Innovative newly-designed road stabilizer PM550(-s) for full depth reclamation (FDR) and soil stabilization. It makes jobs environmentally-friendly and profitable.

High Construction Quality
- Outstanding crushing and optimized mixing
- High-powered engine: Tier3 (PM550) and non-Tier3 (PM550-s) are available
- Single operator control providing a clear view of the mixing operation
- Rotor shift mechanism (unique to SAKAI)
- All-wheel drive system for consistent traction
- Easy speed change for working and mobilizing

Improved Safety
- Four safe braking systems are provided as standard equipment
- Slim engine hood for a clear view
- Wide operator’s deck

Enhanced Maintenance Capability
- Easy access to bits and bit holders
- Full open engine hood
- Fuel filler caps on both sides
- Easy battery check/replacement
- Large toolbox space
- Emulsion spraying system (Optional)
Road Stabilizer Method Featuring Environmentally-friendly Paving Technology Description

- **The road stabilizer method**
  The road stabilizer method is capable for conducting in-place base course construction and/or subgrade rehabilitation by using a road stabilizer that crushes and mixes materials on site. The method provides the following benefits and makes roadwork environmentally-friendly and profitable.

  1. **Cost-saving**: Construction costs can be reduced by as much as 60 to 70% compared with conventional reconstruction or replacement methods.
  2. **Resource-saving**: Existing materials are recycled on site.
  3. **Shorter construction period**: Construction time can be shortened by 2/3 or less compared to conventional reconstruction or replacement methods.

* The reconstruction or replacement methods is a technique that removes the existing worn-out pavement to construct a completely new pavement.
High Construction Quality

- Outstanding crushing and optimized mixing
  
  **Outstanding crushing capacity**
  Material crush size can be optimized by utilizing the two-speed rotor to meet a diverse range of paving conditions. The machine is equipped with a secondary crusher in its rotor hood so as to provide an improved crushing capability and control.

  **High-strength rotor hood**
  Thick, high-strength steel plates are used for the side frames and top plate of the rotor hood, substantially increasing the durability of the rotor hood.

  **Optimized mixing**
  Maximum mixing depth: 430 mm (17in)
  SAKAI unique conical bit arrangement provides optimized mixing.

  
  - **Easy adjustments of crushed material size**
    The size of crushed materials can be adjusted so that they are uniform, thanks to the incorporation of the two-speed rotor and secondary crusher as well as the use of high-strength conical bits.

- **High-powered engine:**
  Tier3 (PM550) and non-Tier3 (PM550-s) are available
  Work efficiency is supported by the 370kW / 503PS (496HP) high-powered engine incorporated in the road stabilizer.
● Single operator control providing a clear view of the mixing operation
Console panels are arranged on the right and left of the operator’s station to provide better visibility to the conditions of crushing and mixing so that they can be easily and carefully controlled during operation. In addition, the machine is designed to permit easy adjustment of operating speed, mixing depth and rotor hood position by a single operator.

● Rotor shift mechanism (unique to SAKAI)

Safe operation along shoulder of a road
The lateral shift of the rotor hood is 500 mm (20 in) on each side, ensuring safe operation even along soft shoulders of a road.

Precision work
The rotor hood can be shifted to run very tight to the edge of any structure to improve the working accuracy.

Rotor hood shift amount
Each side 500 mm (20 in)

● All-wheel drive system for consistent traction
The two-pump, two-motor HST circuit employed in the four-wheel drive system ensures consistent traction even on a slippery road surface and under other severe conditions.
● Easy speed change for working and mobilizing
One switch permits selection of one working speed and two traveling speeds. When the working speed is selected, the differential locking device built in the rear axle is activated automatically to generate better traction.

<table>
<thead>
<tr>
<th></th>
<th>Working speed</th>
<th>Slow speed</th>
<th>High speed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working speed</strong></td>
<td>0~48 m/min</td>
<td>0~10 km/h</td>
<td>0~14 km/h</td>
</tr>
<tr>
<td><strong>Traveling speed</strong></td>
<td>0~157 ft/min</td>
<td>0~6.3 mph</td>
<td>0~8.7 mph</td>
</tr>
</tbody>
</table>

Improved Safety

● Four safe braking systems are provided as standard equipment

<table>
<thead>
<tr>
<th>Application</th>
<th>Operating parts</th>
<th>Braking system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working brake</strong></td>
<td>Normal operation</td>
<td>Hydrostatic transmission (HST)</td>
</tr>
<tr>
<td></td>
<td>(self-propelling / working)</td>
<td></td>
</tr>
<tr>
<td><strong>Traveling brake</strong></td>
<td>Emergency brake</td>
<td>Mechanical wet multi-disc type</td>
</tr>
<tr>
<td></td>
<td>Brake pedal</td>
<td></td>
</tr>
<tr>
<td><strong>Parking brake</strong></td>
<td>Parking</td>
<td>Mechanical wet multi-disc type</td>
</tr>
<tr>
<td></td>
<td>Panel button</td>
<td></td>
</tr>
<tr>
<td><strong>Emergency stop</strong></td>
<td>In danger</td>
<td>Engine stops and stalls</td>
</tr>
<tr>
<td></td>
<td>Emergency stop switch</td>
<td>Mechanical wet multi-disc type</td>
</tr>
</tbody>
</table>

*The safety system is designed to activate the mechanical wet multi-disc brake when the engine stalls.

● Slim engine hood for a clear view
The slim engine hood substantially reduces the dead angle to provide excellent sight lines for safety when reversing the vehicle.

● Wide operator’s deck
The wide operator’s deck improves visibility in all directions.
Enhanced Maintenance Capability

- **Easy access to bits and bit holders**
  The use of a two-stage type rear gate offers a wide opening, which facilitates access to the rotary drum and makes maintenance work easier during replacement of the cutting bits and holders.

- **Power-operated rotor drum inching system**
  A power-operated inching system has been introduced for the rotor drum to permit its rotation during engine stops, thereby ensuring safety during maintenance.

- **Full open engine hood**
  This engine hood provides quick and easy access to the engine, peripheral equipment, and the hydraulic system.

  Centralized layout of the rotor, hydraulic filter for the drive system, and oil pressure gauge test port are arranged together for easy access from the ground.

- **Radiator clogging control**
  To prevent clogging of the radiator with rust, dust, etc., the PM550 is equipped with a manual control valve for reverse rotation of the radiator fan. Periodic reverse rotation is recommended to prevent possible clogging of the radiator core.
● Fuel filler caps on both sides
The PMS50 has fuel filler caps on both side of the machine inside the engine hood. This allows for safe, smooth re-fueling from ground. In addition, a large 700 liters (185 gal) fuel tank used.

**Fuel tank capacity**
700 L (185 gal)

● Easy battery check/replacement
The battery can be checked and replaced easily from the ground.

● Large toolbox space
The PMS50 is designed with a space large enough for housing a toolbox, bits, holder, etc.

● Emulsion spraying system (Optional)
**Automatic emulsion spraying system**
The application rate of emulsion spray is automatically adjusted in accordance with the working speed. Information on mixing such as width, depth, target density, etc., needs to be input in to a controller.

**Emulsion nozzle outlet design easy to clean**
The emulsion nozzle outlet is designed for easy opening/closing operation so as to facilitate cleaning around the outlet.

Large emulsion scouring tank
Scouring tank of 90 liters (23.7 gal) is available.

* This photo includes option for Japanese market.
### PM550 PM550-s

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

**Standard Equipment:**  
- Instrument  
- Gauges  
- Back up alarm  
- Horn  
- Working light  
- Turn signal lamp  
- Mirrors

**Optional Equipment:**  
- Automatic emulsion spraying system  
- Emulsion spraying system  
- Emulsion scouring tank  
- ROPS CANOPY  
- Pressurized water sprinkler system

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### WEIGHS

<table>
<thead>
<tr>
<th></th>
<th>PM550</th>
<th>PM550-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating weight</td>
<td>22,500 (49,600)</td>
<td>22,480 (49,560)</td>
</tr>
<tr>
<td>Load on front axle</td>
<td>7,550 (16,645)</td>
<td>7,560 (16,670)</td>
</tr>
<tr>
<td>Load on rear axle</td>
<td>14,950 (32,955)</td>
<td>14,920 (32,890)</td>
</tr>
</tbody>
</table>

**PERFORMANCE**

<table>
<thead>
<tr>
<th></th>
<th>PM550</th>
<th>PM550-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed range (travel)</td>
<td>0 - 14 (0 - 8.7)</td>
<td></td>
</tr>
<tr>
<td>Speed range (operating)</td>
<td>0 - 48 (0 - 157)</td>
<td></td>
</tr>
<tr>
<td>Gradability</td>
<td>% (%)</td>
<td></td>
</tr>
<tr>
<td>Min. turn radius (outer)</td>
<td>m (in)</td>
<td></td>
</tr>
</tbody>
</table>

**DIMENSIONS**

<table>
<thead>
<tr>
<th></th>
<th>PM550</th>
<th>PM550-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall length</td>
<td>9,280 (365)</td>
<td></td>
</tr>
<tr>
<td>Overall width</td>
<td>2,650 (104)</td>
<td></td>
</tr>
<tr>
<td>Overall height</td>
<td>2,913 (115)</td>
<td></td>
</tr>
<tr>
<td>Wheelbase</td>
<td>5,700 (224)</td>
<td></td>
</tr>
</tbody>
</table>

**CRUSHING AND MIXING ROTOR**

<table>
<thead>
<tr>
<th></th>
<th>PM550</th>
<th>PM550-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotor width</td>
<td>2,000 (79)</td>
<td></td>
</tr>
<tr>
<td>Rotor depth</td>
<td>430 (17)</td>
<td></td>
</tr>
<tr>
<td>Rotor diameter</td>
<td>1,150 (45)</td>
<td></td>
</tr>
<tr>
<td>Rotor speed (L / H)</td>
<td>min^-1</td>
<td></td>
</tr>
<tr>
<td>Number of bit (conical / roof)</td>
<td>pcs.</td>
<td></td>
</tr>
<tr>
<td>Shift stroke</td>
<td>500 (20)</td>
<td></td>
</tr>
<tr>
<td>Side clearance</td>
<td>235 (9.3)</td>
<td></td>
</tr>
</tbody>
</table>

**ENGINE**

<table>
<thead>
<tr>
<th></th>
<th>PM550</th>
<th>PM550-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make</td>
<td>KOMATSU</td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>SAA6D140E-5 (EPA - Tier3)</td>
<td></td>
</tr>
</tbody>
</table>

**Type**

- Diesel, water cooled, 4 cycle, 6 cylinder, with turbo charger

**Displacement**

- L (cu.in)

**Rated output**

- kW (HP) / min^-1

- 370 (496) / 1,800

**FLUID CAPACITY**

<table>
<thead>
<tr>
<th></th>
<th>PM550</th>
<th>PM550-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel tank</td>
<td>L (gal)</td>
<td></td>
</tr>
<tr>
<td>Hydrualic tank</td>
<td>L (gal)</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**  
- Operating weight: 100% Fuel, 100% Water No Operator  
- Specifications are subject change without notice.  
- All units are SI units. Inside of ( ) is for reference units.  
- Above specified numbers will be deviated within ±5%.

※ Using low quality fuel may cause engine failure.