

SEM Machinery

Soil Compactor

SEM

518/520/522



※ Featured machines in photos may include optional equipment

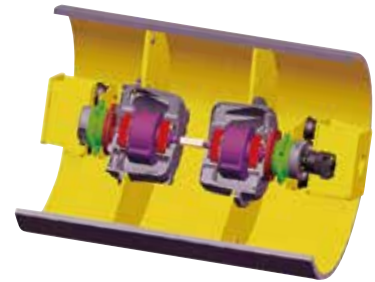
Product Advantage

Reliability: Vibration system utilizes eccentric vibrate pod design, extends life over 50%

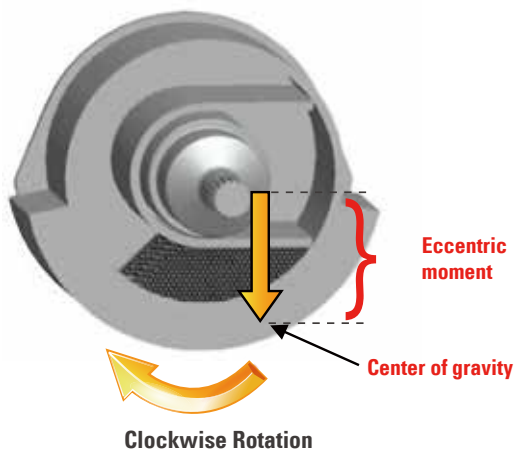
Operation: Digital frequency meter and three level alarm system monitor machine performance

Vibe Pod Design

- Eccentric vibrate pod design, extends system life by 50%
- Steel shot moving inside closed eccentric block, stable and reliable vibrate amplitude, reduces impact to motor, prolongs maintenance period of vibratory system
- Completely sealed eccentric gear eliminates contamination, prolongs bearing life

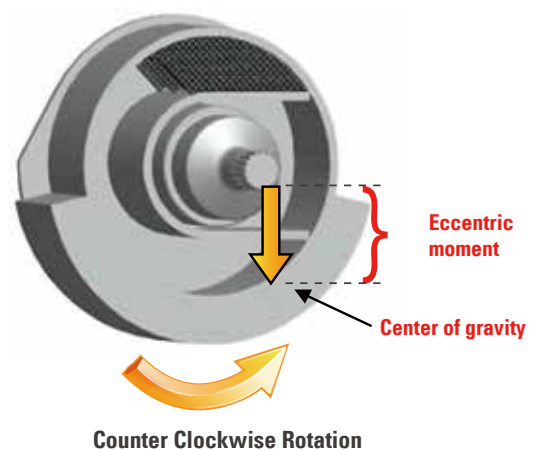


High Amplitude



- The position of the steel shot and the eccentric weight combine to produce the maximum centrifugal force

Low Amplitude



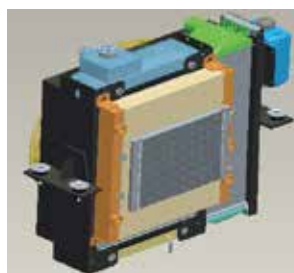
- The position of the steel shot is offset by the eccentric weight to produce a lower centrifugal force

Cooling System

Isolated modular cooling system

- Suction style fan pulls low temperature air through the radiator, providing superior cooling capability
- Optional high ambient cooling system allows the machine to work in ambient temperature up to 49 °C

Shunt tank provides constant system pressure and provides easy visual check of coolant level



Vibratory Hydraulic System

Closed center hydraulic system

- Improves efficiency by 20% over the open center system
- Reduces oil contamination, prolongs life of hydraulic system
- Maintains higher pressure and smaller energy loss
- Allows for simpler hose routing
- Requires smaller volume hydraulic tank, reduces maintenance cost

Vibratory hose

- Optimized hose routing, prolongs hose life



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- 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.

Powertrain

Electronically controlled transmission

- Easier to shift, reduces operator fatigue and improves working efficiency
- High reliability

Axle equipped with Proportional Torque differential (PTD)

- PTD controls torque applied to the wheels based on ground conditions, improves overall traction
- Grade ability is 34% compared to competitors' at 30%
- Optimized transmission ratio, 1st gear has higher travel speed



Dashboard

Vibratory Frequency Meter

- Continuously displays machine compaction frequency
- Operator may select appropriate frequency to avoid excessive compaction

Three Level Alarm System

- Machine will diagnose system issues and notify the operator with 3 levels of warning indicator lights and audio alarms



Display Contents

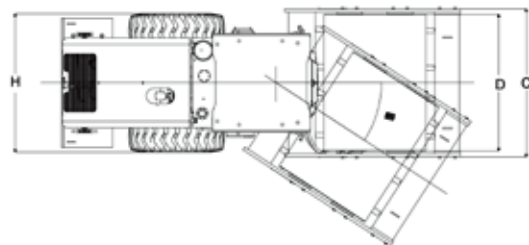
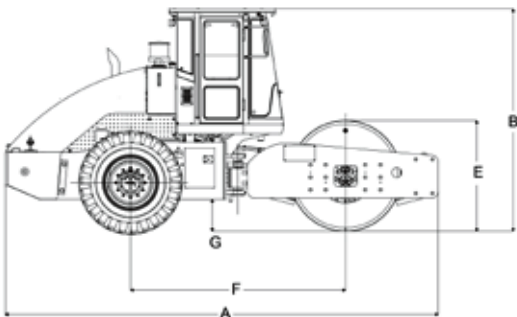
Transmission Oil Temperature	Battery Voltage
Vibratory Frequency Meter	
Working Hours	



Main Specifications

Items	Unit	SEM518	SEM520	SEM522
Operating Weight	kg	18,000	20,000	22,000
Compaction				
Vibration Frequency (High/Low)	Hz	30/28	30/28	30/28
Amplitude (High/Low)	mm	2/1	2/1	2/1
Excitation Force (High/Low)	kN	327/188	360/208	374/215
Static Pressure	N/cm	415	461	507
Engine				
Model		WP6G175E20	WP6G175E20	WP6G190E20
Rated Power	kW	129	129	140
Speed	r/min	2,000	2,000	2,000
Fuel Tank Volume	L	262	262	262
Hydraulic Oil Tank Volume	L	80	80	80
Drum				
Drum Width	mm	2,130	2,130	2,130
Drum Diameter	mm	1,600	1,600	1,600
Drum Thickness	mm	40	40	40
Tires				
Tires Type		20.5-25	20.5-25	20.5-25
Speed				
F/R I	km/h	2.98	2.98	2.98
F/R II	km/h	5.88	5.88	5.88
F/R III	km/h	9.60	9.60	9.60
Swing Angle	°	±12	±12	±12
Steering Angle	°	±33	±33	±33
Outer Turning Radius	mm	6,350	6,350	6,350
Max. Gradeability	%	34	34	34

Dimensions



Size	A	B	C	D	E	F	G	H	β
SEM518	6,250	3,200	2,310	2,130	1,600	3,100	460	2,160	33°
SEM520	6,250	3,200	2,310	2,130	1,600	3,100	460	2,160	33°
SEM522	6,250	3,200	2,310	2,130	1,600	3,100	460	2,160	33°
The swing angle of the front and rear frame ±12°									

Machine Applications

Application/Versatility

- Applications include road, railway, airfield and industry yard compaction
- Optional diamond shape pad-foot roller for compacting clay soils
- Optional square shape pad-foot roller for compacting sandy materials

Tiltable Cab

SEM offers a tiltable cabin which provides more convenient maintenance of the pump, transmission, hose and electronic components

- Hydraulic tiltable cab is optional



Hydraulic tilting device as option

Optional Accessories

Configuration (O=Optional)	SEM518	SEM520	SEM522
High ambient cooling system	O	O	O
Cold start preheater	O	O	O
Cab/ROPS Cab with HVAC	O	O	O
Cab/ROPS Cab with heater only	O	O	O
Rear rain wiper(cab only)	O	O	O
Seat plus(rotatable seat)	O	O	O
Cab hydraulic tilt device	O	O	O
Beacon	O	O	O
Radio	O	O	O
Frontal sun shade	O	O	O
Product link	O	O	O
Compaction meter	O	O	O
20.5-25 Diamond tire	O	O	O
20.5-25 agriculture tire	O	O	O
Diamond shape padfoot with steel scraper	O	O	O
Square shape padfoot with steel scraper	O	O	O

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

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