

## Key Features

### 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

### High efficiency

- 50mm drum, compaction performance is 10%~15% better than competitors
- Isolated modular cooling system, works in ambient temperature of 43 °C

### Reliability

- Vibration system utilizes an eccentric vibrate pod design, extends life up to 50%
- Closed center hydraulic system, world famous piston pump and motor
- Electronically controlled transmission, easy and comfortable to operate

### Operation

- Digital frequency meter, monitors compaction frequency
- Three level alarm system and Engine speed gauge monitor machine performance

## 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

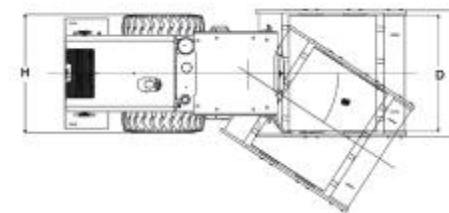
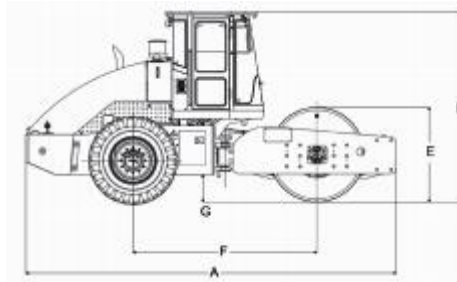
## Optional Accessories

Configuration (O=Optional)	SEM518	SEM520	SEM522
20.5-25 Diamond Tread Tires	O	O	O
20.5-25 Agriculture Tread Tires	O	O	O
Cold Start (intake air heating)	O	O	O
Compaction Meter	O	O	O
A/C (Cooling & Heating)	O	O	O
High Ambient Cooling System	O	O	O
Cab Hydraulic Tilting Device	O	O	O
Sunshade Curtain	O	O	O
Deluxe Suspension Swiveling Seat with Safety Belt	O	O	O
Heater Only with Defrost	O	O	O
Radio/Rotating Beacon/Rear Wiper & Washer	O	O	O
Diamond Shape Padfoot with Steel Scrapers	O	O	O
Square Shape Padfoot with Steel Scrapers	O	O	O

## Specifications

Model	SEM518	SEM520	SEM522
Operating Weight	18000kg	20000kg	22000kg
<b>Compaction</b>			
Vibration Frequency (High/Low)	30/28Hz	30/28Hz	30/28Hz
Amplitude (High/Low)	2/1mm	2/1mm	2/1mm
Excitation Force (High/Low)	327/188KN	360/208KN	374/215KN
Static Pressure	415N/cm	461N/cm	507N/cm
<b>Engine</b>			
Rated Power	129kw	129kw	140kw
Speed	2000r/min	2000r/min	2000r/min
Fuel Tank Volume	262L	262L	262L
Hydraulic Oil Tank Volume	80L	80L	80L
<b>Drum</b>			
Drum Width	2130mm	2130mm	2130mm
Drum Diameter	1600mm	1600mm	1600mm
Drum Thickness	40mm	50mm	50mm
<b>Tires</b>			
Tires Type	20.5-25	20.5-25	20.5-25
<b>Speed</b>			
F/R I	2.98km/h	2.98km/h	2.98km/h
F/R II	5.88km/h	5.88km/h	5.88km/h
F/R III	9.60km/h	9.60km/h	9.60km/h
Swing Angle	±12°	±12°	±12°
Steering Angle	±33°	±33°	±33°
Outer Turning Radius	6350mm	6350mm	6350mm
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°

# SEM518/520/522 Soil Compactor



\* Featured machines in photos may include optional equipment

## SEM518 SEM520 SEM522

- High Efficiency:** The unique vibratory pod design along with 50 mm thick drum provides superior compaction performance
- Reliability:** Vibration system utilizes eccentric vibrate pod design, extends life over 50%
- Operation:** Digital frequency meter and three level alarm system monitor machine performance



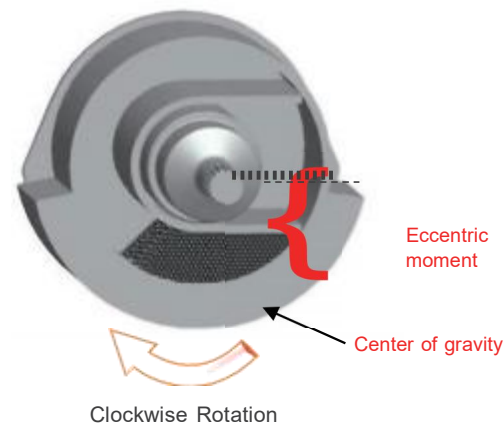
A Caterpillar Brand

## Vibe Pod Design



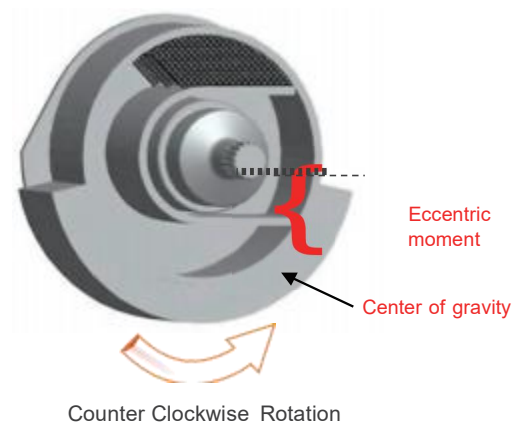
- Eccentric vibe pod design, extends system life by 50%
- Steel shot moving inside closed eccentric block, stable and reliable vibe amplitude, reduces impact to motor, prolongs maintenance period of vibratory system
- Completely sealed eccentric gear eliminates contamination, prolongs bearing life
- SEM520/522 are equipped with a 50 mm thick drum compared to competitors with a 40 mm thick drum, provides increased compaction performance versus the competition

### High Amplitude



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

### Low Amplitude



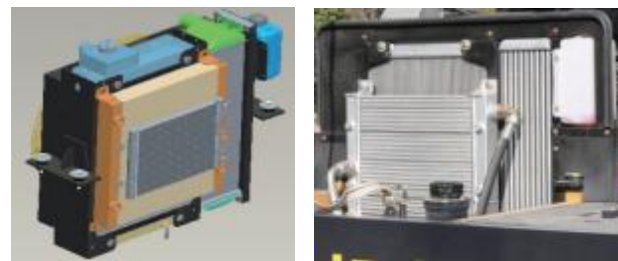
- The position of the steel shot is offset by the eccentric weight to produce a lower centrifugal force

## 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 50 °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

### World class vibratory hydraulic components

- SEM518/520 utilize Sauer piston pump and motor
- SEM522 utilize Rexroth piston pump and motor

### Vibratory hose

- Utilize Eton hoses and joints, high reliability
- Optimized hose routing, prolongs hose life



## 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.



## 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, 1<sup>st</sup> 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	

