XC968-EV

XCMG

WHEEL LOADER

SOLID TO SUCCEED

















XCMG EARTHMOVING MACHINERY BUSINESS DIVISION

CUSTOMER SERVICE HOTLINE (IN CHINA): 400-110-9999

ADDRESS: NO. 99, KUNPENG NORTH ROAD, XUZHOU ECONOMIC DEVELOPMENT ZONE, JIANGSU PROVINCE, CHINA
ZIP CODE: 221004
TEL: 0516 87938888
EMAIL: sales@xcmg.com
SITE: http://www.xcmg.com

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Product Overview

- The pure electric loader with zero-emission is the future of engineer machinery and the optimal choice for environmental protection.
- Based on the international research and development platform and integrated with global resources, XC968-EV pure electric loader is the new-generation loader of XCMG designed with international advanced technology and independent intellectual property right, featuring environmental protection, strong power, solidity and reliability, high efficiency, and energy conservation and easy maintenance, which is the environmentally friendly, energy-saving and efficient solution for multiple applications including construction sites, mines, ports, and roads, etc.
- The rated power is up to 280kW to supply stronger power to the machine, which is improved by more than 10% compared with that of the fuel loaders. The acceleration performance is also improved by more than 50% due to the quick response of the motor.

Advantages

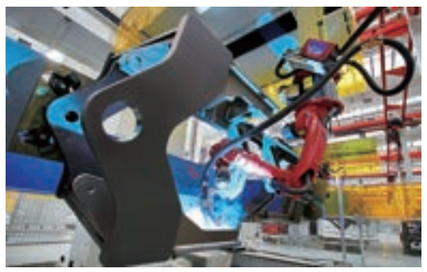
- Environmental protection: It is configured with a pure electric system with zero-emission and lower noise by 10-20dB than traditional loaders.
- Energy-efficiency: Compared with traditional loaders, the transmission efficiency is improved by more than 20% with braking energy recovery.
- Cost performance: The fuel cost conservation is more than 60%, that the longer it is used, the higher the operating income will be. Meanwhile, the simple structure of the pure electric system will ensure easy maintenance to save time, materials, and labor costs.
- In accordance with different materials and operating conditions, the optional configurations include buckets of 2.5-5.0m3, as well as quick-changing and side-dumping tools.

High energy-conservation and efficiency

- The disadvantages of the traditional loaders include low efficiency, the average efficiency of less than 70% of the hydraulic torque converter, and no recovery of the braking energy, causing high fuel consumption and high emission. Regarding the pure electric system, the maximum efficiency of the motor is more than 95%, the average efficiency of the transmission is up to 97%, as well as it is configured with the braking energy recovery function.
- The total power of XC968–EV is up to 250kW and the energy consumption is lower than 40kW · h by applying the self–in–novative motor power distribution technology of XCMG.
- XC968–EV is configured with a 282kW · h lithium battery with a charging time of 50 min, which can be fully charged during time–out for continuous construction.
- Compared with traditional fuel loaders, the annual energy saving of XC968–EV is more than CNY 200,000, and the energy cost is only 1/3 that of the diesel loader.
- Replacing the oil with electricity, XC968–EV features a compact structure and motor–controlled travel and hydraulic systems without maintenance costs of air filter, engine oil filter, and diesel filter, etc., to minimize the maintenance time and the impact to normal operation.

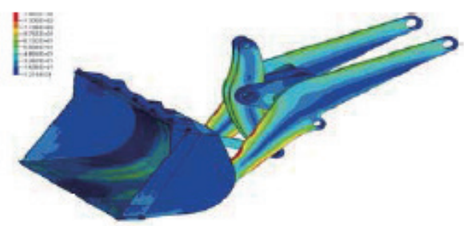
High Reliability

- The articulated heavy structural parts are featuring finite element analysis to minimize the stress concentration. With strong and enhanced manufacturing capacity, the parts are welded by robots to ensure high quality during production.

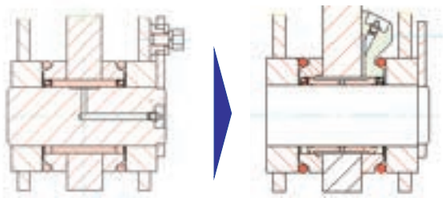


Light–duty working devices

- Light–duty working devices to minimize the energy consumption during each elevation.
- The CAE analysis and design optimization for structural parts i.e. working linkage and bucket, etc. are completed in accordance with the most severe conditions to ensure the adaptability for multiple working conditions. All critical parts i.e. the bucket are specially protected from abrasion.



- Optimized lubricating oil–ways: Without the drilling of holes on hinge pins, the strength and service life of the connecting hinge pins between boom and bucket are increased by more than one time to lead the industry level.



Comfortable

The ultra-quiet and low-pressurized cab with new integrated FOPS & ROPS systems has large internal space, wider vision, and more comfortable operation; the seat and steering mechanism have a number of regulating functions; with the stability module function, the impact of the complete machine from bumpy ride is effectively reduced, the materials are prevented from scattering, the transportation efficiency and driving comfort are improved. The man-machine interaction of full range of products are derived through the JACK simulation technology. The motion trail of each joint is deeply studied. The intelligent temperature control system is arranged under the guidance of wind field theory to ensure a comfortable driving; the dust-proof and sealed-noise-reduction damper ensures a clean working space in harsh environments.









Higher Intelligence

XCMG's intelligent management system

Easy to control and master

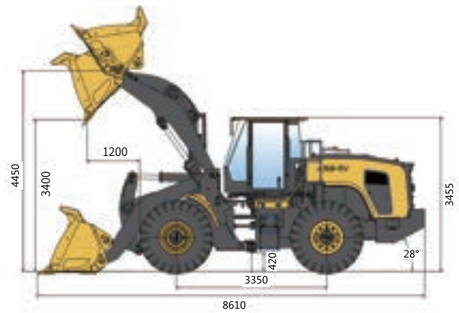
Released on the basis of China-III equipment, the XCMG's intelligent management system enables the user to master the operation and maintenance status of the equipment via mobile phone, PAD, and computer and, by means of data acquisition and analysis, realize the accurate evaluation on user's project and guarantee the best matching of equipment.

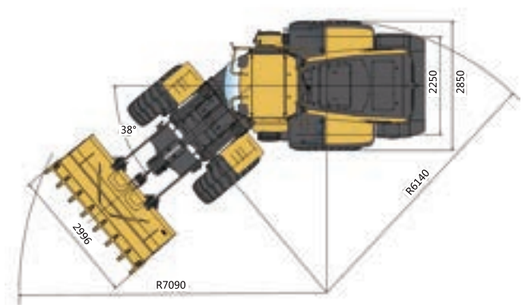


- Optimized equipment matching
- Enhanced productivity
- Increased management efficiency
- Lowered operation cost
- Reduced operation risks
- Optimized profitability

Specifications

Overall dimensions





Main specifications

Description	Specification	Unit
Rated load	6000	kg
Bucket capacity	3.2	m^3
Operating mass	19100	kg
Rated power of the motor	270	kW
Dumping height	3400	mm
Dumping distance	1200	mm
Wheelbase	3350	mm
Wheel tread	2250	mm
Maximum traction force	170±5	kN
Maximum breakout force	174±5	kN
Total cycle time	≤9.7	s
gradeability	28	°
Minimum turning radius (tire center)	5990	mm
Steering angle	38	°
Overall machine dimensions (L×W×H)	8610×2996×3455	mm
Traveling speed — Forward I/II	18/36	km/h
Traveling speed — Reverse I/II	18/36	km/h

Main configuration	Description	Specification
Axle	Brand	XCMG
Working hydraulic system	Type	Double pump confluence
	Operating mode	Hydraulic joy-stick
Diversion hydraulic system	Type	Flow amplification
Brake system	Service brake	Hydraulic brake
	Parking brake	Hydraulic brake
Air conditioner system	Type	Heating/Cooling
Control system	System voltage	DC24V
Tyre	Size	23.5-25
Duration	General condition	6-10h
	Heavy condition	5-6h
Charging	300kW charging pile	55min
	Optional charging pile	240kW-360kW
Oil filling	Antifreeze	45L
	Axle oil (front/rear)	47L/26.5L
	Hydraulic oil	145L

Description	Specification	Unit
Battery class	LiFePO	
Electric capacity	456	Ah
Stored power	282	kWh
Rated voltage	618	V
Protection level	IP67	
Cooling way	Intelligence liquid temperature control	
Rated power	2*100	kW
Protection level	IP67	
Cooling type	Compulsory liquid temperature control	
Ambient temperature	-40～55	℃
Altitude	≤4500	m
Rated power	70	kW
Protection level	IP67	
Cooling type	Compulsory liquid temperature control	
Ambient temperature	-40～+55	℃
Altitude	≤4500	m

No further information of sample contents, product structure and configuration parameters updates. there maybe some difference between sample books and material objects. Please kind prevail.