

SAKAI
100th
1918-2018



SV900D-1
SV900DV-1

VIBRATORY SINGLE DRUM ROLLER

20 ton class and Optimum choice for large scale project and thick lift compaction.

Typical application : Construction of national highway, airport, dam, etc.

Drum variations : Standard, Circular vibration mode : D and T types
Vertical vibration mode(*) : DV and TV types

Superb Compaction Performance

- Enable to double the lift thickness from 30 cm to 60–90 cm.
- Enable to obtain the uniform density throughout the layer.
- DV or TV drum assures the high density in the deeper area due to the higher amplitude settings.

Excellent Trafficability due to Traction Control System

- The manual ON/OFF Traction Control System is a standard equipment. This system assures the roller can easily drive through rough surface or slope.
- Heavy vibratory roller has a tendency to have difficulty of driving in straight line. The DV and TV types provide straight-line driving despite the powerful vibration.

Durable Components and Easy Access to the Service Points

- Less cost of operation and maintenance thanks to the heavy duty and durable components like center-pin hitch.
- The fully open engine hood as well as steps over tires gives an easy access to the major service points such as engine, radiator, hydraulic pumps, etc.

Operator Comfort and Safety

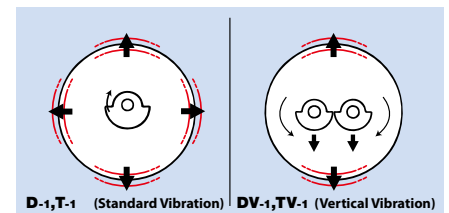
- Despite the powerful vibration, the chassis and operator deck are fully protected from vibration due to Sakai's unique rubber isolator mounting system. This also prolongs the interval of the related parts replacement.
- ROPS-Cabin with air conditioner and adjustable suspension (Deluxe) seat are standard.
- Rotating seat (R:10° L:20°) provides easy access in and out of the seat.
- Sakai's exclusive pedal brake further assures emergency stop in a panic situation.

(*) : Vertical vibration mode : Vibration is purely produced in vertical directions only.



SV900T-1
SV900TV-1

Vibration Mode



D-1, T-1 (Standard Vibration) **DV-1, TV-1 (Vertical Vibration)**

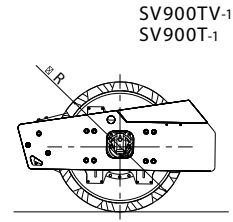
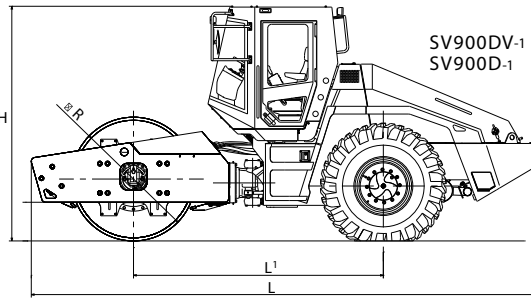
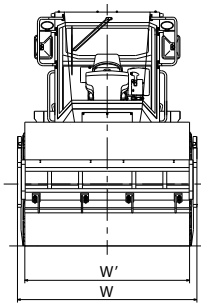
The photos may contain optional equipment and/or attachment.



If you need any technical or service parts support on our products, please contact this web page.

www.sakainet.co.jp/english/

-1 Series



TYPE		Vibratory Single Drum Roller					
MODEL		SV900D-1	SV900T-1	SV900DV-1	SV900TV-1		
CHASSIS MODEL		1SV20					
WEIGHTS	Max. operating weight with ROPS-Cab	kg (lbs)	19,525 (43,045)	19,725 (43,485)	20,320 (44,795)	20,235 (44,610)	
	Operating weight with ROPS-Cab	kg (lbs)	19,350 (42,660)	19,550 (43,100)	20,145 (44,410)	20,060 (44,225)	
	Load on front axle - operating weight with ROPS-Cab	kg (lbs)	10,950 (24,140)	11,210 (24,715)	11,745 (25,895)	11,720 (25,840)	
	Load on rear axle - operating weight with ROPS-Cab	kg (lbs)	8,400 (18,520)	8,340 (18,385)	8,400 (18,520)	8,340 (18,385)	
PERFORMANCE	Centrifugal force (L/H)	kN (lbs)[kgf]	245 / 343 (55,080 / 77,110) [24,985 / 34,975]		343 / 343 (77,110 / 77,110) [34,975 / 34,975]		
	Frequency (L/H)	Hz(vpm)	33 / 28 (1,980 / 1,680)		28 / 24 (1,680 / 1,440)		
	Amplitude (L/H)	mm (in)	1.00 / 1.90 (0.039 / 0.075)		1.70 / 2.20 (0.067 / 0.087)		
	Dynamic linear pressure for front drum - operating weight with ROPS-Cab (L / H)	N/cm (lbs/in)	1,654 / 2,114 (945 / 1,205)	-	2,151 / 2,151 (1,230 / 1,230)	-	
	Number of speed shifts		3				
	Speed range (1 / 2 / 3)	km/h(mph)	0-4 / 0-5 / 0-11 (0-2.5 / 0-3.1 / 0-6.8)				
	Gradeability	% (°)	58 (30)				
	Turning radius compacted surface (inside / outside)	m (in)	3.8 / 6.0 (150 / 237)				
	DIMENSIONS	Overall length L	mm (in)	6,555 (258)			
		Overall width W	mm (in)	2,320 (91)			
Overall height (without ROPS-Cab)		mm (in)	2,505 (99)	2,520 (99)	2,505 (99)	2,520 (99)	
Overall height (with ROPS-Cab) H		mm (in)	3,040 (120)	3,060 (120)	3,040 (120)	3,060 (120)	
Wheelbase L ¹		mm (in)	3,230 (127)				
Compaction width W'		mm (in)	2,130 (84)				
Drum width W' / Drum diameter R		mm (in)	2,130 / 1,600 (84 / 63)	2,130 / 1,680 (84 / 66)	2,130 / 1,600 (84 / 63)	2,130 / 1,680 (84 / 66)	
Pad height		mm (in)	-	115 (4.5)	-	115 (4.5)	
Number of pads		pcs.	-	140	-	140	
Shell thickness		mm (in)	40 (1.6)	32 (1.3)	36 (1.4)	28 (1.1)	
Tire size x Number of tires			23.5-25-16 PR (OR) x 2				
Inflation (each wheels)		kPa (psi)	319 (46.0)				
Ground clearance		mm (in)	435 (17.1)	450 (17.7)	435 (17.1)	450 (17.7)	
Curb clearance	mm (in)	500 (19.7)	555 (21.9)	500 (19.7)	555 (21.9)		
Side clearance	mm (in)	95 (3.7)					
ENGINE	Make		ISUZU				
	Model		AH-4HK1XYLB-01 (EPA-Tier 3 : equivalent)				
	Type		Diesel, water cooled, 4 cycle, 4 cylinder, with turbo charger				
	Displacement	L(cu.in)	5.193 (316.9)				
	Rated output	kW(Hp)/min ¹	137.5 (184) / 2,100				
	Electric system battery	V(V / Ah x Qty)	24 V (12 V / 72 Ah x 2)				
	Electric system alternator	V/A	24 V / 50 A				
	DRIVE SYSTEM	Power transmission type		Hydrostatic			
Drive wheel			All wheel (drum & tires)				
VIBRATION SYSTEM	Power transmission type		Hydraulic				
	Number of amplitude		2				
BRAKE SYSTEM	Vibrator type		Single eccentric shaft	Double eccentric shafts			
	Service brake		Dynamic braking through hydrostatic drive system / FNR lever				
	Secondary brake (Emergency brake)		Hydrostatic + Spring applied hydraulically released type (SAHR) / Brake pedal				
STEERING SYSTEM	Parking brake		SAHR / Panel button				
	Power transmission type		Hydraulic				
FLUID CAPACITY	Articulation / Oscillation angle	± (°)	37 / 6.5				
	Fuel tank	L (gal)	410 (108.3)				
	Hydraulic oil tank	L (gal)	74 (19.5)				

- ⊗ Specified figures have a tolerance of ±5%.
- ⊗ All specifications may be changed without notice.
- ⊗ Specified figures are in SI Units, followed by their equivalent in English units of measurement in parentheses.
- ⊗ Max. operating weight : Fuel=100%, Water=100%, Operator=75 kg
- ⊗ Operating weight : Fuel=50%, Water=50%, Operator=75 kg
- ⊗ The photos may contain optional equipment and/or attachment.

* Using low quality fuel may cause engine failure.



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Standard Equipment :

- ⊗ ROPS-Cab
- ⊗ Instrument panel
- ⊗ Gauges
- ⊗ Backup alarm
- ⊗ Horn
- ⊗ Working lights
- ⊗ Turn signal lamp
- ⊗ Mirrors
- ⊗ Scrapers for both directions
- ⊗ Air conditioner
- ⊗ Deluxe seat
- ⊗ 4 points lifting
- ⊗ Vandalism protections

Optional Equipment :

- ⊗ Rotary beacon
- ⊗ Pass counter
- ⊗ Auxiliary step