Series



SW521D-c Smooth Drum

# **VIBRATORY SINGLE DRUM ROLLER**

The SV521-c series rollers are the 7th generation of SAKAI's reputable 10-ton class vibratory single rollers and are further refined for better use. They are widely applicable to medium and heavy soil compaction works and the most suitable drum type can be selected from four(4) drum variations.

# **Proven Vibratory Compaction Performance**

- High amplitude (2.05 mm for SV521D-c)
- High centrifugal force (26 tons)
- High density and uniform compaction throughout the layer
- Enough operating power in high altitude area (CUMMINS Engine/125HP)

#### **Excellent Traction**

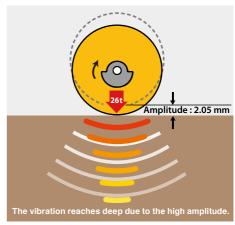
 All-wheel (drum and tires) drive system for all SV521-c models (standard equipment)

# **Economical Operation & Low Maintenance Costs**

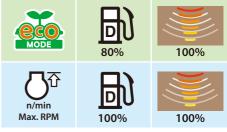
- Fuel saving ECO Compaction Mode as a standard equipment
- Durable and high quality components for prolonged service intervals as well as low maintenance costs

#### **Operator Comfort & Safety**

- Sakai's original shock absorbing system for better vibration isolation and longer parts life
- Increased safety by an emergency pedal brake in addition to the conventional service and parking brakes
- Complete vandalism protection devices



**Powerful Vibration & High Amplitude** 



**ECO Compaction Mode** 

# Reasons for being NO.1

#### **Durable Instrument Panel** & Brake Pedal



Standard: AWNING

Option: ROPS-Canopy, Enclosed Cabin

**Enclosed ROPS-Cabin** 



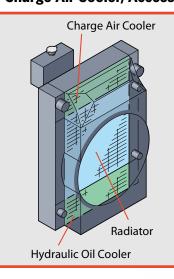
**Reinforced AWNING:** 

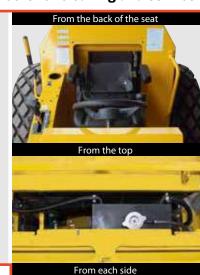
Stays : Bending structure

Roof : Rubber mounted



Side by Side Mounted Radiator, Hydraulic oil Cooler and Charge Air Cooler, Access doors for cleaning and service





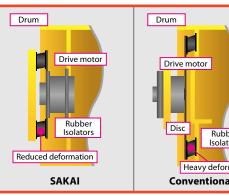


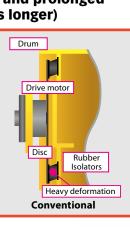
## **Powerful Compaction Force & High Amplitude**

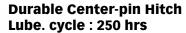
#### For SV521D-c

- Total applied force: 31.8 tons
- Centrifugal force: 26 tons
- High amplitude: 2.05 mm
- \*ECO Compaction Mode is standard.

## **Unique Shock Absorbing Design** for better isolation and prolonged parts life (4-5 times longer)









**Large Size Sedimenter** Water Deposit Capacity: 118 ml

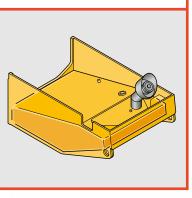


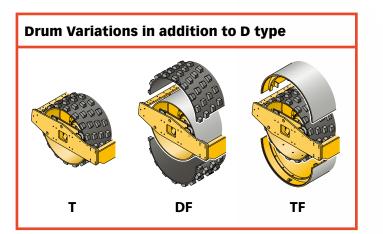
Tool Box in each side



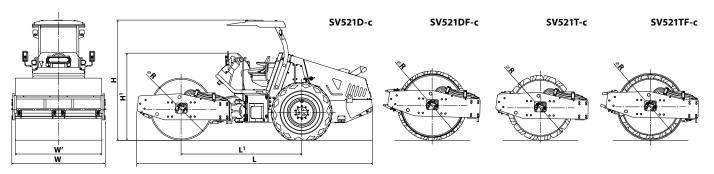
**Solid Fuel Tank** 

**Muffler Cover to prevent burns** 





# SV521-C Series



TYPE		Vibratory Single Drum Roller				
MODEL			<b>SV521D-c SV521DF-c</b> *1		<b>SV521T-c SV521TF-c</b> *2	
RUM TYPE			Smooth Drum	Combi. Drum	Padfoot Drum	Combi. Drum
WEIGHTS	Max. operating weight with AWNING	kg (lbs.)	10,290 (22,685)	11,930 (26,300)	10,630 (23,435)	12,900 (28,440)
	Operating weight with AWNING	kg (lbs.)	10,200 (22,485)	11,840 (26,100)	10,540 (23,235)	12,810 (28,240)
	Load on front axle - operating weight with AWNING	kg (lbs.)	5,775 (12,730)	7,480 (16,490)	6,155 (13,570)	8,415 (18,550)
	Load on rear axle - operating weight with AWNING	kg (lbs.)	4,425 (9,755)	4,360 (9,610)	4,385 (9,665)	4,395 (9,690)
	Static Linear Pressure(drum) - operating weight with AWNING	kg/cm (lbs./in.)	27.1 (150)		_	39.5 (220)
PERFORMANCE	Centrifugal force (L / H)	kN(lbs.)[kgf]	150 (33,720) [15,295] / 255 (57,325) [26,000]			
	Frequency @ low amplitude/high amplitude	Hz (vpm)	33.3 (2,000) / 28.8 (1,730)			
	Amplitude (L / H)	mm (in)	0.87 (0.034) 2.05 (0.081)	0.62 (0.024) 1.47 (0.058)	0.81 (0.032) 1.90 (0.075)	0.53 (0.021) 1.25 (0.049)
	Number of speeds: Speed range (L / H)	km/h (mph)	2 speeds: 0-6 (0-3.7) / 0-10 (0-6.2)			
	Gradeability	% (°)	63% (32°)	56% (29°)	63% (32°)	49% (26°)
	Turning radius at compacted surface (inner / outer)	m (in)			/ 5.6 (221)	1575 (207)
DIMENSIONS	Overall length <b>L</b>	mm (in)	5,810 (229)			
	Overall width <b>W</b>	mm (in)	2,300 (91)			
	Overall height (without AWNING) H¹	mm (in)	2,160 (85)	2,195 (86)	2,165 (85)	2,180 (86)
	Overall height (with AWNING) <b>H</b>	mm (in)	2,960 (117)	2,995 (118)	2,975 (117)	2,985 (118)
	Wheelbase L¹	mm (in)	2,500 (117)		) (117)	2,505 (110)
	Compaction width <b>W</b> '	mm (in)	2,130 (84)			
	Drum width <b>W'</b> x Drum diameter <b>R</b>	mm (in)	2,130 x 1,530 (84 x 60)	2,130 x 1,708 (84 x 67)	2,130 x 1,600 (84 x 63)	2,130 x 1,650 (84 x 65)
	Pad height	mm (in)	(04 × 00)	75 (3)	· '	(04 × 03)
	Number of pads	pcs.		160		40
	Shell thickness	mm (in)		(1.0)	22 (0.9)	
	Tire size x Number of tires		23.1-26-8PR (OR) x 2			
	Ground clearance	mm (in)	400 (15.7)	370 (14.6)	390 (15.4)	380 (15)
	Curb clearance	mm (in)	500 (19.7)	555 (21.9)	520 (20.5)	535 (21.1)
	Side clearance	mm (in)	300 (13.7)		(3.3)	333 (21.1)
ENGINE	Make & Model		CUMMINS "B3.9" (EPA-Tier 2, EU Stage-II: equivalent)			
	Туре		Water-cooled, 4-cycle, 4-cylinder, overhead valve, direct injection type diesel engine with turbochard			
	Displacement	L(cu. in.)	3.900 (238.0)			
	Rated output	kW (HP)/min-1	93.0 (125) / 2,200			
	Electric system - battery	V (V / Ah x Qty)	24 V (12 V / 80 Ah, 655 CCA x 2 pcs.)			
	Electric system - alternator	V/A	24 V (12 V / 60 AII, 653 CCA X 2 pcs.) 24 V / 70 A			
DRIVE SYSTEM	Power transmission type	V/A	Hydrostatic transmission			
DRIVE SISIEM	Drive wheels		Drum and tires			
VIRDATION	Power transmission type		Hydrostatic transmission			
	Number of amplitudes		2			
	Vibrator type		Single eccentric shaft type			
	Service brake (primary brake)		Hydrostatic, dynamic brake (FNR lever)			
	Parking brake (secondary brake)		Spring applied, hydraulically released type multi-disc brake (Panel button)			
	· · · · · · · · · · · · · · · · · · ·					
	Emergency brake		Hydrostatic + Spring applied, hydraulically released type multi-disc brake (Brake pedal)			
TEERING SYSTEM	71		Hydraulic type (articulated)			
	Articulation / Oscillation angle	± (°)	±37°/±9°			
FLUID CAPACITY		L (gal.)	215 (56.8)			
	Hydraulic oil tank	L (gal.)	50 (13.2)			

<sup>\*1)</sup> Refer the specifications of D for DF without padfoot shells.

- Specified figures have a tolerance of ±5%.
- All specifications may be changed without notice.
- Specified figures are in SI Units followed by their equivalent English Units of measurement in ( ).
- 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.



ISO9001 certified Tokyo Head Office, Tokyo Factory, Global Service Division, Research & Development (R&D) HQ.

#### **SAKAI HEAVY INDUSTRIES, LTD.**

HEAD OFFICE: 1-4-8, SHIBA DAIMON, MINATO-KU, TOKYO JAPAN

TELEPHONE: +81-3-3431-9971 FACSIMILE: +81-3-3436-6212

# Standard Equipment:

- Instruments Gauges ECO MODE Scrapers for both directions
- Backup alarm Horn AWNING Comfort seat
- Front-facing working lights (2 pcs.) Rear-facing working lights (2 pcs.)
- Mirrors
   4 points lifting
   Accessory socket (24 V)
   Safety steps
- Vandalism protection

#### **Optional Equipment:**

- Enclosed CABIN Enclosed ROPS-Cabin w/seat belt ROPS-Canopy w/seat belt
- Air conditioner Deluxe seat Turn signal lamp Combi. lamp
- Rotary beacon Pad locks for vandalism protection