

# **SV512 Series**

## ***Vibrating Roller***

Mighty vibrating roller drastically reduces operating costs in large scale earth-moving projects



SV512D  
Smooth drum  
Gross weights 10.5 ton  
(23,150 lbs)



SV512TF  
Padfoot drum with  
removable smooth drum shell  
Gross weights 13 ton  
(28,660 lbs)

**SAKAI®**

# JOB-PROVEN VIBRATORY PERFORMANCE RESPONDS TO VARIOUS TYPES OF MATERIAL.

## Features

### ☆ Excellent performance

- Well-balanced front and rear weight distribution contributes to excellent traction and slope climbing ability.
- The amplitude of the largest in the world class carries out greatest compaction.
- Three basic drum types are available; smooth drum, padfoot drum and smooth-to-padfoot quick-change combination drum.
- An optimal selection of drum type and setting of dual-frequency dual-amplitude vibration system allows the SV512 roller to handle different types of material efficiently under a wide variety of working conditions.
- The hydrostatic transmission offers variable speed ranges and an ideal speed is easily selected for either working or transit.

### ☆ Easy operation and riding comfort

- Despite powerful vibration, the chassis and operator are fully protected from vibration thanks to SAKAI's patented, unique vibration isolation system.
- Due to the rubber isolator mounted operator deck, the operator's riding comfort is excellent, and electrical instruments and gauges are free from vibration.
- The vibration ON-OFF switch located on the forward-reverse lever facilitates timely vibration control.
- All control and instruments are ergonomically arranged in order to reduce operator fatigue.
- A cushioned, adjustable bucket seat is standard.

### ☆ High safety standards

- The roller is equipped with dual independent braking systems. The primary brake is hydrostatic and applied through putting the forward-reverse lever in its "NEUTRAL" position. The three-way secondary braking system is a mechanical spring-applied, hydraulically released type (SAHR) that can be operated either through a push button or pedal or automatically through engine or hydraulic system failure.
- The overall machine design provides the operator with excellent all-around visibility. (1m×1m)

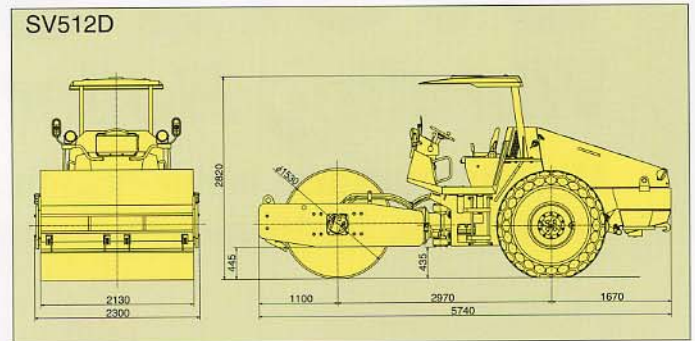
### ☆ Excellent serviceability

- The engine and hydraulic components are enclosed in a compartment. The engine hood opens fully for easy access to engine and hydraulic components for service and maintenance.
- Large ball bearing and taper bearings are employed in the center-pin mechanism to prolong service life and lubrication intervals.
- The vibrator bearing lubrication system keeps lubricating bearings even during hillside operation.

### ☆ Standard equipment and many options

- Standard equipment includes instruments, gauges, scrapers for both directions, back-up alarm, horn, Bracket for ROPS canopy.
- Many options are available for factory or field kit installation. These include a leveling blade, cabin and ROPS canopy.

## Dimensions



## Specifications

|                               |   | SV512D   | SV512T                        | SV512TF                       |
|-------------------------------|---|--|-------------------------------|-------------------------------|
| <b>WEIGHTS</b>                |   |  |                               |                               |
| Gross weight                  | kgf (lbs)                                 | 10,500 (23,148)  | 10,850 (23,920)               | 13,000 (28,660)               |
| Load on front                 | kgf (lbs)                                 | 5,450 (12,015)   | 5,800 (12,787)                | 7,950 (17,527)                |
| Load on rear                  | kgf (lbs)                                 | 5,050 (11,133)   | 5,050 (11,133)                | 5,050 (11,133)                |
| <b>DIMENSIONS</b>             |   |  |                               |                               |
| Overall length                | mm (in)                                   | 5,740 (226")   | 5,760 (227")                  | 5,750 (226")                  |
| Overall width                 | mm (in)                                   | 2,300 (91")  | 2,300 (91")                   | 2,300 (91")                   |
| Overall height without awning | mm (in)                                   | 2,105 (83")  | 2,125 (84")                   | 2,135 (84")                   |
| with awning                   | mm (in)                                   | 2,820 (111")   | 2,825 (111")                  | 2,835 (112")                  |
| Wheelbase                     | mm (in)                                   | 2,970 (117")   | 2,970 (117")                  | 2,970 (117")                  |
| Rolling width                 | mm (in)                                   | 2,130 (84")  | 2,130 (84")                   | 2,130 (84")                   |
| Ground clearance              | mm (in)                                   | 435 (17.1")  | 450 (17.7")                   | 465 (18.3")                   |
| Curb clearance                | mm (in)                                   | 445 (17.5")  | 465 (18.3")                   | 480 (18.9")                   |
| <b>SPEED (F &amp; R)</b>      |   |  |                               |                               |
| 1st                           | km / h (mph)                              | 0 ~ 6 (0 ~ 3.7)  |                               |                               |
| 2nd                           | km / h (mph)                              | 0 ~ 10 (0 ~ 6.2)   |                               |                               |
| <b>VIBRATING POWER</b>        |   |  |                               |                               |
| Frequency                     | Hz (vpm)                                  | L 36.7 (2,200) H 27.5 (1,650)  | L 36.7 (2,200) H 27.5 (1,650) | L 36.7 (2,200) H 27.5 (1,650) |
| Centrifugal force (Max.)      | kN (kgf)                                  | 172 (17,500) 226 (23,000)  | 186 (19,000) 245 (25,000)     | 186 (19,000) 245 (25,000)     |
|                               | lbs                                       | 38,581 50,706  | 41,887 55,115                 | 41,887 55,115                 |
| Amplitude                     | mm  | 0.90 2.00  | 0.90 2.00                     | 0.80 1.70                     |
| <b>MIN. TURNING RADIUS</b>    |   | m (in) 5.6 (221")  |                               |                               |
| <b>GRADABILITY</b>            |   | %  |                               |                               |
|                               |   | 62   |                               | 50                            |
| <b>ENGINE</b>                 |   |  |                               |                               |
| Model                         |   | Perkins "1104-44TA" Diesel engine with turbo charger   |                               |                               |
| Type                          |   | Water-cooled, 4-cycle, 4-cylinder in line, vertical mounted overhead valve, direct injection type, air charge cooler |                               |                               |
| Piston displacement           | L (cu.in)                                 | 4,400 (268.5")   |                               |                               |
| Rated output                  | kW (PS) / min <sup>-1</sup>               | 90.5 (123) / 2,200   |                               |                               |
| Battery                       |   | 24V (12V-100 Ah×2)   |                               |                               |
| <b>POWER LINE</b>             |   |  |                               |                               |
| Transmission                  |   | Hydrostatic transmission   |                               |                               |
| Differential                  |   | Auto lock type   |                               |                               |
| Final drive                   |   | Planetary gear   |                               |                               |
| <b>VIBRATING SYSTEM</b>       |   |  |                               |                               |
| Transmission                  |   | Hydrostatic transmission   |                               |                               |
| Vibrator                      |   | Eccentric shaft type   |                               |                               |
| <b>BRAKE SYSTEM</b>           |   |  |                               |                               |
| Service brake                 |   | Hydrostatic and mechanical type  |                               |                               |
| Parking brake                 |   | Mechanical type  |                               |                               |
| <b>STEERING SYSTEM</b>        |   | Hydraulic type (Articulated type)  |                               |                               |
| <b>ROLL &amp; TIRES</b>       |   |  |                               |                               |
| Use                           | Front: roll<br>Rear: tire<br>No. of tires | Vibrate & Drive<br>Drive<br>2  |                               |                               |
| Dimensions                    |   |  |                               |                               |
| Front roll: width x dia.      | mm (in)                                   | 2,130×1,530 (84"×60")  | 2,130×1,600 (84"×63")         | 2,130×1,650 (84"×65")         |
| Number of pads                |   | 140  |                               |                               |
| Pad height                    | mm (in)                                   | 100 (4")   |                               |                               |
| Tire size                     |   | 23.1 - 26 - 8PR (OR)   |                               |                               |
| Suspension system             |   | Rubber damper type   |                               |                               |
| Front: roll                   |   | Rigid  |                               |                               |
| Rear: tire                    |   | Rigid  |                               |                               |
| <b>FLUID CAPACITY</b>         |   |  |                               |                               |
| Fuel tank                     | L (gal)                                   | 250 (66)   |                               |                               |
| Hydraulic oil tank            | L (gal)                                   | 50 (13)  |                               |                               |

\* Specifications are subject to change without notice.

**SAKAI HEAVY INDUSTRIES, LTD.**

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

TELEPHONE: TOKYO (03) 3431-9971

FACSIMILE: TOKYO (03) 3436-6212

Printed in Japan 2005 07. 1C6©