

SEM Machinery

Soil Compactor

SEM 510 512



※ Featured machines in photos may include optional equipment



A Caterpillar Brand



www.semmachinery.com

Product Advantage

High Reliability: Hydrostatic drive system with world class variable displacement piston pump and motors delivers leading in class reliability

High Productivity: Dual amplitude and frequency vibration system enable the operator to achieve better compaction result

High Efficiency: Up to 45% grade ability allows the machine to work efficiently on slop and uneven terrains

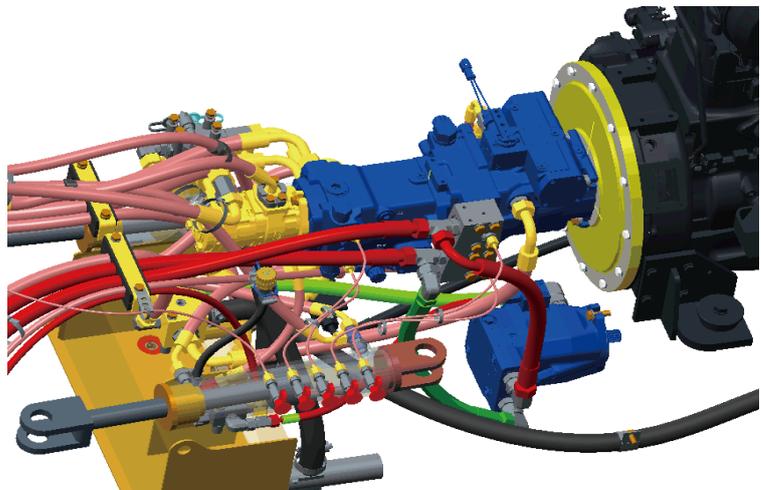
Engine

- Weichai WP4 engine with turbo charger and ATAAC
- High fuel efficiency



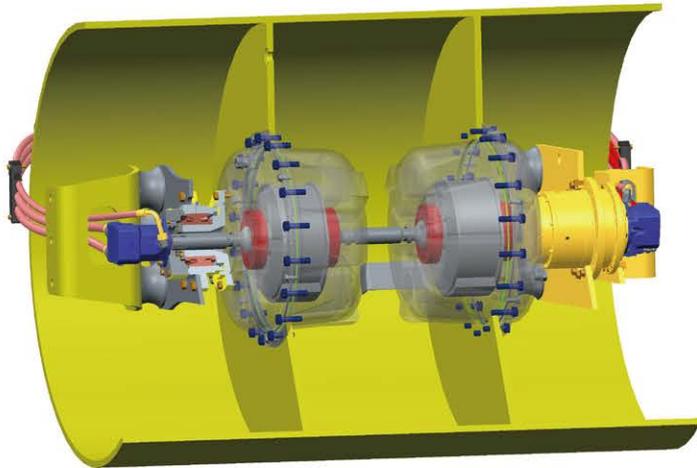
Drive Train

- Hydrostatics drive with rear axle and drum drive
- High performance coupler
- Heavy duty rear axle with limited slip differential



Vibration System

- Pod-style eccentric design
- Dual amplitude and frequency with world class piston pump and motor



Cat® Product Link™

Cat® Product Link™ will support your business, and accurately convey information of the equipment to relevant personnel in a timely and effective manner for your better equipment management.



Hydraulic System

- Improves efficiency by 20% vs. open center system
- Reduces oil contamination, extends life of hydraulic system
- Maintains higher system pressure with less energy loss
- Allows for simpler hose routings
- Requires smaller volume hydraulic tank, reduces maintenance cost



Cooling System

- Modular cooling package design
- Up to 49°C ambient temperature cooling capacity

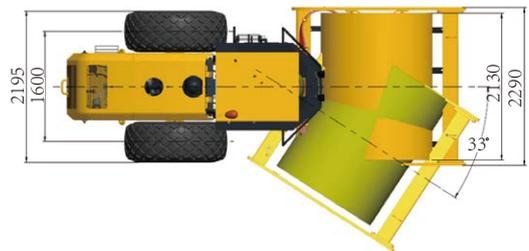
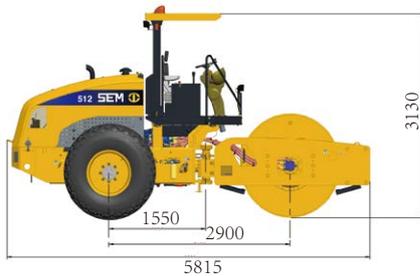


Main Specifications

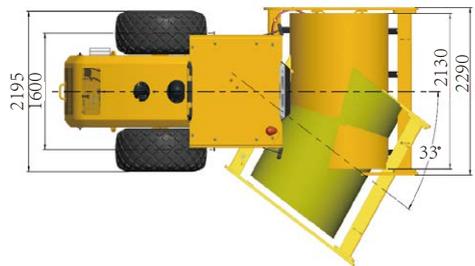
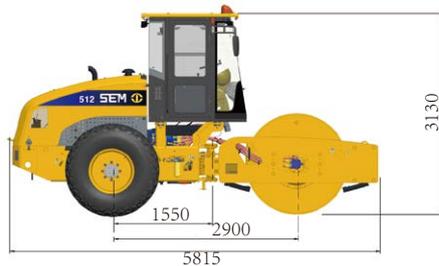
Items	Unit	SEM510	SEM512
Engine Specification			
Model		WP4G130E22	WP4G130E22
Emission		China Stagell	China Stagell
Std Rated Power-Gross	kW	97.5	97.5
Rated Speed	r/min	2,200	2,200
Operating Specifications			
Machine Mass w/Std Config	kg	10,000	12,000
Weight at Drum w/Std Config	kg	5,960	6,960
Weight on Rear Axle	kg	4,100	5,100
Static Linear Load	N/cm	271	317
Max. Grade Ability w/o vibration	%	45	45
Articulated Angle	°	33±1	33±1
Turning Outer Radius	mm	5,990	5,990
Compaction Width	mm	2,130	2,130
Travel Speed			
Lo Range	km/h	0 to 6	0 to 6
Hi Range	km/h	0 to 12	0 to 12
Vibratory System			
Frequency-Hi/Lo	Hz	33/30	33/30
Amplitude-Hi/Lo	mm	1.8/0.9	1.8/0.9
Centrifugal Force-Hi/Lo	kN	215/130	245/150
Dimensions			
Machine Dimensions[L*W*H]	mm	5,815*2,290*3,130	5,815*2,290*3,130
Oscillation Angle	°	10±1	10±1
Wheelbase	mm	2,900	2,900
Drum Width	mm	2,130	2,130
Drum Diameter	mm	1,590	1,600
Tire Specs			
Tire Pressure Setting	MPa	0.2	0.2
Service Refilling Capacity(L)			
Fuel Tank		200	200
Engine Oil		10	10
Coolant		26	26
Hydraulic Oil Tank		22	22
Rear axle(Main reducer & final drive)		9.8	9.8
Rear axle-Differential Additive		0.3	0.3
Vibration pod(each side)		8.5	8.5

Dimensions

SEM512 dimension for standard configuration with sun canopy



SEM512 dimension for standard configuration with sealed cabin



Key Applications

- SEM510 and SEM512 SCOM are widely used in road work, sub-base, parking lots, site development, water and sewer trench work, hills and uneven terrain



Cab & Operation System

- Canopy standard, Cabin + A/C optional
- Big room, superior front, side and rear visibility
- SEM512/510 is hydrostatic compactor. The operation system is very simple, it just has two control levers, one for throttle control, another one is for forward/backward and brake control
- A/C with interior cycle/out side fresh air cycle selection for better defog capability
- Safety belt is standard



Optional Accessories

Configuration (0=Optional)	SEM510	SEM512
Cab non-ROPS	0	0
Cab ROPS	0	0
Compaction meter	0	0
Scraper	0	0
Pad foot shell kit	0	0
Product link	0	0

Caterpillar (Qingzhou) Ltd. Address: No. 12999 Nanhuan Road, Qingzhou City, Shandong Province, Zip Code: 262500, P.R.China

© 2025 Caterpillar (Qingzhou) Ltd. All Rights Reserved. 山工机械, SEM, SEM Logo, their respective logos, trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar (Qingzhou) Ltd. and may not be used without permission.

Materials and specifications are subject to change without notice. Featured machines in photos may include optional equipment. Contact your SEM dealer for available options.

Version: May 2025



Scan the QR code to visit the SEM Official Website