

SOLID TO SUCCEED



Vibratory Roller

# XD140VT



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XD140VT combination roller is characterized by combination of front drum and rear static tire, can implement both vibration compaction and surface kneading. It is an efficient and high-quality compaction machine for compaction operations in limited areas and infrastructure reconstruction and expansion projects. It is mainly applicable to compaction work on asphalt top layer of newly built pavement and thinner stable soil pavement, and road maintenance work. With compact structure, high flexibility, small blind area, high operating comfort, it is an ideal compaction equipment for municipal maintenance and highway custody. Powered by EU stage III four-cylinder water-cooled Kubota engine, suiting ambient temperature of  $-10^{\circ}\text{C} \sim 45^{\circ}\text{C}$  and altitude of below 3000 m, in compliance with EU Stage III emission standards.



# Main Performance And Characteristics

Its unique XCMG series 5 industrial design combines aesthetics and practice.



## 2 Comfortable And Safe Control System

- Bilateral access, bright color paint, ergonomics design principle;
- Spacious operating platform provides enough space for operator's movement, operator's seat has three-level shock absorption;
- Foldable CE ROPS provides safety protection under emergency;
- Driving safety and reliability is guaranteed by three means of braking: neutral brake, secondary brake and parking brake;
- Waterproof instrument control panel, simple and intuitive;
- All switch buttons are arranged for clear and intuitive operation;
- Double elbow support, double levers, left and right sliding control mechanism, convenient for edge compaction operation.

## 3 Efficient Operating Performance

- Dual-frequency single-amplitude vibration exciter provides two kinds of exciter forces for different working conditions;
- 53/60Hz high frequency vibration coordinating with drive speeds suit for compaction on various materials;
- Front drum vibration;
- 920mm large diameter drum design, good traffic performance, high compaction quality;
- Maintenance-free vibration drum, all-weather availability with low cost of use.

## 4 Superior Trafficability

- Low speed and high torque drive motor, high climbing ability;
- Large steering angle, small turning radius;
- Standard mechanical crab-walk for 50mm distance.

## 5 Ideal Visibility

- Unique visual field design ensures no blind spots in the visual field of the mobile operator, while enhancing the ability of curb compaction, improving the comfort and safety of the operation;
- The compact machine structure ensures clear view of the drum edge and construction site. Excellent curb compaction performance.

## 6 Excellent Maintenance Space

- 75° opening angle of engine hood facilitates service;
- Front and rear driving lamp holder can be turned out, which is convenient for the maintenance of electrical lines, sprinkler system and scraper;
- Air filter, machine filter, diesel filter and hydraulic oil filter are centralized lower placed for easy maintenance and replacement;
- Maintenance-free articulated frame, vibrating drum.



## Front And Rear Frame

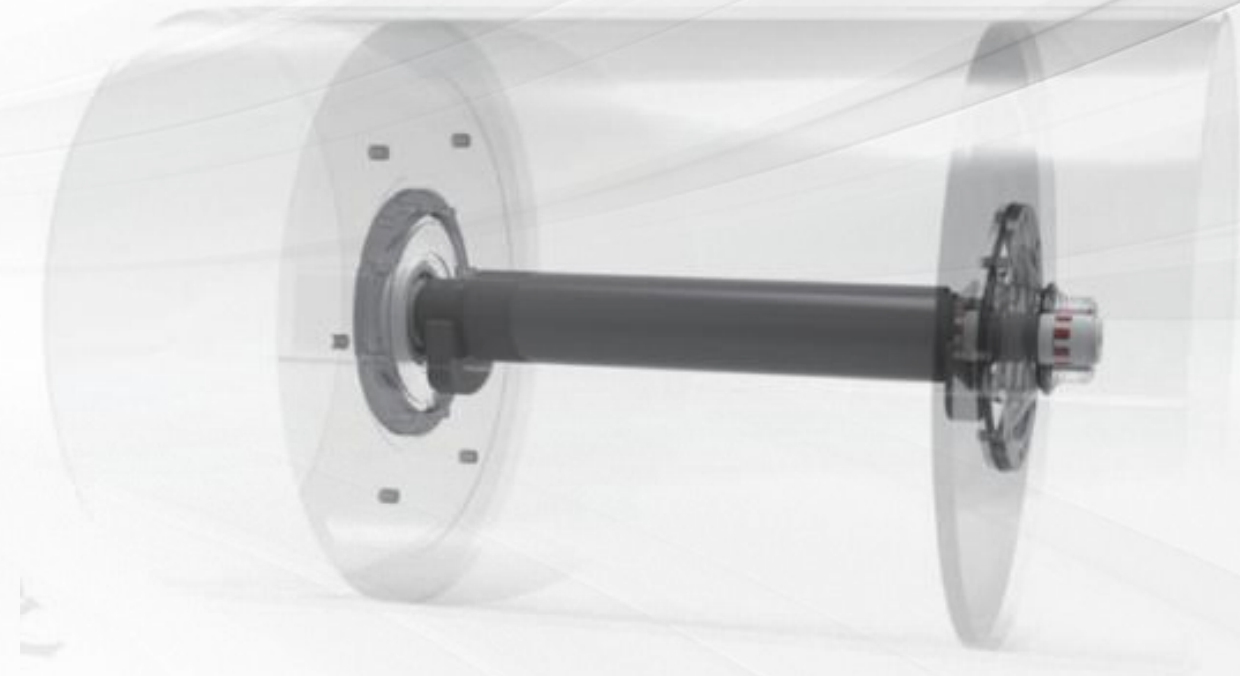
- Frame is composed of front frame, rear frame and articulated mechanism, frame lock-up and armrest, etc. The frame is used to connect the front and rear wheels, carry the power system, control system, sprinkler system and other working parts, and provide steering, swing, crab-walk and other functions. The frame is equipped with two side access channels, with traction rings in front and rear.



## Vibration Drum

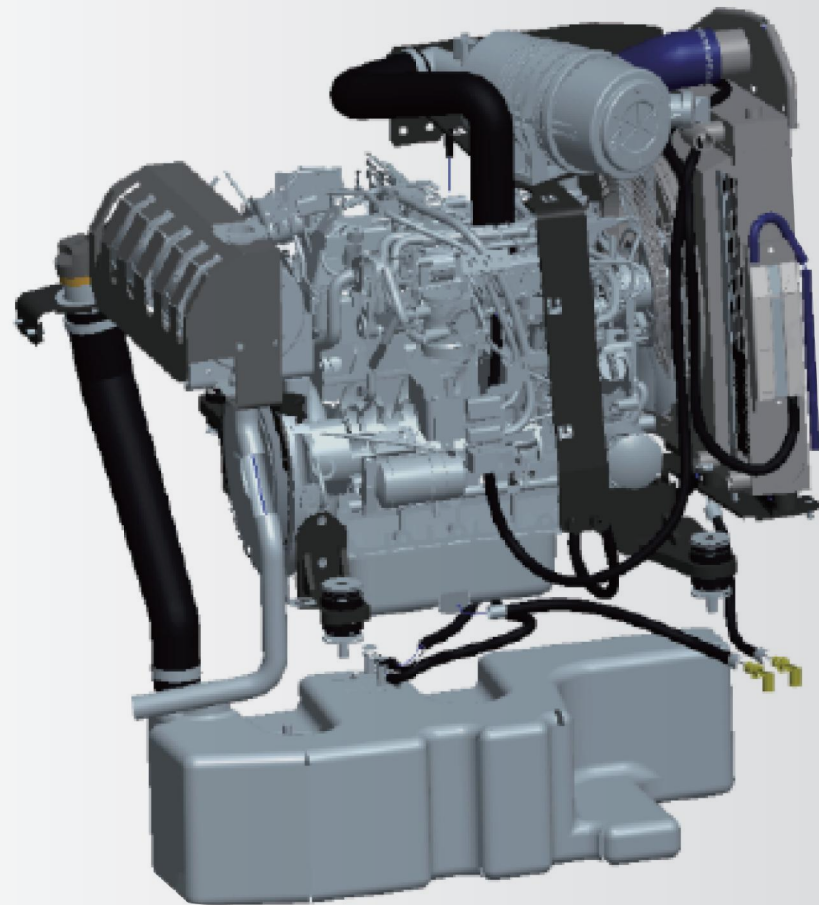
Vibration drum is an important working part. The vibration drum has one side hydraulic motor for propel and the other side gear motor for compaction; the wheel side has hoop bind to fix the roller during transitions.

- The vibration motor and the vibration exciter are connected through the elastic coupling, the start and stop of vibration is stable, and the hydraulic motor has a long life.
- Maintenance-free design of vibration drum and vibration bearing, high availability with low operation cost.
- Dual-frequency single-amplitude vibration exciter provides two kinds of exciter forces for different working conditions.
- 920mm large diameter drum design, good traffic performance, high compaction quality.
- Low speed high torque hydraulic motor with mechanical brake, good low speed stability, is the guarantee of perfect construction.



## Power System

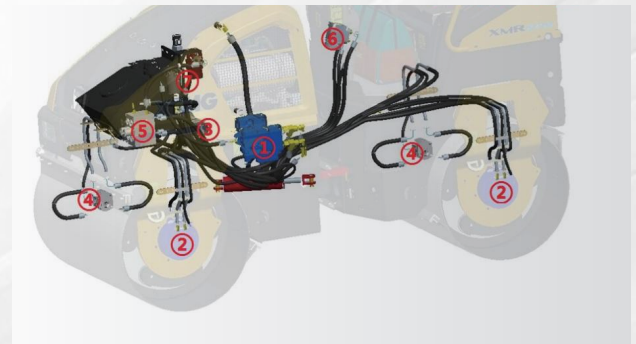
Diesel engine with water cooling, which meets the China stage IV emission standards. The whole power system is installed on the front frame and connected to the frame through the shock absorber.



## Hydraulic System

Closed loop hydrostatic drive system, the combination of axial piston pump and radial piston motor, equipped with a closed brake, driving powerful, parking safe and reliable; The hydraulic vibration system of open circuit can realize the independent vibration and co-vibration of front wheel and rear wheel through solenoid valve control. The hydraulic drive system uses two-stage hydraulic oil filtration system, which can extend the service life of the system. The driving, vibration, steering and oil filling systems are equipped with pressure measuring points for fault diagnosis.

All the main components of the hydraulic system are from the world - renowned manufacturers, market proven higher reliability.



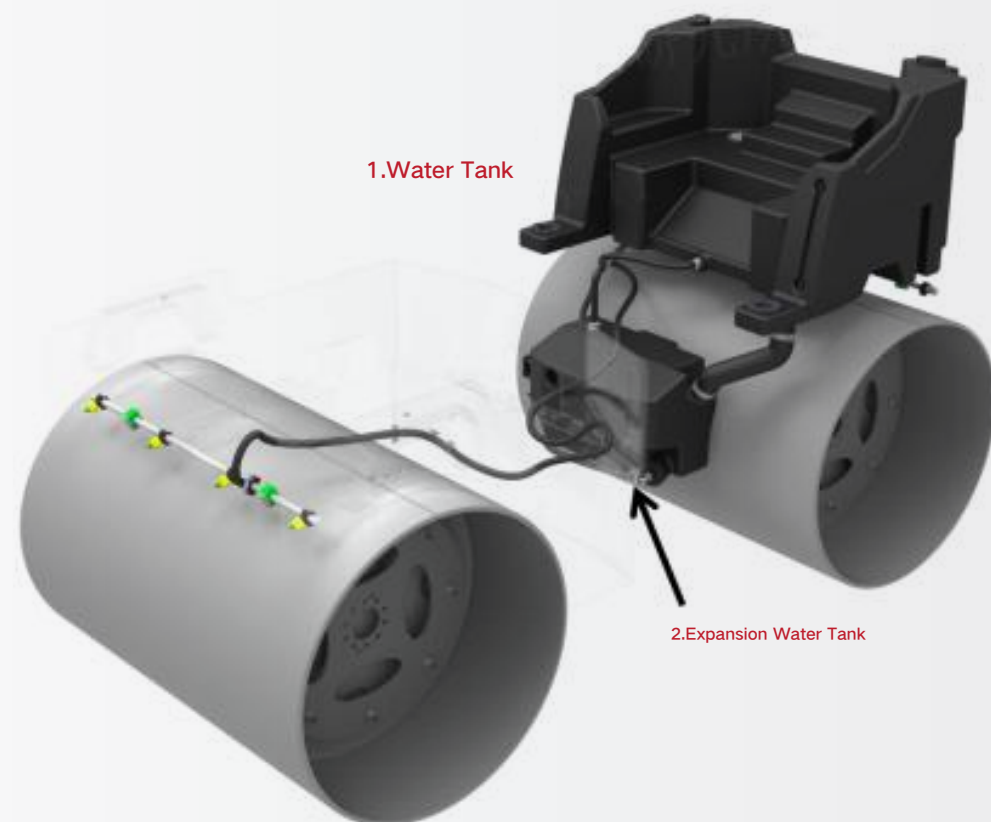
## Hydraulic System

The control system consists of control console, instrument box, steering system, propel control system, seat and other components. The control console is connected to the frame by shock absorber, Trelleborg shock absorber has good vibration isolation performance and high comfort performance. The driver's seat can be adjusted to fit different operators; Double control levers, can slide to left and right, maximize the edge compaction field of view; Under the seat is a box for storing documents and toolkit; It is equipped with central lifting device and anti-falling mechanism, which is convenient for lifting during transport.



## Water Spray System

- Sprinkler system includes electric pump for electronic controlled sprinkling. nozzles deliver uniform spray atomization; Double water tanks are equipped with water level indicator. The capacity of main water tank and auxiliary water tank are respectively 235 liters and 45 liters, reducing the stop times for water supply; Filter devices are provided at inlet, before water pump and nozzles to improve the reliability of the system.



## Electric System

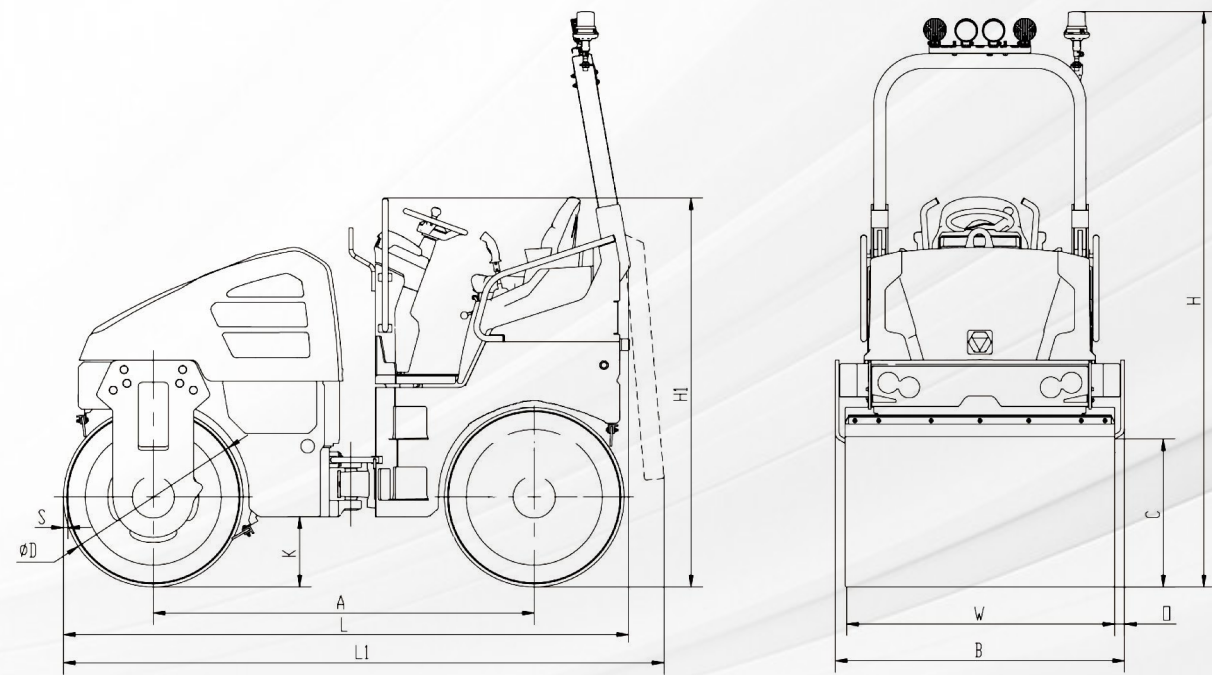
The function of the electric system is to start the engine and power supply for the lighting signal equipment, instrument testing equipment, electronic control equipment and other auxiliary equipment, to ensure the safety of traveling and operation. This electric system consists of a maintenance-free battery of 12V dc, single wire system, minus grounding.



## Main Technical Parameters

| Items                  | Content                                  | Unit  | XD140VT                           |
|------------------------|------------------------------------------|-------|-----------------------------------|
| Weights                | Operating weight                         | kg    | 4000                              |
|                        | Front axle weight                        | kg    | 2100                              |
|                        | Rear axle weight                         | kg    | 1900                              |
|                        | Static linear load                       | N/cm  | 152                               |
| Propelling             | Operating speed                          | km/h  | 0~12                              |
|                        | Theoretical gradeability                 | %     | 30                                |
|                        | Minimum turning radius(inside/outside)   | mm    | 2700/4100                         |
|                        | Minimum ground clearance                 | mm    | 350                               |
|                        | Wheel base                               | mm    | 1980                              |
|                        | Oscillation angle                        | °     | ±8                                |
|                        | Steering angle                           | °     | ±32                               |
|                        | Braking distance(smooth cement pavement) | m     | ≤3.4                              |
| Compaction Performance | Vibration frequency                      | Hz    | 53/60                             |
|                        | Nominal amplitude                        | mm    | 0.5                               |
|                        | Drum diameter                            | mm    | 920                               |
|                        | Drum width                               | mm    | 1380                              |
| Engine                 | Model                                    | -     | KUBOTA V2403                      |
|                        | Type                                     | -     | Inline four-cylinder water-cooled |
|                        | Rated power                              | kW    | 33.6                              |
|                        | Rated speed                              | r/min | 2400                              |
| Miscellaneous          | Drive method                             | -     | Hydrostatic closed-loop           |
|                        | Vibration method                         | -     | Hydrostatic open-loop             |
|                        | Service brake                            | -     | Hydraulic                         |
|                        | Park brake                               | -     | Mechanic/hydraulic                |
|                        | Secondary brake                          | -     | Mechanic/hydraulic                |
|                        | Steering system                          | -     | Articulated                       |
|                        | Steering control                         | -     | Hydraulic                         |

## Appearance And Dimensions



| Model | L    | B    | H    | K   | W    | A    | O  | H1   | S  | C   | D   | L1   |
|-------|------|------|------|-----|------|------|----|------|----|-----|-----|------|
| XD140 | 2910 | 1515 | 2940 | 350 | 1380 | 1980 | 70 | 1980 | 16 | 750 | 920 | 3250 |



Optimum services , XCMG Guaranteed



Cummins engine



Genuine parts



Extension of warranty



Financial solutions



Maintenance contract



Telematics



Monitoring systems

Professional Integrated Complete Solutions

XCMG group has built a strong reputation based on the quality, reliability and durability of its construction machinery.What's more, XCMG has gradually established a service network to constantly provide its local integrated and highly efficient complete solutions for all users.

Full range of services ready for you

In order to respond to your needs as fast as possible, XCMG experts are on their way to your job site from one of our facilities near you. Full range of servcices are available in order to reduce your total cost of ownership and increase your revenue.

XCMG Global Spareparts System

XP305S

Pneumatic Tire Roller

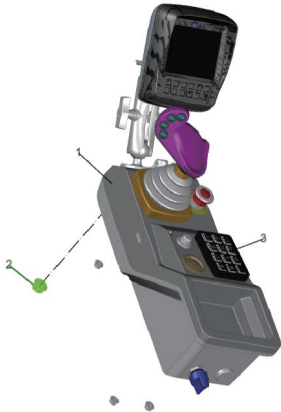
PIN/VIN : XUG03054VKJE02365

225704540 CONTROL BOX

Release Date : 2020-03-15

Updated Date : 2020-03-15

| Number | Material Encoding | Name                  | Quantity | Handle |
|--------|-------------------|-----------------------|----------|--------|
| 1      | 225704532         | CONTROL BOX STRUCTURE | 1        | W ☆    |
| 2      | 895238409         | NUT M8                | 4        | W ☆    |
| 3      | 225704541         | CONTROL BOX ELECTRIC  | 1        | W ☆    |



XP305S

Pneumatic Tire Roller

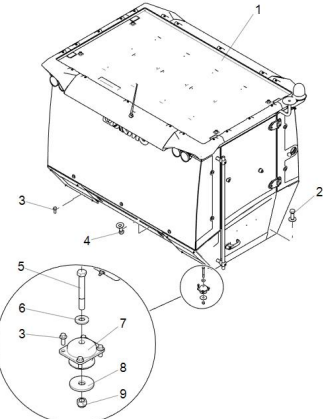
PIN/VIN : XUG03054VKJE02365

225704748 DRIVER'S CAB ASSY

Release Date : 2020-03-14

Updated Date : 2020-03-14

| Number | Material Encoding | Name            | Quantity | Handle |
|--------|-------------------|-----------------|----------|--------|
| 1      | 225704791         | CAB ASSEMBLY    | 1        | W ☆    |
| 2      | 805006280         | BOLT M16*45     | 9        | W ☆    |
| 3      | 805004763         | BOLT M10*25     | 16       | W ☆    |
| 4      | 805046571         | BOLT M16*30     | 2        | W ☆    |
| 5      | 805046668         | BOLT M16*120    | 4        | W ☆    |
| 6      | 805301377         | WASHER 16       | 15       | W ☆    |
| 7      | 228901569         | SHOCK CABSORBER | 4        | W ☆    |
| 8      | 229000495         | BIG FLAT PLATE  | 4        | W ☆    |
| 9      | 805239158         | NUT M16         | 4        | W ☆    |



XP305S

Pneumatic Tire Roller

PIN/VIN : XUG03054VKJE02365

225704748 DRIVER'S CAB ASSY

Release Date : 2020-03-14

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