

TRUCK-MOUNTED CONCRETE BOOM PUMP

VISION CREATES FUTURE



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ZOOMLION

BENCHMARK POSITION



INNOVATION LEADERSHIP

The World's Longest 101m Carbon Fiber Boom Pump Truck- Guinness World Record holder.

80m Carbon Fiber Boom Pump Truck won the Guinness World Record in 2011.

101m Carbon Fiber Boom Pump Truck set a new record in 2012 and remains so far.

INDUSTRY-LEADING INNOVATION

1156 valid patents

592 invention patents

10 patent families for international inventions

The Secretariat Unit of ISO/TC96 for standard setting



Published the first international standard in the industry

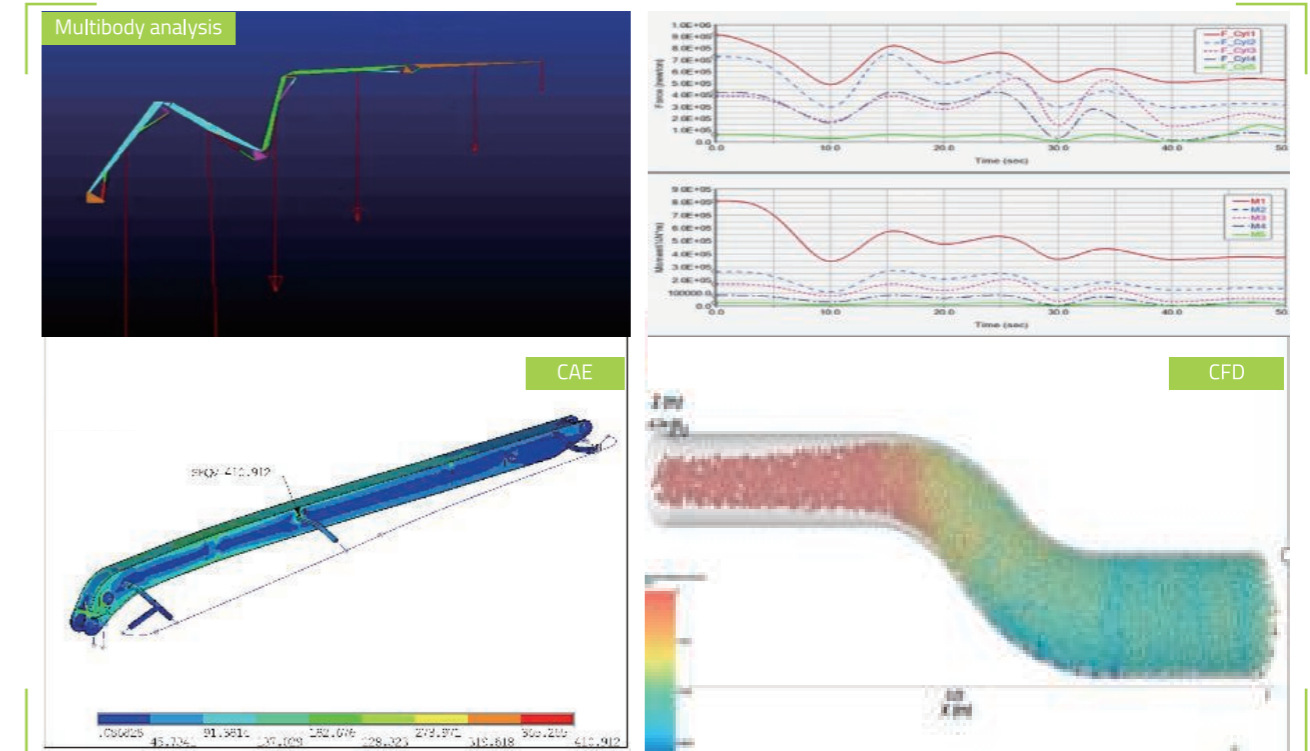
INDUSTRY-LEADING DESIGN AND TESTING

The industry-only National Engineering Research Center of Concrete Machinery

With a world-class digital simulation team for structural strength, stiffness, vibration, fatigue, fluid, and lightweight to carry out the forward design of products efficiently, accurately, and reliably



101 truck-mounted concrete pump



BENCHMARK POSITION

- Intelligent Manufacturing- Zoomlion Smart Industry Park
- The world's largest and most diverse construction machinery industrial base
- A Globally leading efficient factory, ecological park, and smart city

32
Intelligent
Production Lines

6
Dark Unmanned
Operation Areas

200+
Industrial
Robots

210
AGVs for
Automatic Logistics

169
Product Line
Patent Technologies

55
Innovative
Technologies

The industry's most advanced intelligent manufacturing park for concrete pumping machinery.

27min/set
Manufacturing of boom pump trucks

The largest capacity: 45% reduction in production cycle.

Reliable manufacturing: dark unmanned machining, fully automatic welding, intelligent assembly, etc., to ensure high quality and reliability of products.

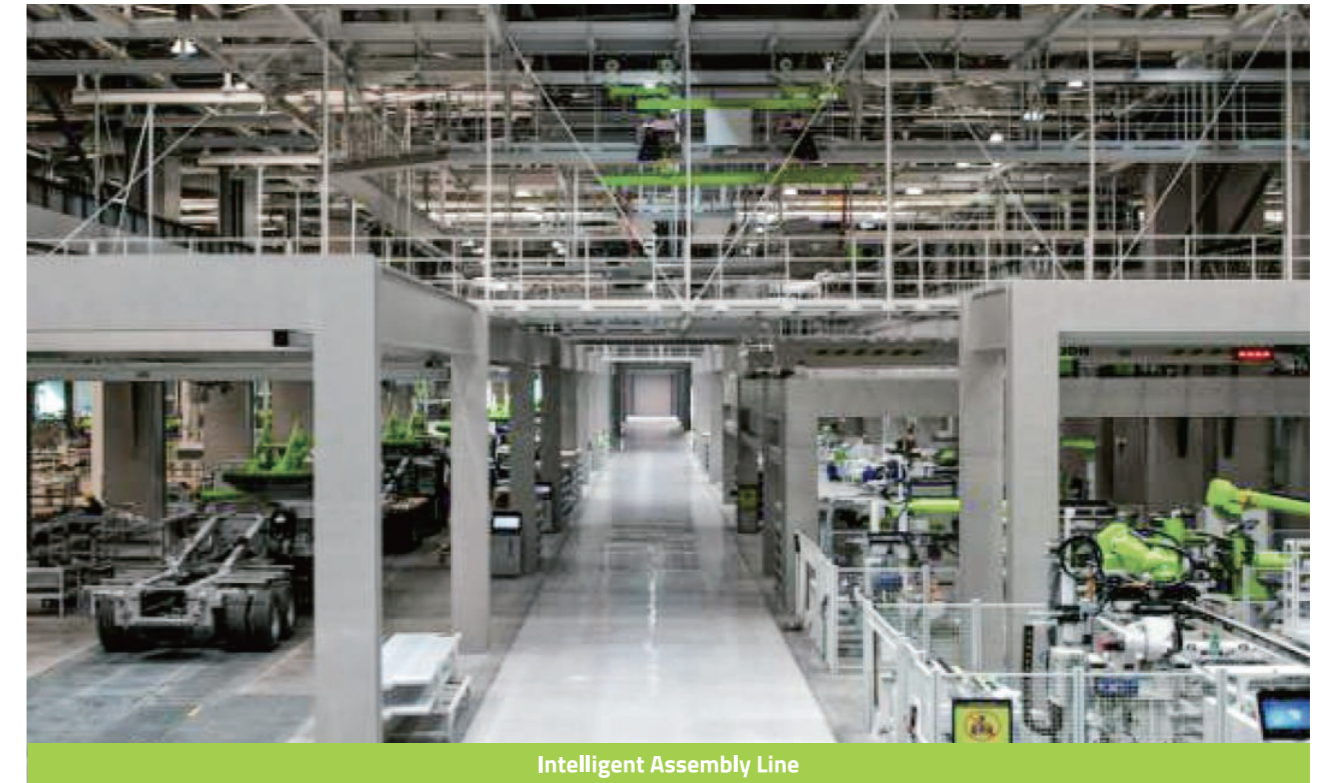
≥90 %
Automation rate of key processes



Intelligent Painting Line



Intelligent Welding Line



Intelligent Assembly Line



Intelligent Warehousing Logistics



Dark Unmanned Machining Line

PRODUCT FEATURES



USER-FRIENDLY

To Operate
To Maintain
To Clean



RELIABLE

Structure
Wearing Parts
Hydraulic And Electrical
Systems



SAFE

Driving
Construction



INTELLIGENT

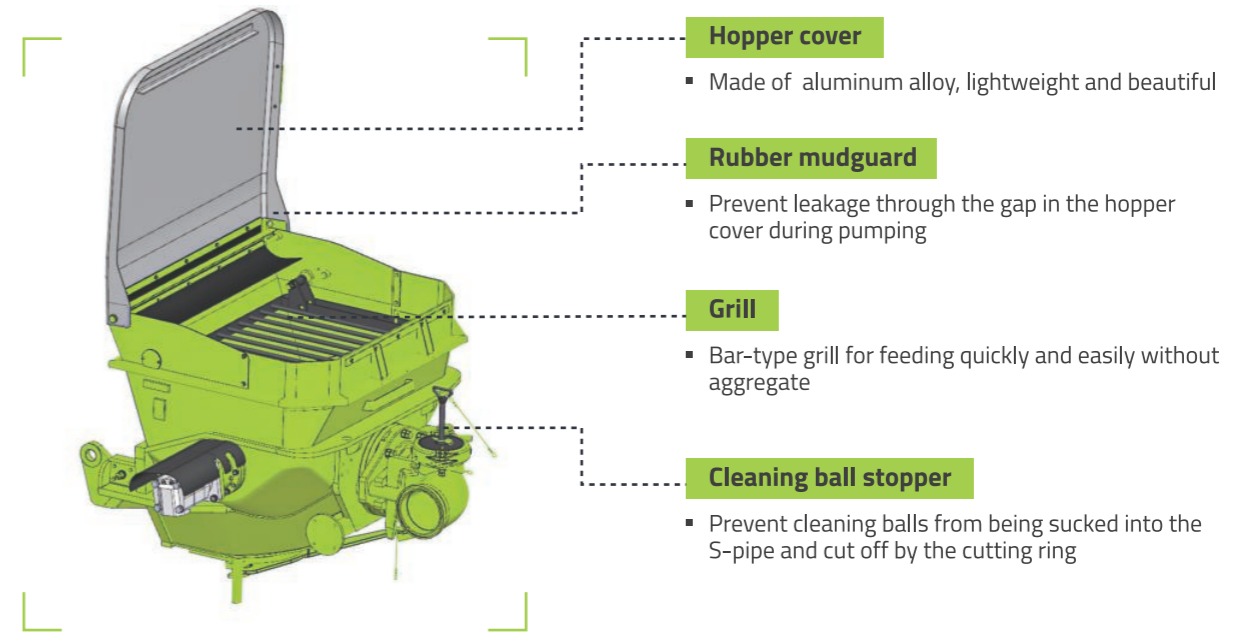
Intelligent
Manageable



PRODUCT FEATURES - EASY TO USE

HUMANIZED HOPPER

Optimized design to avoid aggregate or leakage, worry free cleaning after construction in high thermal environments.



Hopper cover

- Made of aluminum alloy, lightweight and beautiful

Rubber mudguard

- Prevent leakage through the gap in the hopper cover during pumping

Grill

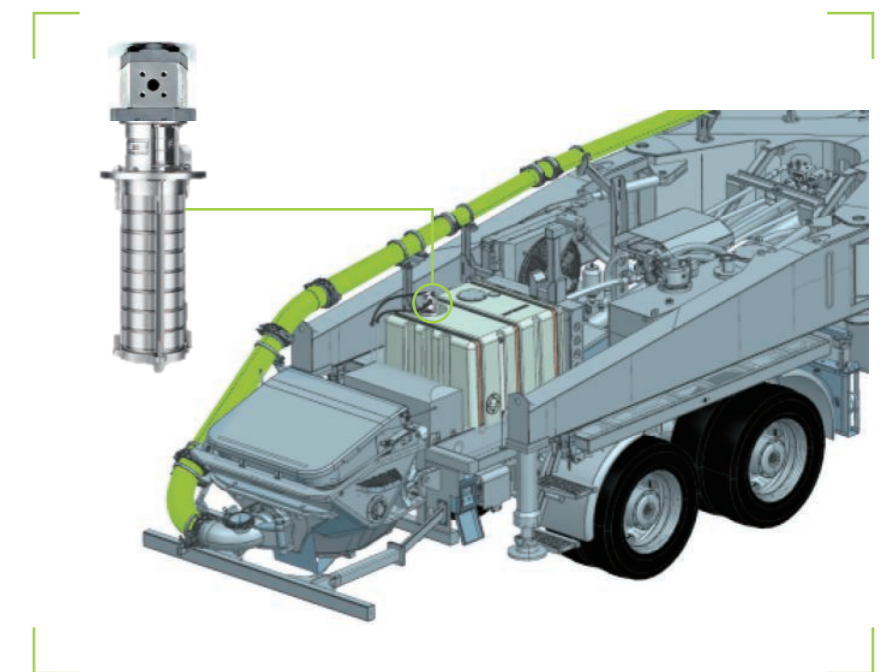
- Bar-type grill for feeding quickly and easily without aggregate

Cleaning ball stopper

- Prevent cleaning balls from being sucked into the S-pipe and cut off by the cutting ring

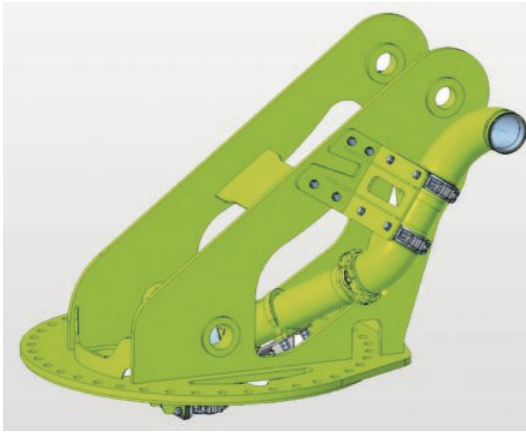
EASY CLEANING

- Immersible high flow rate water pump, cleaning efficiently without blind spots, and large capacity water tank well supplied with water for multi-site construction, making it convenient for transfer.
- Independent large capacity water tank 700L.
- Immersible high flow rate water pump 70l/min.



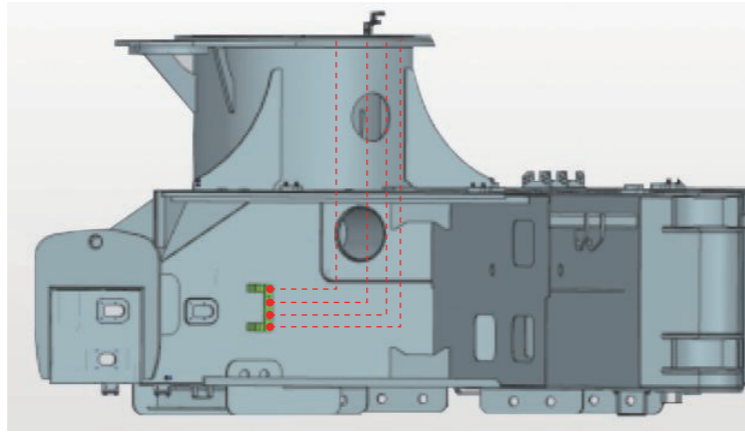
EASY MAINTENANCE

User-friendly and generalization design for convenient maintenance.



Optimized slewing table structure

Externalized delivery pipe with a 20% increase in strength. Less time for replacing the delivery pipe from 3h to 1h.



Central lubricating

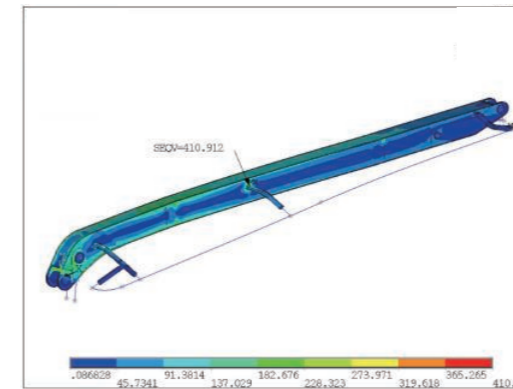
Slewing bearing lubrication point externally centralized to the triangle area of the pedestal, convenient for grease filling.

PRODUCT FEATURES - RELIABLE

RELIABLE STRUCTURE

Long fatigue life of boom and pedestal structures

Designed structural components according to European fatigue design standard; the boom and the main structures of pedestal passed the bench fatigue test by pumping 450,000 cubic meters of concrete.



CAE



Fatigue test bench

Upgraded boom shaft sleeve

Integral structure: no welding required, no welding deformation, easy assembly and disassembly.



STABLE BOOM

Dual damping systems of boom in vertical direction and slewing, making the boom stable.

Boom active vibration control technology, reducing impact by more than 30% at key parts of the boom. The vertical amplitude at the end of the boom reduced by 30% and the slewing amplitude reduced by 80%.



RELIABLE HYDRAULICS

Major hydraulic components such as **hydraulic pumps, hydraulic valves, hydraulic cylinders, and hydraulic pipelines** have passed the rigorous environmental adaptation and durability tests to ensure the reliability of the components.



hydraulic pump

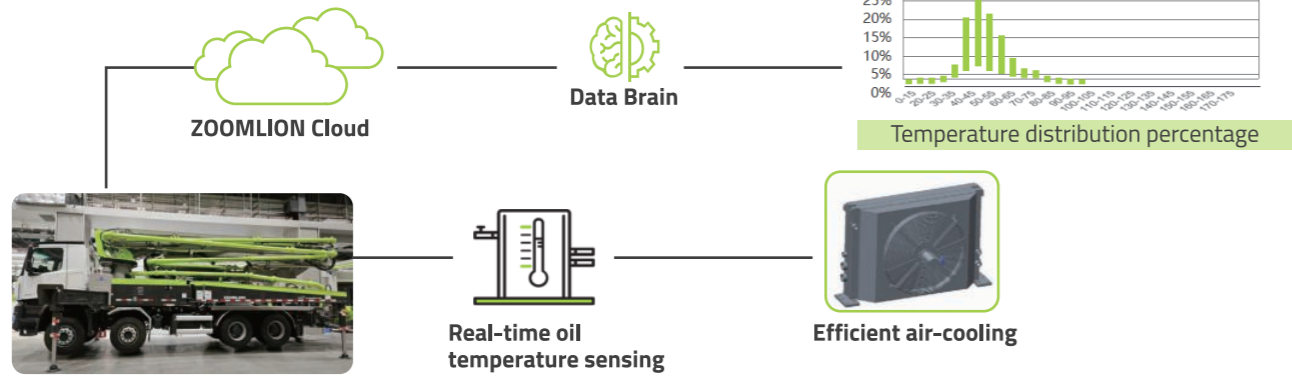
hydraulic valve



Integrated test bench for hydraulic pumps, hydraulic cylinders, and hydraulic valves

RELIABLE HYDRAULICS

The low-energy and long-life air-cooling radiator based on intelligent control technology, controls the oil temperature in the optimal working range of 40 °C ~65 °C, ensuring the reliability of the systems during construction in high thermal environments.



RELIABLE HYDRAULICS

Independent oil tank, less hydraulic oil consumption, long service life, low equipment operating costs.

The **best match** between hydraulic oil tank capacity and system performance through hydrodynamic analysis, reducing generally the hydraulic oil consumption by 30%;

The unique oil tank structure integrated chamber and grid, slowing the flow, eliminating air bubbles and reducing cavitation to improve system efficiency and **prolong the service life of hydraulic oil;**

The system with dual independent tanks, extending the maintenance period of hydraulic oil of boom system more than twice as much and reducing the operating cost.

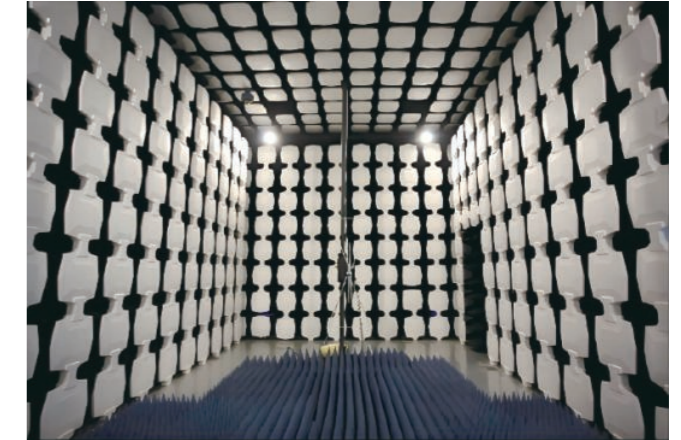


RELIABLE ELECTRICAL

Major electrical components such as controllers, remote controls, displays, circuit boards, and sensors have passed the rigorous environmental adaptation, electro magnetic compatibility (EMC), and durability tests to ensure the reliability of the components.



3-in-1 integrated test bench (for vibration, temperature, and humidity)



EMC test chamber

RELIABLE ELECTRICAL

HBC remote control, equipped with automatic frequency management system (AFS), enables the wireless communication distance of the remoter to be >100m.



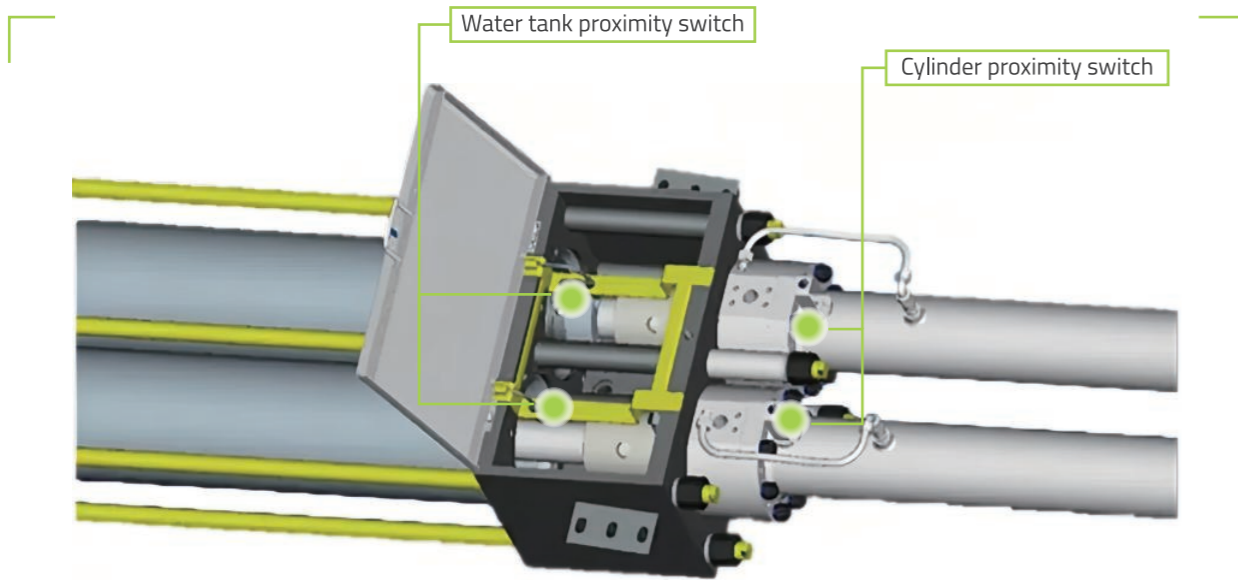
Remote start
Remote stop

2100mA lithium battery life>10h

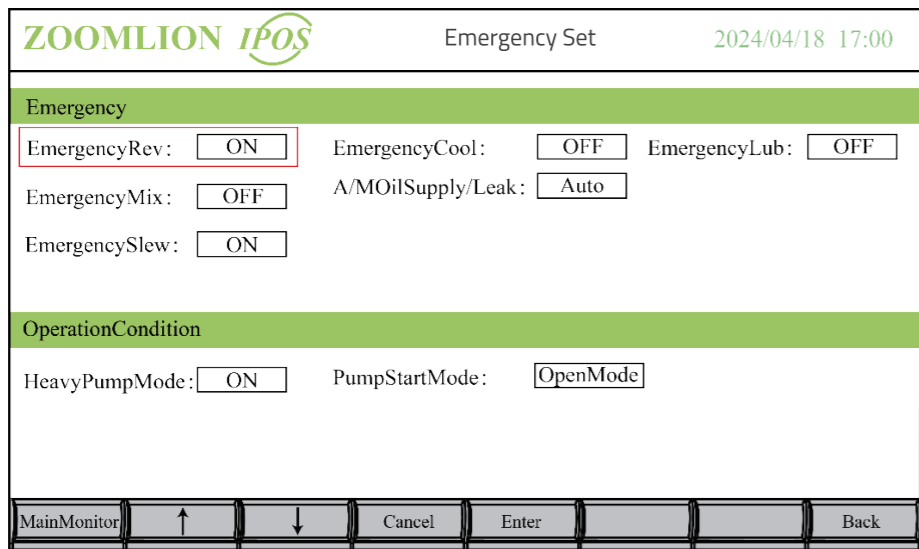
Reliable Electrical

Pumping trouble emergency changeover system, can learn, can adapt

Self-learning and self-adaptive intelligent technology based, can still be pumping even if the proximity switch or displacement sensor fails



Redundant design of reversing sensor

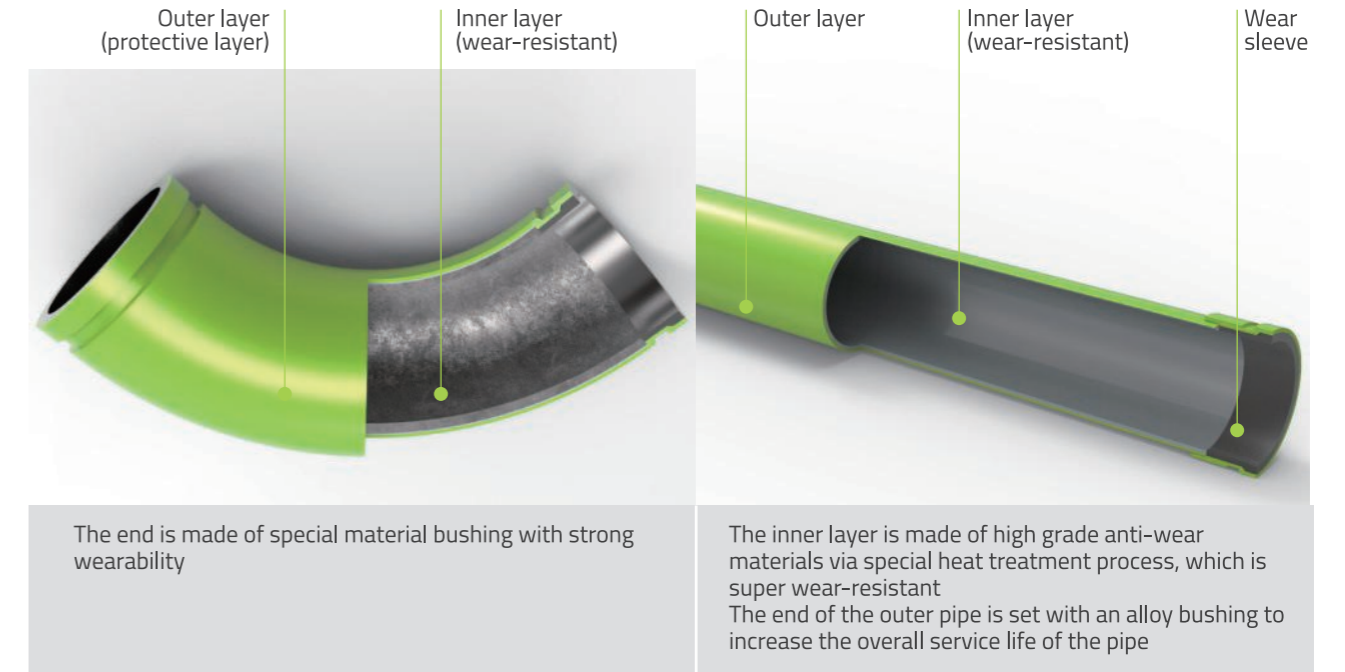


Emergency function setting of control panel

PRODUCT FEATURES- ECONOMICAL

LONG SERVICE LIFE OF WEARING PARTS

Pipes with long service life and great versatility



S-pipe, spectacle plate, and cutting ring with long service life and good sealing performance



The piston with strong adaptability to working conditions and long service life

High-performance piston materials with low frictional resistance and strong compressive strength;
The structure design of lubrication cavity to ensure effective lubrication;
One-piece molding process for high dimensional accuracy and good sealing performance.



PRODUCT FEATURES- SAFE

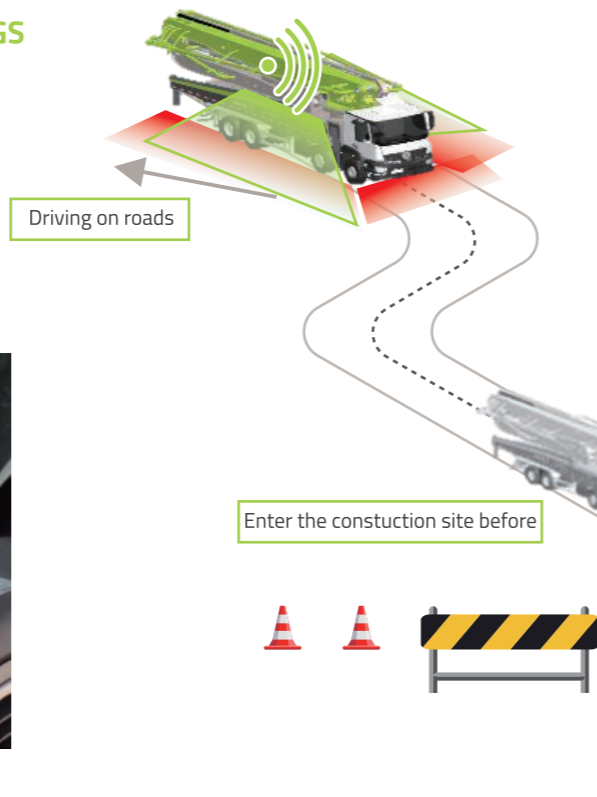
360° panoramic image around the truck pump+OGS

360° panoramic image around the truck pump

1 Driver Assistance



Multimedia touch screen in cab



2 (OGS) Outriggers guidance system



The auxiliary lines indicate the positions where the outriggers will reach when they are fully unfolded



Real-time HD display

Based on the high-definition cameras, it is able to display the 360° panoramic HD video with touch interaction, and to record and view the historical video locally so as to assist in the operation during driving.

SAFER

Standard configuration of side searchlights and warning lights as intense light source, making nighttime construction safer



PRODUCT FEATURES- INTELLIGENT

MANAGEABLE

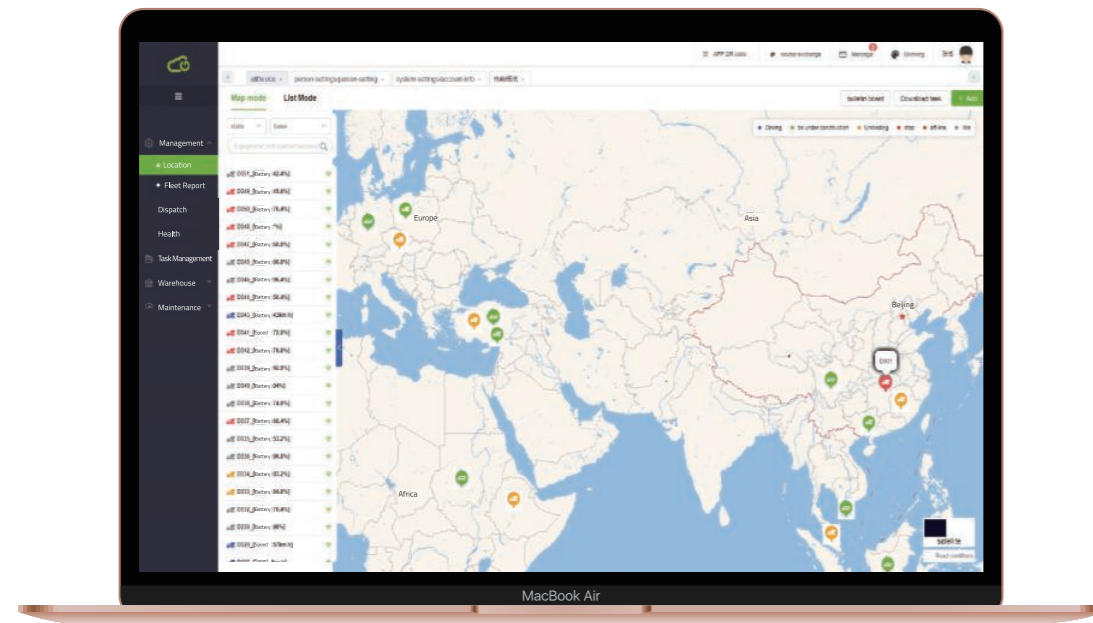
Digital operation management system

- Positioning and forewarning for all equipment
- Intelligent scheduling and dispatching, facilitating the speed on statistics
- Digital accounting without missing orders

1
Less operators

10%
Less operating expenses

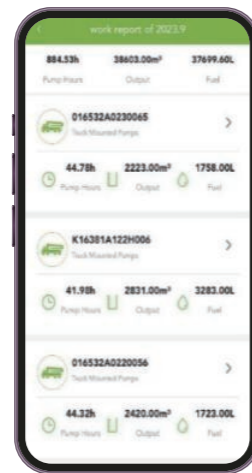
20%
Higher utilization rate of equipment



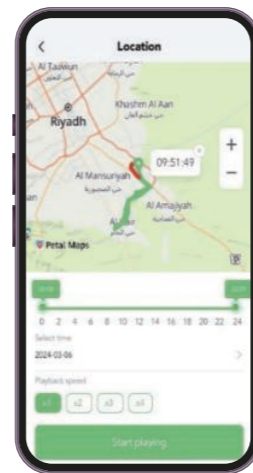
PC+APP



Work Detail



Fleet report



Track location

36m

Model	-	36X-5Z
Vertical/horizontal/depth reach	m	35.5/31.15/23.32
Outrigger span Front/Side/Rear	m	6.19/7.7/6.775
Maximum theoretical output	m ³ /h	170
Maximum output pressure	Mpa	8.8



38m

Model	-	38X-5RZ
Vertical/horizontal/depth reach	m	37.1/32.36/25.2
Outrigger span Front/Side/Rear	m	6.19/7.7/6.775
Maximum theoretical output	m ³ /h	170
Maximum output pressure	Mpa	8.8



43m

Model	-	43X-5RZ
Vertical/horizontal/depth reach	m	42.3/37.7/29.68
Outrigger span Front/Side/Rear	m	7.98/8.22/8.605
Maximum theoretical output	m ³ /h	170
Maximum output pressure	Mpa	8.8



50m

Model	-	50X-6RZ
Vertical/horizontal/depth reach	m	49.3/44.3/35.3
Outrigger span Front/Side/Rear	m	9.31/10.5/8.92
Maximum theoretical output	m ³ /h	170
Maximum output pressure	Mpa	8.8



56m

Model	-	56X-6RZ
Vertical/horizontal/depth reach	m	56/51/40.2
Outrigger span Front/Side/Rear	m	9.59/10.86/12.62
Maximum theoretical output	m ³ /h	180
Maximum output pressure	Mpa	11.3



CONSTRUCTION CASES



CONSTRUCTION CASES



SERVICE SYSTEMS

QUICK RESPONSE

Localization

Local service team provides high-valued repairs and maintenance service and technical support as and when required.
Local stock of a wide range of service exchange parts.
Fastest response to service & spare parts.

Customization

Customized colour painting.
Optional configurations.
Customized service solution and extended warranty package.

Training & delivery

Operation and maintenance training when delivery.
Pre-delivery inspection.
Annual inspection.



ABOUT ZOOMLION

1. Zoomlion is one of the world's largest concrete equipment manufacturers and leaders in developing and manufacturing of major high-tech equipment.
2. Manufacturing enterprise integrating engineering machinery, agricultural machinery and financial services.
3. Possessing 11 major categories and 70 product lines, as well as nearly 568 leading products.
4. Based on the national research institute with 64 years history.
5. Annual sales turnover is more than 6 billion USD.
6. More than 20,000 staff working for Zoomlion globally.
7. Holding over 75% technology innovation patents in the industry in China now.
8. 22 industrial parks all over the world (13 in China, 9 in other countries).
9. The only drafter of the ISO Technical Committee of ISO in China.
10. Drafted 200 national industrial standards.

