

VOLVO PAVING EQUIPMENT

# BLAW-KNOX



MORE CARE. BUILT IN.



# WE'RE AS DEDICATED TO PAVING AS YOU ARE

The new highway-class pavers from Volvo Construction Equipment have been designed to take you to the next level of paving, with independent auger and conveyor systems, automatic conveyor tensioning, and a patented front-wheel suspension. Features like these, born of the Blaw-Knox and ABG legacy, have combined with our never-ending commitment to reliable performance to make Volvo the name to trust in road equipment.

## Decades of innovations

For years, these pavers have featured innovations that were ahead of their time but quickly became paving industry standards, including:

- Fast-attach extensions
- Extendible tunnels
- Pneumatic rubber tires
- Hydrostatic drive
- Sonic feed controls
- Off-set bogie wheels
- Raising hopper
- Dual operator stations

## Unsurpassed operator comfort

Operator seats extend beyond the edge of the machine for improved visibility. Each seat can be adjusted to the front or back, and each console rotates and adjusts at two pivot points for a more comfortable ride.

## Ease of operation

Automatic chain tensioning ensures the proper performance of the conveyor system, saving maintenance time and costs.

## Improved material flow control

Independent control of the auger and conveyor provides optimal control of material flow. Sonic sensors control each of the two auger and conveyor drives while a priming function simplifies the filling of the auger tunnel. Optional reversible augers and conveyors are available.

## Paver-mounted 30 kW (40.2 hp) generator

Integrated into all paver models, a 30 kW (40.2 hp) generator electrically heats the screed while providing plenty of power for such auxiliary applications as lighting or other jobsite tools.

## Environmentally friendly cleaning

An integrated track coating system is standard on all PF6000 Series pavers. The environmentally friendly Blaw-Kote coating system can be used on the complete machine and applied to the tracks with the push of a button.





# NEW VOLVO HIGHWAY-CLASS PAVERS, DESIGNED WITH INNOVATION FROM AROUND THE GLOBE

## 1 Better flotation

The PF6110 has a per track footprint that is 3,3 m (129") long and 0,5 m (19.7") wide. It is the industry's largest, providing for even weight distribution over the tracks and improved flotation.

## 2 Optimal tractive effort

The PF6110 undercarriage has been completely redesigned using heavy-duty, traction-drive technology and a new tandem-bogie weight distribution system that provides maximum traction during paving and comfortable steering in the travel mode. Machine weight shifts smoothly about the tandem-bogie pivot to maintain optimal ground contact in all operating modes. The undercarriage utilizes six pairs of oscillating bogies and large diameter wheels to ensure maximum component life and smooth operation.

## 3 Lower operating costs

The PF6110 is powered by an efficient 153 kW (205 hp) Cummins QSB6.7 Tier 3 diesel engine that operates at 1,800 rpm to provide better fuel economy and lower operating costs.

## 4 Easy access cooling system

The variable speed cooling fan provides on-demand cooling, reducing engine power stress. The tiered design of the radiator supplies easy access and serviceability.

## 5 Ease of use

The intuitive control panel places all controls within the reach of the operator. This design built with rocker switches, a single diagnostic panel and lever steering makes it easy to learn and easy to operate.

## 6 Screed versatility

Multiple screed configurations are available on the PF6110 tractor with vibratory front- or rear-mounted extensions.

## 7 Efficient screed heating

All screeds for the PF6110 are heated electrically with heater bar technology, reducing set-up and heating times. The heat bars are interchangeable and can be replaced without removing the screed plate.

## 8 431,8 mm (17") auger assembly

The auger assembly consists of 431,8 mm (17") auger segments to effectively move the material to the endgate.

## 9 Foldable exhaust system

The SmokEater fumes extraction and engine exhaust are discharged through a combined exhaust tube. The exhaust system is foldable for transport purposes.

## 10 Onboard diagnostic system

An integrated diagnostic panel provides clear error readouts for quick problem diagnosis and less downtime. It also retrieves and stores information for further analysis.

## 11 Power tunnel synchronization

Standard, two-stage power tunnels operate from the tractor or from the screed and are synchronized to retract in conjunction with the screed. Tunnel extension range from 3 m (10') to 5 m (16.25'). This feature gives the contractor more control of the head of material to improve performance.

## 12 Hopper lock system

This safety mechanism locks the hopper in place for safer transport and service.





Job specifications and requirements are impacted by global influences, and Volvo has developed a new line of pavers incorporating technology and innovation from around the world. As an industry-leading manufacturer of paving and compaction products, Volvo has designed the PF6110 with proven components and systems to offer a paver that gives you a competitive edge.



# NEW VOLVO HIGHWAY-CLASS PAVERS, DESIGNED WITH INNOVATION FROM AROUND THE GLOBE

## 1 Screed versatility

Multiple screed configurations are available on the PF6160 and PF6170 tractors, including vibratory with front- or rear-mounted extensions.

## 2 Ease of use

The intuitive control panel places all controls within the reach of the operator. This design built with rocker switches, a single diagnostic panel and a steering wheel makes it easy to learn and easy to operate.

## 3 Efficient screed heating

All screeds for the PF6160 and PF6170 pavers are heated electrically with heater bar technology, reducing set-up and heating times. The heat bars are interchangeable and can be replaced without removing the screed plate.

## 4 Better flotation

The PF6160 and PF6170 utilize low-pressure tires, exclusive to Volvo, providing a larger footprint for flotation and better traction.

## 5 Lower operating costs

The Volvo PF6160 and PF6170 pavers are powered by an efficient 152,9 kW (205 hp) Cummins QSB6.7 Tier 3 diesel engines that operate at 1,800 rpm to provide better fuel economy and lower operating costs.

## 6 Level-load steering

The Volvo wheeled pavers are equipped with a patented level-load suspension system to improve stability and extend the life of the bogie wheels.

## 7 Easy access to cooling system

The variable speed cooling fan provides on-demand cooling, reducing engine power stress. The tiered design of the radiator supplies easy access and serviceability.

## 8 Foldable exhaust system

The SmokEater fumes extraction and engine exhaust are discharged through a combined exhaust tube. The exhaust system is foldable for transport purposes (as shown).

## 9 431,8 mm (17") auger assembly

The auger assembly consists of 431,8 mm (17") auger segments to effectively move the material to the endgate.

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## 11 Power tunnel synchronization

Standard, two-stage power tunnels operate from the tractor or from the screed and are synchronized to retract in conjunction with the screed. Tunnel extension range from 3 m (10') to 5 m (16.25'). This feature gives the contractor more control of the head of material to improve performance.

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Job specifications and requirements are impacted by global influences, and Volvo has developed a new line of pavers incorporating technology and innovation from around the world. As an industry-leading manufacturer of paving and compaction products, Volvo has designed the PF6160 and the PF6170 with proven components and systems to offer pavers that give you a competitive edge.



# HIGHER PRODUCTIVITY AND LOWER COSTS: VOLVO MID-SIZE PAVERS ARE HIGH IN VALUE

Volvo Construction Equipment presents a high-capacity family of mid-sized, wheel- and track-mounted pavers capable of placing a variety of materials: bituminous base, binder, and surface course mixes; cement- and lime-stabilized sub-base; and graded aggregate materials. Each model is equipped with proven Blaw-Knox technology and assures you of high-performance features that reduce maintenance, lower operating costs, and boost productivity.

## Performance Features

- Exclusive low-pressure tires provide larger footprint for better flotation and traction **(PF161, PF2181, PF3172)**
- Exclusive offset bogie front suspension distributes front-end weight more evenly for better traction **(PF161, PF2181, PF3172)**
- Maintenance-free sealed auger and conveyor bearings eliminate daily greasing
- Patented power-adjustable auger height of 114,3 mm – 279,4 mm **(4.5" – 11")** lets operator adapt quickly to varying job requirements
- Easy-access filters reduce maintenance time
- High-efficiency 406 mm **(16")** augers are 19 mm **(0.75")** thick for better delivery and longer wear; patented power-adjustable height of 114 mm – 279 mm **(4.5" – 11")** permits the operator to quickly adapt to varying job requirements
- Single, swing-mounted operator console and two control stations allow operators the convenience and control to work safely with industry-best visibility **(PF161, PF4410)**
- Automatic feed system control uses Mat Kontrol® II with a choice of paddle sensors or Ultra® III Sonic sensors
- Continuous, flexible, Hi-Speed, EzRider, rubber track combines the traction and

- flotation of a track machine with the mobility and rideability of a wheeled machine **(PF4410)**
- Hydraulic power tunnels and baffles (chain curtains) assist the operator in maintaining an even head of material in front of the screed and quickly accommodates paving widths to 3,7 m **(12')** without additional component **(PF4410 standard – PF161, PF2181, PF3172 optional)**
- Exclusive clamp-in conveyor floor plates reduces maintenance time versus traditional bolt-in designs **(PF2181, PF3172, PF4410)**
- Dual operator consoles provide operator full control while operating from either side of the machine **(PF2181, PF3172)**

## Available Options

- Additional operator's umbrella
- Auger and auger-guard extension kits
- Blaw-Kontrol® II (mechanical grade sensor, mobile reference system, Ultra IV sonic averaging system, UltraEye® V ultrasonic grade sensor)
- Hydraulic power tunnels **(PF161, PF2181, PF3172)**
- Material indicator kit
- Material management kit
- Tower lighting kit **(PF2181, PF3172)**
- Truck hitch

- Backup alarm **(PF161, PF2181, PF3172)**
- Engine shutdown kit **(PF2181, PF3172, PF4410)**
- Front wheel assist
- Generator set **(PF2181, PF3172, PF4410)** (cannot be used with UltiMat or Omni III E screeds)
- Light beacon and work lights **(PF2181, PF3172, PF4410)**

## Additional Features

- Hydrostatic direct traction drive eliminates approximately 70 percent of mechanical drive train components
- Easier access to electrical circuit boards ensures faster service
- Central hydraulic valve block with interchangeable cartridge valves speeds service access, simplifies troubleshooting
- Extensive state-of-the-art equipment options help automate and improve HMA paving quality
- Unitized rear-feed section speeds service access to all major feeder system components by approximately 50 percent
- Counter-rotating tracks provide superior tight-quartered maneuverability **(PF4410)**

If no model specified, applies to all models.





# INNOVATIVE, HIGH-PERFORMANCE SCREEDS

## SET THE LEVEL OF QUALITY

From laying and sealing a smooth mat, beginning the compaction process, producing tight joints, to establishing grade and slope, the quality of a finished job depends on the quality of the screed. That's why so many contractors choose Blaw-Knox screeds from Volvo. We offer the widest range of screeds, each one unmatched for durability and performance.

### High-production screed

The Volvo Blaw-Knox Omni 318 screed is built with front-mounted extensions and equipped with a variable vibration system for improved performance, reliability, and operator control. This vibratory screed is electrically heated with technology that provides uniform heat and reduced operating costs.

### High-density screed

The Volvo Blaw-Knox line also includes the Omni 1000 screed with rear-mounted extensions and a variable vibration system. Based on proven technology, this screed includes power height, slope, and crown adjustments, as well as a quick coupling system to add extensions — all standard.

### Quick coupling system

Extensions for the Omni 1000 screed are available in 0,75 m (**30"**) and 1,25 m (**49"**) lengths. Using hydraulic tensioning cylinders, extensions can be quickly added to change paving widths. Power is transmitted from the screed to the tampers and vibrators through a splined coupling.

### Heater bar technology

Heater bars in our screeds offer an efficient way to provide even heat through proven technology. Each screed has three bars per section with variable power density to better heat the edges. These bars are interchangeable and can be replaced without removing screed plates, providing quicker changes and less downtime.





# THE MOST IMPORTANT PART

Paving equipment is just the beginning at Volvo. We're committed to you for the long haul with an industry-leading support system. It will keep you up and running for as long as you own Volvo equipment.

It all starts with your Volvo dealer, who's dedicated to the business of asphalt paving and provides you with an invaluable source for product information, training, technical service bulletins, service and parts. Purchasing paving equipment is an investment. Service and support from Volvo protects the value of your investment down the road.

You're not just buying a powerful piece of equipment. You're investing in the strength of Volvo and its people. From engineers to factory technicians, from field representatives to your dealer, they support your purchase and are committed to helping you realize maximum value, job after job, day after day. Wherever you see a piece of Volvo equipment, you'll know that all of Volvo is behind it.

Other elements of the Volvo support network include:

#### **Volvo Road Institute**

Factory-sponsored training in all aspects of asphalt paving and compaction operations.

#### **Field service representatives**

Regionally located representatives who support your dealer with troubleshooting expertise on difficult service problems.

#### **Factory technical support**

Available at each Volvo manufacturing plant for all product lines.

#### **Expanded and expedited parts delivery**

Dealer stocking program for frequently used parts and express availability for other parts.

#### **Product upgrades**

Retrofit packages and improvements are designed to keep older equipment productive.

#### **Financial solutions**

Financing and leasing options tailored to meet your individual business needs offered through your dealer. Our streamlined loan application and credit approval process can quickly make your business plans a reality.



# SPECIFICATIONS

Model		PF161	PF2181	PF3172	PF4410
Engine Make / Model		Cummins Elite 4BTA 3.9	Cummins QSB 5.9-30T	Cummins QSB 5.9-30T	Cummins QSB 5.9-30T
Engine	kW @ rpm (hp)	107 @ 79,8 (2,100)	158 @ 117,8 (2,100)	158 @ 117,8 (2,100)	158 @ 117,8 (2,100)
Paving Speed	m/min (fpm)	59,7 (196)	79,2 (260)	69,2 (227)	73,8 (242)
Travel Speed	km/h (mph)	15,9 (9.9)	13,7 (8.5)	15,8 (9.8)	13,7 (8.5)
Basic Screed Width	m (ft)	2,44 (8)	2,44 (8)	3,05 (10)	2,44 (8)
Max Paving Width	m (ft)	5,79 (19)	6,4 (21)	6,4 (21)	7,62 (25)
Paving Depth	mm (in)	6,35 (0.25) - 304,8 (12)	6,35 (0.25) - 304,8 (12)	6,35 (0.25) - 304,8 (12)	6,35 (0.25) - 203,2 (8)
Hopper Capacity	m <sup>3</sup> (cu ft)	5,13 (181)	5,15 (182)	5,15 (182)	1,55 (4.39)
Overall Travel Length w/ Screed*	m (ft)	5,39 (12.28)	6,50 (21.33)	6,50 (21.33)	5,43 (17.83)
Overall Travel Height w/ Exhaust	m (ft)	3,05 (10)	3,15 (10.33)	3,15 (10.33)	3,13 (10.27)
Width (hopper wings in)	m (ft)	2,5 (8.21)	2,5 (8.21)	3,05 (10)	2,5 (8.21)
Width (hopper wings out)	m (ft)	3,18 (10.42)	3,15 (10.33)	3,15 (10.33)	3,18 (10.42)
Wheelbase	cm (in)	190,5 (75)	226,1 (89)	228,6 (90)	259,1 (102)
Weight w/ Screed*	kg (lb)	11 022 (24,300)	14 515 (32,000)	15 118 (33,330)	16 307 (35,950)

\*Ask dealer for configuration options. Measurements (approx.) represent machine with heaviest screed.

Model		PF6110	PF6160	PF6170
Basic Screed Width	m (ft)	3,05 (10)	3,05 (10)	3,05 (10)
Max Paving Width	m (ft)	7,92 (26)	7,92 (26)	7,92 (26)
Paving Depth	mm (in)	6,35 - 304,8 (0.25 - 12)	6,35 - 304,8 (0.25 - 12)	6,35 - 304,8 (0.25 - 12)
Hopper Capacity	T (t) / m <sup>3</sup> (cu ft)	13,04 (14.38) / 6,51 (230)	13,04 (14.38) / 6,51 (230)	13,04 (14.38) / 6,51 (230)
Weight Of Tractor Only	kg (lb)	18 174 (40,066)	16 385 (36,122)	16 521 (36,422)
	w/ Omni 318	21 597 (47,614)	19 672 (43,370)	19 808 (43,670)
	w/ Omni 1000	22 173 (48,884)	20 248 (44,640)	20 384 (44,940)
Track Length / Wheelbase	mm (in)	3 454,4 (136) / 2 286 (90)	2 616 (103)	2 616 (103)
Operating Height	mm (in)	3 810 (150)	3 556 (140)	3 556 (140)
Width	mm (in) Hopper Sides Up	2 997,2 (118)	2 997,2 (118)	2 997,2 (118)
	Hopper Sides Down	3 276,6 (129)	3 276,6 (129)	3 276,6 (129)
Inside Hopper Width	mm (in)	3 225,8 (127)	3 225,8 (127)	3 225,8 (127)
Max Paver Length	mm (in)	6 382 (251)	6 401 (252)	5 232,4 (206)
<b>Engine</b>				
Make / Model		Cummins QSB 6.7 Tier 3 electronic engine w/ CAC	Cummins QSB 6.7 Tier 3 electronic engine with CAC	Cummins QSB 6.7 Tier 3 electronic engine with CAC
Rated Power @ 1,800 rpm	kW (hp)	153 (205)	152,9 (205)	152,9 (205)
<b>Propulsion</b>				
Suspension		Continuous rubber track	2-speed planetaries, 2-speed drive motors	2-speed planetaries, 2-speed drive motors, optional 4-wheel FWA
Drive Tire Size	mm (in)	482,6 (19)	457,2 x 635 (18 x 25)	457,2 x 635 (18 x 25)
Front Wheel Size	mm (in)	508 (20)	356 x 559 (14 x 22)	356 x 559 (14 x 22)
Traction Drive		Hydrostatic direct drive	Hydrostatic direct drive	Hydrostatic direct drive
Paving Speed	m/min (fpm)	75 (246)	90,5 (297)	90,5 (297)
Travel Speed	km/h (mph)	16,1 (10)	19,3 (12)	19,3 (12)
<b>Miscellaneous</b>				
Fuel Tank Capacity	L (gal)	302,8 (80)	302,8 (80)	302,8 (80)
Hydraulic Tank Capacity	L (gal)	236,6 (62.5)	236,6 (62.5)	236,6 (62.5)
Auger Diameter	mm (in)	431,8 (17)	431,8 (17)	431,8 (17)
Adj Height Augers	mm (in)	114,3 - 241,3 (4.5 - 9.5)	114,3 - 241,3 (4.5 - 9.5)	114,3 - 241,3 (4.5 - 9.5)

<b>Front-mounted extensions</b>		<b>Omni 318</b>
Vibration / Tamping System		Vibratory
Basic Screed Width	m (ft)	3,05 (10)
Standard Paving Width	m (ft)	3,05 – 5,49 (10 – 18)
Max Paving Width	m (ft)	7,92 (26)
Paving Depth	mm (in)	6 – 305 (0.25 – 12)
Screed Width	mm (in) Main	457 (18)
	Optional Extensions (front to rear)	635 (25) 457 (18)
Screed Plate Thickness (All)	mm (in)	13 (0.5)
Screed Weight	kg (lb)	3 425 (7,550)
Vibratory Speed	Hz (vpm)	16,67 – 40 (1,000 – 2,400)

<b>Rear-mounted extensions</b>		<b>Omni 1000</b>
Vibration / Tamping System		Vibratory
Basic Screed Width	m (ft)	3 (9.8)
Standard Paving Width	m (ft)	3 – 6 (9.8 – 19.7)
Max Paving Width	m (ft)	8 (26.2)
Paving Depth	mm (in)	6 – 305 (0.25 – 12)
Screed Width	mm (in) Main	450 (17.7)
	Optional Extensions (front to rear)	635 (25) 450 (17.7)
Screed Plate Thickness (all)	mm (in)	15 (0.59)
Screed Weight	kg (lb)	4 000 (8,818)
Vibratory Speed	Hz (vpm)	8,33 – 50 (500 – 3,000)

#### Available Options\*

- 3-function screed assist
- Air intake screen
- Balloon light kit (as shown)
- Beacon
- Blaw-Kontrol
- Floating beam
- Flood light
- Light tower
- Material indicator alarm
- Reversible augers
- Reversible conveyors
- Screed remote control
- Special paint
- Truck hitch
- Ultra 4 reference kit

\*Some options are not available on all machines.





Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



*Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.*

# **VOLVO**

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[www.volvoce.com/na](http://www.volvoce.com/na)

Ref. No. VOE 22 A 100 4519  
Printed in USA 2008.2-5,0  
Volvo, Asheville

English