

SOLID TO SUCCEED



SINGLE DRUM VIBRATORY ROLLER

XS185S



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XS185S 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 DCEC 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.

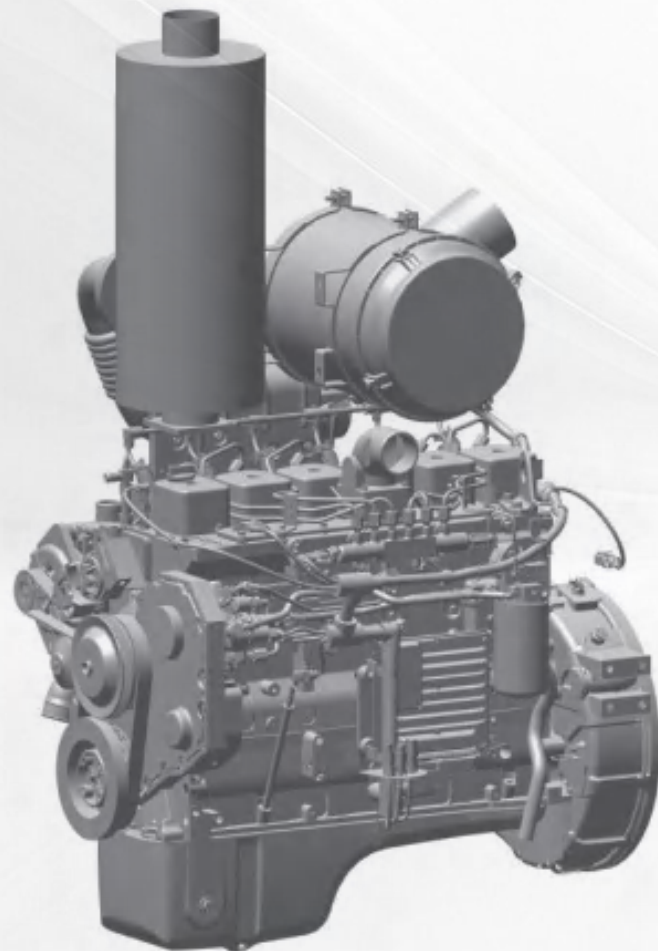
6 Control system

- Designed according to ergonomic principles, the inclination of steering wheel can be adjusted; Air suspension seat is equipped with a safety belt; The armrest control box is connected with the seat through the bracket and can move back and forth with the seat. The display, keypad, lever, rocker switch, key switch and other components are assembled on the armrest control box for convenient operation.



Engine

- It's equipped with DCEC China-III water-cooled engine, featuring high power reserve, low fuel consumption and low noise.
- The QSB5.9-C190 inline 6-cylinder turbocharged and intercooled engine (142kW@2200r/min) manufactured by the approved supplier DCEC complied with the China-III emission regulation via the electronically controlled high pressure common rail technology (CRS) and air-air intercooler. 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

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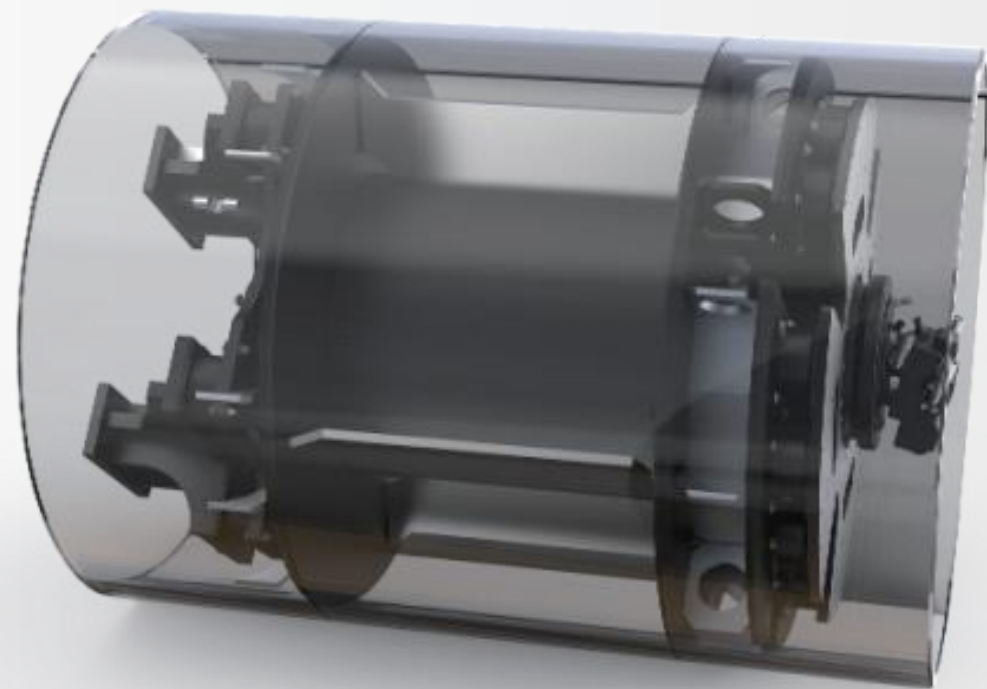
Hydraulic Vibration System

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Vibration Drum

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- 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 XS185S 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

Designed according to ergonomic principles, the inclination of steering wheel can be adjusted; Air suspension seat is equipped with a safety belt; The armrest control box is connected with the seat through the bracket and can move back and forth with the seat. The display, keypad, lever, rocker switch, key switch and other components are assembled on the armrest control box for convenient operation.

Electrical system

The electrical system includes starting circuit, power circuit, stop circuit and fault alarm system; Configured with large screen display, complete machine parameters display in real time. It can provide maintenance information and the working status of the engine at any time, and avoid operation with “faults”. The control button and switch action are accurate, sensitive and reliable.

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 cabin 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

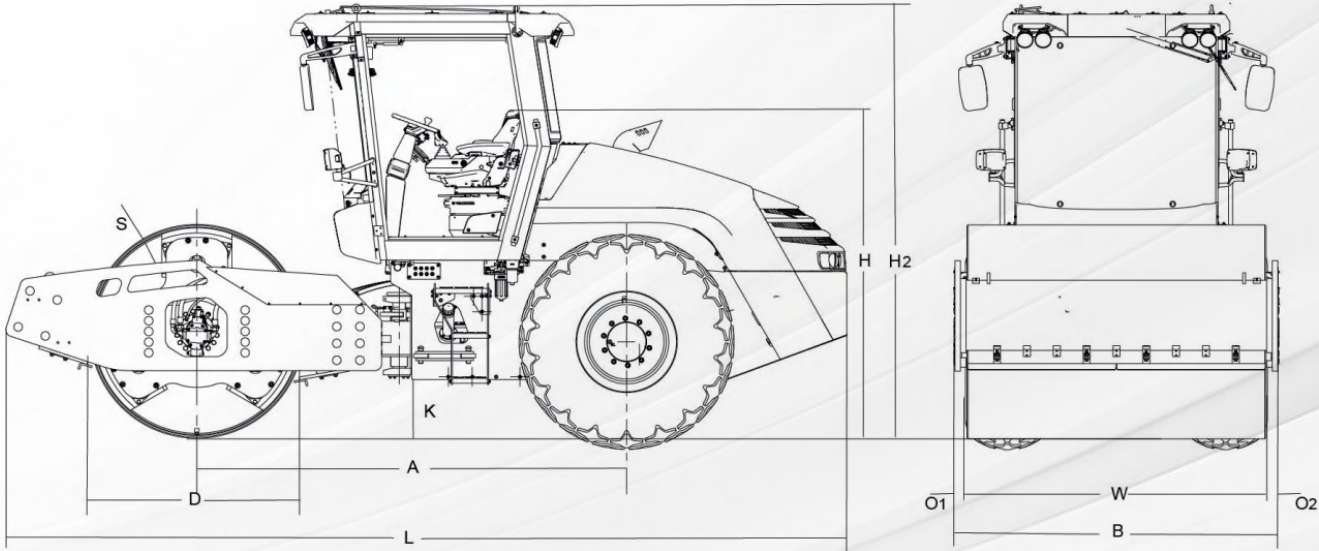
Three level vibration insulation is used, including the drum shock absorber, seat shock absorber, and cabin shock absorber which are analyzed by CAE simulation. The cabin uses the 3D shock-absorbing technology and optimal arrangement of vibrating drum shock absorber to guarantee the excellent shock-absorbing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



Main Technical Parameters

Items	Content	Unit	XS185S Standard	XS185SPD Options
Weights	Operating weight	kg	18000	18800
	Front axle weight	kg	11500	12300
	Rear axle weight	kg	6500	6500
	Static linear load	N/cm	529	-
Propelling	Operating speed	km/h	0~3.9; 0~5.9; 0~5.7; 0~10.3	0~4.2; 0~6.1; 0~6.3; 0~11.0
	Theoretical gradeability	%	50	50
	Minimum turning radius(inside/outside)	mm	4770/6900	4770/6900
	Minimum ground clearance	mm	490	490
	Wheel base	mm	3430	3430
	Steering angle	°	±33	±33
	Oscillation angle	°	±10	±10
	Braking distance	m	<3.8	<4.0
Compaction Performance	Vibration frequency	Hz	28/33	28/33
	Nominal amplitude	mm	1.86/0.93	1.6/0.8
	Excitation force (High/low frequency)	kN	340/240	385/270
	Drum diameter	mm	1523	1735
	Drum width	mm	2130	2130
Hydraulic System	Charge pressure, drive system	MPa	2.4	2.4
	Peak pressure, drive system	MPa	38	38
	Peak pressure, vibration system	MPa	33	33
	Peak pressure, steering system	MPa	14	14
Engine	Model	-	DCEC QSB5.9-C190	DCEC QSB5.9-C190
	Type	-	Water-cooled in-line 6-cylinder diesel engine	Water-cooled in-line 6-cylinder diesel engine
	Rated power	kW	142	142
	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	A	B	D	H	K	L	S	W
XS185S Standard	3430	2350	1523	3200	490	6990	36	2130
XS185SPD option	3430	2350	1735	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 services are available in order to reduce your total cost of ownership and increase your revenue.

XCMG Global Spareparts System

XCMG PAVING COMPACTOR

Home System Report Shopping Cart Language superAdmin

Parts Atlas Manual Documents Other Documents XP305S Pneumatic Tire Roller PIN/VIN : XUG03054VKJE02365

Query Partlist Or Manual

225704540 CONTROL BOX

Release Date : 2020-03-15 Updated Date : 2020-03-15

Number	Material Encoding	Name	Quantity	Handle
1	225704532	CONTROL BOX STRUCTURE	1	W ☆
2	895238409	NUT M8	4	W ☆
3	225704541	CONTROL BOX ELECTRIC	1	W ☆

2D 3D

XCMG PAVING COMPACTOR

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Query Partlist Or Manual

225704748 DRIVER'S CAB ASSY

Release Date : 2020-03-14 Updated Date : 2020-03-14

Number	Material Encoding	Name	Quantity	Handle
1	225704791	CAB ASSEMBLY	1	W ☆
2	80500280	BOLT M16*45	9	W ☆
3	805004763	BOLT M10*25	16	W ☆
4	805046571	BOLT M16*30	2	W ☆
5	805046668	BOLT M16*120	4	W ☆
6	805301377	WASHER 16	15	W ☆
7	228901569	SHOCK CABSORBER	4	W ☆
8	229000495	BIG FLAT PLATE	4	W ☆
9	805239158	NUT M16	4	W ☆

2D 3D

XCMG X-GSS Global Management Platform

Bright Mode English 服务与备件

HOME PAGE

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 OQ TOP OQ

30-day Data

Operating rate

Less than 30 hours More than 100 hours

Monthly Distribution of operating rate

Monthly average working hours of main models

Monthly workload of main models