

XC978



WHEEL LOADER

SOLID TO SUCCEED



wheel loader XCMG XC978



Description & Features

- ▼ With higher adaptability to high-intensity, continuous and heavy-duty operations, XC978 wheel loader features outstanding performance in terms of reliability, comfort, maintainability and work efficiency, and can be optionally configured with 4.2~7.0m³ buckets for different applications.
- ▼ The machine is configured with WEICHAO high-power engine to ensure excellent power performance, and XCMG patented MYF310A automatic transmission for easy operation and reliable performance, while being equipped with heavy-duty wet drive axles specially designed for large load capacity applications and double-circuit braking system for safe and reliable operation.
- ▼ This model is not only powerful, robust and reliable, but also highly efficient and energy-saving, and easy to maintain, providing more energy-saving and efficient solutions for construction sites, mines, ports, highways and other construction fields.
- ▼ WD12G310E221 four-valve engine, designed with large displacement, air intake volume and power output; combined with P8500 dedicated high-pressure oil pump to ensure improved fuel injection atomization, and dedicated high-efficiency supercharger with higher air intake efficiency to ensure less energy consumption, improved power performance, and higher reliability and safety.

Description & Features



- ▼ Configured with dual-transmission system based on XCMG advanced electronically-controlled MYF310A transmission, designed with four gears (4 forward and 4 reverse) and automatic gear switch (KD function); featuring electronically-controlled gear shifting, power cut-off and neutral start protection functions, ensuring outstanding performance and easier operation to effectively reduce the driver's work intensity, and improve the adaptability to various operating conditions as well as the work efficiency of the machine.
- ▼ XCMG wet drive axle combined with maintenance-free multi-piece wet brake shoes to prolong the service life of axles; robust drive shaft specially developed for construction machinery, featuring excellent impact resistance and reliable power transmission.
- ▼ Configured with working and steering hydraulic systems based on the dual-pump confluence technology in order to save engine power; wherein, the steering system is incorporated with flow amplification technology and hydraulic limit device, and the working hydraulic system is designed with pilot control to enable easy operation and reduces the driver's work intensity. The hydraulic system has high-pressure automatic unloading function, which increases the efficiency of the entire machine, reduces the heat generation of the hydraulic system, and reduces the energy loss of high-pressure overflow in the hydraulic system. The joint operation traction force is further improved, with better energy-saving performance and higher operating efficiency.
- ▼ 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.



Advanced:

- XCMG customized WD12 China II engine meets various operational requirements and maximizes efficiency. The combustion ratio, atomization and ignition timing are optimized, resulting in high combustion efficiency.
- Optimal combustion ratio, atomization, and ignition timing result in high combustion efficiency;
- Three-stage air filter Effectively reduces early engine wear and failure rate;
- Multi-stage fuel filter Fuel-water separator with good fuel adaptability ensures engine system cleanliness;



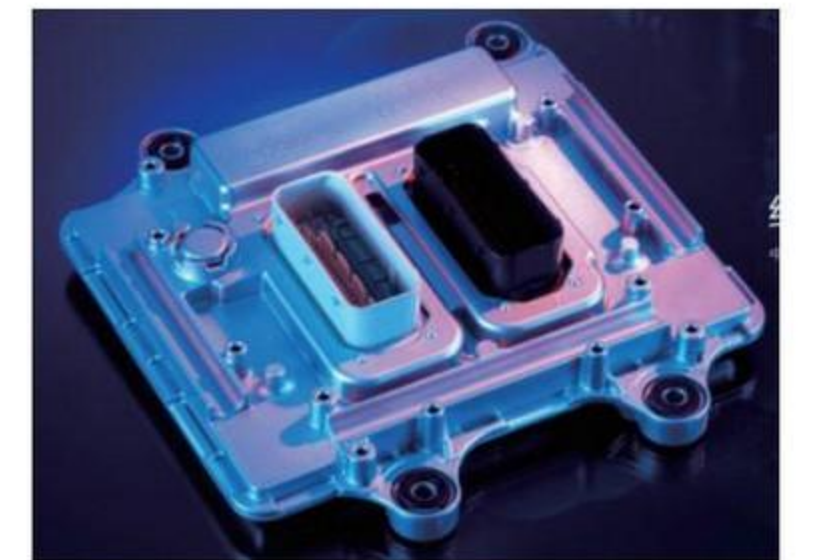
Reliable:

- XCMG WA series wet axles ensure leading reliability, adaptability to working conditions and production efficiency domestically.
- Equipped with forced cooling system, forced cooling by wet brake friction plate, effectively extend the service life of the axle;
- Central limited slip differential (LSD) technology enhances the traction of the entire machine;
- Independently developed wheel-side wet brake, providing safety and reliability;
- Optimized shell design and finite element optimization analysis, with high material strength and excellent ductility;
- Split planetary output mechanism, and slip planetary frame and connection hub structure, improving the wheel-side maintainability;
- Designed for heavy-duty use. The front frame adopts XCMG unique large ear seat structure, made of thick steel plates with high strength and rigidity, capable of withstanding torque and impact loads under various operating conditions; the rear frame adopts a heavy-duty frame structure design with high reliability. The fatigue destructive test is conducted for millions of cycles, in order to ensure normal operation in all server conditions;



Energy-saving:

- Adopting a quantitative hydraulic system, energy-saving and efficient. The variable-displacement pump adopts power control to limit the maximum power of the hydraulic system, reduce the power proportion of the hydraulic system in the machine, ensure sufficient power input for the traveling system of the machine, and improve the tractive force and combined operation capability of the loader, optimize the power distribution of the machine, and avoid engine flameout and other faults under overload conditions.
- Using a flow amplification steering system for easy and flexible operation; combination of hydraulically-controlled steering limit and dual mechanically-controlled limit, where the former can override the latter, ensuring minimal steering impact and improved operating comfort and machine reliability;



High efficiency:

- Highly-efficient linkage system, fast action, large breakout force and lifting capability;
- Optimized bucket shape, with low insertion resistance and high fillability.



Comfortable:



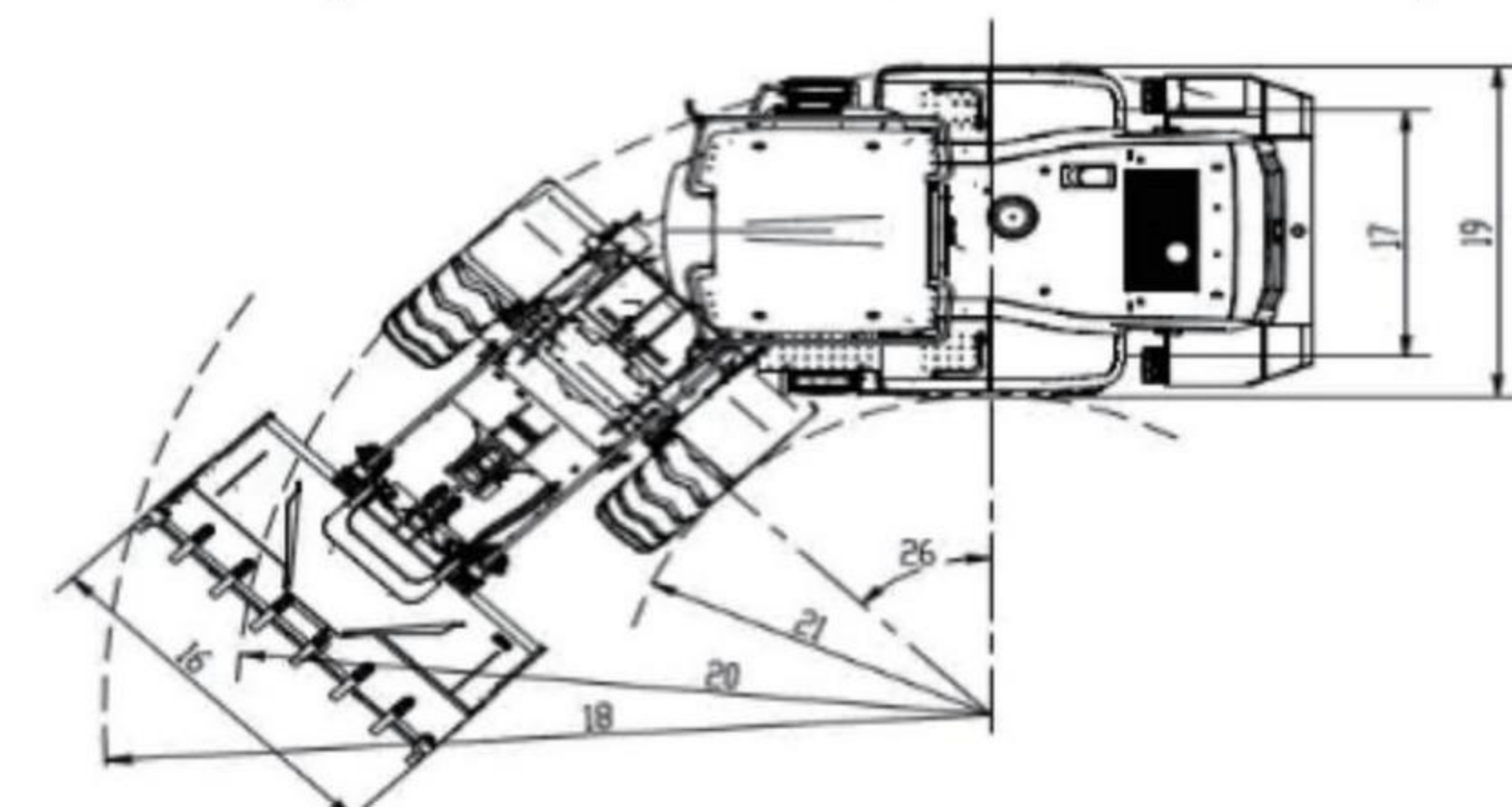
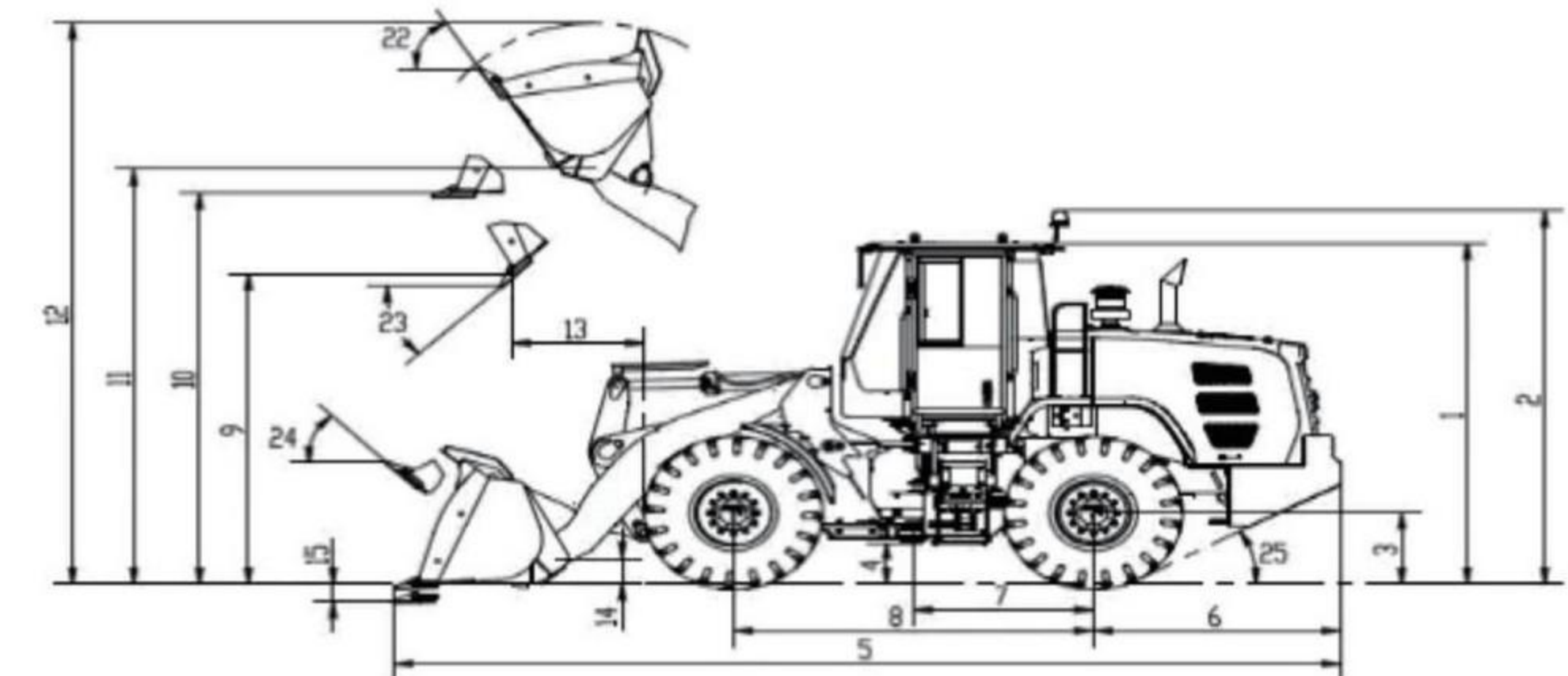
- The fully-enclosed frame structure cab provides a noise-reducing, dustproof, and heat-insulating environment to protect the driver's health;
- Equipped with a micro-pressurized air conditioning system, providing a comfortable working environment for the operator;
- Reversing camera: configured with reversing camera system as standard for safer reversing.



Tool name	Parameter (mm)	Tool structure	Function and operation conditions
Paring clamp	Opening:2667 Holding circle:1000 Width: 2681		Function: Loading, unloading and transportation of wood, boards and other materials. Main applications: Ports, docks, timber processing, forest farms, etc.
Clamp (staggered)	Opening:2538 Holding circle:1000 Width: 2681		Function: Loading, unloading and transportation of wood, boards and other materials. Main applications: Ports, docks, timber processing, forest farms, etc.
Grass clamp	Opening:2875 Holding circle:900 Width:3009		Function: Loading, unloading and transportation of wood, boards, wooden sticks, branches and other materials. Main applications: Docks, timber processing, forest farms, paper mills, biomass power plants, etc.

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Dimensions



Convenient:



- "One-stop" maintenance and repair, reducing maintenance time, labor intensity and shift handover time, and maximizing equipment utilization;
- The engine hood is designed a large flip-up side door with a large opening angle, making daily maintenance convenient;
- Engine oil filters, diesel filters, dual-transmission oil filters and air filters can be maintained and repaired in a "one-stop" manner;



Dimensions

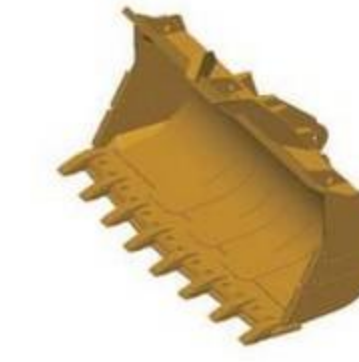
Parameter	978 standard arm						978 small-height dumping					
	4.2 m³	5.0 m³	5.5 m³	6.0 m³	6.5 m³	7.0 m³	4.2 m³	5.0 m³	5.5 m³	6.0 m³	6.5 m³	7.0 m³
1 Overall height mm	3620	3620	3620	3620	3620	3620	3620	3620	3620	3620	3620	3620
2 Warning light extension height mm	3845	3845	3845	3845	3845	3845	3845	3845	3845	3845	3845	3845
3 Tyre static radius mm	820	820	820	820	820	820	820	820	820	820	820	820
4 Min ground clearance mm	488	488	488	488	488	488	488	488	488	488	488	488
5 Overall length mm	9040	9135	9146	9164	9181	9229	9205	9300	9311	9329	9346	9394
6 Rear overhang length mm	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775
7 Distance from articulation center to rear axle mm	2324	2324	2324	2324	2324	2324	2324	2324	2324	2324	2324	2324
8 Wheel base mm	3550	3550	3550	3550	3550	3550	3550	3550	3550	3550	3550	3550
9 Dumping height mm	3221	3143	3143	3097	3079	3032	3515	3437	3437	3391	3373	3326
10 Blade leveling height mm	4095	4095	4095	4095	4095	4095	4388	4388	4388	4388	4388	4388
11 Pivot height mm	4395	4395	4395	4395	4395	4395	4689	4689	4689	4689	4689	4689
12 Maximum lift height mm	5860	5950	5980	6042	6136	6229	6335	6375	6395	6430	6523	6597
13 Dumping range mm	1217	1312	1323	1341	1358	1406	1086	1181	1192	1210	1227	1275
14 Pivot height at transport position mm	500	500	500	500	500	500	500	500	500	500	500	500
15 Digging depth mm	60	60	60	60	60	60	60	60	60	60	60	60
16 Overall width mm	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230
17 Wheelbase mm	2320	2320	2320	2320	2320	2320	2320	2320	2320	2320	2320	2320
18 Turning radius (outside of tool) mm	7228	7228	7228	7228	7228	7228	7228	7228	7228	7228	7228	7228
19 Mainframe width mm	2995	2995	2995	2995	2995	2995	2995	2995	2995	2995	2995	2995
20 Turning radius (outside of tyre) mm	6375	6375	6375	6375	6375	6375	6375	6375	6375	6375	6375	6375
21 Turning radius (inside of tyre) mm	3380	3380	3380	3380	3380	3380	3380	3380	3380	3380	3380	3380
22 Rollback angle during lifting °	56	56	56	56	56	56	56	56	56	56	56	56
23 Dumping angle °	45	45	45	45	45	45	45	45	45	45	45	45
24 Dumping angle at transport position °	48	48	48	48	48	48	48	48	48	48	48	48
25 Departure angle °	27	27	27	27	27	27	27	27	27	27	27	27
26 Vehicle steering angle °	40	40	40	40	40	40	40	40	40	40	40	40

Specifications

Parameter	Parameter
Rated load kg	7800
Rated bucket capacity m³	4.5
Rated power kW	226
Working mass kg	25000
Max tractive force kN	214
Max breakout force kN	220
Wheel base mm	3550
Wheel track mm	2320
Dumping height mm	3220
Dumping range mm	1214
Boom lifting time s	6.2
Total s	10.7
Max gradeability °	27
Steering angle °	40
Speed at Gear 1 (forward/reverse) km/h	7/7
Speed at Gear 2 (forward/reverse) km/h	14/13
Speed at Gear 3 (forward/reverse) km/h	22/21
Speed at Gear 4 (forward/reverse) km/h	40/38
Overall dimensions (L × W × H) mm	9040×3620×3230

System category	Specification	XC978
Engine	Type	Inline six-cylinder, turbocharged
	Displacement	11.596L
	Emission standard	China II
Gearbox	Type	Fully automatic fixed shaft transmission
	Gears	Forward 4 reverse 4
Drive axle	Brand and form	XCMG, main transmission: one-stage reducer with helical bevel gear, wheel-side reducer: planetary reducer
	Tyre	Standard specifications 26.5-25-20PR
Working hydraulic system	Type	Quantitative hydraulic system
	Operation mode	Pilot control
Steering hydraulic system	Type	Flow amplification
	Service brake	Whole hydraulic wet brake
Brake System	Parking brake	Hydraulic caliper disc parking brake
	Air conditioner	Cooling and heating
Fuel/oil filling	Diesel L	400
	Engine oil (L)	22
	Antifreeze (L)	55
	Drive axle oil (L)	Front 60L/rear 55L
	Hydraulic fuel tank (L)	160
	Brake fluid L	2

- The technology of XCMG backhoe loaders 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;
- XCMG reserves the right of final interpretation for the above. Our products may be modified without prior notice to users.



XCMG approved attachments



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

