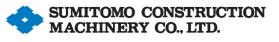
# SUIVITOIVO Sumitomo Asphalt Paver P.D.A.T.E.D.



## **SUMITOMO**P A V E R S



731-1 Naganumahara-cho, Inage-ku, Chiba, 263-0001 Japan For further information please contact : Phone: +81-43-420-1829 Facsimile: +81-43-420-1907

https://www.sumitomokenki.com/

We are constantly improving our products and therefore reserve the right to change designs and specifications without notice. Illustrations may include optional equipment and accessories and may not include all standard equipment.





## Paving the way. With our way.

SUMITOMO - JAPAN

## Outstanding Universality & Convenience.

The new generation of HA60 is developed with Sumitomo's expertise spanning more than six decades, and meets the latest EU Stage Vemission standards.

SUMITOMO Pavers are designed under the concept of the following 3 points and manufactured with high quality.

**Human Friendly** 

**Eco Friendly** 

HA60W-11

Repair Friendly



## **WORLD FIRST**

HA60C-11

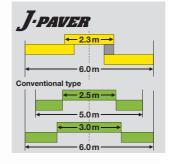
## Infinitely variable triple screed

The J.Paver 2360 uses an enhanced frame structure to improve rigidity significantly, for more consistent and reliable paving operations.



## **Double role**

The J.Paver 2360 covers two conventional screed ranges.



## Within And Market Manager The I m-wi



SUMITOMO

## **Easy transportation**

The HA60-11 can be completely loaded onto a 2.5 m-wide trailer and paving can be started without having to assemble any parts.



## Powerful & ECO

20% more power with the same fuel consumption (compared to the HA60-8B)

## Powerful and ECO

## High-power torque and low fuel consumption engine New

The power system, a combination of the newly developed intelligent YANMAR engine and SUMITOMO's cutting-edge technology, delivers high work efficiency and low fuel consumption. The YANMAR-4TN107 meets EU Stage V emission standards.

> ©YANMAR-4TN107 (Single turbo + Intercooler)

> > **SCR (Selective Catalytic Reduction) System**

SCR + ASC

►NOx

## **SCR System**

The Selective Catalytic Reduction System is one of the most cost-effective and fuel-efficient technologies for injecting AdBlue® (urea water) into the exhaust, where NOx undergoes a chemical reaction and converts exhausts gases into harmless nitrogen and water.

Post-processing NOx results in more efficient engine combustion, thereby improving fuel efficiency and power generation.

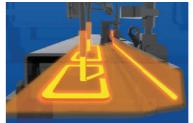


## **Outstanding Convenience**

/ type of heating device New

system provides excellent heating performance with the use of new ype heating device.

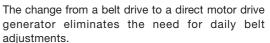




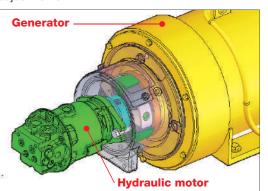


The flat design ensures greater contact with the screed plate

## **Heating generator without New** daily maintenance



HA60C-11



## **Extendable mold board (powered type)**

The extendable mold board extends together with the screed, and cuts off the material to avoid over capacity in front of the rear screed. It also carries material smoothly to the end of the screed.









Hydraulic height adjustmen

## **Height of extendable screeds**

When a difference in surface height occurs between front and rear screeds, it can be adjusted by just a flick of a switch.







## **Crown adjustment**

The slope from center to side can be adjusted by a switch on the hydraulic crown device.





## with Crawler Type HA60C-11

## **Greater Traction & Stability**

## **New operator console layout**

Switches for each operation and function are conveniently configured on the new ergonomic operator console. The operation panel is equipped with a full-color display, which is designed for ease of use. In the event that the screed console is faulty, the main operator console in front of the driver's seat can also be used for operations



- Emergency travel control
- Screed control
- Hopper
- Auto leveling mode
- Auger height adjustment
- **G** Conveyor control
- Auger control
- (1) Steering control
- Engine control
- Travel control

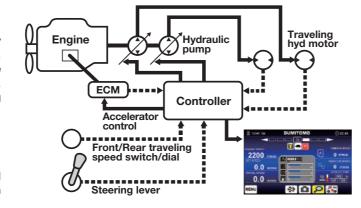
### **Advanced control system**

The engine, hydraulic pumps, and traveling motor are centrally controlled with fine precision by the computer. In addition, settings are stored in the computer's memory, so paving can be carried out simply by turning the traveling switch to "on" or "off". Sumitomo's latest feedback system delivers superior traveling stability (by maintaining the set speed and course).

### **In-shoe motor**

The drive motors are mounted inside the shoe and connected directly via sprockets, eliminating chain backlash. This design ensures strong road surface traction capabilities.





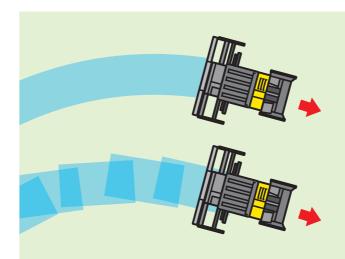
## **Smoother finish achieved with** superior surface contact

The oscillating bogie absorbs impacts from uneven road surfaces. such as those created by manholes.



## **Smooth steering**

The machine can automatically control the speed difference between the left and right tracks for smoother turns with a certain curve radius. Both tracks are driven at the same time, even when turning, for better traction and climbing



## Self-centering direction stick New

The operating direction stick automatically returns to its neutral position after release to prevent operating errors. The fine-tuning steering knob is convenient for when paving around curves.



## Foldaway retaining plate

Spin turn

Extremely useful for feeding materials outward smoothly. The plate is stowed completely within the machine width.

This function makes it possible to turn on the spot, which is

useful on cramped work sites. Dead-ends and corners can

also be paved smoothly, and the machine can be withdrawn





HA60C-11

## **Crawler blade (option)**

The crawler blade scrapes off spilt material in front of the



## **Link-shoes with durable rubber pads**

Durable rubber pads are installed on the link-shoes to prevent damage to the asphalt surface.



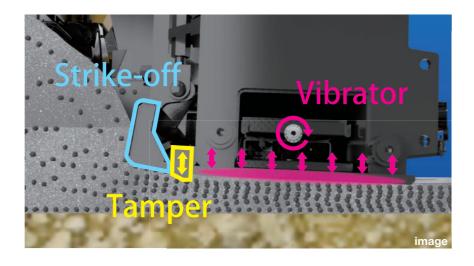




## **High Performance & Quality**

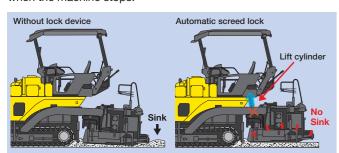
## **STV** compaction system

Features Sumitomo's original Strike-off + Tamper + Vibrator combination system. The strike-off transfers material to the tamper smoothly, and the tamper and vibrator layout provides sufficient compaction.



## **Automatic screed lock**

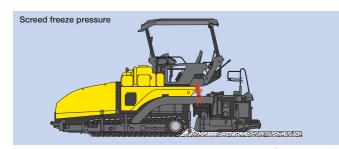
When the automatic lock device is activated, the screed lift cylinder prevents (holds) the screed from sinking into the surface when the machine stops.



Free: Lock (hold):

## **Anti-climb lock**

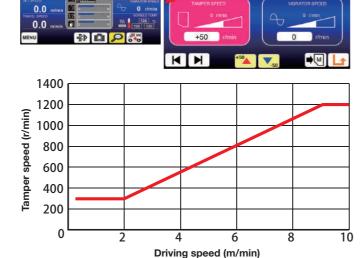
When the anti-climb lock device is activated, the screed lift cylinder prevents (holds) the screed from floating up to the surface when the machine re-starts.



Pressure: Lock (hold): X

## Automatic tamper speed setting New

When using the automatic mode, the system will automatically set the tamper speed appropriate to the paving speed. In addition, the tamper speed can be adjusted manually. Switch between automatic or manual mode via the display screen.





## **New hopper shape**

The new shape helps supply material to the conveyor easier.



The hopper front apron is operated by two hydraulic cylinders, which keeps material inside the hopper and prevents it from spilling onto the ground.







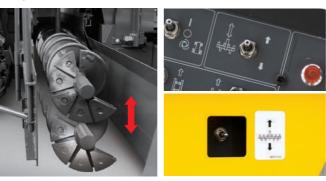
## **Individual operating hopper wings**

This function is useful to avoid obstacles on the road. It also allows for operation depending on the volume of material.



## Auger height adjust switches

The height of the auger can be adjusted hydraulically according to the paving thickness. Adjustment switches are located on the operator console and behind the screed arms.



## Reversible auger and conveyor (individual Left & Right operation)

A perfect balance of material in front of the screed can be achieved by this function.



## Oscillating push roller

When paving a curved road, the push roller is contacting the tire of the dump truck constantly.



6 07

## **HA60W-11**

## **Greater Mobility & Transportability** with Wheel Type HA60W-11

## New operator console lavout

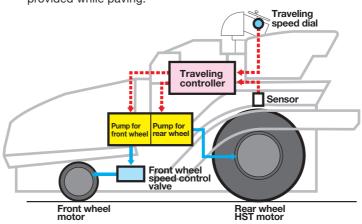
Switches for each operation and function are conveniently configured on the new ergonomic operator console. The operation panel is equipped with a full-color display, which is designed for ease of use. In the event that the screed console is faulty, the main operator console in front of the driver's seat can also be used for operations



- A Emergency travel control
- Screed control
- **O** Hopper
- Auto leveling mode
- Auger height adjustment
- G Conveyor control
- Auger control
- 1 Steering wheel
- Engine control
- **1** Diff-lock
- Travel control

### **4WD** parallel drive system

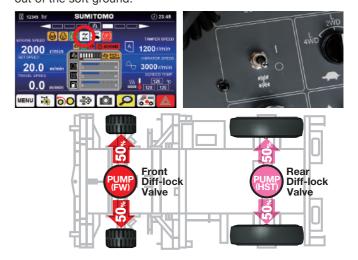
The parallel driving system prevents the front wheels from slipping to make starting smoother. Furthermore, the speed feedback system maintains driving speed without being affected by the material load, and powerful traction force is provided while paving.



## Diff-lock system (option) New



The new developed diff-lock system prevent wheel slip, that gives much traction to keep moving force and easier to get out of the soft ground.



## Two modes of travel speed

- High-speed (0~15 km/h)\* \*Forward, backward (0~8 km/h)
- Low-speed 2WD (1.0~20 m/min) For paving speeds with only rear-wheel drive.
- Low-speed 4WD (1.0~20 m/min) For paving speeds with 4WD for

## **Front wheel traction** control

The front wheel traction power (hydraulic pressure) can select from 4 modes depending on the paving conditions.



### In-wheel-motor

The drive motors are mounted inside the wheels, and eliminate chain backlash. This design ensures strong road surface traction capabilities



## Foldaway retaining plate **New**

Extremely useful for feeding materials outward smoothly. The plate is stowed completely within the machine width.





## Tires can be changed with the screed arm still attached

If a rear tire is punctured, it can be changed without removing the screed and screed arm.



## **Retaining plate storage space**

The retaining plate can be stored behind the hopper wing, and the support pipe can be unraveled and stored behind the body side panel



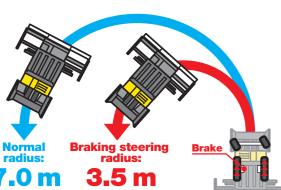




model. The compact body makes the transportation much easier. The braking steering as a standard function enhances turning performance.

The total length of HA60W-11 is shortened by 340 mm compared to the previous

**Short turning radius & improved transportability** 



HA60W-8 340mm shorter than previous model New

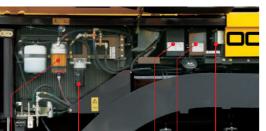
## Maintenance and Featured Options

## **Easy maintenance**

Daily inspections are extremely straightforward. Oil and grease checks, filter changes as well as other maintenance jobs can be easily carried out just by opening the covers.







Fuel filter (pre) Fuel filter (main) ECM/DCU Machine controller Bat











Tractor		Screed		
Conveyor idler	Conveyor drive	Auger	Tamper	Leveling bearing
4	2	4	16	2

## **Emergency evacuation system (option)**

If the engine or pump malfunction during paving, this function allows the machine to be moved to a safe location away from

\*The hydraulic hand pump can operate the cylinders of the hopper,



### **AVS** (Asphalt fume Ventilation System) (option)

The hydraulic fan draws fumes from the area between tractor and screed, and blows them away upward of canopy.

**Side plate heater** (option)





## **Automation for convenience**

Grade sensors, slope sensors, 3D control systems and other devices for automation can be used with Sumitomo's pavers to make operations more convenient.

,,,,	Cilicite		
	Device	Туре	
0	Grade sensor	Contact / Ultrasonic	
2	Slope sensor	Conventional / Digital	
8	Big-Ski	3 / 4 Sonic	
4	Material flow sensor	Auger rotation speed	
6	3D-Machine control	GPS / Total station	

## **Principle specifications**

		HA60C-11	HA60W-11		
	Paving width	2.3~6.0 m infi	nitely variable		
	Paving thickness	10~300 mm			
	Paving speed	1~20 m/min			
	Hopper capacity	12 ton			
	Center crown ratio / Side slope ratio	-1~3% (Hyd.) / 0~3%			
Dimensions	Overall length	6,590 mm			
Difficitsions	Overall (Transportation) width	2,490	mm		
	Overall height / Transportation height	3,765 mm / 2,920 mm	3,865 mm / 3,020 mm		
	Operating weight	15,900 kg	15,970 kg		
	Tumbler distance / Wheel base	2,615 mm	2,650 mm		
	Crawler width	284 mm	_		
	Tires	_	Front; 22× 14 × 16 (solid) Rear; 14.00R25 (385/95R25)		
Conveyor system	Width x No. of line	400 mi	m × 2		
	Rotating speed	0~15.9 m/min			
Auger	Auger dimensions	330 dia. × 300 pitch mm			
system	Rotating speed	0~82 min <sup>-1</sup>			
0	Model	J-Paver	2360		
Screed system	Heating system	Electric			
oyotom	Compaction system	Tamper & Vibrator			
	Type of driving method	Crawler (Track)	Wheel (Tire)		
Drive	Drive method	HST	Front; Hyd. Motor / Rear; HST		
system	Brake type	Automatic brake			
	Travelling speed (Forward /Backward)	0~3 / 0~3 km/h	0~15 / 0~8 km/h		
	Make & Model	YANMAR-4TN10	07 (EU Stage V)		
Engine	Displacement	4,567 cc	(4 CYL.)		
Engine	Rated output	110/2,200 kW/min <sup>-1</sup> (ECO MODE 108/2,000 kW/min <sup>-1</sup> )			
	Fuel tank capacity	180 L	191 L		

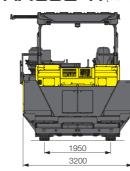
### **Equipment items**

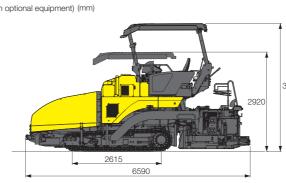
		HA60C-11	HA60W-11
Push roller	Oscillating push roller	0	0
Hopper	Hydraulic operated hopper front	0	0
	Individual operated wings (L&R)	0	0
Auger	Hydraulic height adjustment (150 mm)	0	0
Auger	Reversible auger	0	0
Operator seat	Left & right seat	0	0
	Slide-out seat	0	0
	Seat heater (Under developing)		•
Sensor	Grade & Slope sensor (Contact/Ultrasonic)		•
	Material flow controller (Auger rotation control)		•
Hydraulic	Front wheel traction control	-	0
	Brake steering	-	0
	Diff-lock system	_	

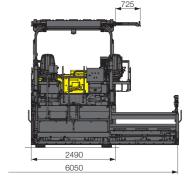
	0	Standard	<ul><li>Option</li></ul>
		HA60C-11	HA60W-11
	Screed anti climb lock	0	0
	Hydraulic center crown	0	0
	Hydraulic height adjustment of extendable screed	0	0
Screed	Hydraulic height adjustment of extendable mold board	0	0
	Auto. Tamper speed setting	0	0
	Electric heating (3CH control)	0	0
	Side plate heating (Electric)		
	Hard top canopy (FRP) (Hydraulic operation)	0	0
	Emergency control system by hand pump		
	Auto greasing system (Inc. screed)		
	Crawler blade		-
Others	FVM (Field View Monitor) (3 cameras)		
	Hopper camera (1 camera)		
	Side window shield	0	0
	Front window shield (Under developing)		
	AVS (Asphalt fume Ventilation System) (Under developing)		

## **Dimensions**

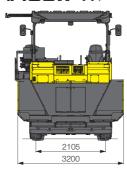
HAGOC-11 [Crawler Type] (with optional equipment) (mm)

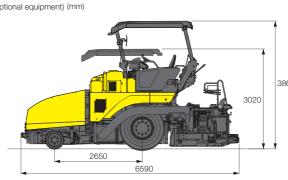


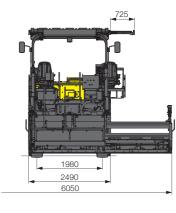




## HAGOW-11 [Wheel Type] (with optional equipment) (mm)







## Easy & Safe

## **Comfortable Operation**

## Smooth movable operator console **New**

The operator console can be moved from left to right to provide the operator with greater flexibility, with the force required for movement half that of the HA60-8B.



## Smooth slide out seat **New**

The slide out seat is useful for checking the road and working conditions. The operator console can also slide to suit the seat, with the force required for movement half that of the HA60-8B. The deluxe suspension seat also adds a higher level of comfort.



## Hard top canopy New

The new FRP (Fiber Reinforced Plastic) canopy is operated hydraulically during opening and closing.





## Slide out type sunshade

With the new designed FRP Canopy, the newly slide out type sunshade is much bigger, easy to operate and gives the operator stand more comfort.



## **Side windshield**

The newly designed side windshield prevents strong winds and helps maintain a clear field of view



Sumitomo has developed the world's first revolutionary safety device, Field View







Wide field of view

to the front! Camera

## **Full color display**

The operator console has a 7-inch wide full-color display that is easy to read even in bright places. Most working conditions can be set through the buttons below, and machine status, maintenance and other important information can also be collected.



### **Eco Mode switch**

The Eco Mode switch drops the engine speed from 2,200 min<sup>-1</sup> to 2,000 min<sup>-1</sup> under light loads, which is useful for reducing fuel consumption.

emergency.

**Emergency stop button** 

This is an emergency stop button to be pressed in case of



## **New screed console with color display**

Key functions are arranged on the left and right screed console, and the auger and conveyor can also be operated individually. The color sub displays indicate the performance in figures. Tamper & vibrator, heating temperature and other settings are also available with the push buttons below. Emergency stop buttons are also equipped for safety.

## 9

### **<sup>3</sup>** Screed control

### **G** Auger & Conveyor control

Control material supply, Auger and Conveyo









## Safety

## FVM (Field View Monitor) (option) New

Monitor (FVM). The primary feature of the device is its ability to provide a maximum range view of 270 degrees - mostly in the front and rear of the equipment - on a full color monitor. The technology that dramatically expands the view of the operator will probably set the standard for construction sites that demand a higher level of safety.





LED light for driving guide