

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 lb)



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

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 x 1m)

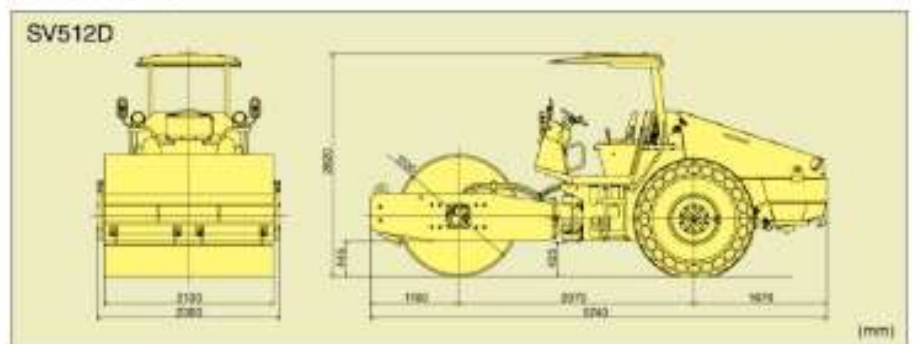
☆ Excellent serviceability

- 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 CABIN and ROPS CANOPY.

Dimensions



Specifications

| MODEL | SV512 | SV512D | SV512T | SV512TF | SV512DF | |
|--|---|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| WEIGHTS | | | | | | |
| Gross weight | kg (lb) | 10,320 (22,755) | 10,500 (23,148) | 10,850 (23,920) | 13,000 (28,660) | 12,050 (26,570) |
| Load on front | kg (lb) | 5,270 (11,620) | 5,450 (12,015) | 5,800 (12,787) | 7,950 (17,527) | 7,150 (15,765) |
| Load on rear | kg (lb) | 5,050 (11,135) | 5,050 (11,135) | 5,050 (11,133) | 5,050 (11,133) | 4,900 (10,805) |
| DIMENSIONS | | | | | | |
| Overall length | mm (in) | 5,740 (226) | | 5,760 (227) | 5,760 (226) | 5,785 (229) |
| Overall width | mm (in) | 2,300 (91) | | 2,300 (91) | 2,300 (91) | 2,300 (91) |
| Rolling wheel KW36 | mm (in) | 2,105 (83) | | 2,125 (84) | 2,135 (84) | 2,155 (85) |
| Rolling wheel KW36 | mm (in) | 2,820 (111) | | 2,825 (111) | 2,835 (112) | 2,850 (112) |
| Wheelbase | mm (in) | 2,970 (117) | | 2,970 (117) | 2,970 (117) | 2,965 (117) |
| Rolling width | mm (in) | 2,130 (84) | | 2,130 (84) | 2,130 (84) | 2,130 (84) |
| Ground clearance | mm (in) | 435 (17.0) | | 450 (17.5) | 465 (18.5) | 480 (19.0) |
| Curb clearance | mm (in) | 445 (17.5) | | 465 (18.5) | 480 (19.0) | 500 (19.5) |
| SPEED (F & R) | | | | | | |
| 1st | km / h (mph) | 0 - 9 (0 - 5.6) | | 0 - 6 (0 - 3.7) | | |
| 2nd | km / h (mph) | - | | 0 - 10 (0 - 6.2) | | |
| VIBRATING POWER | | | | | | |
| 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) | L 36.7 (2,200) H 27.5 (1,650) | L 36.7 (2,200) H 27.5 (1,650) |
| Centrifugal force | kN (kgf) | 172 (17,500) 38,581 | 226 (23,000) 50,706 | 186 (18,800) 41,887 | 186 (18,800) 41,887 | 172 (17,500) 38,581 |
| Amplitude | b | 0.90 | 2.00 | 0.90 | 0.80 | 0.80 |
| MIN. TURNING RADIUS | m (ft) | 5.6 (221) | | | | |
| GRADABILITY | % (°) | 39 (21) | 62 (32) | 50 (27) | 55 (29) | |
| ENGINE | | Perkins "1104C-44TA" Diesel engine with turbo charger | | | | |
| Model | | Water-cooled, 4-cycle, 4-cylinder in line, vertical mounted | | | | |
| Type | | overhead valve, direct injection type | | | | |
| Piston displacement L (cu.in) | | 4,400 (268.5) | | | | |
| Rated output KW (HP) / min ⁻¹ | | 90.5 (121) / 2,200 | | | | |
| Battery | | 24V (12V-100 Ah x 2) | | | | |
| POWER LINE | | Hydrostatic transmission | | | | |
| Transmission | | Auto lock type | | | | |
| Differential | | Planetary gear | | | | |
| Final drive | | | | | | |
| VIBRATING SYSTEM | | Hydrostatic transmission | | | | |
| Transmission | | Eccentric shaft type | | | | |
| Vibrator | | | | | | |
| BRAKE SYSTEM | | Hydrostatic and mechanical type | | | | |
| Service brake | | Mechanical type | | | | |
| Parking brake | | | | | | |
| STEERING SYSTEM | | Hydraulic type (Articulated type) | | | | |
| ROLL & TIRES | | Vibrate & Drive | | | | |
| Use | Front: roll Rear: tire No. of tires | Drive 2 | | | | |
| Dimensions | | | | | | |
| Front roll: width x dia. | mm (in) | 2,130 x 1,530 (84 x 60) | 2,130 x 1,600 (84 x 63) | 2,130 x 1,650 (84 x 65) | 2,130 x 1,708 (84 x 67) | 2,130 x 1,708 (84 x 67) |
| Number of pads | | - | 140 | 140 | 160 | 160 |
| Pad height | mm (in) | - | 100 (4) | 100 (4) | 75 (3) | 75 (3) |
| Tire size | | 23.1 - 26 - 8PR (OR) | | | | |
| Suspension system | | Rubber damper type | | | | |
| Front: roll | | Rigid | | | | |
| Rear: tire | | | | | | |
| FLUID CAPACITY | | | | | | |
| 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: +81-3-3431-9971

FACSIMILE: +81-3-3436-6212

2011.04.10