

VOLVO SINGLE DRUM COMPACTORS

# SD105DX, SD105F



**MORE CARE. BUILT IN.**



# HIGH PERFORMANCE COMPACTORS

Volvo SD105 vibratory soil compactors have 2 134 mm (84") vibratory drums and are designed with many innovative features that provide excellent drum performance, serviceability, reliability, and a safe, comfortable, and productive environment for the operator. The SD105DX smooth drum and SD105F padfoot drum models are engineered to efficiently and effectively compact all types of soils from granular to cohesive.

## Performance Features

- Audible and visual warning lights for engine oil pressure, coolant temperature, hydraulic oil temperature, and air cleaner restriction
- Centrally located remote-mounted hydraulic oil filters
- Control console provides storage and a cup holder
- Easily accessible batteries protected behind hinged steps
- Gauges for coolant temperature, fuel, hour meter, and tachometer
- Heavy-duty axle with No-Spin® differential
- Hydraulic and eccentric oil level sight gauges
- Inside drum scraper bar
- Lockable control panel, engine cover, and fill caps
- ONE METER BY ONE METER visibility, increasing operator productivity and safety
- Premium 6-way adjustable suspension seat including swivel feature and arm rest
- Premium shock mounts for operator platform
- Rear-mounted cooling system, easy access for cleaning
- ROPS / FOPS with seat belts
- Safety features include skid-resistant deck with foot rest, dual deck rails, hand rails, seat switch, back-up alarm, horn, and emergency stop
- Single control for direction and speed with on / off vibration switch
- Tilt steering column with console

- Tilting operator platform for easy access to major components, reducing downtime and repair costs
- Ultra-Grade® Traction Control System for climbing and traction
- Universal front scraper, reducing time required to install or remove optional padfoot shell kit
- Vibration-isolated, anti-slip, polymer operator platform reduces fatigue, and its ergonomic design includes a seat, console, steering column, and controls all located within the operator's zone of comfort and reach
- Warning lights for battery discharge and parking brake

## Available Options\*

- Air precleaner
- Battery master switch
- Block heater
- Control console power outlet
- Engine cold start aid
- ROPS cab with heat
- ROPS cab with heat and A/C
- Gauges for engine oil pressure, hydraulic oil temperature, and volt meter
- Patented 2-piece, clamp-on padfoot shell kit
- Quick disconnect fittings for test ports
- Rotating beacon light
- Strike-off blade (padfoot drums only)
- VPM meter / speedometer
- Work lights (two front and two rear)
- CompAnalyzer
- CompGauge

\*Certain options are not available in all markets.



# SPECIFICATIONS

Model		SD105DX	SD105F
<b>Machine Weights (w/ ROPS / FOPS)</b>			
Operating Weight (CECE)	kg (lb)	10 748 (23,700)	11 383 (25,100)
Static Weight @ Drum	kg (lb)	6 213 (13,700)	6 848 (15,100)
Static Weight @ Tires	kg (lb)	4 535 (10,000)	4 535 (10,000)
Shipping Weight	kg (lb)	10 619 (23,416)	11 254 (24,816)
<b>Machine Dimensions</b>			
Length	mm (in)	5 895 (232)	5 895 (232)
Width	mm (in)	2 286 (90)	2 286 (90)
Height (top of ROPS / FOPS)	mm (in)	3 051 (120)	3 106 (122)
Wheelbase	mm (in)	3 100 (122)	3 100 (122)
Curb Clearance	mm (in)	483 (19)	483 (19)
Inside Turning Radius (to drum edge)	mm (in)	3 463 (136)	3 463 (136)
<b>Drum</b>			
Width	mm (in)	2 134 (84)	2 134 (84)
Diameter	mm (in)	1 500 (59)	1 500 (59)
Shell Thickness	mm (in)	25 (1)	25 (1)
Diameter Over Pad Feet	mm (in)	-	1 702 (67)
Number Of Pad Feet		-	120
Pad Height	mm (in)	-	102 (4)
Pad Tip Area	cm <sup>2</sup> (sq in)	-	125 (21)
<b>Vibration</b>			
Frequency	Hz (vpm)	31,2 – 33,6 (1,870 – 2,020)	31,2 – 33,6 (1,870 – 2,020)
Centrifugal Force	kN (lb) High	264 (59,300)	347 (78,000)
	Low	206 (46,300)	262 (59,000)
Nominal Amplitude	mm (in) High	1,92 (0.076)	2,14 (0.084)
	Low	1,29 (0.051)	1,39 (0.055)
<b>Propulsion</b>			
Type System		Hydrostatic, single-speed motor on planetary axle w/ No-Spin® differential and 2-speed drum drive motor	
Tire Size	mm (in)	587 x 660 (23.1 x 26) – 8PR R3	587 x 660 (23.1 x 26) – 8PR R1
Drum Drive		2-speed motor into planetary gear reduction	
Travel Speed	km/h (mph) High	0 – 10,1 (0 – 6.3)	0 – 10,3 (0 – 6.4)
	Low	0 – 6 (0 – 3.7)	0 – 6,3 (0 – 3.9)
<b>Engine</b>			
Make & Model		Cummins QSB4.5	
Engine Type		Turbocharged and aftercooled 4-cylinder	
Rated Power @ Installed Speed	kW (hp)	97 (130)	97 (130)
Electrical System		12 volts DC, positive ground; 95 A alternator; (2) 750 CCA batteries	
<b>Brakes</b>			
Service		Dynamic hydrostatic through propulsion system	
Parking / Secondary		Spring-applied, hydraulically released on axle and drum drive motors	
<b>Miscellaneous</b>			
Articulation Angle		+ / - 38°	+ / - 38°
Oscillation Angle		+ / - 17°	+ / - 17°
Fuel Capacity	l (gal)	257 (68)	257 (68)
Hydraulic Oil Capacity	l (gal)	84 (22)	84 (22)
Gradeability (theoretical)		35%	60%

Product improvement is a continuing goal at Volvo. Designs and specifications are subject to change without notice or obligation.



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 175 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. And we're proud of what makes Volvo different – **More care. Built in.**



*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**  
**[www.volvoce.com](http://www.volvoce.com)**

Ref. No. VOE 21 B 100 4056  
Printed in Sweden 2008.05-5,0  
Volvo, Sweden

English  
RM