

VOLVO SINGLE DRUM COMPACTORS

SD105

11.3-11.8 t 97kW



A PASSION FOR PERFORMANCE.

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



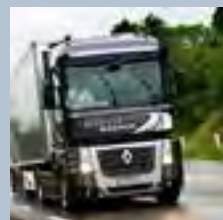
You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.



Volvo Trucks

Renault Trucks

Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services

CONTROL IN COMFORT.

Safety and comfort are packed into the Volvo SD105 single drum soil compactor. With all-around visibility, a rotating seat and low noise levels, the task at hand becomes easier and operators will work efficiently with less fatigue. Increase your productivity with Volvo.

Visibility

Floor to ceiling, 360° visibility provides maximum safety. The machine's frame and hood have been designed to provide a superior rear view with 1x1 meter visibility from the operator's seat.



Climate control

For maximum comfort, the enclosed cab is fitted with a powerful heating and air conditioning system as standard. The enhanced climate control system routes air through vents conveniently located on both high and low sides of the operator's seat to quickly lower or raise the temperature and increase comfort.



Operator controls and propulsion control lever

The ergonomically designed operator controls and console are optimally positioned for increased comfort and productivity. Key functions are accessible in close proximity to the controls. The propulsion control lever ensures smooth and precise speed control and features integrated vibration activation and an easy-to-find detent.

Rotating seat

The adjustable seat can be rotated 15° to the left and 45° to the right – enhancing visibility and safety when operating in reverse while also increasing operator comfort.



Cab

The enclosed ROPS/FOPS cab and ROPS canopy provide a safe and comfortable working environment with all-around visibility. The cab and canopy design has ideally positioned controls, an air climate control system, and an integrated cup holder.

SUPERIOR COMPACTION.



Dynamic drum forces

Whether you're compacting thin soil layers or thick lifts, experience superior results in all applications and material depths by simply flipping a switch on the operator control panel and selecting high or low amplitude.

The powerful SD105 is designed with productivity in mind. Dual amplitude, variable frequency, high centrifugal force and a heavy drum weight ensure optimal compaction in less time. Experience increased machine performance and enhanced productivity with Volvo.



Centrifugal force

The SD105 delivers high drum impact forces when operating in both high and low amplitude. The combination of high centrifugal force and heavy drum weight facilitates excellent compaction - allowing you to achieve material target density in fewer passes.



Variable frequency

Easily adjust the vibration frequency from the operator console to compensate for changing soil types and worksite conditions - increasing productivity and performance. Dual frequency is standard; for greater versatility the variable five frequency option can be selected.



THE VOLVO EXPERIENCE.

Visibility

Benefit from a 360° view of the entire work zone for maximum safety and productivity.

Tapered drum frame

The tapered drum frame allows for a steep grade approach of up to 35° as well as increased clearance when loading for transport.

Ultra grade traction control

The Volvo traction system provides excellent traction on steep inclines, slippery surfaces and when loading for transport.



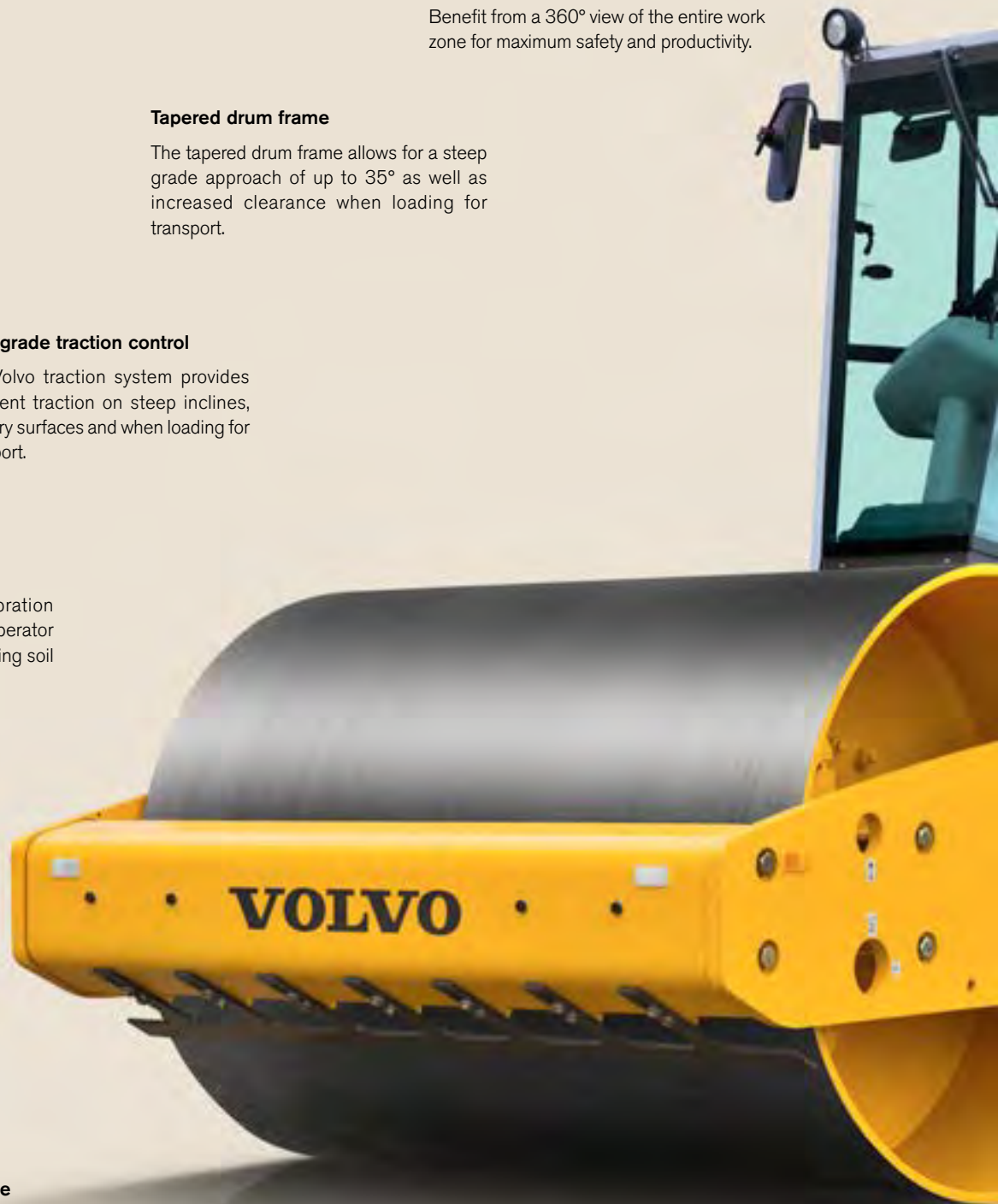
Variable frequency

Easily adjust the vibration frequency from the operator console to compensate for changing soil types and conditions.



Centrifugal force

The combination of high centrifugal force and heavy drum weight facilitates excellent compaction in fewer passes.





Volvo cab

The industry-leading, enclosed Volvo ROPS/FOPS cab and ROPS canopy provide a safe and comfortable working environment with all-around visibility.

Climate control

Volvo's enclosed cab is fitted with a powerful heating and air conditioning system which provides all-around ventilation to quickly lower or raise the temperature.

Rotating seat

The adjustable seat can be rotated 15° to the right and 45° to the left – enhancing visibility and safety when operating in reverse.

Articulation-oscillation joint

The center joint provides 38° of articulation and 17° of oscillation for greater stability, maneuverability and performance.



Dynamic drum forces

Simply select high or low amplitude depending on your application and material depth.



Engine hood opening

The rear-hinged engine compartment is easily opened to provide unobstructed access to the engine for quick service checks.

VOLVO GIVES YOU MORE.



Ultra-Grade traction control

The Volvo traction system provides excellent traction on steep inclines, slippery surfaces and when loading for transport – allowing the machine to work in different applications and increasing its versatility. The system prevents wheel and drum spin, improving gradeability, performance and productivity.

Increase your versatility and access more applications with the SD105. Whether you're working on steep inclines or slippery surfaces, this machine delivers the power and traction you need to cover all applications and material depths. Maximize your productivity and profitability and get the job done with Volvo.

Tapered drum frame

The tapered drum frame allows for a steep grade approach of up to 35° as well as increased clearance when loading for transport.

Articulation-oscillation joint

The center joint provides 38° of articulation and 17° of oscillation for greater stability, maneuverability and performance. Compaction is improved by maintaining continuous drum contact with the ground.



MAINTENANCE MADE EASY.

The SD105 has been built with easy service and maintenance access in mind. Key checkpoints are conveniently located allowing regular checks to be done quickly and efficiently. Maximize your uptime and get the most out of each working day with Volvo.

Daily checkpoints

Each daily checkpoint is conveniently located and easily accessible – reducing maintenance time and improving the quality of daily inspections.

Grouped service ports

Key service ports are grouped to ensure hydraulic pressure check is straightforward and uptime is maximized.



Filter maintenance

To enable convenient daily checks, the air filter is remotely mounted under the engine compartment. All hydraulic test ports and filters are grouped in a sealed compartment under the cab, ensuring quick and easy access.

Cab tilt

The operator platform can be tilted forward to provide quick and easy access to the major hydraulic components.

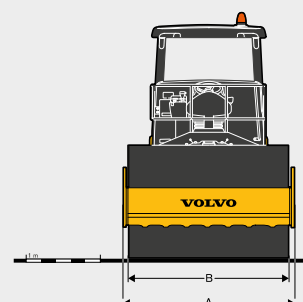
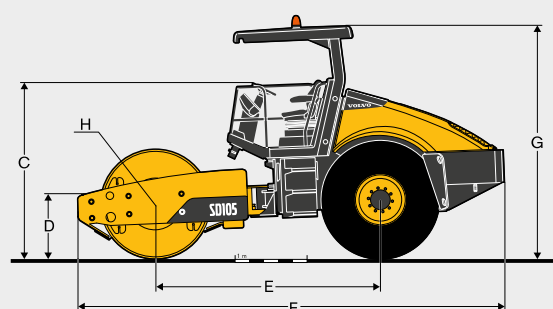


Engine hood opening

The rear-hinged engine compartment is easily opened to provide unobstructed access to the engine for quick service checks. The lockable fuel cap is accessed through the engine hood to allow for convenient refuelling without opening the engine compartment.

SPECIFICATIONS.

Model		SD105	
Drum type		Smooth	Padfoot
Machine Weights (inc. cab and inside scraper)			
Operating Weight (CECE)	kg	11 286	11 857
Static Weight @ Drum	kg	6 543	7 114
Static Weight @ Tyres	kg	4 743	4 743
Shipping Weight	kg	11 156	11 727
Operating Weight w/ROPS (CECE)	kg	10 748	11 321
Bolt-on Padfoot Shell	kg	1 419	
Drum			
Width	mm	2 134	2 134
Diameter	mm	1 500	1 500
Shell Thickness	mm	25	25
Diameter Over Pad Feet	mm	-	1 702
Pad Feet	Number of	-	120
Pad Height	mm	-	101
Pad Tip Area	cm ²	-	135.3
Vibration			
Frequency	Hz	30.8/33.8	27.5/33.8
Optional 5 settings (High Amp)	Hz	23.3 - 33.8	22.5 - 33.8
Centrifugal Force	High	kN	258
	Low	kN	207
Nominal Amplitude	High	mm	1.92
	Low	mm	1.29
Propulsion			
Type System	Hydrostatic		
Tyre Size	587x660 (23.1 x 26) R3 8PR TT 587x660 (23.1 x 26) R1 8PR TL		
Drum Drive	Planetary gear box		
Travel Speed			
High	km/h	8.7	10.2
Low	km/h	5.8	6.2
Engine			
Make / Model	Cummins QSB 4.5		
Engine Type	Turbocharged 4-cylinder		
Rated Power @ Installed Speed	kW (hp)	97 (130)	
Electrical System			
Positive grounded	Volt	12	
Alternator	Ah	95	
Batteries	CCA	1 x 750	
Brakes			
Service	Hydrostatic		
Parking / Secondary	Spring-applied, hydraulically released on drum & axle		
Miscellaneous			
Articulation Angle	°	+/- 38	
Oscillation Angle	°	+/- 17	
Fuel Capacity	L	267	
Hydraulic Oil Capacity	L	84	
Gradeability (theoretical)	%	65	60



DIMENSIONS

	Smooth drum	Padfoot drum
	mm	mm
A	2 286	2 286
B	2 134	2 134
C	2 253	2 253
D	483	483
E	3 100	3 100
F	5 895	5 895
G	3 091	3 146
H	750	750

EQUIPMENT.

STANDARD EQUIPMENT

	Canopy	Cab
Volvo Standard ROPS	•	•
Variable frequency	•	•
Rotating full suspension seat	•	•
Tilttable cab for service	•	•
Retracting seat belt	•	•
Seat belt alarm	•	•
Operator prescense switch	•	•
Hydraulic test ports and remote filters	•	•
External lockable fuel fill	•	•
Tilttable steering wheel	•	•
Back-up alarm	•	•
Daily service checkpoints list	•	•
12 Volt power port	•	•
Drum isolation	•	•
High ground clearance	•	•
Integrated parking brake	•	•
Parking brake test function	•	•
Wrap-around handrails	•	•
Starter motor protection	•	•
Three stage air intake filter	•	•
Climate control	•	•
Windshield wipers	•	•
Ballasted tires for stability	•	•
Countersunk frame bolts for clearance	•	•
Two-speed transmission	•	•
Heavy-duty frame	•	•
Engine fan guard	•	•
Operator platform isolation	•	•
Smooth drum	•	•

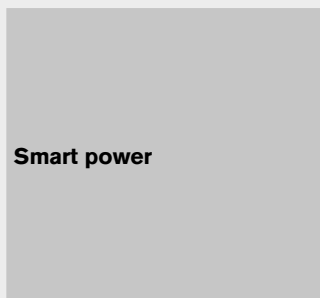
OPTIONAL EQUIPMENT

5 Frequency Vibration
Smart power
Cab
Gauge package
Impact & VPM Meter
Compaction Analyzer
Compaction Analyzer - prep kit
Compaction Analyzer - printer
Inside scraper
Bolt-on padfoot shell kit
Premium bumper
Audible alarm
Work lights
Rotating beacon
Vandal cover
Fuel strainer
First aid mounting
Fire extinguisher mounting
Steering wheel - spinner kit
Remote oil drain
CE weighted bumper
Scraper - hardened
Tires - diamond Tread
Tires - traction Tread
Tow valve
Road lights
Grid heater
Special paint
Bio-degradable oil
Suspension seat headrest
CD radio
Leveling blade
Hose covers

SELECTION OF VOLVO OPTIONAL EQUIPMENT



Padfoot shell kit



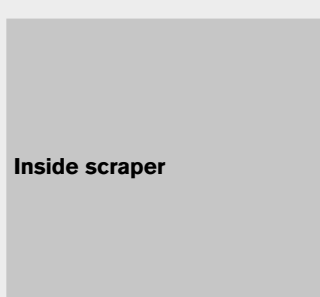
Smart power



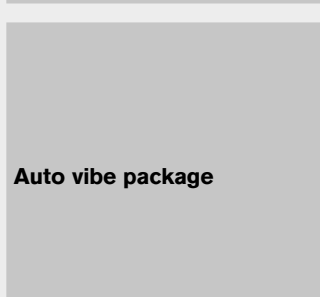
Diamond tread and traction tire



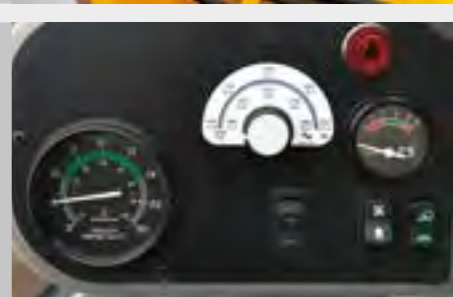
Compaction gauge



Inside scraper



Auto vibe package



VOLVO CONSTRUCTION EQUIPMENT

Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 180 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo.

Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

Volvo Construction Equipment
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