SUMITOMO

HAGOD



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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.



HA60-88 series

TRANSITION TO A NEW STAGE Paving the way. With our way.

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

Human Friendly
Eco Friendly
Repair Friendly

High Performance Easy Operation Cost and Time Saving



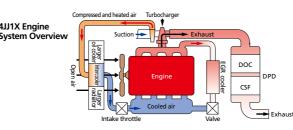
High-power torque and low fuel consumption engine

The power system, a combination of an intelligent **ISUZU** engine and **SUMITOMO's** cutting-edge technology, delivers high work efficiency with low fuel consumption.

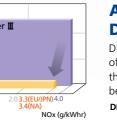
New Generation Engine System "SPACE 5+"







• Nox 18% Reduction (as compared to Tier 3 levels) • PM 92% Reduction (as compared to Tier 3 levels) (as compared to Tier 3 levels)



Compliant to Emission Regulations U.S. EPA Tier 4 Interim, EU Stage III B, and JPN Tier 4 Interim

PM (a/kW

The state-of-the-art engine system "SPACE 5+" substantially reduces NOx (nitrogen oxide) and PM (particulate matter) contained in the exhaust gas, further reducing or minimizing the impact on the environment.



Made in Japan



Photo may include optional equipment

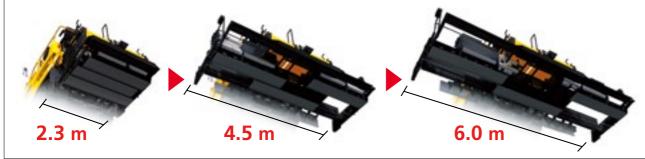
After-Treatment Technology: Diesel Particulate Diffuser (DPD)

DPD is an exhaust after treatment device which traps and burns off PM in the exhaust gas. PM accumulation can be monitored by the DPD status gauge, and Auto Regeneration (filter cleaning) will be conducted at regular intervals.

HA60-88 series

World First: Screed Extensibility Allows a Double Role Save a Maximum of 50% on Working Hours.

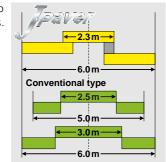




The new J- Paver2360 uses a new frame structure to drastically improve rigidity. As a result, it can carry out consistently stable paving operations.

Double role

The J·Paver2360 covers two conventional screed ranges.



Easy transportation

The HA60C(HA60W) can be completely loaded onto a 2.5 m-wide trailer and start paving without having to assemble the screed.

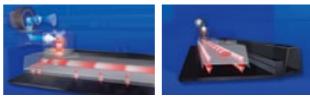


Photo may include optional equipment

The human friendly

LPG Blower burner (Auto. Temp control type)

The heating controller keeps the temperature of each screed to the setting temp automatically.





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.



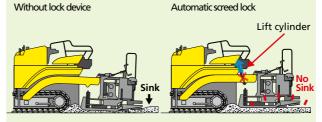
Center crown

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



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.



A W is Cy so su

rown n center switch lic

Electric heating system (option)

Sumitomo's latest control system delivers ecologically optimized heating without increasing the horsepower of the engine.



Extendable mold board (Powered type)

The extendable mold board cuts off the material to avoid over capacity in front of the rear screed. And it can carry the material smoothly to the end of screed.

d Front

draulic height adjustment



Extendable mold board Hydraulic cylinder

Center (manual)

Screed assist

When paving thick layers, the screed lift cylinder assist floating of the screed by the back pressure.

Anti-climb lock (option)

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





Free: Pressure: Lock (hold):

HAGO-88 series

Labor-saver Feeding System for Best Efficiency.

Low front and large hopper

The hopper's leading edge is low to suit dump trucks with low bumpers. The hopper also has ample supply capacity.

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. And operation depending on the volume of materials is possible.



Hydraulically adjusted auger

The height of the auger can be adjusted freely according to the paving thickness. (Adjustment range; 115 mm-265 mm *from the bottom of the auger to the ground)



Easy operation and comfort

Movable control box

The control box can be moved from left to right to provide the operator with greater flexibility.



Reversible auger conveyor A perfect balance of materials 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.



Slide out seat

The slide out seat is useful for checking the road and working conditions. The control box can also slide to suit the seat. The deluxe suspension seat also adds a higher level of comfort.



The user friendly and repair friendly

Color monitor

The liquid crystal color monitor displays useful information and can adjust many functions. These simple toggle switches have been used which allows them to be replaced individually with ease.





Eco Mode switch

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



time

Eco Mode switch

Emergency controls

Sumitomo machines are equipped with many emergency control systems. Sumitomo's concept is to continue paving where possible, or in the worst case, move the machine to a safe place away from the road if engine or pump malfunctions.



Self-sealing for hand pur operation also available

Hard top (FPR) canopy

The hard top canopy can be folded using the hand pump easily. And the exhaust pipe is folded at the same



Fail



06





Sub color monitor is equipped on both sides of the extendable screed.





Folding

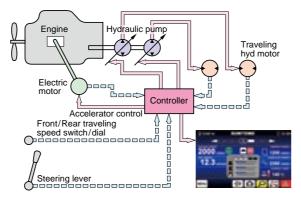
		F	unctions				
ure device	Travel		Paving			Emergency operation	
	High speed	Low speed	Manual	Auto(sensor)	Heating		
n panel ch and dial	×	0	0	0	о	Operate by monitor	
n panel troller	×	0	0	0	0	Operate by monitor	
achine troller	0	0	0	×	×	Replace controller cable	
achine trollers	0	0	×	×	×	Replace controller cable	
achine trollers	×	0	×	×	×	Operate by emergency mode (main panel controller)	
ine or Pump	×	×	×	×	×	Retracting and lifting up the screed, and closing hopper by hand pump	

HA60C-88

Crawler Type for Powerful Towing Capacity and Exceptional Paving Flatness.

Adopting the latest travel 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.



Improvements to smoothness attained by superior surface contact

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

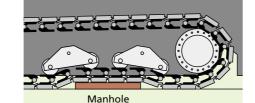
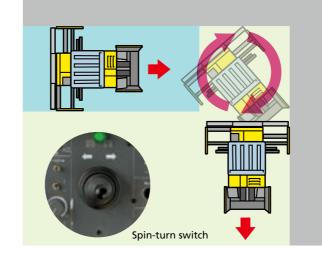


Photo may include optional equipment

SUMITOMO

Spin-turn function installed

This function makes it possible to turn on the spot, which is very useful on cramped job-sites such as dead ends.



Utilization of a link-shoe with durable rubber pads

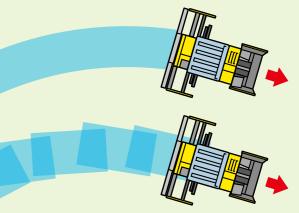
The durable rubber pads are equipped on the link-shoe, so asphalt surface is not damaged.





Smooth steering with computerized control

The machine is automatically controlled, with left and right side traveling speeds being set to curve in a continuous smooth arc without losing traction force.



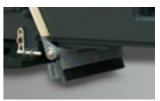
Foldaway retaining plate

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



Crawler blade (option)

The crawler blade scrapes off the spilled material in front of the shoe.



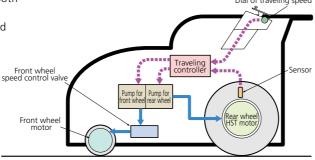
HA60W-88

Wheeled-type for Great Mobility with Outstanding Drivability.



The 4WD with parallel drive system makes the front and rear wheels start rotation exactly simultaneously

This system prevents slipping of the front wheel, and makes a smooth starting motion possible. Furthermore, the speed feedback system maintains driving speed without influence of the material load, and powerful traction force is provided while paving.





Two modes of travel speed

•High-speed (0~15 km/h)* A mode designed for high-speed travel *Forward, backward (0~8 km/h)

- •Low-speed 2WD (1.0~20 m/min) A mode designed for paving speeds which is rear-wheel drive only.
- Low-speed 4WD (1.0~12 m/min) A mode designed for paving speeds which provides powerful traction force through 4 wheel drive.



Front wheel traction control

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



Braking steering (option)

The machine can turn with a minimum radius by locking the unilateral rear wheels with brakes.





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



Tire changing situati

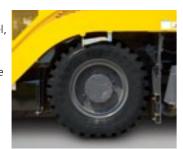
Extension auger storage

The extension augers can be stowed under the hopper.



In-wheel-motor

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





in the hopper section

The retaining plates can be stowed in the side of hopper.

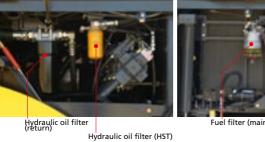


OTHER ITEMS

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.





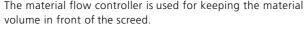


The grade sensor is used for leveling screed along a height reference. The slope sensor serves to control the cross-slope of the screed.

Grade and slope sensor (option)

The material flow controller is used for keeping the material

Material flow sensor (option)





	Sensor type	Feature		
1	Contact type grade sensor	For direct tracing of a reference (stringline, ground).		
2	Digi-rotary grade sensor	Same as No.1. This can be easily operated by "Digital controller".		
3-1	Ultrasonic type grade sensor	Non-contacting tracing of a reference (stringline, ground).		
3-2	Big-ski	Three ultrasonic sensors scan the reference in non-contacting operation.		
4	Slope sensor	This is used with No.1.		
5	Digi-slope sensor	This is used with No.2 or No.3. This can be operated by "Digital controller".		
6	Material flow sensor	This is used for controlling the auger speed (The contact type of the conveyor sensor is standard).		

3D-machine control (option)

3D-machine control system makes it possible to automatically control grade and slope according to the digital design data of road. The combination of Grade and Slope control and Navigation is called a positioning system, which is provided by many manufacturers. For positioning, laser-based total stations are available as well as mmGPS.

Standard equipment





Screw guard

Leveling cylinder gauge





Toolbox

AGC bracket and storage space

Special equipment (option)

AVS (Asphalt fume Ventilation System)

Sumitomo's AVS has two functions that make working operations safer and more comfortable.

- 1. After the air cools the radiator, it blows away fumes from the hopper. 2. The hydraulic fan draws fumes from the area between tractor and screed, and blows them
- away from the outlet installed outside of the engine exhaust pipe.

Outlet



Cooling air Fan Hood



Camera (for hopper monitoring)

Auto greasing system TV: tractor and screed / V: tractor

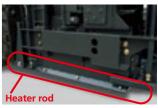


Rear LED auxiliary lighting Cleaning devices





Photo is for illustration purposes.



Electric heating side plate For models with electric heater

SPECIFICATIONS

Principle Specifications

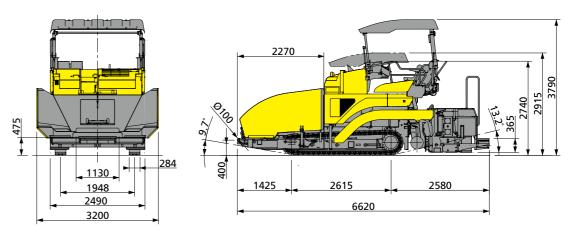
			HA60C-8B	HA60W-8B		
Paving performance	Paving width		2.3~6.0 m infinitely variable			
	Paving thickness		10~300 mm			
	Paving speed		1~20 m/min			
	Hopper capacity		13 ton			
	Center crown ratio / Side slope ratio		-1~3 (Hyd.) / 0~3 %			
Dimensions	Operating we	ight (LPG heating)	14730 kg	14730 kg 14990 kg		
	Operating we	ight (Electric heating)	15000 kg	15260 kg		
	Overall length		6620 mm	6930 mm		
	Overall (transp	portation) width	2490 mm	2490 mm		
	Overall height	(with canopy)	2740 (3790) mm	2765 (3790) mm		
	Transportation	n height (with canopy)	2740 (2915) mm	2765 (2915) mm		
	Wheel base /	Tumbler distance	2615 mm	2700 mm		
	Crawler width		284 mm	_		
	Tires		_	Front 22 × 14 × 16 (solid) Rear 15.5R25		
Convovor	Type of driving method		Hydraulic (individual left & right)			
Conveyor system	Width × No. of line		482 mm × 2			
oyotoni	Rotating speed		0~15.9 m/min			
Auger	Auger dimens		330 dia. × 300 pitch mm			
system	Rotating spee	ed	0~82 min ⁻¹			
	Model		J'Paver 2360			
	Heating syste	m	LPG blower burner / Electric (option)			
Screed	Compaction system	Туре	Tamper and vibrator			
system		Vibrator frequency	0~50 Hz (3000 cpm)			
System	System	Tamper rotating speed	0~20 Hz (1200 cpm)			
	Height adjustr	ment of extendable screed	Hydraulic			
	Height adjustment of extendable mold board		Hydraulic			
Drive system	Type of driving	g method	Crawler (Track)	Wheel (Tire)		
	Drive method		HST	Front; Hyd. Motor / Rear; HST		
	Brake type		Automatic brake	Automatic brake		
	Traveling spee	ed (Forward / Backward)	0~3 / 0~3 km/h	0~15 / 0~10 km/h		
Engine	Make & mode	el	ISUZU 4JJ1X (EU Stage III B / EPA Interim Tier 4)			
	Displacement		2999 cc (4CYL.)			
	Rated output		92.2/2200 kW/min ⁻¹ (125.3 hp)			
	Fuel tank cap	acity	140 L			
	Electric system	n	24 V			

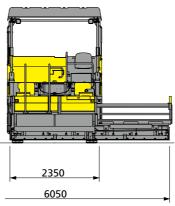
Equipment Items HA60C-8B HA60W-8B Oscillating push roller \bigcirc \bigcirc Hydraulic operated hopper front \bigcirc \bigcirc Individual operated wings (L&R) \bigcirc \bigcirc Hydraulic height adjustment & reversible auger \bigcirc Auger \bigcirc Left & right seat \bigcirc \bigcirc Slide-out seat \bigcirc \bigcirc Deluxe seat (Suspension type) \bigcirc \bigcirc Grade & slope sensor (Contact / Ultrasonic) • ۲ Material flow controller (Auger rotation control) • • Front wheel traction control \bigcirc Brake steering • Screed anti-climb lock Hydraulic center crown \bigcirc \bigcirc \bigcirc Hydraulic height adjustment of extendable screed \bigcirc Hydraulic height adjustment of extendable mold board \bigcirc \bigcirc Auto. Temp. control for LPG heating \bigcirc \bigcirc Electric heating • • Electric heating side plate Hard top canopy (FRP) \bigcirc \bigcirc \bigcirc \bigcirc Canopy folding and Emergency control by hand pump • Auto greasing system • AVS (Asphalt fume Ventilation System) Crawler blade

Sales specifications, accessories and other items may differ depending on country or region. Ask for details during sales negotiations.

Dimensions (mm)

HASOC-88 [Crawler Type] (with optional equipment)





HAGOW-BB [Wheel Type] (with optional equipment)

