# Main features

# Main Specifications



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#### **Engine**

Be equipped with engine, which is turbocharged, and electrically started and stopped, with strong driving force and large power margin; the three-stage air filter is specially designed for the harsh working environment of the construction machinery industry, with the emissions up to the China's Stage III standards; and the multi-stage fuel filter, and fuel & water filter enjoy a good fuel adaptability to guarantee the cleanliness of the engine system. XCMG proprietary engine curve can adapt to more than one working modes based on the working conditions, rendering higher economical efficiency.

The diesel engine is a new generation of diesel engine developed by WEICHAI Power (Europe) R&D Center using the world's top-notch technology and brand-new design concept. It refreshes a number of performance indexes among domestic heavy-duty diesel engines, being more fuel-saving, more powerful, more reliable and safer: Large displacement and large intake; equipped with special P8500 high pressure oil pump, providing better fuel injection atomization; and furnished with the special high-efficiency supercharger, providing high intake efficiency; more complete combustion, lower fuel consumption, and stronger driving force; large displacement, rendering better vehicle acceleration performance; larger maximum torque, making the complete vehicle's operation efficiency high; lower heat load and longer service life of components, reducing maintenance costs; the high-strength machine body is subject to comprehensive structural calculation and reliability test, with the comprehensive performance index value 20% higher than that of similar products; the high pressure oil pump adopts flange gear transmission, and the flange connection raises the accuracy of fuel injection advance angle, avoiding the deterioration of diesel engine performance and emission index caused by the change of advance angle, reducing vibration, and improving the reliability of the complete machine; It enjoys a large market volume, with sufficient accessories and being convenient for service and repairs.



Working Mode Selector Switch Power Curve Working



#### Torque converter-transmission system

The torque converter-transmission system adopts full-auto electrohydraulically-controlled transmission, with a good overload-carrying capacity, strong torque transmission capacity, large safety factor, and high reliability, and adapting to various complex and overweight working conditions. It has two kinds of working modes: Full-auto and manual; In the full-auto mode, the gear position and speed can be adjusted automatically according to the external load.

High-power heavy-duty electrically-controlled transmission has the following powerful functions: (Full-auto and manual modes)1. Electrohydraulically-controlled dynamic gear shift: Provide smooth shift without impact, being simple, comfortable and efficient for operation.2. Neutral gear starting protection: Effectively protect the transmission components and ensure the safety of the loader during operation.3. Power cut-off.4. KD gear function: Simplify the driver's operation, effectively reduce the driver's operating intensity, and improve the machine's operating efficiency and fuel economy for the loader requiring frequent reversing due to complex working conditions.5. Reverse signal.6. The 4-FWD & 3-RWD power output.7. Fault self-diagnosis: Be equipped with automatic fault diagnosis function, for displaying the fault code, and improving the product maintainability.



Full-auto electrohydraulically-controlled



#### Drive axle

XCMG wet drive axle has a super load-carrying capacity. The maintenance-free wet drive axle adopts the multi-friction discs for braking, guaranteeing that the brake is smooth, safe and reliable, and being able to withstand super heavy load conditions. The rear axle swings around the center, reducing the impact of additional torque and external load on the transmission system. The key-block transmission shaft for construction machinery has strong impact-resistance capacity and high power transmission reliability. The use of 26.5-25 tires, coupled with the rear axle swinging around the center, makes the machine have good off-road performance and passing performance, and adapt to driving and working on bumpy roads. The furnished limited slip differential (LSD) ensures the superior driving ability and operation safety of the complete machine under harsh road conditions.



CMG wet-type axle

#### Hydraulic system



The hydraulic system is configured with XCMG-developed third-generation constant variable hydraulic system with load sensitive pressure compensation technology as standard, which improves the operating capacity and efficiency of the entire machine under complex working conditions, saves engine power, by more than 5% energy compared with second-generation constant variable technology; the pilot handle integrates FNR shift function, making operation easier. With new high mounted hydraulic oil tank and filtration system, improving the cleanliness and circulation efficiency of hydraulic oil. The steering limit adopts hydraulic flexibility and then mechanical rigidity, reducing the impact.

#### Brake system

Full hydraulic wet brake system with low pressure protection function, independent brake circuits designed for the front and rear axles, "two-in-one" designed for integrated parking brake and emergency brake, hydraulic caliper disc brake used for hand brake to ensure safe operation, and able to be released even when the engine is not running.



#### Cab and steering system

The system, equipped with the rear view camera as a standard, features a beautiful shape, wide vision, low vibration, and low noise, being comfortable for driving; it is furnished with exquisite interior, involving the humanized facilities like storage compartment, teacup holder, cigarette lighter, coat and hat hook and so on; and the excellent ergonomic design provides comfortable environment and easy operation.

High-performance shock-absorbing seat, combined with multi-directional adjustable steering column, can meet the requirements of different drivers.

# **D**

### Frame

The front frame adopts a four-plate box structure, with good rigidity and strong absorption of impact energy. It is analyzed and optimized by CAE and important bearing areas are reinforced; the overall large cross-section structure can withstand various torsion and impact loads under various working conditions, fully assuring the strength of the frame structure.

The distance between the center hinge of the industry's largest frame disperses the force at the hinge, reduces the stress on the hinge pin, and improves the service life of the bearings.

The rear frame is designed with a super strong and heavy-duty structure, and the overall structure has undergone rigorous finite element simulation analysis to reinforce the weak points under stress and assure the structural strength of the frame; the height of the rear frame tail is reduced to fully expose the radiator, facilitating "one-stop" maintenance.



#### Maintenance convenience features

With electric rear flip large side door hood, engine air filter, diesel filter element, engine oil filter element, oil filling and inspection, radiator maintenance, etc., making operation easy; designed with transmission filter and oil filler lead; all maintenance points such as oil level inspection, fluid addition, and grease filling are arranged in accessible areas.

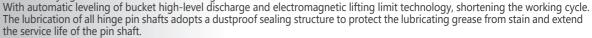
Centralized electrical fuse box, featuring easy maintenance & troubleshooting, and high reliability.

Remote centralized lubrication, centralized drainage, and centralized pressure metering, facilitating routine lubrication and



## Operating unit and bucket

The working device adopts a Z-type reverse six-link structure. After optimization, the lifting force of the boom oil cylinder is increased by 8% compared with existing products, and the unloading angle and digging depth at any position are increased, better satisfying the needs of different working conditions.



The bucket is a large arc bucket shape, increasing the bucket capacity ratio and increasing the fullness; the parts prone to wear are made of special wear-resistant steel and high-strength materials; the inner wall of the bucket is designed with reinforced ribs, and the back of the bucket is designed with anti-overflow material, improving the strength, extending the service life.

# **OPTIMUM SERVICES XCMG GUARANTEED**



# Main components

Item		Parameter
Bucket capacity m³		5.0
Rated load kg		7400
Operating weight kg		23400
Dumping height mm		3137
Dumping range mm		1286
Wheel base mm		3560
Wheel track mm		2360
Overall length mm		8870
Overall height mm		3620
Bucket width mm		3230
Max. gradeability (°)		29
Steering angle (°)		±40
Rear axle swing angle (°)		±12
Max. breakout force KN		210
Tipping load Kg	Line up	≥17000
	Full steering	≥14800
Outside of bucket (Min. turning radius) mm		6550
Boom lifting time S		≤5.9
Total cycle time S		≤10.4
Engine	Туре	Six-cylinder, four-stroke, turbocharged, and electronic fuel injection
Liigiile	Rated power kW	210
	1st Gear	0~6.9/0~6.9
Travel speed Km/h	2nd Gear	0~13.7/0~13.7
	3rd Gear	0 ~ 25/0 ~ 25
	4th Gear	0~38

<sup>•</sup> The technology of XCMG loader is subject to constant improvement and upgrading. In case the specifications or detailed appearance contained in this brochure differ from actual products, the latter shall prevail;







Genuine parts



Financial solutions



Maintenance contract



**Telematics** 

# **Professional Integrated Complete Solutions**

XCMG 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 customers.

# **Full Range of Services Ready for you**

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



### **XCMG Global Spare Parts System**



<sup>•</sup> XCMG reserves the right of final interpretation for the above. Our products may be modified without prior notice to users.