

VOLVO TRACKED PAVERS

# ABG7820B, ABG8820B



# POWERFUL PAVING MACHINES FOR DEMANDING JOB-SITES.

Every Volvo ABG paver is the result of 50 years experience in the road construction industry. With ample reserve power, robust and sturdy design, paving efficiency and Volvo's ease of operation, the tracked pavers ABG7820B and ABG8820B are the ideal partner for medium and large scale projects in paving widths from 2.5 m up to 13 m.

## Versatility

Volvo tracked pavers are particularly suitable for paving a wide range of materials from the wearing course right down to the base courses on the most diversified paving contracts.

## Paving applications

- Municipal roads
- Main roads and highways
- Airfield construction
- Waste storage areas
- Asphalt dam and dyke construction\* (parallel or vertical to the crown)
- Railway track construction\* (rigid carriageways only with high density screeds)

## Travel drive with electronic control

An electronically controlled and independent travel drive on each crawler unit ensures uniform propulsion, accurate straight ahead travel, exact cornering and a soft start. This system offers the optimum prerequisites for a smooth and even mat.

## Crawler unit with phenomenal traction properties

The large contact area of the crawler tracks together with an optimal machine weight distribution enable a highly effective paving process even on bases with a poor bearing capacity.

## Eco-friendly Volvo engines

The tracked pavers ABG7820B and ABG8820B are now equipped with Volvo D7 engines. These modern COM III/EPA Tier III certified diesel engines run quietly and are environmentally friendly.

## Smart power

Just like the Volvo wheeled pavers, both tracked paver models feature the smart power paving mode to give high power when it is needed and reduce fuel consumption when less power is required.

## Exemplary ease of operation

All Volvo ABG pavers feature the EPM Electronic Paver Management. No other system on the market offers such an intuitive and simple operation together with an extensive range of possibilities for storing and analysing machine data.

## Maintenance friendly

Volvo pavers are designed to require very low maintenance. Easy access to all maintenance points saves time. The entire electronics are installed in an easily accessible switch cabinet. Lifetime lubricated crawler tracks with automatic tensioning system and maintenance-free bearings for the screed tamper and vibrator reduce maintenance work. An optional central lubrication system simplifies maintenance still further, saving time and costs.



- Eco-friendly Volvo D7 engines.



- Easy access to all maintenance points.



- Precise cornering.

\* Pavers equipped for special applications



max (m)



(mm)



(t)



(kW)

**ABG7820B**

11.0

300

16.2 - 22.3

170

**ABG8820B**

13.0

300

19.1 - 27.4

182



# OPERATOR COMFORT AND EXEMPLARY EASE OF OPERATION.

Thanks to the clear layout of the operator's station and the ergonomically designed working area, the operator can fully concentrate on the paving process.

## Comfortable operation - leaves nothing to be desired

The operator can adjust his sitting position and the position of the control panel to meet his own personal requirements. Both seats can be laterally extended beyond the outer edge of the paver. The centrally mounted EPM control panel can be swivelled, tilted and telescopically extended. If required, the operator can transfer his work station from one side of the paver to the other within a few seconds.

The sides of the sun roof can be extended outwards to protect the operator from the elements and can be equipped with an optional front windscreen and side curtains.

## The latest generation of Electronic Paver Management (EPM)

This system provides the operator with an optimum overview and control of all paving processes. The unique EPM control panel guides the operator intuitively through the individual working functions.

The control buttons for all functions are arranged on a bird's eye diagram of the paver and are easily identified on the control panel. By using the function buttons, the operator can call up menus for the engine data and paving functions etc. which are clearly shown on a large colour screen. Any alterations the operator makes to the paver's settings can be immediately reproduced on the animated graphics.

Due to its high degree of compatibility, the system can be easily upgraded and data can be transferred via USB and bluetooth interfaces on the control panel. This allows messages to be quickly read out of the system and new functions implemented.

The EPM control panel and auxiliary control panels can be safely stowed in easily accessible compartments. These lockable compartments protect this valuable equipment from vandalism.

## Service Interval Manager

Provides warning or alerts to the operator regarding upcoming or past due service requirements. Proper maintenance will extend the life and reliability of the machine.

## Settings Manager

This feature allows an operator the ability to pre-program function settings for particular job characteristics. Improves productivity by reducing set-up times.

## Care for the environment

Both the operator and the environment benefit from two extra features of the ABG7820B and ABG8820B: "smart power" and the new fuel consumption indicator.

## Smart Power

Most applications do not require the high output capacity of the engines. In such cases, the driver can select the **smart power** mode on the EPM control unit. This lowers the engine speed resulting in lower noise emissions and fuel savings of up to 15%.

## Fuel consumption indicator

The fuel consumption indicator on the EPM display clearly informs the operator about:

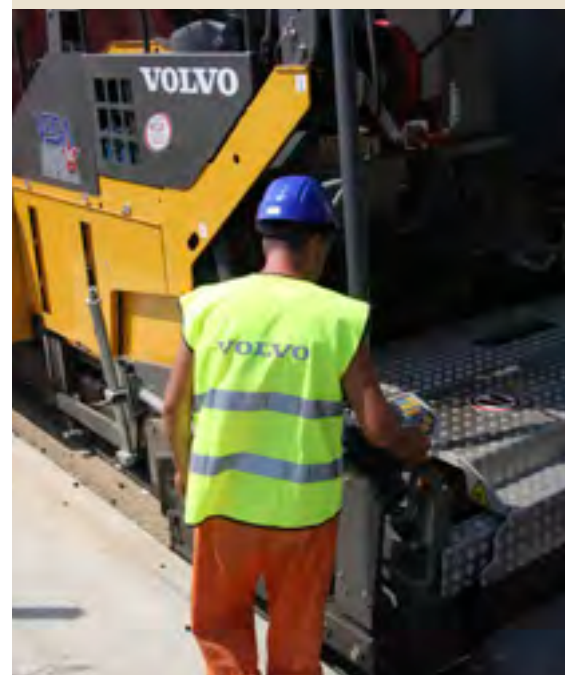
- daily fuel consumption
- fuel consumption over a period of days (for example a complete paving project)
- current fuel consumption
- remaining working time
- the percentage of time utilized for paving in the smart power mode.



- Swivelling EPM control panel.



- Fuel consumption indicator display.



- External EPM control panels at both sides of the screed.



# STATE-OF-THE-ART SOLUTIONS PAVE THE WAY.

A high paving output is a strength of all Volvo pavers and that is not all: numerous, well thought out features simplify work during and after paving the mat.

## **A** Powerful, eco-friendly Volvo engines

Both the ABG7820B and ABG8820B are now equipped with Volvo D7 engines. The COM III /EPA Tier III certified high performance engines provide ample reserve power for all operating conditions even at maximum paving width and under extremely high loads.

## **B** Crawler units with high tractive force

Maintenance free crawler units with durable trapezoidal shaped rubber track pads and automatic track tensioners.

## **C** Road surface scrapers

Road scrapers clear the debris and make a clean and smooth surface for the crawler tracks. They can be quickly and easily raised to the transport position or lowered for paving work.



## **D** Mix conveyor system with proportional control

Thanks to the large hopper volume, interruptions in the supply of paving material can be bridged over. The optional front hopper apron alleviates emptying the front area of the hopper. Independent drives for both bar conveyors and both augers ensure the paving material is conveyed to both sides of the screed where and when it is required. The optimum head of material is maintained in the auger channel during every paving situation by adjusting the auger height and direction of rotation.

## **E** Perfect view of the paving process

The comfortable operator's seat with its elevated sitting position provides a perfect view of the mat thickness scales, the flow of material in the hopper, the paving screed and the auger channel. Optional working lights illuminate the auger channel and are a handy feature during adverse light conditions.





**F Easy operation**

Self-explanatory control functions are clearly displayed on the large coloured EPM control panel.

**G Multi-purpose sun roof**

The operator can extend the sides of the sun roof for added protection. The sun roof together with the exhaust pipe is easily raised and lowered using the hydraulic hand pump for transport on a low-loading trailer.

**H Fixed and hinged channel plates**

Fixed and hinged channel plates ensure an optimum head of material in the auger channel.



# ABG SCREED TECHNOLOGY FOR EXCELLENT PAVING QUALITY.

Whether equipped with a single or double tamper screed, Volvo tracked pavers combine excellent paving quality, high efficiency and cost-effectiveness.

## Screed technology

With the ABG high density screeds, Volvo offers an outstanding technology. The patented combination of double tampers with screed vibration enables the paver to achieve the highest possible degree of compaction so that subsequent roller compaction is significantly reduced. This also benefits the mat's surface evenness and results in a smooth ride.

Both Vario and fixed screed models can be supplied as double or single tamper versions.

## Variomatic screeds

The VB 78/88 and VDT-V 78/88 Vario screed models offer the highest flexibility on jobs with frequently changing paving widths. These screeds can be hydraulically extended to double the basic width.

By using the patented hydraulic quick coupling system, extensions can be quickly attached to the basic screed. The paving crew require no tools whatsoever for this operation.

## Fixed screeds

Volvo fixed screeds have proved their versatility and effectiveness in a host of paving projects all over the world. They achieve paving widths of up to 13 m. In addition to all hot bituminous coated materials, dry lean, RCC and CBBM concrete courses, railway ballast and graded mineral mixes can be laid.

All fixed screeds are also available with infinitely variable extendable ends. The extension range is 0.75 m on each side.



You will find more detailed information on screeds in our separate screed brochures.



- Variomatic screeds - ideal for flexible paving widths.



- Fixed screeds for large width paving.



- Paving thicknesses up to 300 mm.



# SPECIFICATIONS

Paver Model			ABG7820B		ABG8820B	
Engine (Diesel)	Make		Volvo			
	Model		D7E GEE3		D7E GDE3	
	Output	kW	170 @ 1,800 rpm		182 @ 2,000 rpm	
	Coolant		Liquid			
	Fuel tank capacity	l	300			
	Exhaust emission		COM IIIA /EPA Tier III			
Paving	Output (theor.) <sup>1</sup>	t/h	900		1100	
	Mat thickness (max.)	mm	300			
Speeds	Paving	m/min	20			
	Transport	km/h (mph)	3.6 (2.24)			
Crawler unit	Length	mm	2 900		3 085	
	Width (track plates)	mm	305		325	
Mix conveyor system	Hopper capacity	t	13.5		14	
	Conveyors		2			
	- Conveyor speed	m/min	24		24	
Augers			2			
	Auger speed	rpm	95		100	
	Auger diameter	mm	360			
Electrical system	Vehicle Voltage	V	24			
Transport dimensions	Width	mm	2 500		2 500	
	Length	mm	6 210		6 674	
	Height	mm	2 940		3 077	
Weights <sup>2</sup>	Tractor unit	kg	14 600		17 500	

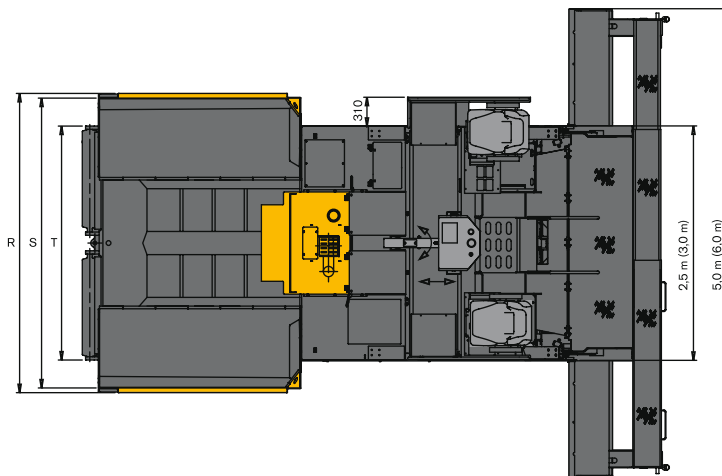
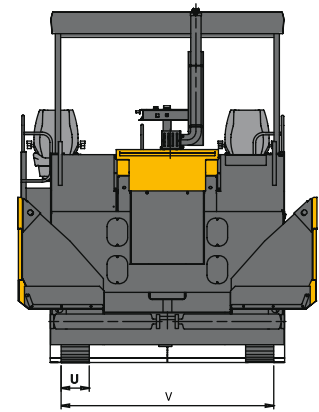
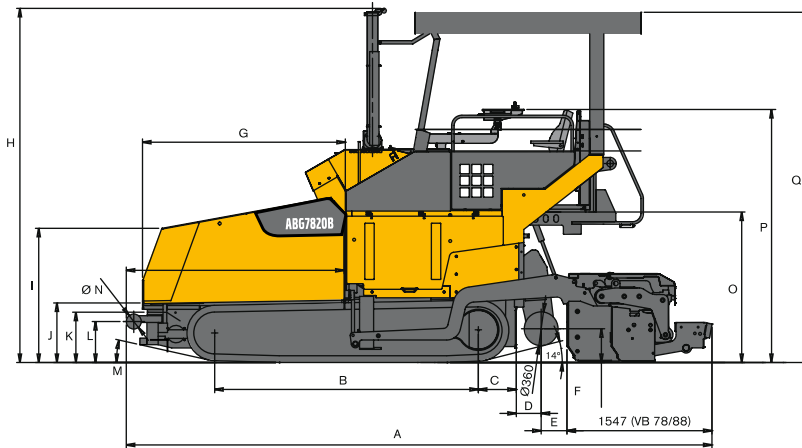
<sup>1</sup> The actual paving output depends upon the mat thickness, the paving width and paving speed and will vary according to paving conditions prevailing on your jobsite. Please approach us and we will be pleased to assist you in calculating the paving output for your particular paving project.

<sup>2</sup> All weights are approximate weights without options.

Paving widths / Screed operating weights <sup>3</sup>		kg	ABG7820B		ABG8820B	
Screed model			m	kg	m	kg
VB 78	Basic adjusting range 2.5-5.0 m	3 620				
	max. paving width with extensions		9.0	6 710	9.0	6 710
VDT-V 78	Basic adjusting range 2.5-5.0 m	4 000				
	max. paving width with extensions		9.0	7 320	9.0	7 320
VB 79 <sup>4</sup>	Basic adjusting range 2.5-5.0 m	3 860				
	max. paving width with extensions		9.0	6 910	9.0	6 910
VDT-V 79 <sup>4</sup>	Basic adjusting range 2.5-5.0 m	4 230				
	max. paving width with extensions		9.0	7 510	9.0	7 510
VB 88	Basic adjusting range 3.0-6.0 m	4 090				
	max. paving width with extensions		10.0	7 080	10.0	7 080
VDT-V 88	Basic adjusting range 3.0-6.0 m	4 530				
	max. paving width with extensions		9.0	7 300	9.0	7 300
VB 89 <sup>4</sup>	Basic adjusting range 3.0-6.0 m	4 460				
	max. paving width with extensions		9.0	6 890	9.0	6 890
VDT-V 89 <sup>4</sup>	Basic adjusting range 3.0-6.0 m	4 830				
	max. paving width with extensions		9.0	7 560	9.0	7 560
MB 122	Basic width 2.50 m	1 600				
	max. paving width with extensions		11.0	6 200	13.0	8 000
VDT 121	Basic width 2.50 m	2 000				
	max. paving width with extensions		9.00	6 785	13.0	9 875

<sup>3</sup> All weights are approximate weights without options. <sup>4</sup> only ETC version available, articulated screed extensions  $\pm 10\%$

# DIMENSIONS



	A	B	C	D	E	F	G	H	I	J	K
<b>ABG7820B</b>	6 247	2900	405	265	275	360 ± 65	2 163	3 780	1 431	635	535
<b>ABG8820B</b>	6674	3085	475	260	298	360 ± 50	2 163	3 938	1465	652	535

	L	M	N	O	P	Q	R	S	T	U	V
<b>ABG7820B</b>	437	12,5°	160	939	1 606	3 735	3 191	3 091	2 495	300	2 269
<b>ABG8820B</b>	445	13°	160	939	1 781	3 887	3 262	3 162	2495	325	2350

# STANDARD FEATURES / OPTIONAL EQUIPMENT

Standard ●    Optional ○    not available -	ABG7820B	ABG8820B
Volvo Diesel engine, COM IIIA/EPA Tier III	●	●
Electronic Paver Management (EPM2)	●	●
Smart power	●	●
Settings Manager	●	●
Service Interval Manager	●	●
Adjustable and revolving control unit	●	●
Two seats, laterally extendable	●	●
Deluxe seats with heating	○	○
GFK all-weather roof with manual-hydraulic folding device	○	○
All-weather roof with manual-hydraulic folding device	○	○
Front windscreen (only in conjunction with all-weather roof)	○	○
Tarpaulin for sides	○	○
Electronic drive control	●	●
Lifetime lubricated crawler track rollers	●	●
Forged and hardened crawler track links	●	●
Automatic track tensioner	●	●
Large truck buffer rollers with 160 mm Ø	●	●
Individual operating hopper wings	○	○
Hydraulically operated front apron	○	○
Four individual hydrostatic drives for conveyors and augers	●	●
Proportional control of conveyor belts	-	○
Reversible conveyor	○	○
Proportional Ultrasonic Sensor auger control according to material requirements	○	○
Reversible direction of auger rotation	●	●
Auger speed control ON/OFF	●	●
Screed towing arms, continuous version	●	-
Split towing arms	○	●
Hydraulics for Vario screeds with tamper and vibration	●	-
Hydraulics for Vario screeds with double tamper and vibration & man. adjust. screeds	○	●
Screed lock	●	●
Screed anti-climbing lock	○	○
Screed tensioning device	○	○
Screed assist	○	○
Screed load device	○	○
Hydraulic height adjustment of extendable screeds	○	○
Mechanical auger height adjustment	●	●
Hydraulic auger height adjustment	○	○
Levelling systems (please see price list)	○	○
Electric switch cabinet	●	●
Four working lights	●	●
Sound insulation	●	●
Anti-vandalism kit	●	●
Battery master switch	●	●
Two external control panels for the paving screed	●	●
Tool kit	●	●
Extractor for bituminous fumes	○	○
Particle filter (according to BUVAL directions)	○	○
Central lubrication	○	○
Xenon Floodlighting (only in conjunction with all-weather roof)	○	○
Two additional lights (rear)	○	○
Driver's compartment lighting	○	○
Auger lighting	○	○
Warning beacon	○	○
Auxiliary control panel	○	○
Additional sockets 230V	○	○
Emulsions spraying system	○	○
Heavy-duty spray cleaning gun	○	○
Fuel transfer pump	○	○
Special paintwork (according to RAL colour code, excluding metallic paintwork)	○	○
Biodegradeable hydraulic oil	○	○

Partial listing of standard equipment and available options

# VOLVO CONSTRUCTION EQUIPMENT

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 180 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.

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**

**Volvo Construction Equipment**  
[www.volvoce.com](http://www.volvoce.com)

Ref. No 20000048-C  
2012.10  
Volvo, Global Marketing

English-21  
PAT