



Volvo Construction Equipment

P7820D ABG

Volvo Tracked Pavers 2.5-11.0 m / 8.2-36.1 ft 175 kW / 235 hp



Volvo puts you in control

Be in complete control of your paver with Volvo's technologically-advanced features, designed for simple operation and maximum efficiency. Combining the next generation Electronic Paver Management system (EPM3) and the Settings Manager feature with a low-noise operator environment and all-around visibility, the P7820D ABG is the ultimate package.

Get set and go

Experience consistent, high quality paving job-to-job with Settings Manager, capable of storing customized settings for individual projects. Begin paving quickly with this integrated feature, which simplifies the initial machine setup by enabling operators to recall saved parameters within EPM3 when facing similar paving jobs. Once paving is underway, fine tuning can be made to optimize performance and productivity.



High power, high comfort

Achieve high paving performance at remarkably low noise levels with the P7820D ABG. By matching the engine output to the actual need, the adaptive ECO Mode and optimized RPM reduce noise levels, benefiting the paving crew and local community alike. For a comfortable work environment, the canopy offers built-in sound insulation, while the automatic track tensioner reduces vibrations to ensure a smooth operation.



Every angle in view

From the operator platform, experience unhampered visibility around the paver, hopper, auger channel and screed. The newly designed engine hood offers superb visibility to the hopper, enabling the operator to check material supply and flow at a glance. Meanwhile, the new glazed area to both sides of the operator platform offers even greater visibility, optimizing overall efficiency and jobsite safety.



See more, do more

Pave with precision day or night with six standard work lights and optional balloon lights, offering increased visibility, safety and convenience. The LED lights are brighter and longer-lasting, so you can see and do more in low-light conditions. The home lights, located below the weather roof, illuminate the platform for three minutes once the main switch is turned on and after the ignition is turned off.





INTUITIVE OPERATION

Take control of your operation with the new Electronic Paver Management (EPM3) system. All control buttons for all functions are consolidated within one system and arranged in a bird's-eye view layout to guide the operator intuitively through individual working functions. Using the jog wheel, quickly select and adjust functions for greater machine control, ease of use and optimum efficiency.



POWER TO PERFORM

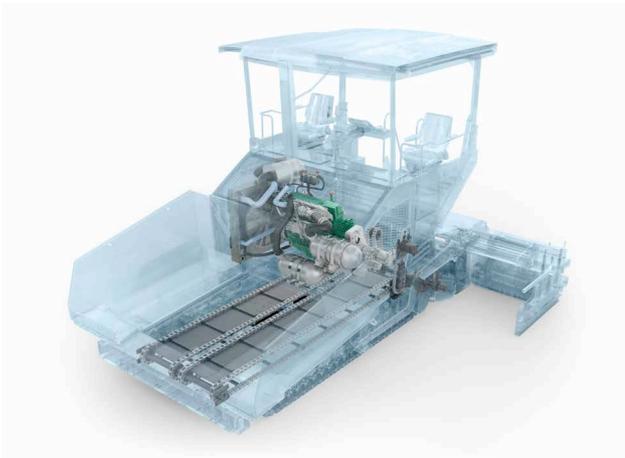
Power your operation with the fuel-efficient Volvo engine, specifically tuned to the hydraulic system. Built by Volvo for Volvo, the premium engine combines high torque and low RPM for superior, long-lasting performance. Reduce fuel consumption and increase productivity with advanced, built-in features, such as the adaptive ECO Mode, which matches engine output to jobsite requirements, giving you the power to perform.

Long-lasting paving performance

Built on high-performance components, the P7820D ABG is designed to boost productivity while reducing fuel consumption, noise and operating costs. With over half a century of paving experience and innovative engineering, this paver achieves long-lasting performance.

Durably efficient

Optimize uptime and machine lifetime with Volvo powertrain and the improved hydraulic system, offering unrivalled durability and performance. The powertrain feature complements the hydraulic system, which is perfectly matched to the Volvo engine to provide high performance, low fuel consumption, emissions and noise.



Faultless finish

Rely on the durably-designed P7820D ABG paver for a consistent, high quality paving surface. Combining several features, including the automatic track tensioning system, large hopper capacity and Soft Dock, you can depend on the paver to deliver a smooth, even surface.



Efficiently cool

Count on the P7820D ABG to keep cool while operating in extreme temperatures and altitudes. The cleverly-designed engine compartment and hood provide ample space for continuous air circulation from the adaptive cooling fan, allowing the engine and hydraulics to cool effectively, even at high ambient temperatures. Plus, this feature reduces noise, boosts machine lifetime and optimizes efficiency of the hydraulic system.



The perfect assistant

Unlock the full potential of your machine's productivity with Pave Assist, designed specifically for Volvo pavers. Pave Assist provides a powerful set of tools - including Thermal Profiling, Weather View and Material Manager - to improve performance, efficiency and paving quality.



Supreme screed technology

Take your paver's performance to the next level with Volvo screeds. Whether equipped with a single or double tamper screed, your P7820D ABG combines optional hydraulically controlled end gates, Volvo quick coupling system, and special profiles to deliver versatility and a smooth, high quality surface.

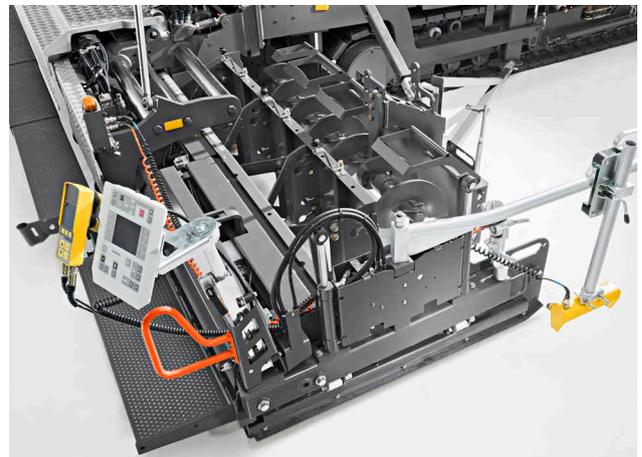
Designed for durability

Achieve material target density with Volvo's specially-designed tamper bars, fully hardened for lasting durability. Depending on application and condition, choose from the single or double tamper screeds to ensure a smooth, uniform surface. The double tamper screed offers the highest levels of compaction density behind the screed, which is essential when paving thick asphalt and cement-treated base (CTB) material.



Safe and in control

Improve controllability and operator safety with the new hydraulically controlled end gates. Forget about manually adjusting screed end gates – the control to this optional feature is integrated into the Screed Control Unit, which requires less effort, delivers faster handling for the screed operator and ensures a clean side finish. Plus, it keeps operators safely away from traffic when operating closely alongside.



Quick and easy changes

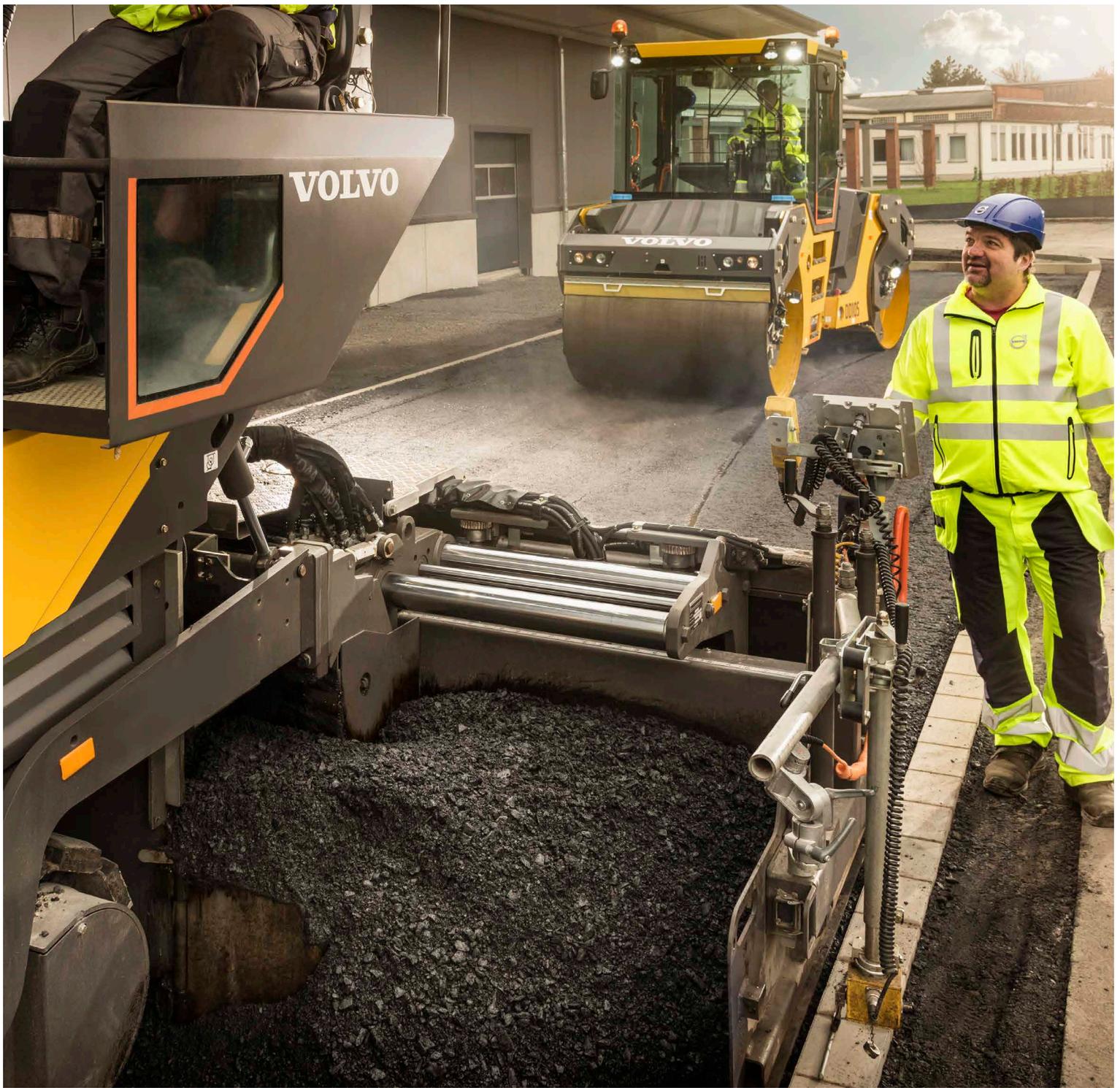
Add or remove screed extensions in minutes with no special tools required thanks to Volvo's quick coupling system. This feature enables paving crew members to change extensions quickly, efficiently and safely, saving valuable time and money.



Special profiles

The VB 79/89 and VDT-V 79/89 screeds are the perfect choices when needing to pave special crown profiles in road surfaces. The extendable screeds feature two additional articulated sections and are adjustable upwards or downwards by 10% (5.7°), creating the possibility for paving irregular profiles – such as special drainage requirements – with greater ease, less material used and at a lower cost.





ENGINEERED FOR EFFICIENCY

Built on decades of engineering excellence, Volvo screeds deliver the best pavement quality, uniformity and smoothness. Versatile and effective in paving widths up to 11 meters, the P7820D ABG features industry-leading screeds, capable of handling a wide range of materials. Volvo Variomatic screeds have eight guide tubes, four for each hydraulic extension, which contribute to a consistent, uniformly compacted smooth surface.



MACHINE MONITORING MADE EASY

Stay ahead of unscheduled downtime and check that your machine is being operated efficiently with CareTrack telematics system. Remotely receive reports on the machine location, usage, productivity, fuel consumption and more to boost machine uptime. Using MATRIS diagnostic software, your Volvo dealer analyzes your machine's operational data to help identify improvement areas, for optimized operations.

Keep your paver up and running

To keep machines efficient and increase longevity, Volvo offers a number of component life-extending features as well as quick and easy maintenance. With smart systems like CareTrack® and the Service Interval Manager, plus a range of services, it's easy to keep your hardworking P7820D ABG paver up and running.

Service Interval Manager

Stay informed of servicing requirements and maximize machine uptime with Service Interval Manager. A dedicated display on the EPM3 paving panel alerts the operator of required or scheduled maintenance, and is recorded on the system, which retains a service history record. And, with the fuel-theft prevention system, you will be notified if fuel has been stolen, helping you avoid unwanted and costly downtime.



Volvo – a partner to trust

Volvo is here to support you whenever you need it. As a complete solutions provider, we listen to your requirements to ensure machine uptime and availability. With our extensive dealer coverage, parts availability and trained technicians, Volvo has a comprehensive network to fully support you using local knowledge and experience.



State-of-the-art servicing

Maximize uptime with quick and safe servicing. Improved service access to essential checkpoints via the wide-opening on top of the platform provides ease of maintenance, reduces downtime and minimizes operational costs. Quickly access every ignition and service hatch across an entire fleet with a single key.



Care kits

Replacing only major or visibly worn parts and not those around them can stress the replaced parts, significantly reducing your machine's lifetime. Ensure optimum part performance and life with Volvo Care Kits for wear parts and eliminate the guess work of which parts to replace by having them all on hand in a single package. Save time, lower costs, and receive the latest technical improvements with just one kit.



Take performance to the next level

Every angle in view

From the operator platform, experience all-around visibility around the paver, hopper, auger channel and screed.

See more, do more

See and do more in low-light conditions with LED lights and secure safety with the convenient home lights.

MACHINE MONITORING MADE EASY

Remotely receive reports on your machine's location, usage, productivity, fuel consumption and more with CareTrack.

Designed for durability

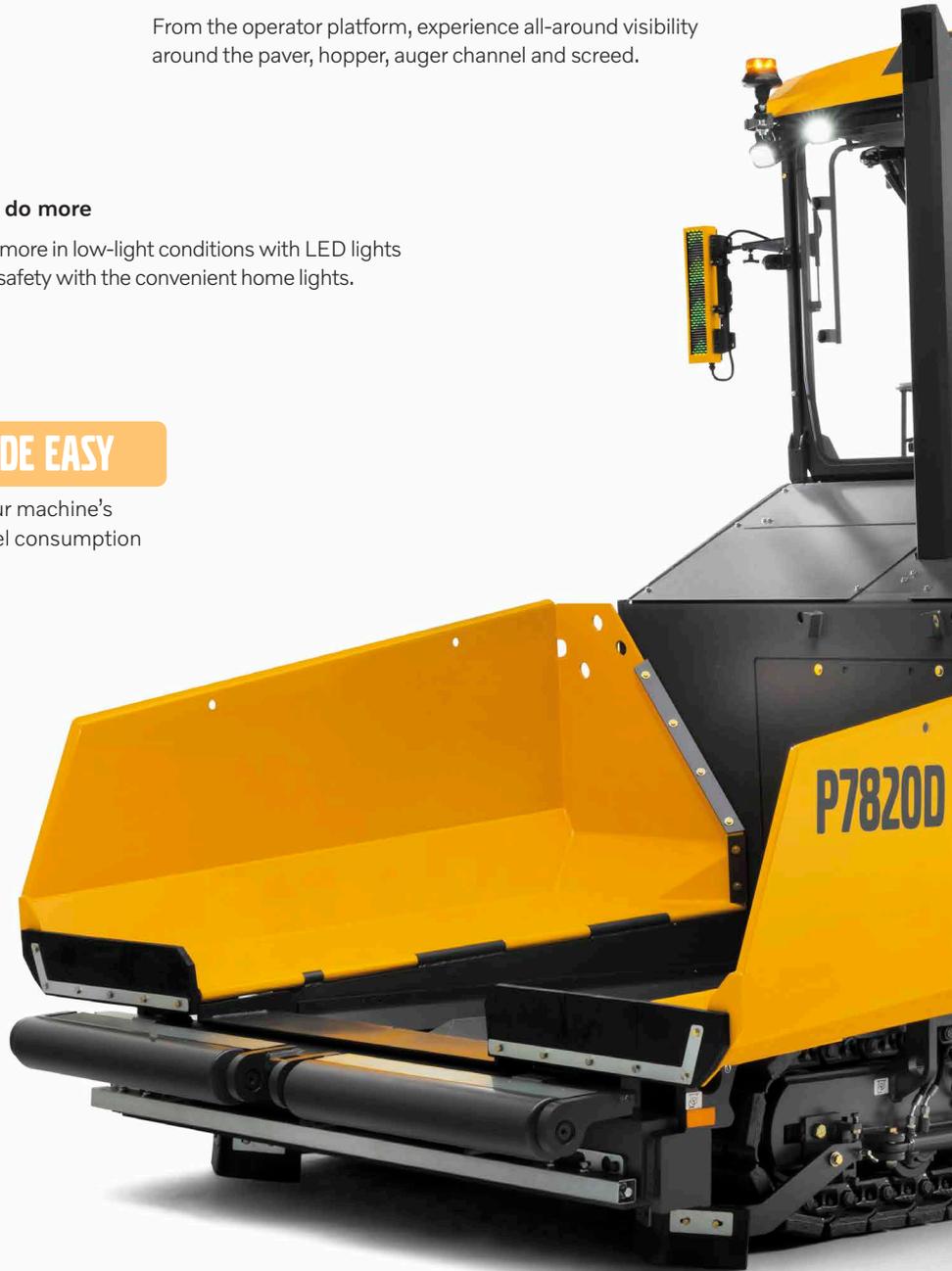
Depending on application and condition, choose from the single or double tamper screeds for a smooth, uniform surface.

POWER TO PERFORM

Volvo's quiet and efficient engine gives you more power while consuming less fuel thanks to advanced, built-in features.

ENGINEERED FOR EFFICIENCY

Rely on Volvo screeds, built on decades of engineering excellence for the best surface quality, uniformity and smoothness.



Efficiently cool

Even at high ambient temperatures, the adaptive cooling fan allows the engine and hydraulics to cool effectively.

The perfect assistant

Pave Assist combines Thermal Profiling, Weather View and Material Manager to boost productivity and paving quality.

Special profiles

The VB 79/89 and VDT-V 79/89 screeds are the perfect choice when needing to pave special crown profiles in road surfaces.

INTUITIVE OPERATION

Control paving performance with EPM3, which consolidates all control buttons within one system for optimum efficiency.

Safe and in control

Improve controllability and operator safety with the new hydraulically controlled end gate feature, available as an option.

State-of-the-art servicing

Maximize uptime with quick and safe servicing thanks to improved service access and single key.



Volvo P7820D ABG in detail

Engine (diesel)

Manufacturer		Volvo
Model		D8J
Output	kW (hp)	175 (235)
at engine speed	r/min (r/s)	1,800 (30)
Coolant		Liquid
Fuel tank capacity	l (gal)	250 (66)
Exhaust emission		EPA Tier 4f

Paving

Output (theoretical)*	t/h (sh tn/h)	900 (992)
Mat thickness (max)	mm (in)	300 (11.8)

Speed

Paving (max)	m/min (ft/min)	20 (65.6)
Transport (max)	km/h (mi/h)	3.6 (2.2)

Undercarriage

Length	mm (in)	3,000 (118)
Width (track plates)	mm (in)	300 (11.8)

Conveyor

Hopper capacity	t (sh tn)	13.5 (14.9)
Number of conveyors		2
Conveyor speed (max)	m/min (ft/min)	23 (75.5)
Auger		
Speed (max)	1/min (r/min)	95 (95)
Diameter	mm (in)	360 (14.2)

Electrics

Battery voltage	V	24
-----------------	---	----

Dimensions

Length with Vario Screed (Walkway up)	mm (ft)	6,120 (20.1)
Width	mm (ft)	2,548 (8.36)
Height	mm (ft)	3,785 (12.42)
Height (transport)	mm (ft)	2,934 (9.63)

Weight**

Tractor unit	kg (lb)	14,900 (32,849)
--------------	---------	-----------------

Max. allowable gradeability***

Tractor unit + screed	%	25
-----------------------	---	----

* 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.

** All weights are approx. weights without options. Weight of tractor without screed, with standard hopper, with fuel tank half full, with towing arms separated, with push roller D=160 mm / 6.3 in, and incl. 75 kg / 165 lb driver.

*** Applies to screed VB 78 2.5-5.0 m / 8.2-16.4 ft. When using extensions the max. allowable gradeability will be reduced.

Sound Level

Sound Pressure Level at Driver's Ear, acc. to ISO 11201		
L _{pA}	dB	82
Guaranteed Sound Power Level, acc. to Directive 200/14/EC		
L _{WA}	dB	105

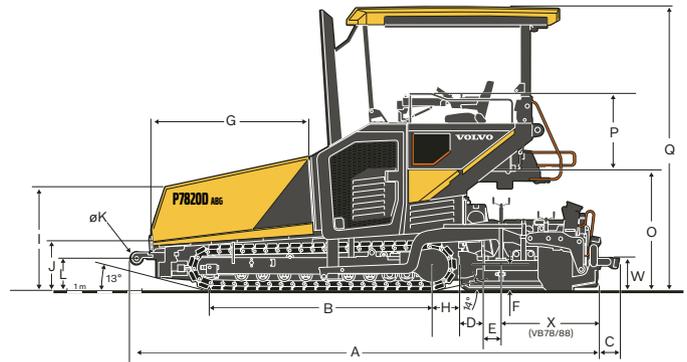
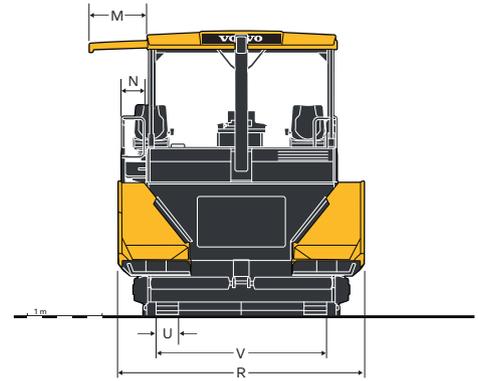
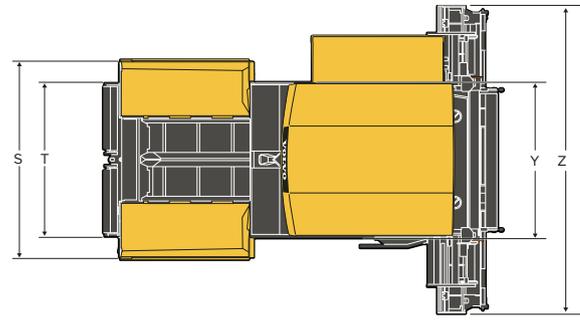
Vibration

Hand-Arm vibration accord. to ISO 5349:2001	m/s ²	<2.5
Whole Body vibration accord. to ISO 2631:1997	m/s ²	<0.5

Specifications

DIMENSIONS

Unit		mm	ft in
A	Standard	6,120	20'1"
	Soft Dock	6,244	20'6"
B		3,000	9'10"
C		268	0'11"
D		275	0'11"
E		265	0'10"
F		360 ± 60	1'2 ± 0'2"
G		2,151	7'1"
H		3,792	12'5"
I		1,385	4'7"
J		607	1'12"
K		160	0'6"
L		436	1'5"
M		770	2'6"
N		320	1'1"
O		1,615	5'4"
P		1,025	3'4"
Q	up	3,785	12'5"
	down	2,934	9'8"
R	open	3,256	10'8"
	closed	2,452	8'1"
S		3,169	10'5"
T		2,495	8'2"
U		300	0'12"
V		2,269	7'5"
W		438	1'5"
X		1,280	4'2"
Y		2,500	8'2"
Z		5,000	16'5"



OPERATING WEIGHTS¹ OF SCREEDS

P7820D

At working width		2.5 m (8'2")	4 m (13'1")	5 m (16'5")	6 m (19'8")	6.5 m (21'4")	7 m (23'0")	7.5 m (24'7")	8 m (26'3")	8.5 m (27'11")	9 m (29'6")	10 m (32'10")	11 m (36'1")
VB 78 ETC	kg	-	-	3,600	-	5,222	-	5,782	6,342	-	6,903	-	-
	lb	-	-	7,937	-	11,513	-	12,747	13,982	-	15,218	-	-
VDT-V 78 ETC	kg	-	-	3,720	-	5,442	-	6,032	6,662	-	7,253	-	-
	lb	-	-	8,201	-	11,998	-	13,298	14,687	-	15,990	-	-
VB 79 ETC	kg	-	-	3,730	-	5,352	-	5,912	6,472	-	7,033	-	-
	lb	-	-	8,223	-	11,799	-	13,034	14,268	-	15,505	-	-
VDT-V 79 ETC	kg	-	-	4,100	-	5,822	-	6,412	7,072	-	7,633	-	-
	lb	-	-	9,039	-	12,835	-	14,136	15,591	-	16,828	-	-
VB 88 ETC	kg	-	-	-	3,820	-	-	5,542	-	6,102	6,662	7,223	-
	lb	-	-	-	8,422	-	-	12,218	-	13,453	14,687	15,924	-
VDT-V 88 ETC	kg	-	-	-	4,450	-	-	6,272	-	6,862	7,492	-	-
	lb	-	-	-	9,811	-	-	13,827	-	15,128	16,517	-	-
VB 89 ETC	kg	-	-	-	4,200	-	-	5,922	-	6,482	7,042	-	-
	lb	-	-	-	9,259	-	-	13,056	-	14,290	15,525	-	-
VDT-V 89 ETC	kg	-	-	-	4,570	-	-	6,392	-	6,982	7,612	-	-
	lb	-	-	-	10,075	-	-	14,092	-	15,393	16,782	-	-
MB 122	kg	1,800	3,065	-	4,752	-	5,595	6,017	6,439	-	7,282	8,126	8,969
	lb	3,968	6,757	-	10,476	-	12,335	13,265	14,196	-	16,054	17,915	19,773
VDT 121	kg	2,100	-	-	5,052	-	-	6,317	-	-	7,582	-	-
	lb	4,630	-	-	11,138	-	-	13,927	-	-	16,715	-	-

¹ Including auger extensions, channel plates, end gates, towing arms rear, etc.

Equipment

STANDARD EQUIPMENT

Engine

Volvo Diesel engine, EU Stage 4 / EPA Tier 4f

Drive

Electronic drive control

Lifetime lubricated crawler track rollers

Forged and hardened crawler track links

Automatic track tensioner

Material Management

Proportional conveyor sensors

Four individual hydrostatic drives for conveyors and augers

Reversible direction of auger rotation

Hydraulic auger height adjustment

Electrics and electronics

Electronic Paver Management (EPM 3)

ECO mode

Settings Manager

Service Interval Manager

Adjustable and revolving main control panel at operator platform

Two adjustable and revolving screed control panels

Battery master switch

Electric switch cabinet

MATRIS

Structure

All-weather roof of GRP (glass-fibre reinforced plastic)

Two seats, laterally extendable

Anti-vandalism kit

Near field mirrors at weather roof

Volvo Green Key

Screed

Split towing arms

Screed lock

Lights

Operator's platform lighting

Home light function

Environmental

Sound insulation

OPTIONAL EQUIPMENT

Material Management

Smart Dock

Soft Dock

Proportional ultrasonic sensor auger control

Individual operating hopper wings

Hydraulically operated front apron

Auger quick lock system

Protective half shells for auger shaft

Auger extensions and additional auger bearings

Heavy duty conveyor cover

Reversible conveyor

Central lubrication

Proportional ultrasonic sensor conveyor control

OPTIONAL EQUIPMENT

Electrics and electronics

Four 230V power sockets

Lateral emergency stop

High ambient temperature fan

CareTrack - GSM installation

CareTrack - Satellite installation

Pave Assist (Volvo Co-Pilot system)

Volvo Smart View camera system

Levelling equipment

Transport case for EPM control panels

Structure

Deluxe seats with heating

Front windscreen

Tarpaulin side curtains for weather roof

Custom colours

Electrohydraulic powered weather roof

Front ballast weight

Screed

Screed spacer blocks

Screed assist

Screed anti-climbing lock

Screed load device

Screed tensioning device

Hydraulic height adjustment of extendable screed

Hydraulic crown adjustment VB screeds

Special profiles VB79, VB89

Hydraulically adjustable Power-Float screed end gates

Heatable screed end gate

Foldable screed walkway

Lights

Warning beacons LED

Warning beacons Halogen

Two balloon lights LED

Six worklights LED at weather roof

Six worklights Halogen at weather roof

Four additional worklights LED at weather roof

Four additional worklights Halogen at weather roof

Two additional worklights LED at rear frame

Two additional worklights Halogen at rear frame

Two additional auger worklights LED at rear frame

Two additional auger worklights Halogen at rear frame

Portable worklight LED with magnetic base

Portable worklight Halogen with magnetic base

Environmental

Extractor for bituminous fumes

Emulsion spraying system

High performance spray cleaning unit

Biodegradeable hydraulic oil

SELECTION OF VOLVO OPTIONAL EQUIPMENT

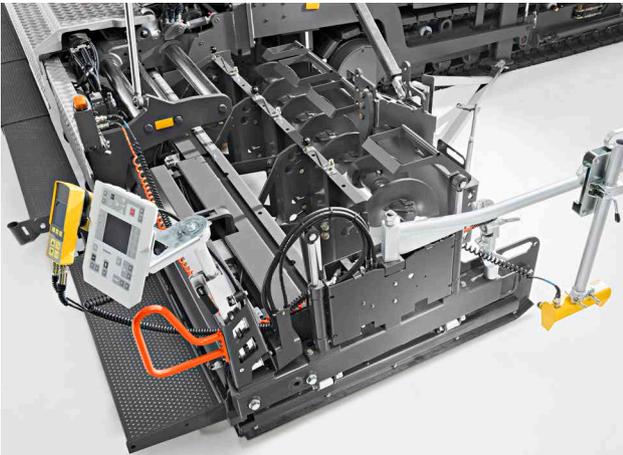
Electro hydraulic weather roof



Levelling equipment



Hydraulic end gates



Fumes extractor



Smart Dock



Front windscreen and weather protection



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