

VOLVO SINGLE DRUM COMPACTORS

# SD77DX, SD77F



# HIGH PERFORMANCE SINGLE DRUM COMPACTOR

The Volvo SD77 single drum compactors with 1 676 mm (**66 in**) vibratory drums offer many innovative features that provide excellent drum performance, serviceability, reliability, and a comfortable and safe environment for the operator. The SD77DX smooth drum and SD77F padfoot drum are engineered to efficiently and effectively compact all types of soils ranging from granular to cohesive.

## Features

- Visual warning light for engine oil pressure, coolant temperature, hydraulic oil temperature, and air cleaner restriction
- Centrally located remote-mounted hydraulic oil filters and hydraulic test points
- Easily accessible battery 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
- Powerful eccentric system with dual amplitude
- 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, seat belt, horn, and emergency stop
- Single control for direction and speed with on / off vibration switch
- Battery master 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 provides excellent climbing and traction when operating in difficult applications
- Universal front scraper, reducing time required to install or remove optional padfoot shell kit
- To better match the natural resonance of different soils, Volvo equips its SD77DX and SD77F vibratory compactors with five different frequency settings in low amplitude (for compacting thinner layers) and five frequencies in high amplitude (for compacting thicker layers)
- Vibration-isolated, anti-slip, roto-molded plastic operator platform reduces fatigue

## Available Options

- Air precleaner
- Audible alarm
- Beacon light
- Cab with heat
- Cab with HVAC
- Inside drum scraper
- Leveling blade (padfoot drums)
- Patented 2-piece clamp-on padfoot shell kit
- Strike-off blade (padfoot drums only)
- Speedometer/VPM meter
- Work lights

## Optional Padfoot Shell Kit

A two-piece, clamp-on padfoot shell kit easily and quickly converts the SD77 smooth drum into a padfoot drum without changing the hydraulic system. Drum conversion is completed by bolting together the two half-shells and replacing the smooth scraper bar with padfoot teeth.



# SPECIFICATIONS

Model		SD77DX	SD77F
<b>Machine Weights (w/ ROPS / FOPS)</b>			
Operating Weight (CECE)	kg (lb)	7 415 (16,350)	8 063 (17,780)
Static Weight @ Drum	kg (lb)	3 855 (8,500)	4 503 (9,930)
Static Weight @ Tires	kg (lb)	3 560 (7,850)	3 560 (7,850)
Shipping Weight	kg (lb)	7 303 (16,103)	7 951 (17,533)
<b>Machine Dimensions</b>			
Length	mm (in)	5 044 (199)	5 044 (199)
Width	mm (in)	1 870 (74)	1 870 (74)
Height (top of ROPS / FOPS)	mm (in)	2 882 (113.5)	2 915 (114.5)
Wheelbase	mm (in)	2 673 (105)	2 673 (105)
Curb Clearance	mm (in)	385 (15)	445 (17)
Inside Turning Radius (to drum edge)	mm (in)	3 249 (128)	3 249 (128)
<b>Drum</b>			
Width	mm (in)	1 676 (66)	1 676 (66)
Diameter	mm (in)	1 219 (48)	1 219 (48)
Shell Thickness	mm (in)	22 (0.88)	22 (0.88)
Diameter Over Pad Feet	mm (in)	-	1 372 (54)
Number Of Pad Feet		-	84
Pad Height	mm (in)	-	76 (3)
Pad Tip Area	cm <sup>2</sup> (sq in)	-	125 (21)
<b>Vibration</b>			
Max Frequency	Hz (vpm) High Amp	35,0 (2,098)	35,0 (2,098)
		Low Amp	31,5 (1,850)
Number Of Frequency Settings	High Amp	5	5
	Low Amp	5	5
Max Centrifugal Force	kN (lb) High Amp	149 (33,500)	175 (39,400)
	Low Amp	111 (25,000)	145 (32,500)
Max Nominal Amplitude	mm (in) High Amp	1,98 (0.078)	1,98 (0.078)
	Low Amp	1,2 (0.047)	1,33 (0.052)
<b>Propulsion</b>			
Tire Size		14,9 x 24 - 6PR R3	14,9 x 24 - 6PR R1
Type System		Hydrostatic, two-speed motor on planetary axle w/ No-Spin® differential and two-speed drum with planetary gear reduction	
Drum Drive		Planetary gear reduction	
Travel Speed	km/h (mph) High	0 - 13,5 (0 - 8.4)	0 - 11,7 (0 - 7.3)
	Low	0 - 8,7 (0 - 5.4)	0 - 8,0 (0 - 5.0)
<b>Engine</b>			
Make / Model		Kubota V3800DI Tier 3	
Engine Type		Turbocharged 4-cylinder	
Rated Power @ Installed Speed	kW (hp)	74,0 (99.2)	74,0 (99.0)
Electrical System		12 volts DC, negative ground; 90 A alternator; 750 CCA battery	
<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		+ / - 15°	+ / - 15°
Fuel Capacity	l (gal)	178 (47)	178 (47)
Hydraulic Oil Capacity	l (gal)	84 (22)	84 (22)
Gradeability (theoretical)		77%	63%

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

# 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.

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