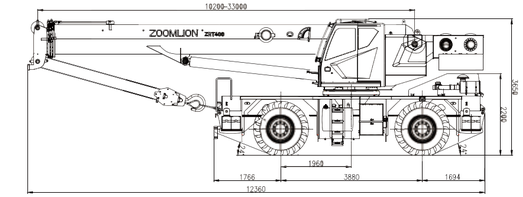
-Deadweight: 31 tons.

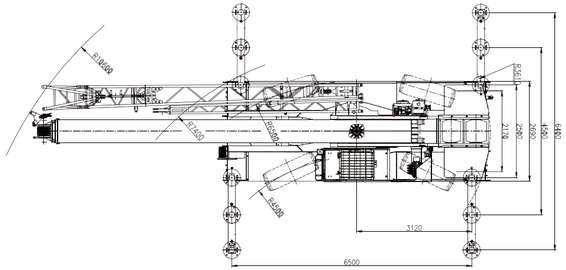
-Capable of picking and carrying loads.

-Capable of travelling on rough terrains.

## DIMENSIONS

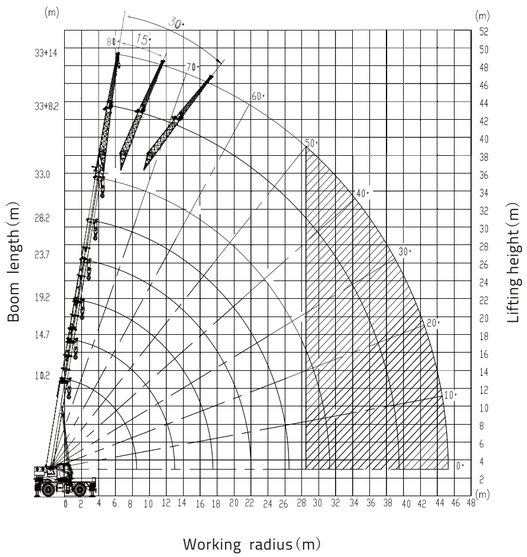
unit:mm



# LIFTING HEIGHT CURVE

LIFT HEIGHT WITH 16 M JIB ON OUTRIGGERS FULLY EXTENDED




# LOAD RATINGS FOR ROUGH TERRAIN CRANE

RATED LOADS WITH BOOM

BOOM

360° slewing (UNIT: KG)

OUTRIGGERS FULLY EXTENDED

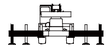
| Working radius (m) | Cylinder I fully extended, outriggers fully extended, with 4.5 t counterweight | | | | | |
|---|---|---|---|---|---|---|
| | 10.2 | 14.7 | 19.2 | 23.7 | 28.2 | 33 |
| 2.5 | 40000 | | | | | |
| 3 | 37000 | 23000 | | | | |
| 3.5 | 34000 | 23000 | 22000 | | | |
| 4 | 31000 | 23000 | 22000 | 20000 | | |
| 4.5 | 29000 | 23000 | 21000 | 18000 | | |
| 5 | 25500 | 21500 | 20000 | 17000 | 14200 | |
| 5.5 | 23000 | 19500 | 18800 | 15800 | 14000 | |
| 6 | 20000 | 18000 | 17600 | 15000 | 13500 | 10000 |
| 7 | 17000 | 15500 | 15000 | 13500 | 12000 | 9800 |
| 8 | | 13500 | 13000 | 12000 | 10600 | 9000 |
| 9 | | 11500 | 11500 | 10800 | 9600 | 8400 |
| 10 | | 9200 | 9600 | 9600 | 8700 | 7800 |
| 11 | | 7500 | 8000 | 8200 | 8000 | 7200 |
| 12 | | | 7200 | 7400 | 6800 | 6600 |
| 14 | | | 5400 | 5600 | 5800 | 5600 |
| 16 | | | | 4400 | 4500 | 4600 |
| 18 | | | | 3400 | 3500 | 3600 |
| 20 | | | | | 2700 | 2800 |
| 22 | | | | | 2300 | 2300 |
| 24 | | | | | 1700 | 1800 |
| 26 | | | | | | 1400 |
| 28 | | | | | | 1100 |
| 30 | | | | | | |
| I (m) | 0 | 4.5 | 9 | 13.5 | 18 | 22.8 |
| Line part | 8 | 6 | 6 | 5 | 4 | 3 |
| Hook | 40t | | | | | |

# LOAD RATINGS FOR ROUGH TERRAIN CRANE

RATED LOADS WITH 8.2 M JIB

Boom + 8.2m Jib

360° slewing (UNIT: KG)



OUTRIGGERS FULLY EXTENDED

| Boom angle (°) | Outriggers fully extended, with 4.5t counterweight | | |
|---|---|---|---|
| | 0° | 15° | 30° |
| 80 | 4500 | 3000 | 2400 |
| 78 | 4200 | 2800 | 2300 |
| 76 | 4000 | 2700 | 2200 |
| 74 | 3600 | 2500 | 2100 |
| 72 | 3300 | 2400 | 2000 |
| 70 | 3000 | 2200 | 1900 |
| 68 | 2800 | 2100 | 1800 |
| 66 | 2600 | 2000 | 1700 |
| 64 | 2300 | 1900 | 1550 |
| 62 | 2100 | 1700 | 1400 |
| 60 | 1800 | 1500 | 1300 |
| 58 | 1600 | 1400 | 1200 |
| 56 | 1500 | 1200 | 1100 |
| 54 | 1300 | 1100 | 1000 |
| 52 | 1100 | 1000 | 900 |
| 50 | 1000 | 900 | 800 |
| 48 | 900 | 800 | 700 |
| 46 | 700 | 600 | 550 |
| Line part | 1 | | |
| Hook | 4.5 t | | |

RATED LOADS WITH 14 M JIB

Boom + 14m Jib

360° slewing (UNIT: KG)

OUTRIGGERS FULLY EXTENDED

| Boom angle (°) | Outriggers fully extended, with 4.5t counterweight | | |
|---|---|---|---|
| | 0° | 15° | 30° |
| 80 | 2500 | 1800 | 1200 |
| 78 | 2400 | 1700 | 1200 |
| 76 | 2200 | 1550 | 1100 |
| 74 | 2000 | 1400 | 1100 |
| 72 | 1800 | 1350 | 1100 |
| 70 | 1700 | 1300 | 1000 |
| 68 | 1500 | 1200 | 1000 |
| 66 | 1400 | 1100 | 950 |
| 64 | 1300 | 1000 | 900 |
| 62 | 1200 | 900 | 850 |
| 60 | 1100 | 850 | 800 |
| 58 | 1000 | 800 | 800 |
| 56 | 950 | 750 | 750 |
| 54 | 850 | 700 | 700 |
| 52 | 800 | 600 | 550 |
| 50 | 700 | | |
| Line part | 1 | | |
| Hook | 4.5 t | | |

# NOTES

a)Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.

b)Crane load ratings on outriggers are based on all outrigger beams being positioned according to the applicable lift chart and the tires raised free of the supporting surface.

c)CRANE LOAD RATINGS MUST NOT BE EXCEEDED. DO NOT ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.

d)Lift the load vertically. Do not pull the load at an angle.

e)When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.

f)Do not operate at longer radii than those listed on the applicable lift chart (cross hatched areas  )

g)shown on range diagrams) as tipping can occur without a load on the hook.

h)The boom angles shown on the lift charts give an approximation of the operating radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection.

i)Rated loads include the weight of hook block, slings, and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted.

j)Consult appropriate section of the Operator's Manual for more exact description of hoist line reeving.

k)Properly maintained wire rope is essential for safe crane operation. Consult the Operator's Manual and Maintenance Manual for proper maintenance and inspection requirements.

l)When the rotation-resistant wire rope is used, the allowable rope loading shall be the breaking strength divided by five (5), unless otherwise specified by the wire rope manufacturer.

m)The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping off loads, hazardous conditions, experience of personnel, two-machine lifts, traveling with loads, electric wires, etc, (side pull on boom or jib is hazardous). If the wind speed is higher than the maximum permissible value (45 ft/s (13.8 m/s), grade 6) or it is fulminous during crane operation, stop the work, fully retract the boom and correctly stow the boom.

n)Load ratings are dependent upon the crane being maintained according to the Operator's Manual and Maintenance Manual.

# LIFTS WITH OUTRIGGER BEAMS AT MID-POSITION

ATED LOAD ON OUTRIGGERS PINNED AT MID-POSITION

BOOM

360° slewing
(UNIT: KG)

OUTRIGGERS FULLY RETRACTED

| Working radius (m) | Cylinder I fully extended, outriggers half extended, with 4.5 t counterweight | | | | | |
|---|---|---|---|---|---|---|
| | 10.2 | 14.7 | 19.2 | 23.7 | 28.2 | 33 |
| 3 | 35000 | 23000 | | | | |
| 3.5 | 29000 | 23000 | 22000 | | | |
| 4 | 25000 | 23000 | 22000 | 20000 | | |
| 4.5 | 22000 | 20000 | 19500 | 18000 | | |
| 5 | 17500 | 17800 | 17500 | 17000 | 14200 | |
| 5.5 | 15000 | 15500 | 15500 | 15800 | 14000 | |
| 6 | 12000 | 13000 | 13500 | 14000 | 13500 | 10000 |
| 7 | 8500 | 9800 | 10000 | 10000 | 11000 | 9800 |
| 8 | | 8000 | 8000 | 8400 | 8600 | 8500 |
| 9 | | 6400 | 6600 | 7000 | 7000 | 7000 |
| 10 | | 4800 | 5200 | 5600 | 5800 | 5800 |
| 11 | | 4000 | 4500 | 4800 | 5000 | 5000 |
| 12 | | | 3800 | 4000 | 4200 | 4200 |
| 14 | | | 2800 | 3000 | 3000 | 3100 |
| 16 | | | | 2200 | 2300 | 2400 |
| 18 | | | | 1600 | 1700 | 1800 |
| 20 | | | | | 1400 | 1400 |
| 22 | | | | | 1000 | 1100 |
| 24 | | | | | 800 | 900 |
| 26 | | | | | | 650 |
| 28 | | | | | | |
| 30 | | | | | | |
| I (m) | 0 | 4.5 | 9 | 13.5 | 18 | 22.8 |
| Line part | 8 | 6 | 6 | 5 | 4 | 3 |
| Hook | 40t | | | | | |



# NOTES

a)Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.

b)Crane load ratings on outriggers are based on all outrigger beams being positioned according to the applicable lift chart and the tires raised free of the supporting surface.

c)CRANE LOAD RATINGS MUST NOT BE EXCEEDED. DO NOT ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.

d)Lift the load vertically. Do not pull the load at an angle.

e)When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.

f)Do not operate at longer radii than those listed on the applicable lift chart (cross hatched areas  )

g)shown on range diagrams) as tipping can occur without a load on the hook.

h)The boom angles shown on the lift charts give an approximation of the operating radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection.

i)Rated loads include the weight of hook block, slings, and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted.

j)Consult appropriate section of the Operator's Manual for more exact description of hoist line part.

k)The use of more parts of line than required by the load may result in having insufficient rope to allow the hook block to reach the ground. Choose the correct line parts to get a rope in the proper length. Refer to Table 1.1.

l)Properly maintained wire rope is essential for safe crane operation. Consult the Operator's Manual and Maintenance Manual for proper maintenance and inspection requirements.

m)When the rotation-resistant wire rope is used, the allowable rope loading shall be the breaking strength divided by five (5), unless otherwise specified by the wire rope manufacturer.

n)The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping off loads, hazardous conditions, experience of personnel, two-machine lifts, traveling with loads, electric wires, etc, (side pull on boom or jib is hazardous). If the wind speed is higher than the maximum permissible value (45 ft/s (13.8 m/s), grade 6) or it is fulminous during crane operation, stop the work, fully retract the boom and correctly stow the boom.

o)Load ratings are dependent upon the crane being maintained according to the Operator's Manual and Maintenance Manual.

# LIFTS WITH OUTRIGGER BEAMS FULLY RETRACTED

RATED LOAD WITH BOOM ON OUTRIGGERS FULLY RETRACTED

BOOM

360° slewing
(UNIT: KG)

OUTRIGGERS FULLY RETRACTED

| Working radius (m) | Cylinder I fully extended, outriggers fully retracted, with 4.5 t counterweight | | | | | |
|---|---|---|---|---|---|---|
| | 10.2 | 14.7 | 19.2 | 23.7 | 28.2 | 33 |
| 3 | 20000 | 20000 | | | | |
| 3.5 | 15000 | 15500 | 15000 | | | |
| 4 | 11000 | 11500 | 12000 | 12000 | | |
| 4.5 | 9200 | 10000 | 9800 | 9800 | | |
| 5 | 7800 | 8400 | 8400 | 8500 | 8500 | |
| 5.5 | 6400 | 7000 | 7200 | 7500 | 7500 | |
| 6 | 5200 | 5800 | 6200 | 6500 | 6500 | 6500 |
| 7 | 3600 | 4200 | 4600 | 4600 | 4800 | 5000 |
| 8 | | 3000 | 3500 | 3600 | 3700 | 4000 |
| 9 | | 2400 | 2800 | 3000 | 3200 | 3000 |
| 10 | | 2000 | 2200 | 2400 | 2400 | 2400 |
| 11 | | 1500 | 1700 | 1800 | 2000 | 2000 |
| 12 | | | 1400 | 1600 | 1700 | 1700 |
| 14 | | | 1000 | 1100 | 1100 | 1200 |
| 16 | | | | 750 | 800 | 900 |
| 18 | | | | | | 600 |
| 20 | | | | | | |
| 22 | | | | | | |
| 24 | | | | | | |
| 26 | | | | | | |
| 28 | | | | | | |
| 30 | | | | | | |
| I (m) | 0 | 4.5 | 9 | 13.5 | 18 | 22.8 |
| Line part | 8 | 6 | 6 | 5 | 4 | 3 |
| Hook | 40t | | | | | |

# NOTES

a)Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.

b)Crane load ratings on outriggers are based on all outrigger beams being positioned according to the applicable lift chart and the tires raised free of the supporting surface.

c)CRANE LOAD RATINGS MUST NOT BE EXCEEDED. DO NOT ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.

d)Lift the load vertically. Do not pull the load at an angle.

e)When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.

f)Do not operate at longer radii than those listed on the applicable lift chart (cross hatched areas  )

g)shown on range diagrams) as tipping can occur without a load on the hook.

h)The boom angles shown on the lift charts give an approximation of the operating radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection.

i)Rated loads include the weight of hook block, slings, and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted.

j)Consult appropriate section of the Operator's Manual for more exact description of hoist line part.

k)The use of more parts of line than required by the load may result in having insufficient rope to allow the hook block to reach the ground. Choose the correct line parts to get a rope in the proper length. Refer to Table 1.1.

l)Properly maintained wire rope is essential for safe crane operation. Consult the Operator's Manual and Maintenance Manual for proper maintenance and inspection requirements.

m)When the rotation-resistant wire rope is used, the allowable rope loading shall be the breaking strength divided by five (5), unless otherwise specified by the wire rope manufacturer.

n)The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping off loads, hazardous conditions, experience of personnel, two-machine lifts, traveling with loads, electric wires, etc, (side pull on boom or jib is hazardous). If the wind speed is higher than the maximum permissible value (45 ft/s (13.8 m/s), grade 6) or it is fulminous during crane operation, stop the work, fully retract the boom and correctly stow the boom.

o)Load ratings are dependent upon the crane being maintained according to the Operator's Manual and Maintenance Manual.

# LIFTS ON TIRES

**RATED LOAD WITH BOOM FOR LIFT ON TIRES**

Rated capacities for lift on tires
(Unit: Kg)

| Working radius (m) | Lift on tires standing still, over front working area, with 4.5t counterweight | | | |
|---|---|---|---|---|
| | 10.2 | 14.7 | 19.2 | 23.7 |
| 3 | 15000 | 15000 | | |
| 3.5 | 13000 | 13500 | 14000 | |
| 4 | 12200 | 12500 | 13000 | 12000 |
| 4.5 | 11000 | 12000 | 12000 | 11500 |
| 5 | 9500 | 10000 | 11000 | 10500 |
| 5.5 | 8500 | 9200 | 9800 | 9600 |
| 6 | 7400 | 8000 | 8600 | 8800 |
| 7 | 6400 | 7200 | 7800 | 7500 |
| 8 | | 6400 | 6800 | 6600 |
| 9 | | 5500 | 5600 | 5600 |
| 10 | | 4800 | 5200 | 5000 |
| 11 | | | 4600 | 4600 |
| 12 | | | 3600 | 3500 |
| 14 | | | | 2800 |
| 16 | | | | 2100 |
| 18 | | | | |
| l (m) | 0 | 4.5 | 9 | 13.5 |
| Line part | 8 | 6 | 6 | 4 |
| Hook | 40t | | | |



# LIFTS ON TIRES

**RATED LOAD WITH BOOM FOR LIFT ON TIRES**

Rated capacities for lift on tires
(Unit: Kg)

| Working radius (m) | Lift on tires standing still, over 360-degree working area, with 4.5t counterweight | | | |
|---|---|---|---|---|
| | 10.2 | 14.7 | 19.2 | 23.7 |
| 3 | 10000 | 9500 | | |
| 3.5 | 8600 | 8600 | 8000 | |
| 4 | 7200 | 7400 | 7200 | 7500 |
| 4.5 | 6600 | 6500 | 6000 | 6000 |
| 5 | 5600 | 5400 | 5500 | 5200 |
| 5.5 | 4800 | 4800 | 4800 | 4600 |
| 6 | 4200 | 4300 | 4000 | 4000 |
| 7 | 3500 | 3600 | 3200 | 3400 |
| 8 | | 2600 | 2500 | 2600 |
| 9 | | 2100 | 2100 | 2200 |
| 10 | | 1600 | 1700 | 1600 |
| 11 | | | 1300 | 1300 |
| 12 | | | 1100 | 1100 |
| 14 | | | | 900 |
| 16 | | | | |
| 18 | | | | |
| l (m) | 0 | 4.5 | 9 | 13.5 |
| Line part | 8 | 6 | 6 | 4 |
| Hook | 40t | | | |

Rated capacities for lift on tires
(Unit: Kg)

| Working radius (m) | Pick and carry the load, with 4.5t counterweight | | | |
|---|---|---|---|---|
| | 10.2 | 14.7 | 19.2 | 23.7 |
| 3 | 14000 | 12000 | | |
| 3.5 | 12000 | 10800 | 10000 | |
| 4 | 10000 | 10000 | 9600 | 9000 |
| 4.5 | 8800 | 8500 | 8400 | 8200 |
| 5 | 7600 | 7500 | 7500 | 7600 |
| 5.5 | 7000 | 7000 | 6800 | 7000 |
| 6 | 6400 | 6500 | 6400 | 6500 |
| 7 | 5500 | 5600 | 5500 | 5500 |
| 8 | | 4800 | 4800 | 4600 |
| 9 | | 4000 | 4200 | 4200 |
| 10 | | 3400 | 3600 | 3600 |
| 11 | | | 3000 | 3000 |
| 12 | | | 2600 | 2500 |
| 14 | | | | 2000 |
| 16 | | | | 1500 |
| 18 | | | | |
| l (m) | 0 | 4.5 | 9 | 13.5 |
| Line part | 8 | 6 | 6 | 4 |
| Hook | 40t | | | |

# NOTES

p)Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.

q)Crane load ratings on outriggers are based on all outrigger beams being positioned according to the applicable lift chart and the tires raised free of the supporting surface.

r)CRANE LOAD RATINGS MUST NOT BE EXCEEDED. DO NOT ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.

s)Lift the load vertically. Do not pull the load at an angle.

t)When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.

u)Do not operate at longer radii than those listed on the applicable lift chart (cross hatched areas 

v)shown on range diagrams) as tipping can occur without a load on the hook.

w)The boom angles shown on the lift charts give an approximation of the operating radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection.

x)Rated loads include the weight of hook block, slings, and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted.

y)Consult appropriate section of the Operator's Manual for more exact description of hoist line part.

z)The use of more parts of line than required by the load may result in having insufficient rope to allow the hook block to reach the ground. Choose the correct line parts to get a rope in the proper length. Refer to Table 1.1.

aa)Properly maintained wire rope is essential for safe crane operation. Consult the Operator's Manual and Maintenance Manual for proper maintenance and inspection requirements.

ab)When the rotation-resistant wire rope is used, the allowable rope loading shall be the breaking strength divided by five (5), unless otherwise specified by the wire rope manufacturer.

ac)The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping off loads, hazardous conditions, experience of personnel, two-machine lifts, traveling with loads, electric wires, etc, (side pull on boom or jib is hazardous). If the wind speed is higher than the maximum permissible value (45 ft/s (13.8 m/s), grade 6) or it is fulminous during crane operation, stop the work, fully retract the boom and correctly stow the boom.

ad)Load ratings are dependent upon the crane being maintained according to the Operator's Manual and Maintenance Manual.



# TECHNICAL DESCRIPTION

## Superstructure

### ENGINE model

- Cummins B6.7V-C173.
- Four-stroke, 6-cylinder, direct injection, water-cooled, turbocharged diesel engine.
- Max. output power: 129KW/2500RPM.
- Max. output torque: 800Nm/1500RPM.

### Boom and telescoping mechanism

- The box-shaped telescopic boom consists of 4 U-shape boom sections made of high-strength steel.
- Min. boom length (with telescopic sections completely retracted): 10200mm.
- Max. boom length (with telescopic sections completely extended): 33000mm.
- Min. telescoping out time: 50 s.

### Jib

- Jib angle: 0°, 15° and 30° .
- Jib length: 8.2m - 14m.

### Derricking mechanism

- A front-mounted single derricking cylinder is installed with a derricking balance valve.
- Derricking angle range: -2° - 80°.
- Derricking speed: -2° - 80°/45s.

### Hoist mechanism

- Main and auxiliary winches

The main winch realizes lifting and lowering movements through rotations of the drum driven by the planetary reducer which is driven by the axial variable plunger pump.
The auxiliary winch adopts identical components.

- Wire rope

High strength wire rope.
Max. hoist rope tensile force: 5130kg.
Max. hoist rope speed: 130m/min (At the 4th layer).
Rope diameter: 17 mm.
Main winch rope length: 185 m.
Auxiliary winch rope length: 110 m.

- Rotatable main hook: 40 t, with 4 pulleys and a hook latch, secured at the chassis frame in front of slewing table.
- Rotatable auxiliary hook: 4.5 t, with a hook latch, used with the rooster sheave and jib, secured at the auxiliary hook holder on the chassis frame.

# TECHNICAL DESCRIPTION

## Superstructure

### Slewing mechanism

- It consists of hydraulic motor, planetary gear reducer, pinion gear and swing bearing etc.
- Slewing speed: 0-2.5r/min.

### Hydraulic system

- Capacity 580 L.
- Two return oil filters with the filtering accuracy of 12 μ are mounted in the hydraulic oil tank.

### Crane controls

- The superstructure movements are controlled by two hydraulic joysticks (with a cross shaft) on both sides of operator's seat (complying with ISO standard requirements).
- The left joystick controls slewing and auxiliary winch movements.
- The right joystick controls derricking and main winch movements.
- The telescoping control pedal controls boom telescoping movements.
- Derricking and telescoping movements can be executed simultaneously.

### Cab dimensions:

- Length: 1830±5mm.
- Width: 910±5mm.
- Height: 1710±5mm.

### Rated capacity indicator (RCI)

- f the actual load approaches the rated one, the buzzer sends out visual and audible warning.
- If the actual load reaches the rated one, all dangerous movements are switched off automatically.
- The rated capacity indicator also can limit the working range (including working radius, boom angle, lifting height and swing range etc.).

### Outriggers

- H-type outriggers, hydraulically controlled, can be operated in the cab simultaneously or independently.
- Each vertical jack cylinder is equipped with a two-way hydraulic lock to ensure that outriggers are secured reliably during working or driving.
- Outrigger boxes are directly welded onto the chassis frame.
- The outriggers can be completely extended, half extended or completely retracted for different operating modes.
- Outrigger spread (Height): 6500 mm.
- Outrigger spread (Width): 6400 mm (fully extended).
  4500 mm (half extended).
  2500 mm (fully retracted).

# TECHNICAL PARAMETERS

| Type | Item | | Value |
|---|---|---|---|
| Working performance | Max. rated lifting capacity × working radius | kg.m | 40000×2.5 |
| | Max. load moment of the boom | kN.m | 1305 |
| | Max. load moment of the boom (fully extended) | kN.m | 792 |
| | Max. lifting height of the boom (fully extended) | m | 33.9 |
| | Max. lifting height of the jib | m | 47.8 |
| Dimensions | Overall dimensions (L × W × H) | mm | 12360×2690×3650 |
| | Outrigger spread (Height × Width) | mm | 6500×6400 |
| | Boom length | mm | 10200-33000 |
| | Jib length | mm | 8200-14000 |
| | Boom angle | ° | -2-80 |
| | Slewing range | | 360° unlimited slewing (Full range) |
| Working speeds | Max. hoist rope speed (Main winch) | m/min | 130 |
| | Min. boom telescoping out time | s | 50 |
| | Min. boom telescoping in time | s | 40 |
| | Min. boom derricking up time | s | 45 |
| | Min. boom derricking down time | s | 120 |
| | Slewing speed | r/min | 0-2.5 |
| Hydraulic system | Rated working pressure | MPa | 25 |
| | Hydraulic oil tank capacity | L | 580 |
| Gross vehicle mass | Gross weight | kg | 31000 |
| Driving | Max. driving speed | km/h | 38/38 |
| | Wheelbase | mm | 3880 |
| | Treads (Front / Rear) | mm | 2132 |
| | Max. gradeability | % | 52.3 |

# MAINPARTSTABLE

| Type | Item | | Main configuration |
|---|---|---|---|
| Power system | Engine make & model | | Cummins B6.7V-C173 |
| | Fuel type | | Diesel |
| | Intake system | | Turbo-charged, air to air, inter-cooling |
| | Cooling system | | Water-cooling |
| | Engine rated power | KW/r/min | 129KW/2500rpm |
| | Engine rated torque | N.m/r/min | 800N.m/1500rpm |
| | Fuel tank capacity | | 250 L |
| Drive system | Transmission drive mode | | 4×2, 4×4, |
| | Model or brand of transmission | | DANA |
| | Transmission gear stage | | 6 forward and 3 reverse speeds |
| Travel system | Suspension | | Rigid (front) / Flexible (rear) |
| | Model or brand of axles | | Meritor (Xuzhou) |
| | Steering mode | | 2-wheel steering (front wheels)/2-wheel steering (rear wheels)/4-wheel steering Crab steering |
| | Tire size | | 20.5-25-28PR TL |
| | Tire number | | 4 |
| Hydraulic system | Model or brand of main valve | | ZOOMLION |
| | Gear pump | | Jinan Hydraulics |
| | Balance valve / hydraulic lock | | ZOOMLION |
| | Slewing motor | | HIGH-TECH |
| Electrical system | Rated capacity indicator | | ZOOMLION |
| | Controller | | IFM |
| | Electric accelerator pedal | | Jieou |
| | Bus cable | | Phoenix/Zhaolong |
| | Battery | | VARTA |
| | Lights and switches | | Hella and Bangchen |
| Emission | | | Chinese National Stage for non-road vehicles |