

SW/TW300-1 SERIES Vibratory Asphalt Rollers

SAKAI



**Double Drum and
Drum/Tire Models**

High Frequency for Faster Compaction

Counter-Rotating Eccentric Weights

Dual Drum Hydrostatic Drive

Independent Drum Vibration

Fuel Efficient Engines

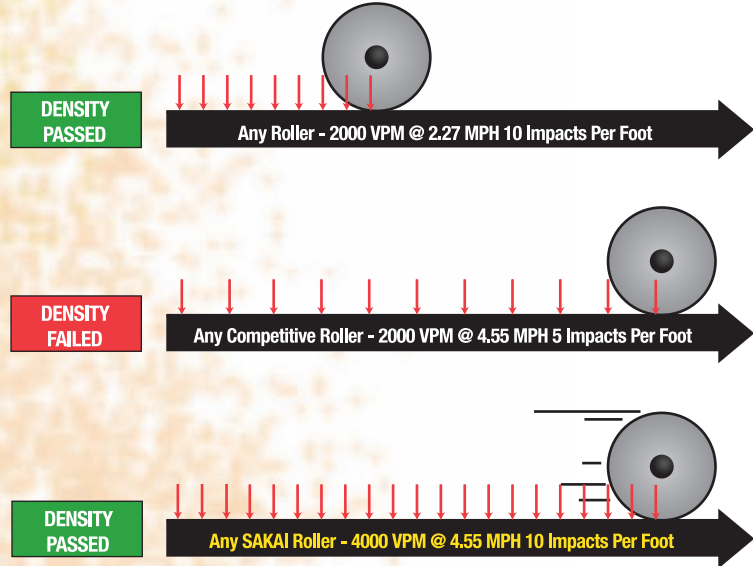
Triple Filtration Spray System

**SAKA
SW330**

The Sakai SW/TW300-1 Series

are designed for small to medium range applications – municipal streets and county roads, highway shoulders and widening, driveways, parking lots, bike paths, and tennis courts. Sakai offers its SW300-1 Series double drum rollers in three different sizes for use on virtually any small or medium size job.

The TW300-1 Series offers combination drum/tire rollers in two different sizes. These models feature vibratory drums on the front end of the roller for rapid compaction and four complementary pneumatic tires on the rear for a kneading action and smooth surface finish.



SW300-1
39-Inch Double Drum Vibratory Roller



SW320-1
47-Inch Double Drum Vibratory Roller



SW330-1
51-Inch Double Drum Vibratory Roller



TW320-1
47-Inch Combination Vibratory Drum and Tire Roller



TW330-1
51-Inch Combination Vibratory Drum and Tire Roller

Powerful Performance

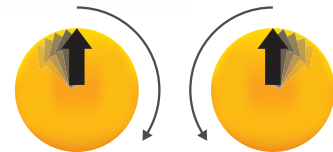
- **Compaction System** – The High Frequency Difference – Sakai offers the highest productivity of any compact vibratory rollers on the market. The SW/TW300-1 Series feature the same high frequency – 4,000 vpm – as larger Sakai machines. The eccentric weights rotate faster – permitting faster ground speeds while maintaining the customary 10-12 impacts per foot. Or the ground speed can be maintained, increasing the impacts per foot and achieving density in fewer passes.

Sakai vibratory rollers are engineered from the ground up to produce a true 4,000 vpm – unlike competitors’ models that attempt to get faster compaction at the expense of the machine’s components. Plus, smooth machined drums, excellent drum edge visibility, and a high 21-1/2” curb clearance permit smooth finishes in even the most confined applications. Tight side frame clearances permit work up close to walls, guard rails and other obstructions.

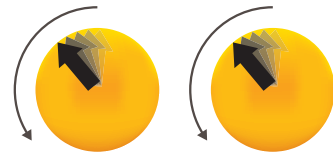
- **Unique Eccentric Weight Design** – All Sakai vibratory compactors offer our unique eccentric weight design. Sakai eccentric weights spin in a counter-rotational direction. This feature directs the forces downward into the material, eliminating pavement shoving, scuffing and hairline cracks.

The Sakai hydrostatic vibration system consists of few moving parts. The hydraulic motor directly drives the eccentric shaft-type vibrator. The vibrator bearings are

automatically lubricated by an oil bath – providing long life and easy maintenance.



Sakai Counter-Rotating Weights



Competitive Unidirectional Weights

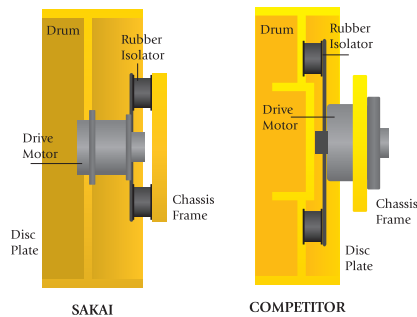
- **Traction** – The SW/TW300-1 Series rollers offer dual drum or drum/tire drive to ensure excellent traction and eliminate bow wave build-up in front of the machine. The drive system is independent from the vibration system – ensuring that all the vibration force is applied to the material. The drive and vibration motors are cross-mounted between the front and rear axles, balancing the weight from front to rear as well as left to right – and keeping the machines rolling straight even at slower speeds.

- **Efficient Engine** – The SW/TW300-1 Series are powered by a fuel efficient, 35 hp Kubota water-cooled, diesel engine. This engine fully complies with current

US emission standards. The engine is mounted on rubber isolators to absorb vibration. The engine hood is noise-suppressed and fully opens for simplified maintenance and safety.

Heavy-Duty Components

- **Patented Shock Isolation** – Sakai is well known for its patented shock isolation systems. These custom designed shock isolators are stronger than any other on the market today. Located between the chassis frame and the drive motors, the shock isolators reduce the transmission of vibration back to critical machine components as well as the operator.



Competitive machines place the shock isolators between the drum and the drive motor – meaning these isolators wear out faster because the drive torque is transferred to the drum through the rubber isolators – whether the vibration system is on or off. This wear then causes the machine to jerk with changes in direction. This irregular movement can cause pushing/pulling of the asphalt material, rough surfaces or hairline cracks.

- **Unsurpassed Spray System** – Sakai asphalt rollers offer the most reliable pressurized spray systems available. The system consists of rustproof tanks, stainless pipes, and brass (not plastic) nozzles that can simply be cleaned or replaced by hand with a one-quarter turn twist. A triple filtration system consists of filters at the reservoir intake, in line, and at the nozzles to prevent contamination and debris from clogging the system. The system also provides a pressurized water spray across the full width of the drums, and spring-loaded, reinforced rubber scrapers swing open for easy clean-out. A release agent is available to help prevent asphalt from sticking to the tires during warm-up. All components in this system are easy to maintain on site.



- **Unique Hitch Design** – All Sakai vibratory compactors feature a unique heavy-duty hitch design that is exceptionally stronger than competitive models. This joint system provides better control, smoother steering and unmatched chassis stability while vertical oscillation provides uniform compaction on uneven surfaces. Lubrication intervals are only required every 250 hours vs. competitive models that require daily service.

High Safety Standards

- **ROPS and Seat Belts** – Sakai believes that operator safety is a high priority. ROPS and seat belts are standard equipment on every Sakai roller sold in North America.

- **Failsafe Braking System** – The SW/TW300-1 Series are equipped with a two-brake, three-way failsafe system. A hydrostatic service brake is located at the forward-reverse lever. A wet disc, spring-applied, hydraulically-released (SAHR) parking brake switch is located on the instrument panel. An emergency brake foot pedal activates both the hydrostatic and the SAHR brakes, and will automatically apply in the event of an engine or hydraulic system failure.

Operator Comfort

The SW/TW300-1 Series operator's station is a rubber-isolated deck designed to minimize the transmission of vibration to the operator and to reduce fatigue. Accessible from both sides of the machine, the operator's station, instrumentation and controls are conveniently located and within easy reach and view of the operator. The machines also provide an excellent view of all drum edges, and 360° visibility from the operator's seat.

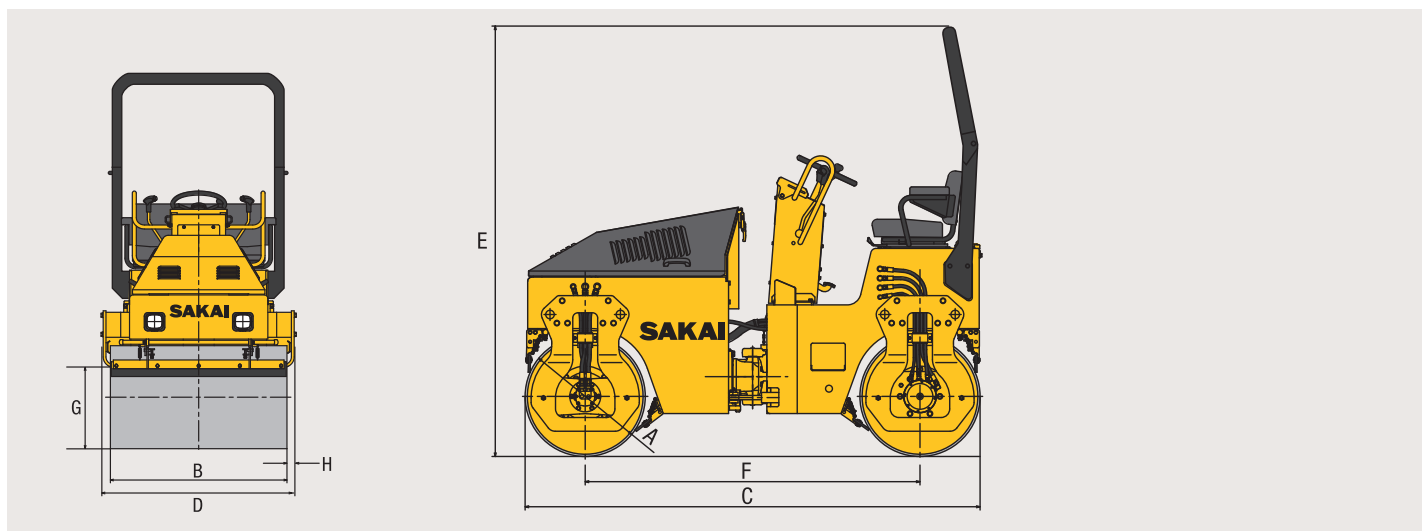
Superior Serviceability – Fast Support

The SW/TW300-1 Series rollers provide a fully opening engine hood for easy access to all main components including the engine, radiator and hydraulic components. The hydraulic system includes conveniently located pressure gauge ports. The vibrator bearing lubrication system consists of an oil bath that keeps the system lubricated regardless of conditions or terrain. ROPS fold down for simplified site-to-site transport.

Sakai has been building high quality construction equipment since 1918. We manufacture more vibratory compactors annually than anyone else in the world. Sakai stocks component parts for all its products and if necessary, these parts are available via over-night dispatch from their North American headquarters in Georgia. Call (800) 323-0535 for prompt assistance with all your application and service needs.



MODEL		SW300-1	SW320-1	SW330-1	TW320-1	TW330-1
Operating Weight	lbs	6,235	6,560	6,730	6,031	6,135
	kg	2,825	2,976	3,053	2,732	2,783
On Front Drum	lbs	2,880	3,110	3,195	3,132	3,217
	kg	1,305	1,410	1,450	1,417	1,459
On Rear Drum	lbs	3,355	3,450	3,535	2,899	2,918
	kg	1,520	1,566	1,603	1,315	1,324
Vibration Frequency	VPM	4,000	4,000	4,000	4,000	4,000
	Hz	67	67	67	67	67
Centrifugal Force per Drum	lbs	7,055	7,055	7,055	7,055	7,055
	kN	31	31	31	31	31
Nominal Amplitude	inches	0.013	0.013	0.013	0.013	0.013
	mm	0.33	0.33	0.33	0.33	0.33
Engine/Model Type		Kubota D 1703-M-ET01 Water-cooled, Tier IV Diesel				
Power	hp / kW	35 / 26	35 / 26	35 / 26	35 / 26	35 / 26
	rpm / min-1	2,800 / 2,800	2,800 / 2,800	2,800 / 2,800	2,800 / 2,800	2,800 / 2,800
Tires (4)		N/A / N/A N/A / N/A N/A / N/A 9.5/65-15-6PR Smooth Tread				
Gradability	percent / degree	44 / 23	40 / 21	38 / 20	40 / 21	38 / 20
Fuel Tank Capacity	gallons / liters	13.2 / 50	13.2 / 50	13.2 / 50	13.2 / 50	13.2 / 50
Spray System Capacity	gallons / liters	48 / 180	48 / 180	48 / 180	48 / 180	48 / 180
Liquid Tank for Tires	gallons / liters	N/A / N/A	N/A / N/A	N/A / N/A	2.6 / 10	2.6 / 10
Brake Types		Hydrostatic, Wet Disc, SAHR, Footbrake				
Steering Types		Articulated with Heavy-Duty Hitch				
Dimensional Data						
Drum Diameter A	inches / mm	28 / 700	28 / 700	28 / 700	28 / 700	28 / 700
Drum Width B	inches / mm	39 / 1,000	47 / 1,200	51 / 1,300	47 / 1,200	51 / 1,300
Overall Length C	inches / mm	104 / 2,650	104 / 2,650	104 / 2,650	104 / 2,650	104 / 2,650
Overall Width D	inches / mm	44 / 1,120	52 / 1,330	56 / 1,430	52 / 1,330	56 / 1,430
Overall Height E	inches / mm	96 / 2,440	96 / 2,440	96 / 2,440	96 / 2,440	96 / 2,440
Wheelbase F	inches / mm	77 / 1,950	77 / 1,950	77 / 1,950	77 / 1,950	77 / 1,950
Curb Clearance G	inches / mm	21.5 / 550	21.5 / 550	21.5 / 550	21.5 / 550	21.5 / 550
Side Overhang H	inches / mm	2.6 / 65	2.6 / 65	2.6 / 65	2.6 / 65	2.6 / 65
Ground Clearance	inches / mm	10 / 250	10 / 250	10 / 250	10 / 250	10 / 250
Outside Turning Radius	inches / mm	150 / 3,800	150 / 3,800	150 / 3,800	150 / 3,800	150 / 3,800
Inside Turning Radius	inches / mm	111 / 2,820	103 / 2,615	99 / 2,515	103 / 2,615	99 / 2,515



SAKAI

MASTERS OF COMPACTION

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