

SOLID TO SUCCEED



Single-Drum Vibratory Roller

XS163



400-110-9999

Address: No.1, Taoshan Road, Jinshanjiao Economic Development Zone, Xuzhou, Jiangsu.
Zipcode: 221004
Email: road.marketing@xcmg.com
Website: www.xcmgglobal.com

Our Company follows the principles of sustainable development, and reserves the right to improve our products continuously without prior notice.
We will perform continuous improvement of relevant contents without notice.



www.xcmgglobal.com



www.xcmg.com

XS163 single drum vibratory roller is heavy type vibratory roller. It is mainly applicable for compacting operation of base layer, sub-base layer of different materials, and filling engineering. It is an ideal set of compacting equipment for building high grade highway, airport, port, dam and industrial construction site. This machine adopts the high power DCEC engine, XCMG special drive axle for road roller and its hydraulic drive system can better meet the construction requirements of all regions. ◦ Applicable altitude $\leq 3000\text{m}$, Applicable environment temperature $-10^{\circ}\text{C} \sim +45^{\circ}\text{C}$.



Main Performance And Characteristics

1 Engine

- This machine is equipped with water-cooled DCEC engine with high margin of power, low fuel consumption and low noise, which is in accordance with National II Emission Standards.

2 Hydraulic drive system

- Closed type hydraulic drive system composed of variable pump and motor ensures better drive performance and higher gradeability. The four continuously variable transmission guarantees most appropriate speed under diversified working conditions. Gear I is the lowest speed for compaction work with highest gradeability; Gear II has front drum anti-slip function; Gear III has rear drum anti-slip function; Gear IV is highest speed for short distance transport.

3 Transmission system

- XCMG drive axle ensures that the road roller can provide required maximum traction force under different working conditions.

4 Hydraulic vibration system

- Adopting hydraulic vibration system with dual-vibration dual-amplitude, scientific and reasonable static linear load and centrifugal force ensures the effective compaction of different materials and varied layer thickness.

5 Vibratory drum

- The vibratory drum adopts inner-cylinder chamber structure with simple structure, high strength and good rigidity; as well as single-frequency and dual-vibration function, big static linear pressure and exciting force and high working efficiency; special vibratory bearing has long lifetime and high reliability.

6 Control system

- As per the ergonomic principle, the console integrates the parts such as steering wheel, various instruments, and key starter switch to realize both aesthetics and utility and improve operation comfort. The control box is located on the right side of the seat for easy operation. Suspension type operator seat and safety belt is safe and comfortable.

7 Electric system

- Electrical system includes starting circuit, power circuit, stop circuit and fault alarm system; Large screen combination instrument and real-time display of machine parameters provide maintenance information and the working status of the engine at any time, avoiding operation with "faults". Control buttons and switches are accurate, sensitive and reliable.
- Integrated control design integrates the relay and fuse which were assembled separately in the instrument box, and reduces the use of wires, realizing centralized fault detection through scientific coding designed circuit.



Braking system

Braking system is made up with drive axle, wet type brakes at vibratory drum speed reducer, and brake of closed hydraulic system. It owns traveling, parking, and emergency braking functions to ensure driving safety.

Engine hood

Engine hood tilts forward largely and easily for better access to the maintenance parts.



Cabin

The cabin is well sealed installed with air conditioner, radio-tape recorder suspended seat, large inner space, a large area of glasses and a wide visual field to provide safe and comfort operation environment for driver. Based on ergonomic principle, simple and comfortable operation. Suspension seat, multi direction adjustments, suitable for drivers of different body shapes.



Vibration and noise reduction technology

Noise and vibration reduction research and application is conducted with domestic well-known University.

Structure optimization of shock absorber and use of acoustic insulating material help to improve the driving comfort.

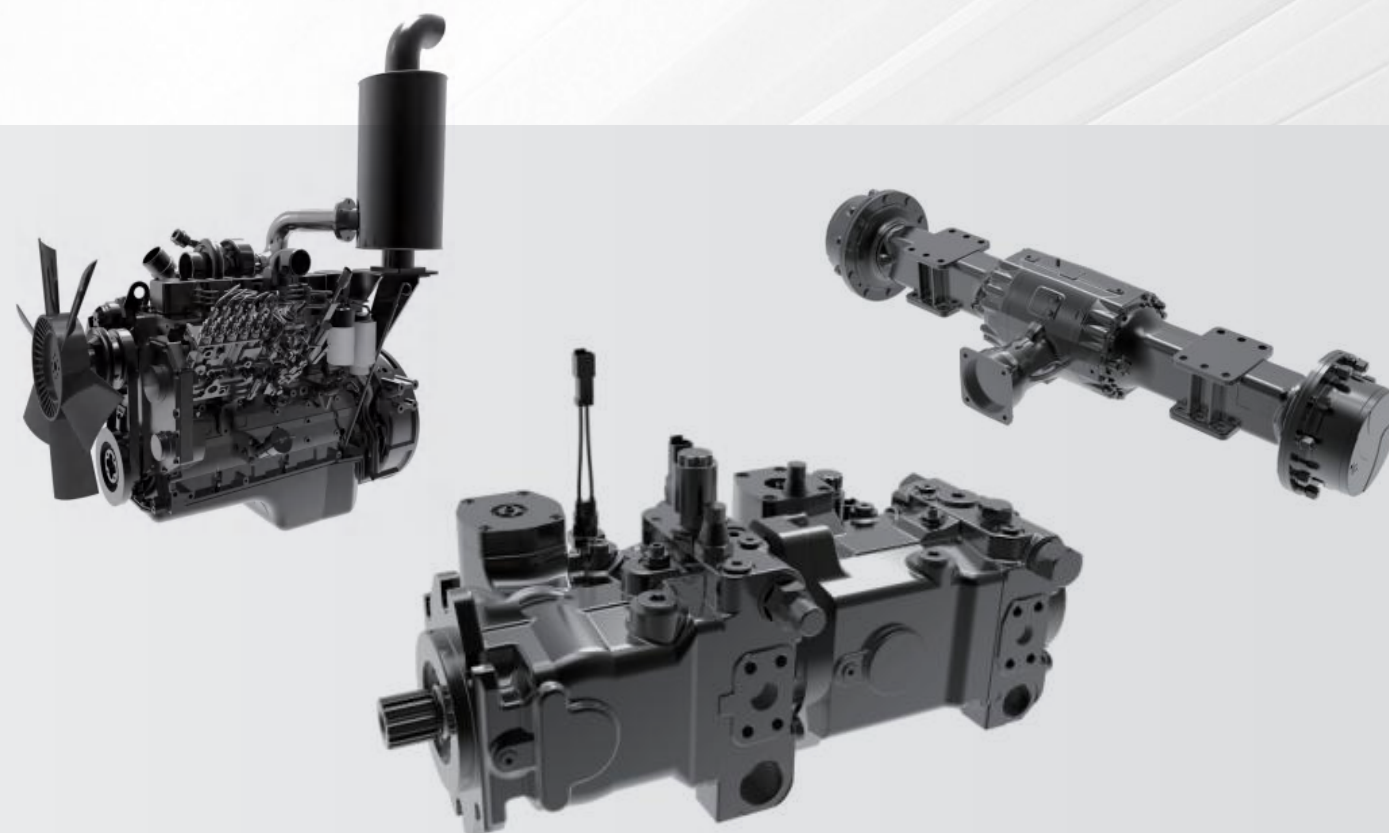
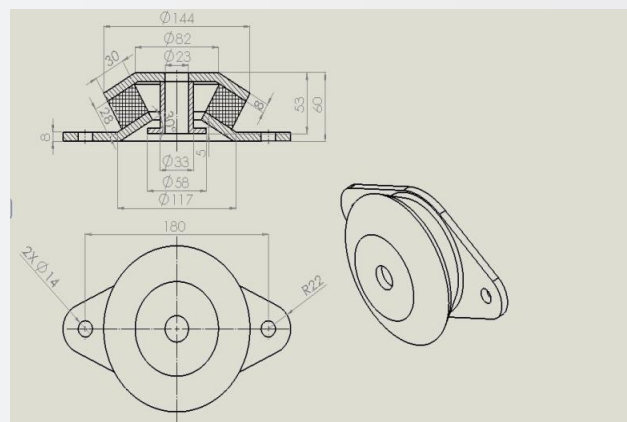
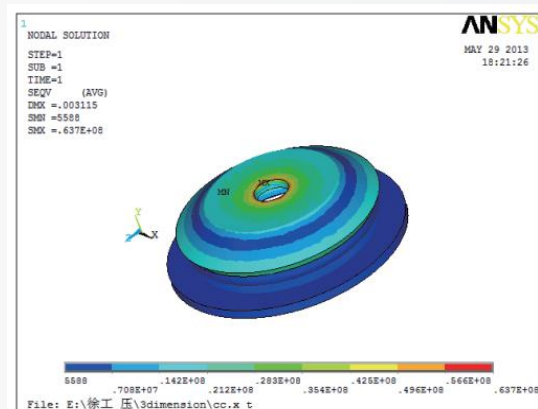
Analyze the components with ANSYS and other software, optimize the shock absorption device design, greatly reduce the noise, make XCMG products more competitive worldwide.

All key components are of international first-class brand and market-proven high reliability;

DCEC CUMMINS turbocharged, water-cooled engine, with reliable quality, low fuel consumption and guaranteed spare parts service;

DANFOSS closed loop hydraulic drive system, high transmission efficiency, stable and reliable performance;

XCMG self-developed special drive axle for road roller, reliable and durable products with long service life;



Four-gear anti-slip, strong driving ability

Closed loop hydraulic drive system composed of piston pump and piston motor ensures better drive performance and higher climbability.

XCMG's heavy-duty wet drive axle ensures that the roller can exert the maximum traction force required under various working conditions;

The four-speed continuously variable transmission guarantees the working at most appropriate speed under diversified working conditions. Gear I is the lowest speed for compaction work with highest gradeability. Gear II has front drum anti-slip function. Gear III has rear drum anti-slip function. Gear IV is highest speed for short distance transport.



Good operation quality and efficiency

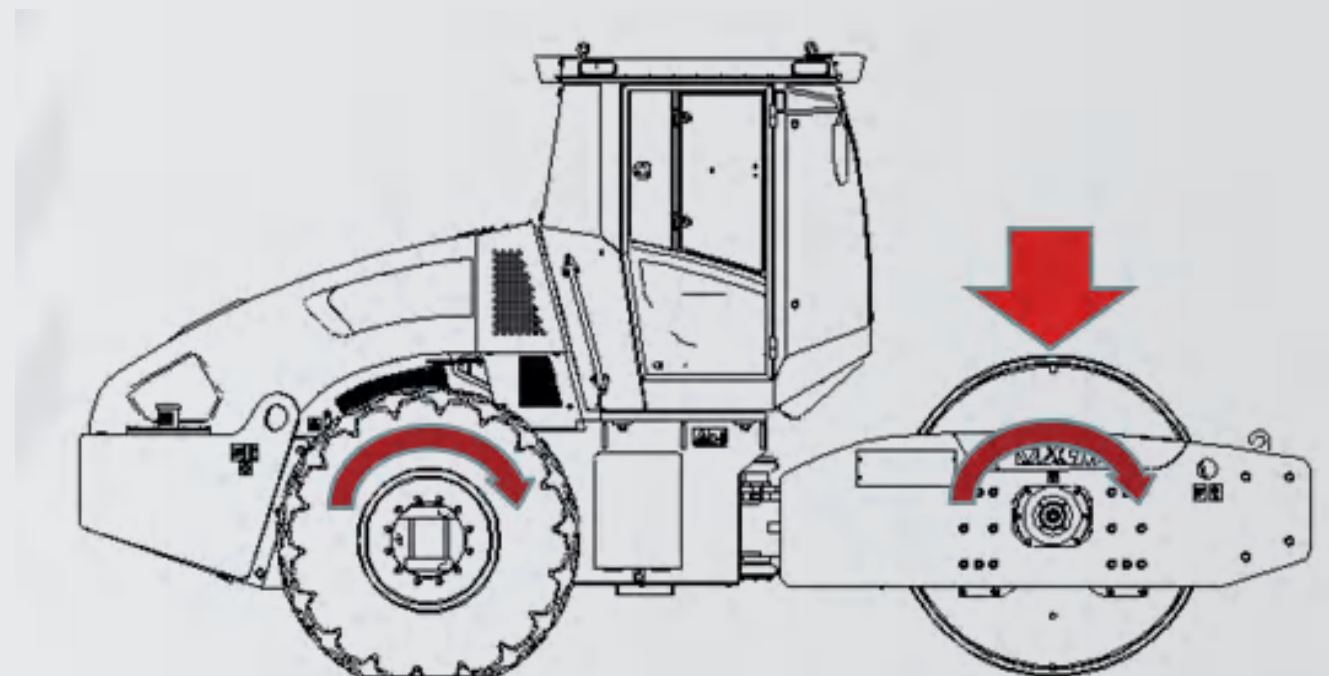
“Three centers in one” , uniform compaction

XCMG pioneered “Three centers in one” homogeneous compaction technology, to ensure the coincidence of three centers (center of vibration quality, center of exciting force and center of geometry), obtaining the uniform static and dynamic compaction.

Big front axle weight, high compaction ability

Active drive drum has bigger distributed mass, does not keep soil and not easily jump vibration.

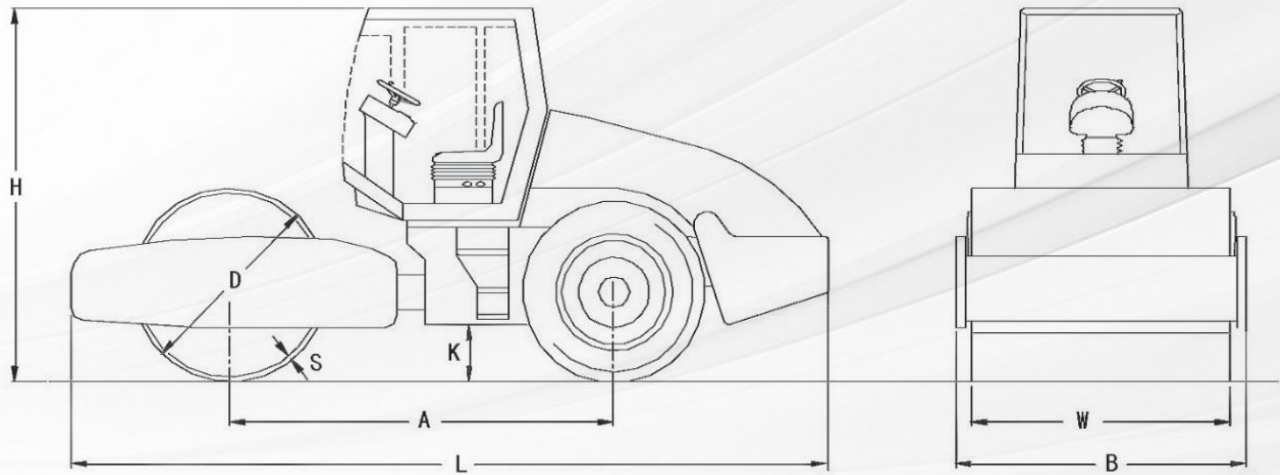
The strong compaction ability allows the machine suitable for various conditions.



Main Technical Parameters

Items	Description	Unit	XS163 (Smooth drum)
Weights	Operating weight	kg	16000
	Front axle weight	kg	9750
	Rear axle weight	kg	6250
	Static linear load	N/cm	449
Maneuverability	Working speed	Km/h	0~4.2; 0~11.5;
	Theoretical gradeability	%	50%
	Min. turning radius(intern/extern)	mm	4115/6415
	Min. ground clearance	mm	459
	Wheel base	mm	3100
	Steering angle	°	±33
	Oscillation angle	°	±10
	Braking distance	m	3.9
Compaction Parameters	Vibration frequency	Hz	30
	Nominal amplitude	mm	1.86/0.88
	Exciting force (High vibration/Low vibration)	kN	320/160
	Drum diameter	mm	1523
	Compaction width	mm	2130
Hydraulic System	Charge pressure of drive system	MPa	2.4
	Max. pressure of drive system	MPa	40
	Max. pressure of vibration system	MPa	21
	Max. pressure of steering system	MPa	14
Engine	Model	-	6BTAA5.9-C170
	Type	-	Water-cooled
	Rated power	kW	125
	Rated speed	r/min	2200
Tire	Spec.	-	23.1-26-12G23TL
	Ply rating	-	12
	Air pressure	kPa	150-170
Others	Drive system	-	Hydrostatic closed-loop
	Vibration system	-	Hydrostatic open-loop
	Service brake	-	Hydraulic
	Parking brake	-	Mechanic/hydraulic
	Emergency brake	-	Mechanic/hydraulic
	Steering system	-	Articulated
	Steering control	-	Hydraulic

Appearance And Dimensions



Dimensions (mm)	A	B	D	H	K	L	S	W
XS163	3100	2300	1523	3200	425	6200	36	2130

Optimum services , XCMG Guaranteed



Cummins engine



Genuine parts



Extension of warranty



Financial solutions



Maintenance contract



Telematics



Monitoring systems

Professional Integrated Complete Solutions

XCMG group 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 users.

Full range of services ready for you

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

XCMG Global Spareparts System

XP305S Pneumatic Tire Roller

XP305S Pneumatic-Tyred Roller

XP305SPNEUMATIC-TYRED ROLLER

XP305SPNEUMATIC-TYRED ROLLER

BACK DRUM

FRONT DRUM

GAS-ROUTE SYSTEM

TRANSMISSION SYSTEM

BODY ASSEMBLY

HYDRAULIC SYSTEM

OPERATING SYSTEM

ENGINE SYSTEM

SPRINKLER SYSTEM

DRIVER'S CAB ASSY

CAB ASSEMBLY

CONTROL BOX

CONTROL BOX ELECTRIC

ELECTRIC SYSTEM

SCRAPER SYSTEM

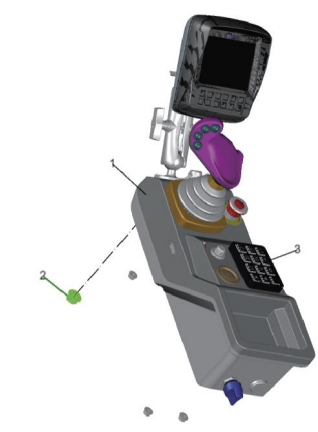
SHIELD FOR DIESEL ENGINE

OIL DRAIN SYSTEM

AC SYSTEM

MOUNTING ASSEMBLY

OIL SPILL SYSTEM



225704540 CONTROL BOX

Number	Material Encoding	Name	Quantity	Handle
1	225704532	CONTROL BOX STRUCTURE	1	
2	895238400	NUT M8	4	
3	225704541	CONTROL BOX ELECTRIC	1	

HOME PAGE

PRODUCT DEBUGING

PRODUCT MONITOR

serviceSupport

Statistical

RESOURCE MANAGE

AUTHORITY MANAGE

SYSTEM MANAGE

APP MANAGE

APP USER MANAGE

EQP LINK APPROVAL

EQP TRANSFER APPROVAL

REPAIR ORDER

25438

Number of network equipment

233

Amount of work yesterday

390

Amount of work now

2907.3

Working hours yesterday

0

Access network today

0

Number of equipment fault alarms now

Overall OIL

Operating rate

Less than 30 hours

30-100 hours

More than 100 hours

Monthly Distribution of operating rate

Bar chart showing operating rate distribution

30-day Data

Map of Europe and Africa with location markers

Monthly average working hours of main models

Bar chart showing working hours

Monthly workload of main models

Line chart showing workload

XP305S Pneumatic Tire Roller

XP305S Pneumatic-Tyred Roller

XP305SPNEUMATIC-TYRED ROLLER

XP305SPNEUMATIC-TYRED ROLLER

BACK DRUM

FRONT DRUM

GAS-ROUTE SYSTEM

TRANSMISSION SYSTEM

BODY ASSEMBLY

HYDRAULIC SYSTEM

OPERATING SYSTEM

ENGINE SYSTEM

SPRINKLER SYSTEM

DRIVER'S CAB ASSY

CAB ASSEMBLY

CONTROL BOX

ELECTRIC SYSTEM

SCRAPER SYSTEM

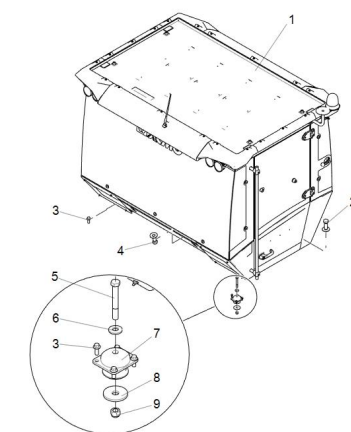
SHIELD FOR DIESEL ENGINE

OIL DRAIN SYSTEM

AC SYSTEM

MOUNTING ASSEMBLY

OIL SPILL SYSTEM



225704748 DRIVER'S CAB ASSY

Number	Material Encoding	Name	Quantity	Handle
1	225704791	CAB ASSEMBLY	1	
2	895096280	BOLT M16*45	9	
3	895094763	BOLT M10*25	16	
4	895048571	BOLT M16*30	2	
5	895046668	BOLT M16*120	4	
6	895301377	WASHER 16	15	
7	228901569	SHOCK CABSORBER	4	
8	229000495	BIG FLAT PLATE	4	
9	895238158	NUT M16	4	