

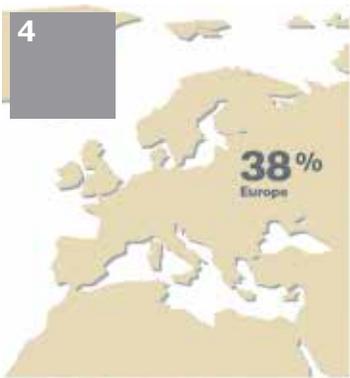


Volvo Construction Equipment

ROAD BUILDING SOLUTIONS







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Serving customers for 180 years...

For over 180 years Volvo Construction Equipment has been at the forefront of the construction equipment industry. Founded in 1832 in Sweden, Volvo CE has a rich heritage and a pioneering spirit that has enabled it to prosper in this leading role.

In 1954, Volvo Construction Equipment invented one of the world's first wheeled loaders, the H10, and in 1966 another invention was released to the market: the articulated hauler, "Gravel Charlie". Since those early days there has been constant innovation of new products and services.

As well as leading the way in construction equipment, Volvo Group is also one of the world's leading manufacturers of trucks, buses and drive systems for marine and industrial applications. Volvo Trucks is Europe's largest and the world's second largest truck manufacturer and Volvo Bus is the world's second largest bus manufacturer.

Volvo Group is also a leading manufacturer of 5-16 litre heavy-duty diesel engines. Our commercial trucks can operate on renewable fuels and we are pioneering the

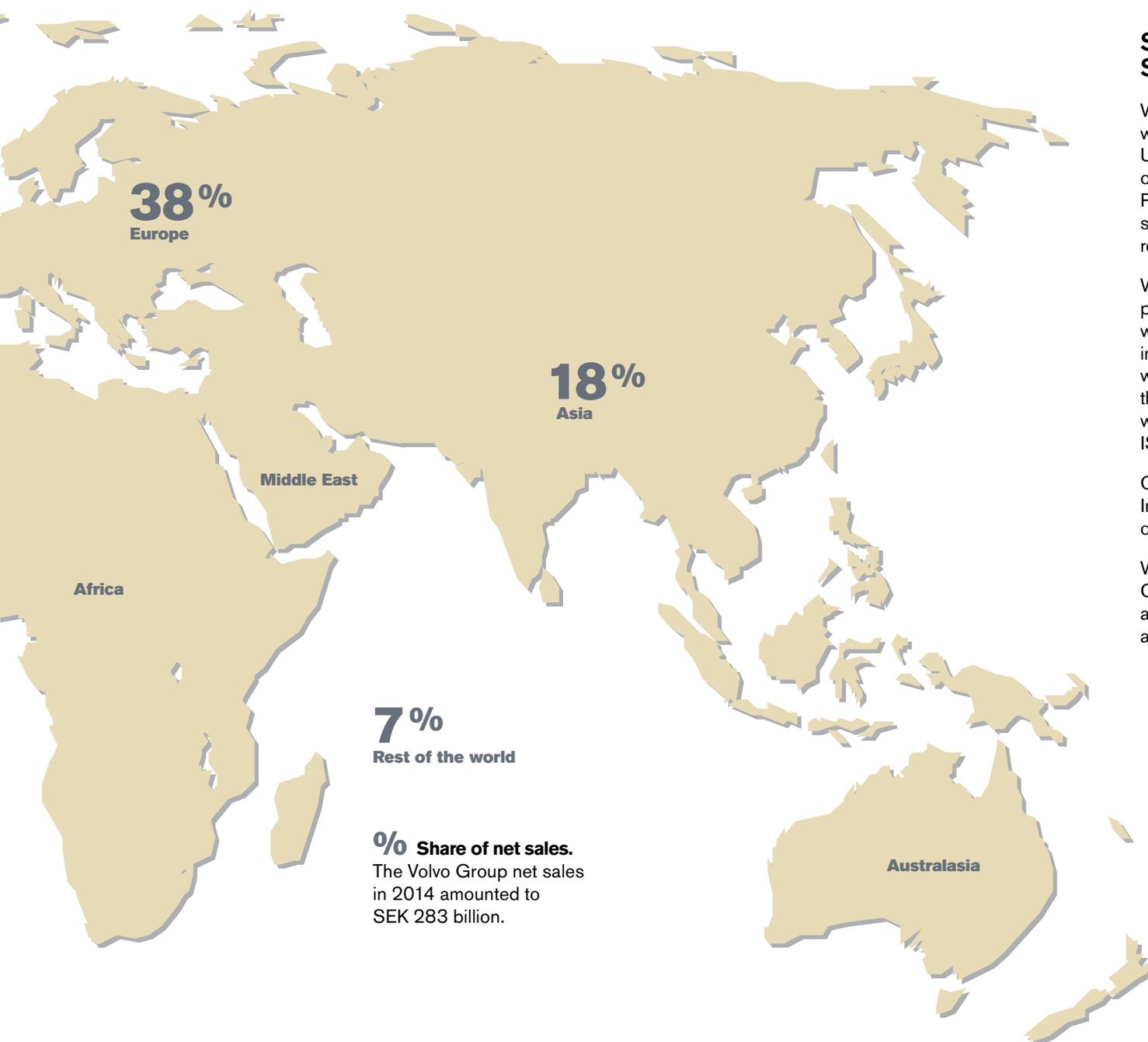
development of hybrid buses, plus fully electric vehicles.

Production in 18 countries - 5 road machinery factories

With 110,000 employees, production in 18 countries and a presence in 190 markets, the Volvo Group has the power to make its vision a reality - to become the world leader in sustainable transport solutions.

At the forefront in terms of road building are our specialist road machinery factories in Hameln (Germany), Pederneiras (Brazil), Shippensburg (US), Linyi (China) and Bangalore (India).





% Share of net sales.
 The Volvo Group net sales in 2014 amounted to SEK 283 billion.

Sustainability and Corporate Social Responsibility

We don't just claim to be sustainable at the Volvo Group; we set out to prove it. We were a founder signatory of the UN's Global Compact and the first construction equipment company to participate in the WWF's Climate Savers Programme. Furthermore Oxfam is a strategic partner for society engagement activities, including emergency and relief work.

We are also stringent with the standards we set in our production processes. We led the way by building the world's first CO₂ neutral automotive factory in 2007 and in 2013 we were the first construction equipment company with a factory to be certified carbon neutral. We also ensure that all our wholly owned plants are certified in accordance with ISO 9001 and nearly all our plants are certified to ISO14001 as well.

Our inclusion in the Dow Jones Sustainability World Index officially ranks us as one of the most sustainable companies in the world.

We are also a founding partner of the Construction Climate Challenge (www.constructionclimatechallenge.com) – the aim of which is to ensure the construction industry works with a more sustainable approach going forwards.



Supporting you on the road

Volvo has long experience in the road construction industry and our wide range of purpose-built machines will support you in every aspect of a road construction project.

From the initial tender, through quarrying of raw materials, to the final paving and maintenance of the road itself, Volvo has the experience and solutions to be your long-term road construction partner.





Machines designed for productivity

Our range of construction equipment is designed from the outset to meet industry demands in terms of safety, reliability and cost-efficiency. Our pavers, for instance, have the option of our patented double tamper compaction system, providing high-compaction levels on thicker layer constructions.

Behind your success

As well as our machines, as a global supplier of construction equipment, our ability to support you at all stages of the road construction process is second to none. We are proud to be a brand founded on hard work, dedicated experts, and an extensive support network committed to your success. Volvo has combined over 150 years of proven technology with the innovative engineering, safety and global support Volvo is known for, to bring you the road building expertise you know today.

A strong ethos of quality, safety and environmental care informs how we engineer our machines, but also as to how we conduct our business.

Volvo enjoys a rich heritage in respect of dedicated and specialist road building machinery. The 2007 acquisition of the Ingersoll Rand's road development equipment division – including the ABG and Blaw Knox brands – saw Volvo secure a paving heritage dating back to 1945.

Supporting you all the way

Road building is a highly specialised environment and to this end in the EMEA (Europe – Middle East – Africa) geographies Volvo has established a specific and highly skilled road machinery team dedicated to road customers.

Productive, fuel efficient and high quality machines that set the standard are an

excellent starting point but uptime and support are prerequisites when it comes to road building.

And it doesn't matter where as the extensive Volvo dealer network means expertise and support is never far away.



We understand your business

From the quarry face to the finished road, Volvo is your materials handling partner. From loading blasted rock in a quarry to transporting asphalt to your paver Volvo has machines and trucks with efficiency, productivity, safety and quality in their very DNA.

Roads and highways sit at the heart of any nation's ability to develop in terms of trade and freedom of movement. The building of these arteries of society is the first step but keeping them flowing, whatever nature throws at us, is equally important. Here again, Volvo offers the equipment and support to keep traffic moving.

1 Quarrying, crushing and asphalt production

In quarrying environments, Volvo machines offer industry leading protection for both man and machine. All components are designed as one unit to deliver maximum productivity to help you move more material, more efficiently.

2 Earthmoving

Operator comfort, power, control and visibility – key benefits that our machines deliver and essential for producing high quality roads.

3 Utilities

We have the machines that are purpose built for the installation of utility services.

4 Road base construction

Volvo machines cover all aspects of material delivery, placement and compaction.

5 Paving

From loading the mixing plant, to paving asphalt on highways and in cities, Volvo has a comprehensive range of machines to do the job efficiently, of the highest standard, and to the desired specification.

6 Road maintenance

Once the road is built, ditches need cleaning, roads need sweeping and snow needs to be cleared. Volvo has equipment to meet every need.





Helping you to shift more material

1 Quarrying, crushing and asphalt production

When you need to move, sort and load material as fast as possible, Volvo wheeled loaders, excavators, articulated haulers and trucks make a formidable combination. They are fast, uncompromising machines that bring together strength, intelligence, drive-ability and, never underestimated at Volvo, safety.



One of the world's largest engine manufacturers

A Volvo strength is that we build our own engines and we are experts at servicing them. Should an accident occur and components are damaged, we can offer Volvo Remanufactured components and do the exchange in record time. Furthermore component quality and warranty is exactly the same as with new.



Durable and reliable

Aggregate is the main stay of any paving project. An asphalt road comprises some 95 % of aggregate for example, so the starting point of any road building project is the quarry.

Blasted rock at the face needs to be loaded into haulers and transported for crushing and screening, crushed aggregate and spoil needs to be moved on-site and then aggregate for road building needs to be transported to an asphalt plant where it has to be handled and loaded. At all stages Volvo offers the machines to maximise productivity, enhance efficiency and help your bottom line.



2 Earthmoving



High productivity and profitability

Large projects require large quantities of materials to be handled efficiently. Keeping transport trucks or dumpers rolling effectively needs well trained operators, careful planning and, of course, great machines.

Great machines means reliability, quicker loading and more tons moved per day, so we built our excavators and wheeled loaders to

effectively and continuously work together with our trucks and articulated haulers.

Never underestimate the importance of trained operators. Here we can support you with our Simulators and Road Institute facilities, enabling your operators to handle both your machines and your material correctly. This will give you the highest productivity and quality.

Keeping your business on the right track

Volvo SiteSim is unique tailor-made software that Volvo dealers can use to organise and set up the site to the most productive and profitable solution.

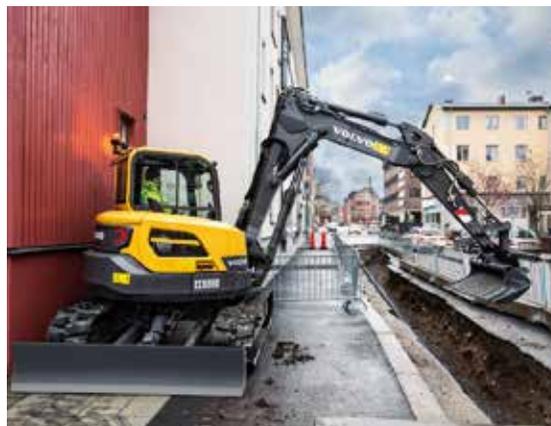
It can enable cost reduction and better planning. It will help you to have the right number of machines, the right combination

of machines, at the right spot, and equipped with the right attachments and options. It can also be of help to simulate production peaks, so you will know well in advance what equipment to complete with when the production is at its peak.

But remember, good operators are still the most important factor in achieving high productivity.

Adding depth to your operation

We know that roads are used for more than transporting vehicles. A network of sewers, cables, gas and water services can be hidden beneath roads, not to mention the drainage systems required to keep the road operational. We have a range of machines to help you construct these specific utility projects.



Trenching and backfilling

Our range of Volvo excavators can help you dig trenches of varying sizes in different locations. From the compact 5.5 tonne compact excavator, which is perfect for an inner-city road where space is tight, to the large 25 tonne excavator, which can dig trenches on highway projects, we have the right trenching solution for you.



Experts in utilities

In support of our road building machinery we also offer all of the construction equipment you might need for the installation of utility services, road signage and landscaping.

Our compact equipment range of wheeled and tracked loaders, zero tail swing excavators and single and double drum compactors mean the confines of the inner-city are no obstacle, while our pioneering pipelayers that can swing through 360° offer a performance and safety driven solution for the installation of heavy pipes over long distances.



Precision engineering for accurate delivery

4 Road base construction

Volvo soil compactors, CTB pavers, trucks and articulated haulers are designed to help you deliver and place material with a high-capacity and accuracy. They are built to withstand the abuse of harsh conditions encountered in road base construction.



Compaction

In most cases soil compaction is a prerequisite when it comes to road building. To ensure air is displaced from the soil and a uniform density is attained from the outset Volvo soil compactors offer superior compaction forces while reducing vibration and noise down to 72 dB for the operator.

Connected machines

The latest set of road machines from Volvo are all equipped with CareTrack telematics which gives the advantage of connecting the machines so you can get the information you need wirelessly sent to your phone or computer device.

A climber

The soil compactors from Volvo can climb gradients up to 65% with the Volvo traction system.



ECO mode

ECO mode adjusts the engine speed to match the operation mode – saving you up to 40% on fuel.





No matter the situation, we have you covered

5 Paving

Whether you are undertaking a national highway construction project, or conducting repairs to an inner-city road, we understand the challenges you will face.

Our range of pavers and compactors are designed to help you no matter what the situation.



Paving the way forward

Our pavers have the opportunity to be equipped with our patented double tamper compaction system, which enables high-compaction levels on thick layer construction, for example for CTB (Cement Treated Base).



The Volvo development

- Volvo tracked and wheeled pavers have benefited from and capitalised on the brand history of ABG, which unquestionably remains in the DNA.
- Improved performance, engine efficiency and dramatic improvements in noise reduction and operator comfort all bring value and enhance productivity.
- The installation of Volvo engines means you can rely on a single partner to support your paver.
- The Volvo engines provide class leading power across the range, with high torque at low RPM enabling them to operate at almost full power while in Smartpower mode.
- Electric screeds are fitted with a three or five circuit heating system, which allows for full temperature control of individual screed sections and fast heat-up times at low engine RPM.
- Volvo Settings Manager allows the operator to save pre-set paving parameters thus reducing set-up times and aiding consistent quality.
- The patented double tamper system means Volvo pavers are second-to-none when it comes to laying alternative materials such as Cement Bound Materials (CBM) and Roller Compacted Concrete (RCC).



Cycle tracks and footways

Narrow pavers with individually operated hopper wings and swivelling truck buffer rollers enable great manoeuvrability in tight spaces.



Highways

For all kinds of major highway works our tracked and wheeled pavers (equipped with the VB screed) will give you accurate control of levels and a high standard of surface finish whether paving thin or thick. With the addition of a thermal scanner you will have complete control of the asphalt material being paved.



Local roads

Volvo pavers are ideal machines for the varied jobs that make up general paving works. Wheeled or tracked machines are available to suit specific needs.



Race tracks, test tracks airports and airfields

Probably the most demanding set of applications when it comes to the quality of the surface finish. For the wearing course our pavers offer exceptional reliability and capacity while delivering a quality of finish that is second to none.



Ports

Ports are one of the most demanding areas for asphalt, CBM and RCC. Our pavers can be equipped with a variety of screeds. Our pavers can achieve high levels of pre-compaction on both thin and thick layers. Our optional double tamper system is suitable for use with both asphalt and cement bound materials. The machines are prepared for use with 3D levelling systems.

Beyond the end of the road

6 Road maintenance

We know that a road requires the proper maintenance to keep it open and operational. From sweeping, ditch cleaning and snow ploughing to barrier installation and traffic management, our machines can help you to maintain the road. Our dealer network has the right equipment range to support you with what you need.





Battling the elements

Winter in the northern hemisphere, for example, clearly has the capacity to bring most vehicles to a standstill. Volvo wheeled loaders offer superb material handling and snow clearing capabilities and even specially adapted Volvo articulated haulers can make light work of a heavy blanket of snow.

Multi-functional Machines

And once winter is over the same machines can be used to sweep the roads of the gravel and grit put down, cut the grass and clear the vegetation from the roadside.

Sustainability

In recent years an increasing emphasis has been put on recycling across all aspects of our lives. The vision of Volvo Group centres on sustainability, and continues to be a leader in this drive. Little wonder then that when it comes to roads and sustainability Volvo machines can again be found out front.



In the metal

Volvo road machinery is supported by an extensive range of general purpose equipment, a vast array of attachments and a host of options to support your business and your bottom line.

Furthermore, we also offer a world leading on-highway presence thanks to Volvo Trucks, which means we are not just a specialist in roads but a full line provider.

This complete offering in support of road building customers means we can cater for all your needs. And as you would expect from Volvo, each and every machine and attachment has quality, safety and environmental care in its DNA.

Soil compactors 2.5 t - 16 t



Volvo Care Cab, with space, accessible controls, a highly efficient climate control system and low noise.



Padfoot, a two-piece, clamp-on padfoot shell kit easily and quickly converts the smooth drum into a padfoot drum.



The high-tech col-or operator display presents operational information and key diagnostics, reducing the need for regular physical checks.

Pavers



Volvo Smartpower reduces the RPM to 1600 while still providing sufficient power for most applications. This results in a reduction in fuel consumption of up to 30%.

A Volvo Smartpower monitor on the main display enables the operator to view fuel consumption while the paver owner is able to track daily and historical consumption via the Smartpower memory.



Screed performance

Volvo Variomatic screeds provide customers with hydraulically extending widths and add on extensions for paving up to 9 metres. Available in single or dual tamper systems. With manual screeds Volvo are able to offer up to 16 meters paving width.



Screed tensioning device

For large working widths the screed is subjected to torsion from frictional forces between the screed and the paving material. These forces are effectively offset by the screed tensioning device (optional), ensuring a constant angle of attack across the screed.



Fume extractor

Reduces bituminous fumes in the operator environment. The fume intake and horizontally mounted fans do not impact on the operator's view into the auger channel.



Volvo FMX truck



Skid steer loaders



Compact excavators



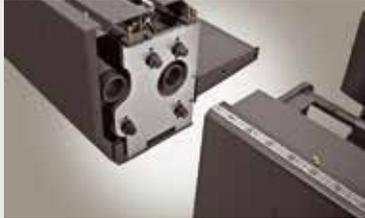
Excavators, crawler and wheeled



Wheeled loaders



Hydraulic extension height adjustment is available for Variomatic screeds.



Quick coupling. Extensions are added or removed in minutes, with no special tools required – saving you time and money.

Asphalt compactors 1.5 t - 10 t



360° visibility

With an optimally positioned sliding seat, angled drum mounts and a sloping hood design, the new asphalt compactors provide industry-leading, all-around visibility.



With Volvo's high frequency compaction, the DD25B can travel faster while still maintaining the correct impact spacing necessary for high productivity and a smooth finish. The frequency can be adjusted to cater for different applications.

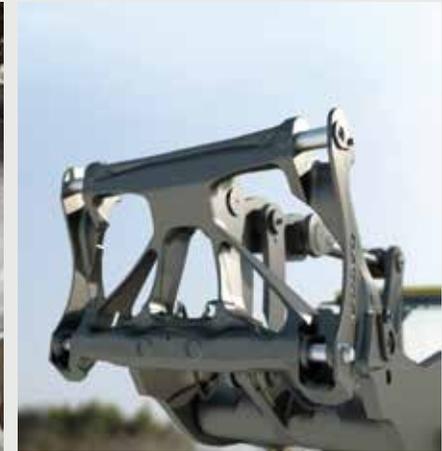


Pillar-less view

With large expanses of curved glass, the Volvo cab offers a commanding view of the jobsite for optimum safety and precision. The pillar-less forward view puts less steel between the operator and the road.

Flexibility through tools

Attachments for general purpose equipment



Couplers and brackets

While the extensive range of Volvo CE attachments such as buckets, hydraulic breakers, forks, grapples and material handling arms are all perfectly matched to your machine, we are able to offer even greater flexibility and productivity through the fitment of our quick-couplers and brackets. These make switching between tools a faster and safer process.

A perfect match

Volvo has matched attachments to machines to optimise performance, productivity and durability. Suffice to say; because we manufacture both the machines and attachments they work as one. Whether you choose to order your new attachment as factory fit or if you would like it delivered separately, we can provide the right tools to you in a timeframe that suits your business.



Articulated haulers



Soil compactors



Wheeled pavers



Tracked pavers



Asphalt compactors

Your uptime is our priority

We understand that uptime and reliability are absolutely critical in the road business. If you are not paving we know about the penalties and the potential damage to your reputation. Therefore, our entire ethos in road machinery starts with machine availability.

We will work with you every step of the way to ensure your pavers have a service schedule that suits and that you don't lose time through repairs or servicing when a machine should be working. From the initial design process through operator training and our support services we do our utmost to eliminate preventable breakdowns.

Our dealer service teams are experts on the machines so you can trust them to undertake quality workmanship using genuine Volvo parts and service techniques, thus reducing your risk. And with our extensive dealer network we are never far away.

Furthermore, if you need specific road expertise, our team of road machinery specialists will back you up at all times, from support during the tendering process through to fleet optimization and analysing operator performance and even offering tailored training where necessary. Driving down your total cost of ownership

It's born from our belief in quality, safety and environmental care. From technical support to financial assistance, our Volvo Dealer Network can offer you worldwide support.

We're more than just a construction equipment supplier. We're a trusted partner to thousands of customers all over the world who rely on us every day.



Genuine Volvo Parts

The use of Genuine Volvo Parts optimizes the Volvo service program and ensures maximum service, improving the performance, safety and efficiency of your machine.



Customer Support Agreements (CSA)

Volvo CSAs offer service and maintenance with maximum cost control and minimum downtime. The Gold, Silver Blue and White levels of agreements cater for a range of needs from total repair and maintenance, to an inspection program covering vital parts and functions.



CareTrack

CareTrack, an advanced remote monitoring tool, gives you and your dealer insight into your machine's operating performance so that action can be taken when necessary to make sure your machine performs at its best.



Volvo Financial Services

Volvo Financial Services provide integrated competitive financial solutions designed to meet the needs of our customers worldwide. As part of the Volvo Group, Volvo Financial Services know all about the machines you rely on and we understand the demands of the construction industry.



Service Manager

From the MCU, the operator receives reminders and alerts when maintenance and service checks are due and overdue. The system also records when checks are performed.



Volvo worldwide dealer support

Premium machines require premium support. Your Volvo dealer can provide the right solution for you to get the most out of your machine. Maximise uptime, productivity and the long term residual value of your machine.



Volvo Reman

How do you know a remanufactured component is as good as new? When it's Volvo Reman. With "like new" performance, fully tested and backed with the latest technological updates wherever applicable – all at a price lower than buying new.



Volvo simulators

Volvo simulators are also available for both training and pre-screening operators on site. They are a safe, cost-effective, environmentally friendly, empowering and versatile way to improve the productivity and profitability of your operators.



Volvo service technicians

Certified Volvo technicians can ensure that your machines are serviced correctly and in the most efficient way. In order to secure maximum uptime and performance, use the same parts and lubricants that the machines were equipped with from new.



Training expertise

The Volvo team of road machinery specialists will back you up at all times, from support during the tendering process through to fleet optimization and analysing operator performance and even offering tailored training where necessary.



Volvo Approved Used program

Our Approved Used program helps achieve the maximum resale value for your machine. Selected machinery is meticulously inspected by Volvo authorised dealer service engineers.



Site Simulation tool

Volvo's Site Sim tool can help to maximise productivity and reduce costs by defining the optimal machine combination for a particular operation and site.

Global reach, local delivery

Volvo dealers are present in some 190 markets around the world and their primary aim is to support you and your business.

From supplying machines, through optimising the logistical efficiency of your site to pro-actively maintaining your fleet of on and off-highway equipment, they can be relied upon as a true partner to support you in your operational needs.

Hundreds of customers from industry-leading multinationals to ambitious, local, family run enterprises rely on Volvo Construction Equipment to meet the needs of their business, to enhance their productivity and to improve their efficiency, all the while minimising their impact on the environment for the benefit of future generations.

**But don't take our word for it.
Take the word of our customers.**



“ When the equipment is unreliable, it really raises everyone’s pulse. This paver provides a whole different sense of confidence that we can carry out the work efficiently and without disruption.

**Johan Pettersson,
NCC Roads Site Manager,
Sweden**

“ We were so impressed with the machine’s low noise feature, its economical benefits and quality of the road’s surface that we decided to buy one.

**Nanning Dijkstra, Quality Manager,
Koninklijke Sjouke Dijkstra, Netherlands**

“ On a project where work continues around the clock, 30 days a month, 100% machine availability is one of our biggest requirements – we cannot risk delay due to unscheduled downtime. I have relied on Volvo Construction Equipment for decades and the quality of the machines, their ease of maintenance and the service provided by Ascendum Portugal has never let me down.

**Dias de Carvalho, General Manager,
EPOS, Portugal**

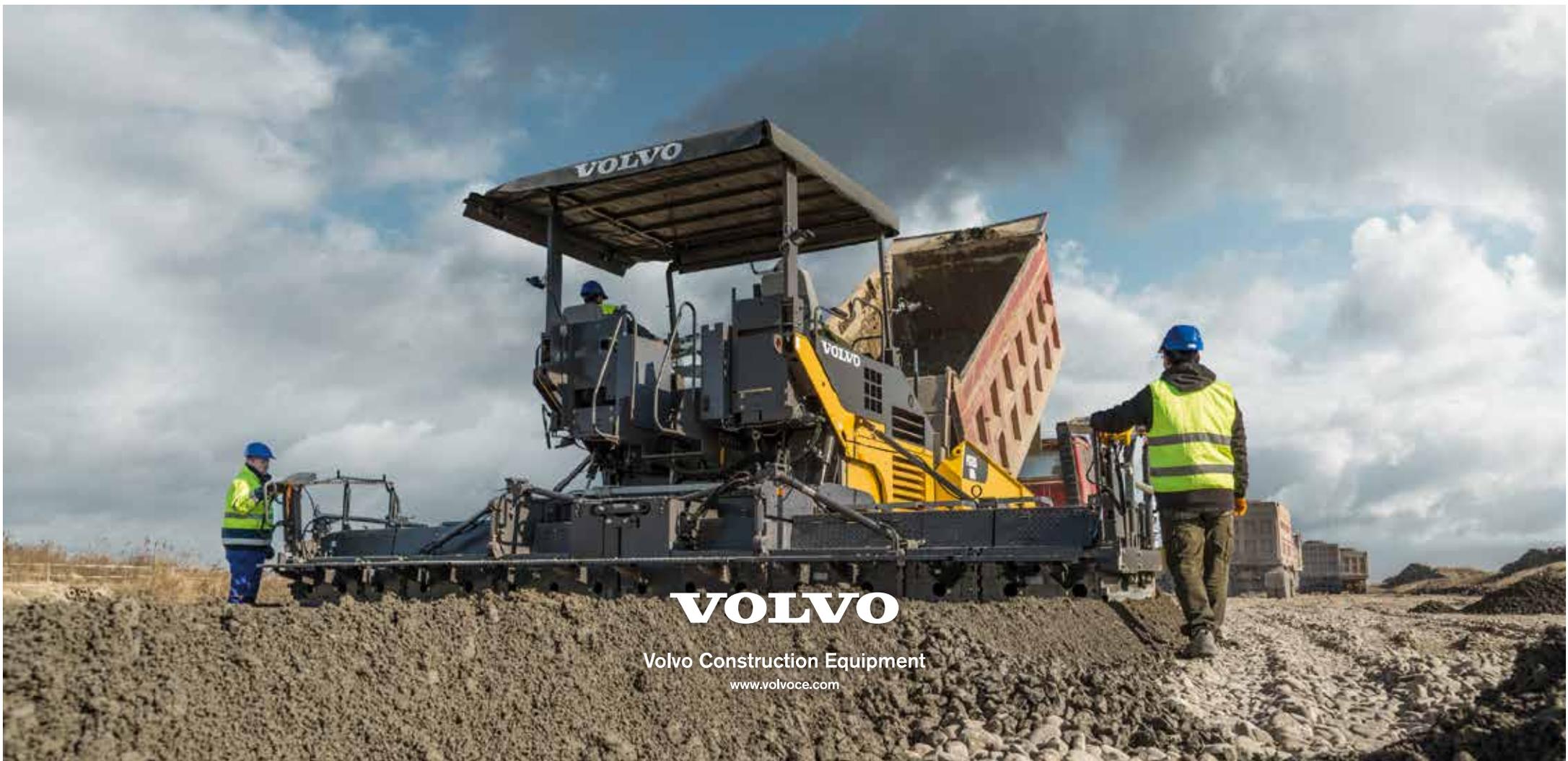
“ It is quick and easy to make modifications to Volvo ABG pavers to meet our needs. It is also very simple to change wear parts and most of the maintenance can be carried out by our own technicians.

**Denis Landais, Site Manager,
Eiffage TP, France**

“ These are good machines that give such high performance. The Volvos have powerful steering and acceleration and are very responsive. They also have excellent visibility and a spacious cab that helps us achieve high quality results.

Michel Lenglen, Operator, Eiffage TP, France





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