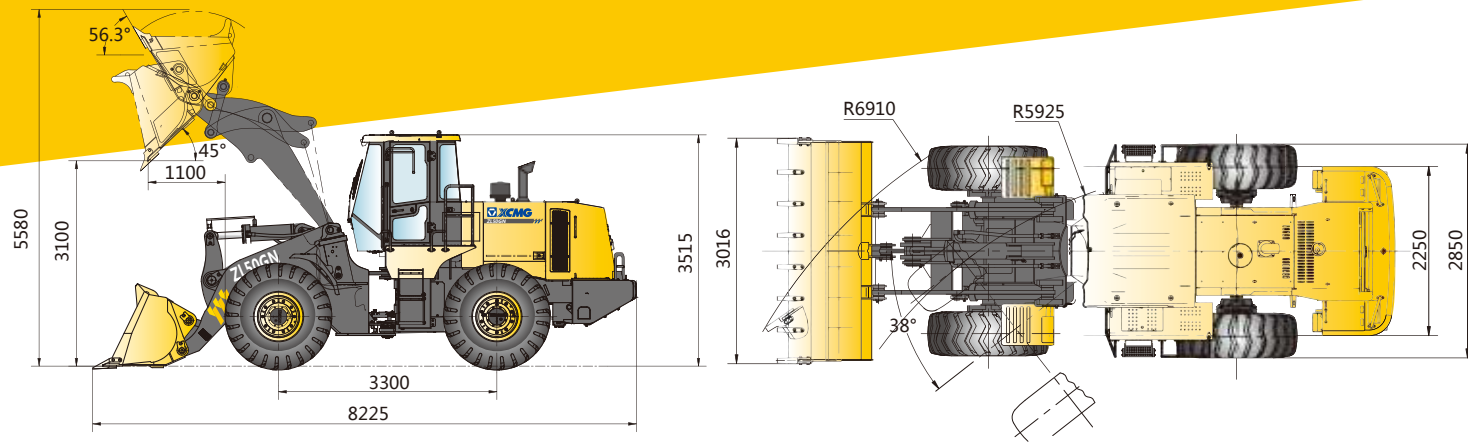


## OUTLINE DIMENSIONS



## MAIN SPECIFICATIONS

Description	Specification	Unit
Rated operating load	5000	kg
Bucket capacity	2.5 ~ 4.5	m <sup>3</sup>
Machine weight	17500±300	kg
Dump clearance at maximum lift	3100 ~ 3780	mm
Reach at maximum lift	1100 ~ 1220	mm
Wheel base	3300	mm
Tread	2250	mm
Max.breakout force	175±5	kN
Max.horse power	160±5	kN
Hydraulic cycle time-raise	≤6	s
Total hydraulic cycle time	≤10.5	s
Min. turning radius over tyres	5925±50	mm
Articulation angle	38	°
Gradeability	30	°
Tyre size	23.5-25-16PR	
Overall machine dimension L×W×H	8225×3016×3515	mm
Model	WD10G220E21	
Rated Power	162	kW
Travel speed	I-gear(F/R)	13/17
	II-gear(F)	41

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.





# Environment-protection pioneer

# Money-making pioneer

## Product Overview

- ZL50GN wheel loader is the latest cross-generation product developed by XCMG on the basis of the globalized technologic resources.
- Focusing on customer value and emphasizing customer experiences, XCMG loader is the first-choice equipment for the production organization in the fields of ports, mines, engineering constructions, and logistics.

## Model Characteristics

- XCMG's exclusive high torque and high efficiency drive chain features reasonable matching.
- XCMG's characteristic super-heavy-load structure parts are free of redundant weight.
- With extended wheelbase, the working capacity and stability are leading the industry.
- The centering design of main hinge joints reduces the turning radius and lowers the tire wear and energy consumption.
- The ergonomically design cab adopts integral skeleton structure, delicate interior trim parts, and sound insulation and noise reduction measure, featuring broad visual field, super-large space, and high operation comfort.
- The diversified configurations and complete attachments comprehensively adapt to the construction needs in different regions and under different working conditions.

## Performance Highlights

- The 160kN traction force and  $\geq 3.5\text{m}$  high dumping capacity handle the severe conditions with ease.
- $\geq 7,500\text{kg}$  lifting capacity and 170kN breakout force handle all kinds of materials with ease.

## Technologic position

- Optimized version of ZL50G, the leadership model of China's 3rd generation loaders.
- Gathering of dozens of technologies.

High energy-conservation

High efficiency

High comfort

High environmental-friendliness

High reliability

High convenience





## Excellent quality power and drive systems



### Strong power

- China-II emission compliant special engine features low speed and low fuel consumption.
- With strong power and high torque reserve factor, this engine meets the instant overload demand during operations and sufficiently provides the power required for heavy-load operations.
- The three-stage desert filter element features simple maintenances and low cost.

Optional Shanghai engine SC11CB220G2B1



### XCMG's patented technology Heavy-duty energy-conservation transmission and torque converter assembly

- The special high capacity torque converter ensures the maximum utilization of engine power.
- The enhanced design and the application of imported products for critical carrying parts effectively improve the overload capacity of transmission.
- The drive shaft flanges are of DIN and SAE specifications and the distribution diameter of the fastening bolts is enlarged to realize super-strong torsion resistance and adapt to high strength and heavy-load continuous operations.

Optional ZF electronic control countershaft transmission

Electronic control countershaft transmission	Gear 1 (Forward/reverse)	6.5/6.5	km/h
	Gear 2 (Forward/reverse)	11/11	km/h
Traveling speed	Gear 3 (Forward/reverse)	24/24	km/h
	Gear 4 (Forward/reverse)	38/-	km/h



### Enhanced heavy-duty drive axle of outstanding performances

- The solid and firm load carrying portions, integral ring gears, and large modulus gears boast excellent overload resistance to meet the needs of diversified high strength and high load operations.





## SPACIOUS CABIN

The design of cab and access passages is ergonomically optimized to create the best driving and riding experience for the operator from the first touch of the machine.

- All-new digitalized VDO combination instrument features beauty and elegance.
- The steering wheel, seat and the pilot joystick are freely adjustable depending on the operator's habits.
- The pilot control features accurate and handy operations, with the control box in follow-up motion with the seat.
- The easily and naturally observable instruments, the panoramic glasses, and the super-large spherical rearview mirrors ensure a broad vision and easy and safe operations.
- The integrally full-enclosed skeleton structure cab is slightly pressurized and is fitted with high-power air conditioning system to realize noise reduction and heat insulation and build a comfortable, healthy, and safe driving environment.



The full-coverage exquisite interior trim parts and the damping and noise reduction measures for the cab and engine hood reduce the noise by more than 6dB.

The super-large spherical rearview mirrors enlarge the visual field by 30%.

The complete accessories, including cup holder and charging port, are provided.

## Human-oriented design Guarantee safety and reduce fatigue

- Convenient get-on/get-off and high operation safety: The arrangement of ladders and handrails conforms to EU standard (CE standard) and the anti-skid perforation measure is taken for the operation platform.
- Stable braking: The air-assisted hydraulic four-wheel caliper brakes feature stable braking and high safety and reliability.
- Double-limit: The double-limit (hydraulically flexible and mechanically rigid modes) is applied for steering limit (primary flexible mode and secondary rigid mode) to ensure impact-free and destruction-free and high operation comfort.
- Automatic high-position leveling: The bucket incorporates the automatic high-position dumping and leveling function and the transport position stop block function to improve the working efficiency and reduce the splashing of material during operations.
- Flow amplifying steering: The full-hydraulic flow amplifying steering system ensures handy and flexible steering.





## Long-tested super-strong heavy-duty structural parts

### Frame structure of super-strong carrying capacity

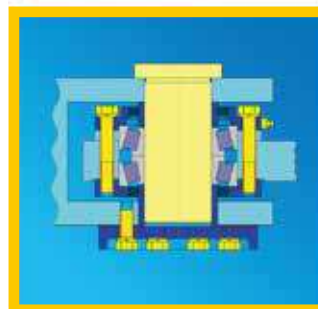
- The heavy-duty design, and robot welding ensure secure welds, high torsion resistance efficiency, and strong overload capacity.
- The finite element analysis technology is adopted to reduce the stress concentration and eliminate the partial weaknesses so that the frame is resistant against impact and overload and handles with ease all kinds of overload conditions.



### Secure and reliable frame hinge joints

- The centering design of main hinge joints reduces the turning radius and lowers the tire wear and energy consumption.
- The large spacing between upper and lower hinged plates realizes high structural strength and sufficient maintenance space.

The pioneering double-row tapered roller bearings are adopted for the main hinge joints, featuring high carrying capacity and long service life.



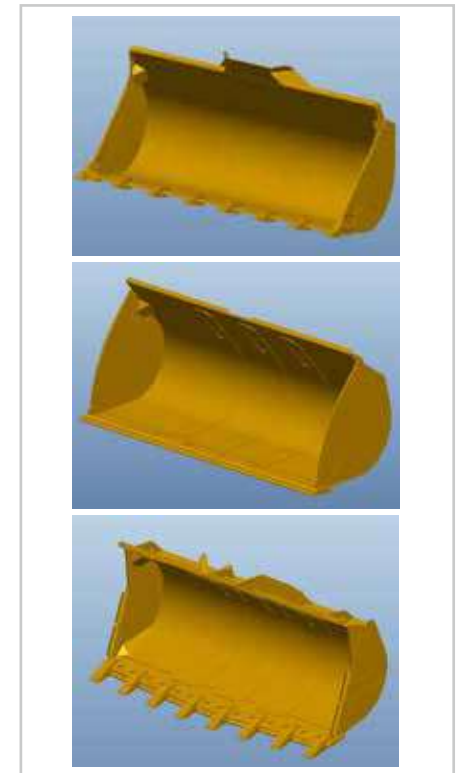
All-new enhanced heavy-duty design further upgrades the reliability and prolongs the average life by 20%.

### Diversified bucket design

- Standard bucket suitable for diversified working conditions.
- Rock bucket: It's dedicated for handling of hard materials (such as rock), featuring good resistance against wear and impact.
- Coal bucket: It's dedicated for handling of bulk materials (such as coal), featuring high bucket capacity and high efficiency.

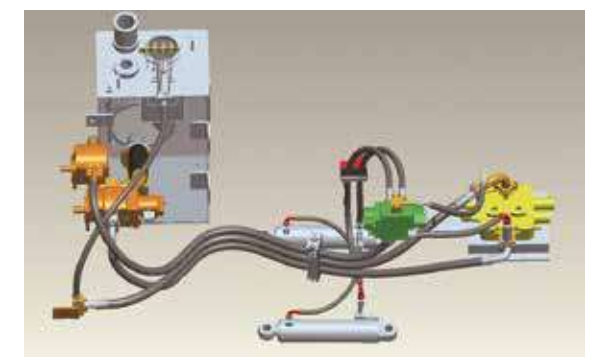
### High strength wear-resistant bucket design

- **Application of high strength wear-resistant material**  
The bucket is thoroughly made of high strength steel plates to improve the wear resistance and impact resistance by more than 30% and prolong the service life.
- **Specially enhanced critical portions**  
The reinforcement ribbed plate structure design is applied for critical load-carrying portions to prevent the distortion and deformation of the bucket.
- **Optimized boom hinges**  
The dumping impact is reduced by 30% to remarkably improve the reliability of bucket and boom.



### International quality hydraulic and electric units

- The first-class distributor valve and flow amplifying valve (steering priority and double-pump confluence) guarantee low pressure loss, less system heat, and high reliability of parts.
- The international brand hydraulic pump supplies stronger hydraulic power.
- The international quality hydraulic hoses applied feature high heat and pressure resistance and long life.
- The hydraulic pipelines adopt double sealing means (DIN standard 24° taper thread + O-ring) to achieve better sealing performance and effectively solve the leakage problem.
- The harnesses are made of imported quality material and the process layout is optimized to ensure reliable electric circuit system.





## Higher convenience

The easy and convenient daily maintenances ensure that the machine is under the best ready status at all times.



### Intelligent checking

- Low engine oil pressure warning.
- Low brake pressure warning.
- Oil temperature display and high temperature warning.

### Ground maintenances

- The optimized arrangement of lubricating points makes the grease filling easier.
- The design of access passage eases the access and climbing.

The locations and sizes of the access panels are optimized to realize higher maintenance convenience.

### Optimized structure

- The openable rotary rear hood eases the cleaning of radiator.
- The large upturning side gate eases the maintenances of engine and related accessories.
- The brake caliper adopts the open-type split structure so that the brake pads can be replaced without disassembling tires.



## Timely and Effective Services Guarantee High Efficiency Sustained Running of Product

The implementation of "full-life cycle services" ensures the trouble-free throughout full life cycle.

The worldwide marketing service network features extensive coverage.

## Various attached tools meeting requirements of different working conditions

Clamp: For grab and transport of various woods and tubing.

Side dumping bucket: For construction in various narrow areas (such as tunnel).

Snow plough: For snow removing in roads and urban streets.



## Specification of optional attachments

Item	Side-dump bucket	Clipping plier I (paired teeth)	Clipping teeth II (staggered teeth)	Toad's mouth clamp	Port plier	Grasping grass machine	Snowplow	Pallet fork	Unit
Bucket capacity	2.5	-	-	-	-	-	-	-	m <sup>3</sup>
Rated load	4500	5000	5000	5000	5000	4500	-	5000	kg
Dump clearance at maximum lift(front dump)	3100	3160	3230	3230	3000	3200	-	3210	mm
Reach at maximum lift(front dump)	1220	1820	1845	1845	1900	2050	-	1760	mm
Dump clearance/reach at maximum lift(side dump)	4080/117	-	-	-	-	-	-	-	mm
overall hight at maximum lift	-	-	-	-	-	-	-	3860	mm
Max. dumping angle(work tool)	45	30	30	30	35	20	-	26	°
Max.opening	-	2270	1780	1900	2330	2900	-	-	mm
Max. clamping diameter	-	1000	430	450	850	1470	-	-	mm
Max.working width(snowplow)	-	-	-	-	-	-	3800	-	mm
Slewing angle (horizontal)	-	-	-	-	-	-	35	-	°
Swing angle (snowplow)	-	-	-	-	-	-	±6	-	°
Rack back angle at ground	-	-	-	-	-	-	-	23	°
Length(work tool)	-	2050	1855	1855	2180	2330	1940	1945	mm
Width(work tool)	2948	2198	2356	2356	1900	2580	3800	2500	mm
Height(work tool)	-	1630	1470	1810	1790	1930	1005	1290	mm
Tine length(pallet fork)	-	-	-	-	-	-	-	1200	mm

