For more information on XCMG products, dealer services, and industry solutions, visit us on the web at **www.xcmg.com** 

Jan 1, 2014 All Rights Reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your XCMG dealer for available options.

apply to all similar docs: XCMG, WWW.XCMG.COM, their respective logos, "XCMG For Your Success", as well as the corporate and product identity used herein, are trademarks of XCMG and may not be used without permission.

### XCMG XUZHOU CONSTRUCTION MACHINERY GROUP IMP. & EXP. CO., LTD



XCMG Headquarters, Xuzhou Economic Development Zone, Jiangsu, China 221004



XCMG Regional Departments: West Asia & North Africa Asia-Pacific Central Asia North America South America Africa Europe

(+86-516) 87739251 87739202 87739223 (+86-516) 87739500 87739529 87739233 (+86-516) 87739218 87739239 87739510 (+86-516) 87739285 87739551 87739713 (+86-516) 87739196 87739714 87739187 (+86-516) 87739501 87739222 87739709 (+86-516) 87739238 87739271 87739228





Engine model V	VD10G220E2
Rated power (kW)	16
Operation mass (kg)	1720
Rated bucket capacity (m <sup>3</sup> )	3.
Total cycling time (s)	≤1



# **Sturdy** • Heavy **All-round Flagship**

### **Model Characteristics**

- Special heavy-load energy-saving drive system of XCMG.
- Characteristic extra-strong heavy-load structural part of XCMG.
- Extra-long wheelbase and super-huge self-weight with stability leading the industry.
- Dual (rigid and flexible)steering limit system, an industrial exclusive creation of originality.
- Alignment design of main hinge joint decreases turn radius and reduces tire wear and energy loss.
- Upgraded quality of hydraulic and electrical elements, featuring reliability and stability.
- Multiple configurations and complete work tools, completely adaptable to construction requirements of different areas and working conditions.
- Exquisite interiors, extra-large space, sound insulation and noise reduction build conformable operation environment.

- - - - - - -

### **Technical Status**

- Optimized version of Chinese 3rd generation loader leader ZL50G.
- Integrate tens of patented technologies.

# **Heavy-load Benchmark**

### **Performance Advantages**

- Easy for handling harsh working conditions with traction force  $\geq$  16.5t and dumping height  $\geq$  3.7m;
- Easy for hoisting various materials with capacity  $\geq$  7t and breakout force  $\geq$  17t; Your first choice in the case of overload working condition.



# **EXCELLENT POWER and drive system**

#### **Powerful**

- Meets China II emission standard, high performance and low fuel consumption.
- Strong power and high torque reserve coefficient, able to meet instantaneous overload requirement and provide power required for operation with heavy and large loads.
- Third-level dust filtering element, featuring simple maintenance and low cost.



#### Heavy-load Energy-saving Gearbox And Torque Converter Assembly, Patented Technologies Of XCMG

- Dedicated large-capacity torque converter guarantees maximum utilization of engine power.
- Reinforced design, i.e. key load-bearing parts employing imported elements, which substantially improve overload capacity of gearbox.
- Flange of drive shaft complies with SAE/DIN international standard with increased diameter of fixing bolt circle, featuring extra-strong resistance to torque for continuous operation with high strength and heavy loads.
- Electric-control dead-axle gearbox with international standard is optional.

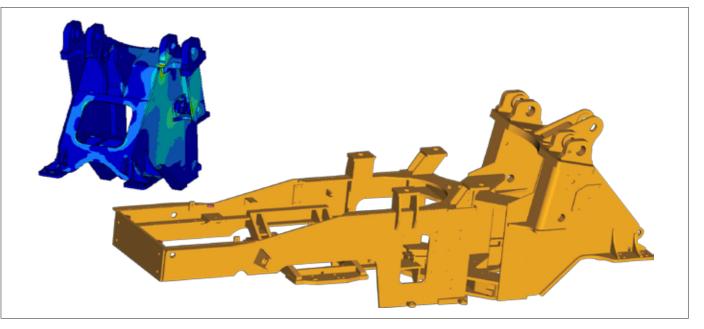


#### **Excellent Reinforced Drive Axle**

• All load-bearing parts are thick and solid with good capacity against overload, satisfying requirements for various operations with high strength and large loads.



# **Extra-strong heavy-load structural part** WITH STANDING TRAILS AND ERRORS

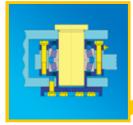


#### Frame Structure With Extra-strong Load-bearing Capacity • Heavy-load design, robot welding, thick plate, secure welding joint, high anti-torque coefficient and high overload

- capacity.
- Technology of finite element analysis is employed to decrease stress concentration and eliminate local weaknesses
- Frame is resistant to impact and overload and capable in various overload working conditions.

#### Firm And Reliable Hinge Joint Of Frame

- Alignment design of main hinge joint decrease s turn radius and reduces tire wear and energy loss.
- Large spacing between upper and lower hinged plates, high structural strength and sufficient repair space.
- The first manufacturer to apply double-row tapered roller bearing to main hinge joint, featuring strong bearing capacity and long service life.





### **Design of wear-resistant bucket** with HIGH STRENGTH



 Steel plate with high strength is applied to bucket with resistance to wear and impact increased by over 30%, featuring longer service life.

#### Special Reinforcement Of Key Parts

• Structural design of reinforcing rib plate is employed for key stressed parts to prevent distortion of bucket.

#### **Utilization Of High Baffle Structure**

• Reduces material scattering and guarantees maximum material loading capacity.

#### **Optimized Lubricating Oil Duct**

• Due to fact that drilling is not applied in hinge pin connecting movable arm and bucket, strength and service life of hinge pin is more than doubled.

#### **Diversified bucket design**

- Standard bucket is universally applicable to various working conditions.
- Rock bucket is dedicated to solid materials, such as rock. resistant to wear and impact.
- Coal bucket is dedicated to loose materials, such as coal, featuring large volume and high efficiency.

### Hydraulic and electric element of international quality

Standard Bucket

Rock Bucket

Coal Bucket

• First-rate hydraulic element, featuring low pressure loss, little system radiation and high part reliability.



- Hydraulic pump of international brand provides stronger hydraulic power. Italian  $\alpha$  hydraulic hose featuring resistance to heat and pressure, and long service life.
- Two layers of sealing, i.e. 24° cone plus O-ring up to DIN international standard are employed for hydraulic pipeline, which features better tightness and effectively resolves the issue of leakage.
- Imported materials are used for harness with optimized process layout for guaranteeing circuit system reliability.

## **Timely and effective service ensures product** can operate continuously with high efficiency.



# **Easy and convenient maintenance**

- Owing to the new frame structure of engine hood, top open side door and large opening angle, maintenance of engine and radiator becomes much easier.
- Measuring points for system pressure are concentrated, saving both time and labor for maintenance.
- Ball valve equipped on air cylinder facilitates inflation of tire in the wild and routine cleaning of air filtering element.
- With concentrated fuse box, operation status of electrical system is uniformly displayed easy for maintenance. Powder metallurgy dirt-proof respirator, firm and reliable, easy for maintenance.
- Oil return circuit of hydraulic oil tank is designed with independent cavity, guaranteeing convenient maintenance.



Implementation of "service throughout full life cycle" brings about trouble-free lifetime experience!

Marketing service network spread around the world covers extensive areas.



# **CAPACIOUS AND COMFORTABLE** driving space

- Extra-large luxurious cab featuring large space and good view.
- Mold-pressing rubber floor, sealed dust prevention.
- MP3 player and FM & AM radio in standard configuration and luxurious audio system.
- Steering gear with adjustable angle.
- Diversified large-volume storage space.



Brand-new digital VDO combination instrument is artistically decent, operating elements and buttons at the fingertips can easily realize various operations.



Luxurious shock-absorption seat and steering gear adjustable at will cater to operation habits and operation requirements of operators with different figures.



Fully-covered exquisite interiors, processed cab and hood by damping noise reduction, reduce the noise by over 6dB and build best operation environment.

### **HUMAN-ORIENTED OPERATION** design guarantees safety and reduces fatigue

- standard) are furnished and operation console employs punching anti-slip measures.
- Stable braking: four-wheel braking with air-over-oil caliper disc brake, featuring stable, safe and reliable braking.
- Dual limit: steering limit employs dual limits of first hydraulic flexible limit and following mechanical rigid limit, free from impacts and damages for conformable operation.
- Automatic leveling at high position: bucket is able to level automatically and keeps material near the damper for dumping at high position, increasing operation efficiency and reducing scattering of material during operations.
- Flow amplification steering: full-hydraulic flow amplification steering system, featuring light and flexible steering.





Full-view rear window, RR wiper and equipment of reverse alarm provide good vision and safe reversing.



• Easy get-on and get-off and safe operation: ladder and handrail up to Standard enforced in European Union (CE





# Various operation devices are suitable for requirements of different operations

Clamp: used for pick-up and transfer of various woods and pipe fittings.

Side dumping: used for construction in narrow areas such as tunnel and etc.

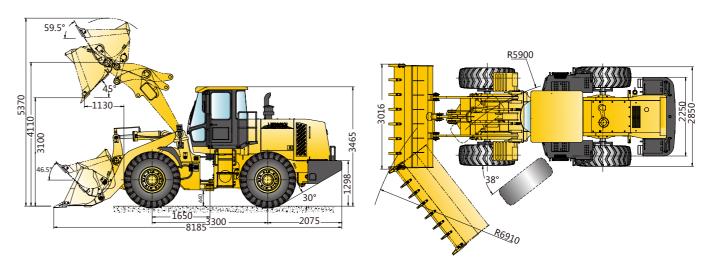
Snow plow: used for removal of snow on highways and urban streets.



### **Parameters Of Transforming Work tools**

Item	Side-dump Bucket	Clipping Plier I (Paired Teeth)	Clipping Teeth Ii (Staggered Teeth)	Toad's Mouth Clamp	Port Plier I	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
Dumping height (main blade plate)(frontal dumping)	3100	3230	3230	3230	3155	3250	-	-	mm
Dumping distance (main blade plate)(frontal dumping)	1220	1845	1845	1845	1830	2050	-	-	mm
Dumping height/Dumping distance (side dumping)	4080/117	-	-	-	-	-	-	-	mm
Horizontal lifting height	-	-	-	-	-	-	-	3737	mm
Maximum dumping angel	45	30	30	30	30	20	-	-	٥
Maximum opening size	-	1955	1780	1900	2390	2900	-	-	mm
Minimum clamping diameter	-	800	430	450	900	1472	-	-	mm
Max. working width(snowplow)	-	-	-	-	-	-	3800	-	mm
Slewing angle (horizontal)	-	-	-	-	-	-	±35	-	٥
Swing angle (snowplow)	-	-	-		-	-	±6	-	o
Fork retracting angle	-	-	-	-	-	-	-	20	0
Length of work tool	-	-	-	-	-	-	-	2053	mm
Width of work tool	-	2356	2356	2390	2100	2580	-	2516	mm
Height of work tool	-	-	-	-	-	-	-	1200	mm
Length of fort tooth	-	-	-	-	-	-	-	1200	mm
Overall demension: Length	8420	8530	8530	8530	8560	8785	8550	8575	mm
Overall demension: Width	2948	2850	2850	2850	2850	2850	3800	2850	mm
Overall demension: Height	3515	3515	3515	3515	3515	3515	3515	3515	mm

### **Overall Demension**



Item	Standa	ard Movab	le Arm	Small High	n Lift Unloa	ading Arm	High lift unlo	bading arm	Unit
	Standard bucket	Rocket bucket	Enlarge bucket	Standard bucket	Rocket bucket	Enlarge bucket	Standard bucket	Enlarge bucket	
	3.0m³	2.5m <sup>3</sup>	3.5m³	3.0m³	2.5m³	3.5m³	3.0m³	3.5m³	
Bucket capacity: Stack loading	3.0	2.5	3.5	3.0	2.5	3.5	3.0	3.5	m³
Bucket capacity: Flat loading	2.5	2.1	3.0	2.5	2.1	3.0	2.5	3.0	m³
Width of bucket	3016	3016	3000	3016	3016	3000	3016	3000	mm
Dumping height	3100	3100	2980	3500	3510	3390	3720	3610	mm
Dumping distance	1130	1120	1230	1210	1200	1310	1220	1320	mm
Working height (height-rising)	5370	5300	5480	5740	5670	5850	5990	6100	mm
Total length	8225	8280	8255	8575	8630	8605	8840	8870	mm
Turning radius (outside of bucket)	6910	6935	6930	7055	7080	7075	7175	7195	mm
Turning radius (outside of bucket)	6910	6935	6930	7055	7080	7075	7175	7195	

### **Main Specifications**

Item Specifications		Unit			
Rated load		5000	kg		
Rated bucket capacity		3.0	m³		
Operation mass		17200	kg		
Maximum breakout force		170	kN		
Maximum traction force		165	kN		
Lifting time of swing arm		≤6.5	S		
Total cycling tim	le	≤11	S		
Minimum turning	g radius (tire center)	5925	mm		
Articulated angl	e	38	0		
Gradeability		30	٥		
Tire type		23.5-25			
Overall demension (L x W x H)		8225×3016×3515	mm		
Engine model		WD10G220E23			
Rated power/ro	tate speed	162/2000	kW/r/min		
<b>T</b>	I -gear(F/R)	0~11.5/0~16.5			
Travel speed	Ш-gear(F)	0~38	km/h		

With the advancement of technology, product structure, specifications are subject to change without notice. In the event of discrepancy between the information and the actual product, the specification of the actual product shall be used as reference.