

SOLID TO SUCCEED



SINGLE DRUM VIBRATORY ROLLER

XS205



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.xcmg.com

XS205 vibratory roller is a kind of heavy type self-propelled vibratory roller, mainly applicable for compaction work of base layer, sub-base layer of different materials and filling projects. It is an ideal choice for compacting high grade highway, airports, ports, dams and industrial construction sites.

Applicable altitude $\leq 4000\text{m}$, Applicable environment temperature $-15^{\circ}\text{C} \sim +45^{\circ}\text{C}$.



Main Performance And Characteristics

1 Engine

- It's equipped with Shangchai China-III water-cooled engine, featuring high power reserve, low fuel consumption and low noise.

2 Hydraulic drive system

- The closed-type hydraulic drive system composed of variable displacement pump and variable dual-motor realizes full-wheel drive, and guarantees excellent drive performance and gradeability. The 4-gear infinite variable speed guarantees most suitable working speed for different working conditions. Gear I is used for compaction work with highest gradeability; gear II and III is for limiting slipping of front and rear drum under slipping conditions, gear IV is used for short distance transit with increased drive speed.

3 Powertrain

- Domestic heavy driving axle delivers big bearing capacity, high safety and reliability.

4 Hydraulic vibration system

- Closed loop hydraulic system formed by variable pump and quantitative motor. Dual frequency and dual amplitude, optimized matching of static linear load and centrifugal force enables the machine with excellent compaction performance over all materials types and different thickness.

5 Vibration drum

- Vibration drum is the core part of vibratory roller. XCMG vibration drum adopts internal cylinder vibration chamber structure, long lifetime design and extreme uniformity technology. It features simple structure, high rigidity and strength, dual frequency and dual amplitude, high static line force and exciting force, high efficiency, long service life and high reliability.

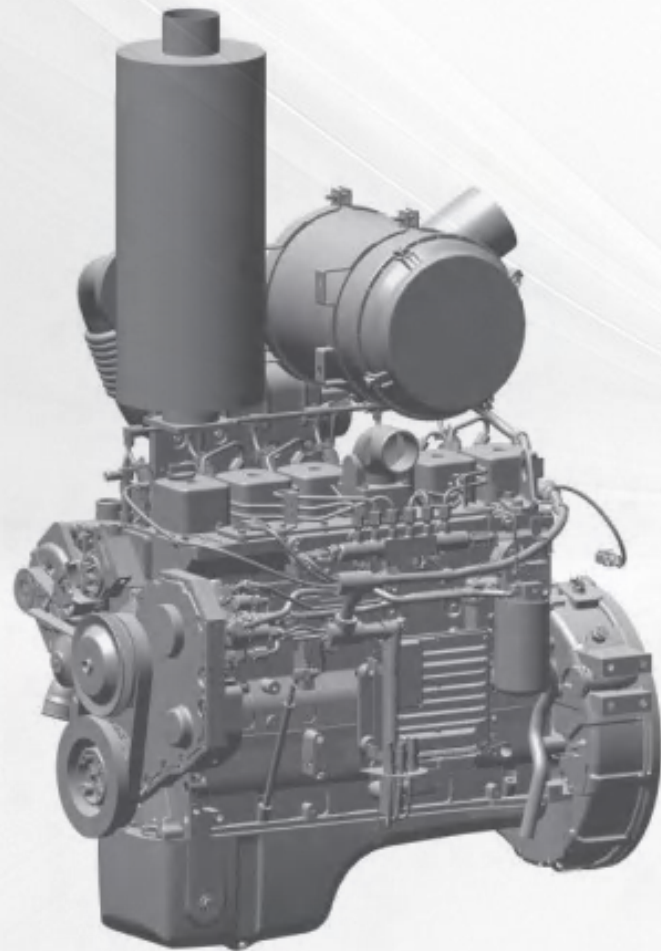
6 Control system

- As per the ergonomic principle, the console integrates the parts such as steering wheel, various instruments 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.



Engine

- It's equipped with Shanghai China-III water-cooled engine, featuring high power reserve, low fuel consumption and low noise.
- It's equipped with SC7H190G3 inline 6-cylinder turbocharged and intercooled engine (140kW@2200r/min) manufactured by the approved supplier Shanghai, with the application of electronically controlled high pressure common rail technology (CRS) and air-air intercooler to meet the China stage-III emission regulation. The basic parameters and technical conditions of this engine conform to the relevant requirements of JB/T4198.1 Technical Conditions of Diesel Engine for Construction Machinery. The operation safety technology meets the requirements of JB8890 Reciprocating internal combustion engines-safety requirements.



Hydraulic Drive System

- The closed-type hydraulic drive system composed of variable displacement pump and variable dual-motor realizes full-wheel drive, and guarantees excellent drive performance and gradeability. The 4-gear infinite variable speed guarantees most suitable working speed for different working conditions. Gear I is used for compaction work with highest gradeability; gear II and III is for limiting slipping of front and rear drum under slipping conditions, gear IV is used for short distance transit with increased drive speed.

Powertrain

- Domestic heavy driving axle delivers big bearing capacity, high safety and reliability.

Hydraulic Vibration System

- Closed loop hydraulic system formed by variable pump and quantitative motor. Dual frequency and dual amplitude, optimized matching of static linear load and centrifugal force enables the machine with excellent compaction performance over all materials types and different thickness.
- Hydraulic vibration system uses the damping-controlled hydraulic shock prevention technology, which not only improves the reliability of vibration system, but guarantees stability of starting/stopping vibration, reducing hydraulic impact on the compacted materials and improving the uniformity.



Vibration Drum

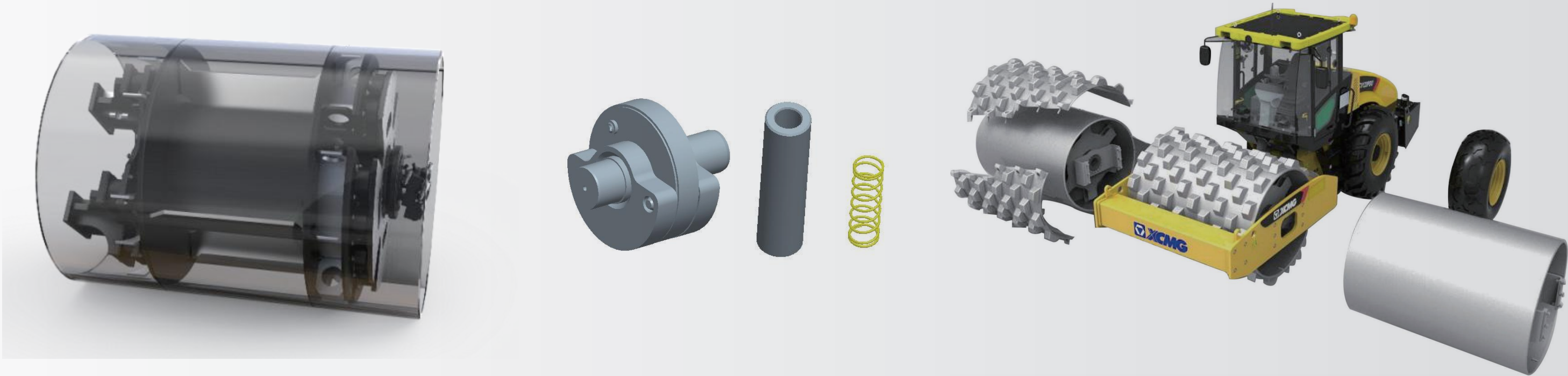
Vibration drum is the core part of vibratory roller. XCMG vibration drum adopts internal cylinder vibration chamber structure, long lifetime design and extreme uniformity technology. It features simple structure, high rigidity and strength, dual frequency and dual amplitude, high static line force and exciting force, high efficiency, long service life and high reliability.

XCMG vibration drum has breakthroughs in the following aspects:

- Lifetime of vibration bearing
Vibration bearing is the key part to support vibration, and it is of great significance to improve the life of vibration bearing. After trial and error of the self-made vibration drum test-bed trial and research on vibration bearing lubrication situation under the different conditions, joint development special design of reinforced XCMG special bearings, the vibration theory of life is over 10000 hours.

- Lifetime of transmission components
Exciter and spline sleeve are the key components of vibratory drum. The exciter of XS205 is newly designed to reduce the impact on bumper pin while guaranteeing same vibration parameters. The patented self-positioning spline sleeve avoids the axial movement on the motor shaft head, and the dynamic spline pair is changed into static connection, which reduces the wear of the motor shaft head and improves the life of parts in the vibration drum.
- Vibration drum sealing technology
The double frame oil seal structure and dual sealing design greatly reduces the oil leakage in the vibration chamber and improves the reliability of the vibration drum.

- Quick-change design
The quick change between pad-foot drum and smooth drum improves the adaptability of the whole machine.



Control system

As per the ergonomic principle, the console integrates the parts such as steering wheel, various instruments 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.

Electrical 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

The brake system composed of the multi-plate brake on the drive axle and vibrating drum reducer and hydrostatic braking of closed-loop hydraulic system can realize functions of service brake, parking brake and emergency brake to guarantee the driving safety and reliability.

Cabin

The cabin is equipped with air conditioner, radio and suspension seat, featuring good sealing performance, large internal space and excellent visibility with large glasses, providing the driver with a safe and comfortable operation environment. The air conditioner ensures the comfort temperature in cabin. The multi-channel air conditioning air outlet allows the driver to adjust the switch and blowing direction of air outlet. The driver's visibility conforms to the relevant requirements of GB/T16937.1 Earthmoving Machinery - Operator's View Field Regulation. Optional ROPS cab is available.

Engine hood

XCMG rollers engine hood is processed by advanced metal molding technology other than the current glass steel molding material, not only avoid the frangibility of the glass fiber, pollution to the environment, enables also smoother metal material surface and more beautiful and fluent modeling. The machine hood adopts the linear drive support opening mode and large opening angle enables better accessibility of service parts.

Cooling and vibration reduction

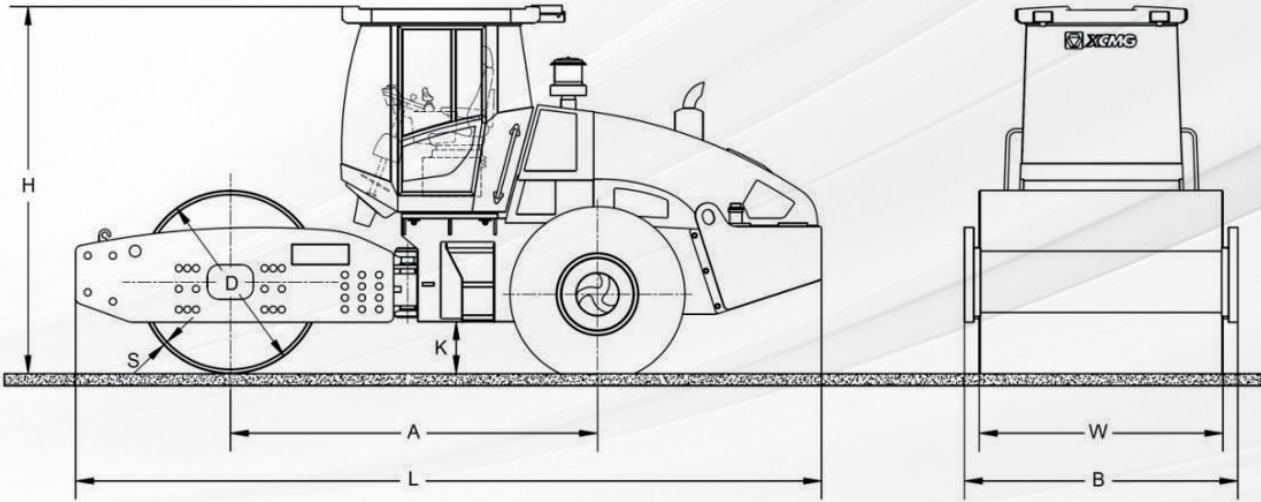
Three level vibration insulation is used, including the drum shock absorber, seat shock absorber, and cabin shock absorber which are analyzed by CAE simulation. The cabin uses the 3D shock-absorbing technology and optimal arrangement of vibrating drum shock absorber to guarantee the excellent shock-absorbing effect.



Main Technical Parameters

Items	Content	Unit	XS205 Standard	XS205 Optional PD
Weights	Operating weight	kg	20000	21500
	Front axle weight	kg	13500	15000
	Rear axle weight	kg	6500	6500
	Static linear load	N/cm	634	-
Maneuverability	Operating speed	km/h	0~4.0; 0~5.9; 0~5.9; 0~10.6	0~4.3; 0~6.1; 0~6.3; 0~11.3
	Theoretical gradeability	%	50	50
	Minimum turning radius (inside/outside)	mm	4770/6900	4770/6900
	Minimum ground clearance	mm	490	490
	Wheelbase	mm	3430	3430
	Steering angle	°	±33	±33
	Oscillation angle	°	±10	±10
	Braking distance	m	<3.9	<4.1
Compaction Performance	Vibration frequency	Hz	28/33	28/33
	Nominal amplitude	mm	1.90/0.95	1.55/0.78
	Exciting force (High/low frequency)	kN	385/270	385/270
	Drum diameter	mm	1600	1812
	Drum width	mm	2130	2130
Hydraulic System	Charge pressure, drive system	MPa	2.4	2.4
	Relief pressure of drive system	MPa	38	38
	Relief pressure of vibration system	MPa	32	32
	Relief pressure of steering system	MPa	14	14
Engine	Model		Shangchai SC7H190G3	Shangchai SC7H190G3
	Type		Water-cooled in-line 6-cylinder diesel engine	Water-cooled in-line 6-cylinder diesel engine
	Rated power	kW	140	140
	Rated speed	r/min	2200	2200
Tire	Spec.		23.1-26-12PR	23.1-26-12PR
	Ply rating		12	12
	Air pressure	kPa	150~170	150~170
Miscellaneous	Drive method		Hydrostatic closed-loop	Hydrostatic closed-loop
	Vibration method		Hydrostatic closed-loop	Hydrostatic closed-loop
	Service brake		Hydraulic	Hydraulic
	Park brake		Mechanic/hydraulic	Mechanic/hydraulic
	Secondary brake		Mechanic/hydraulic	Mechanic/hydraulic
	Steering system		Articulated	Articulated
	Steering control		Hydraulic	Hydraulic

Appearance And Dimensions



Dimensions(mm)	A	B	D	H	K	L	S	W
XS205 Standard	3430	2350	1600	3200	490	6990	36	2130
XS205 Optional PD	3430	2350	1812	3200	490	6990	-	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

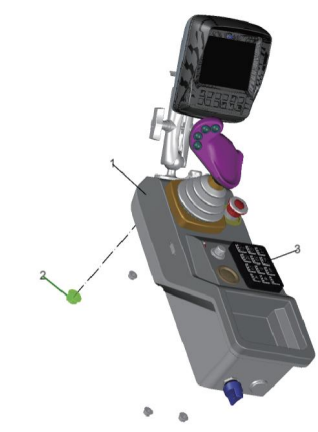
In order to respond to your needs as fast as possible, XCMG experts are on their way to your job site from one of our facilities near you. Full range of servivices are available in order to reduce your total cost of ownership and increase your revenue.

XCMG Global Spareparts System

XP305S Pneumatic Tyre 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



Number	Material Encoding	Name	Quantity	Handle
1	225794532	CONTROL BOX STRUCTURE	1	
2	895238400	NUT M8	4	
3	225794541	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

Operating rate

Monthly Distribution of operating rate

Monthly average working hours of main models

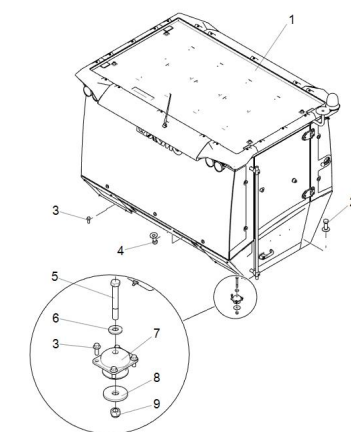
Monthly workload of main models

Map of China with location markers

XP305S Pneumatic Tyre 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



Number	Material Encoding	Name	Quantity	Handle
1	225794791	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	895391377	WASHER 16	15	
7	228901569	SHOCK CABSORBER	4	
8	229000495	BIG FLAT PLATE	4	
9	895238158	NUT M16	4	