

Volvo Construction Equipment
Building Tomorrow



EC220D

Volvo Crawler Excavators 20.9 - 24.1 t 167 hp



A large wind turbine stands in a field of rolling hills under a warm, orange-hued sunset sky. The turbine's blades are partially visible, with one blade extending from the left side of the frame. The ground is covered in dry grass and some small shrubs.

WELCOME TO OUR WORLD

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

Working harder, working smarter

For over 180 years Volvo has been a pioneer in the design and manufacture of machines which set the standard for efficiency, performance and uptime. Across our range of excavators, wheel loaders and haulers, our reputation for engineering excellence is unrivalled, which means whatever your operation or application, we can provide a total fleet solution to help you succeed.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts, to ensure we offer customers machines which work harder and smarter long into the future.



Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.



BUILDING TOMORROW



ECO mode

Volvo's unique ECO mode contributes to up to 5% of the machine's total improved fuel efficiency – without any loss of performance in most operating conditions. The design features electronic pump control technology which reduces flow and pressure losses while maintaining digging power and maximizing swing torque.

New levels of fuel efficiency

Volvo proudly introduces the EC220D and the next generation of fuel efficiency. Thanks to sophisticated technology, this excavator boasts a 10% improvement in fuel efficiency compared to the previous model. With Volvo's unique ECO mode, a new hydraulic system and a premium Volvo D6 diesel engine, you'll soon start to reap the benefits of reduced operational costs. Maximize your fuel efficiency with Volvo.

Volvo D6 engine

Volvo's state-of-the-art D6 diesel engine is seamlessly integrated with all excavator systems. The premium, six cylinder engine delivers high performance and low fuel consumption. The D6 is available in two versions to comply with regional emission regulations.

Auto engine shutdown

The optional auto engine shutdown function automatically turns the engine off to reduce fuel consumption when the machine is inactive for a preset amount of time (five minutes is the default setting). The operator is informed one minute before this occurs.



Fuel consumption display

A new gauge bar on the I-ECU measures instantaneous fuel consumption while average fuel consumption is displayed numerically per hour. This allows you to monitor fuel usage on different job sites and applications.



Work modes

Volvo's unique, integrated work mode system now includes the G4 mode for optimum fuel efficiency and machine performance. Operators can choose the best work mode to suit the task at hand – simply select from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max) mode.

Designed for productivity

The new, modern D-series styling of the EC220D cab puts the operator in control facilitating optimal conditions for productivity. With superior visibility, easy to access controls and built in comfort, it's no wonder operators experience less fatigue and feel more productive in this spacious and safe working environment. See more and do more with Volvo.

Climate control system

Operators can set their ideal temperature with Volvo's powerful climate control system which is integrated into the I-ECU. Industry-leading air circulation and defrosting is delivered quickly via 14 well-spaced vents for increased comfort and productivity.



ROPS

Volvo recommends an optional Roll Over Protective Structure (ROPS) certified cab when working in challenging applications. This provides increased operator safety in the unlikely event of machine roll over.



I-ECU monitor

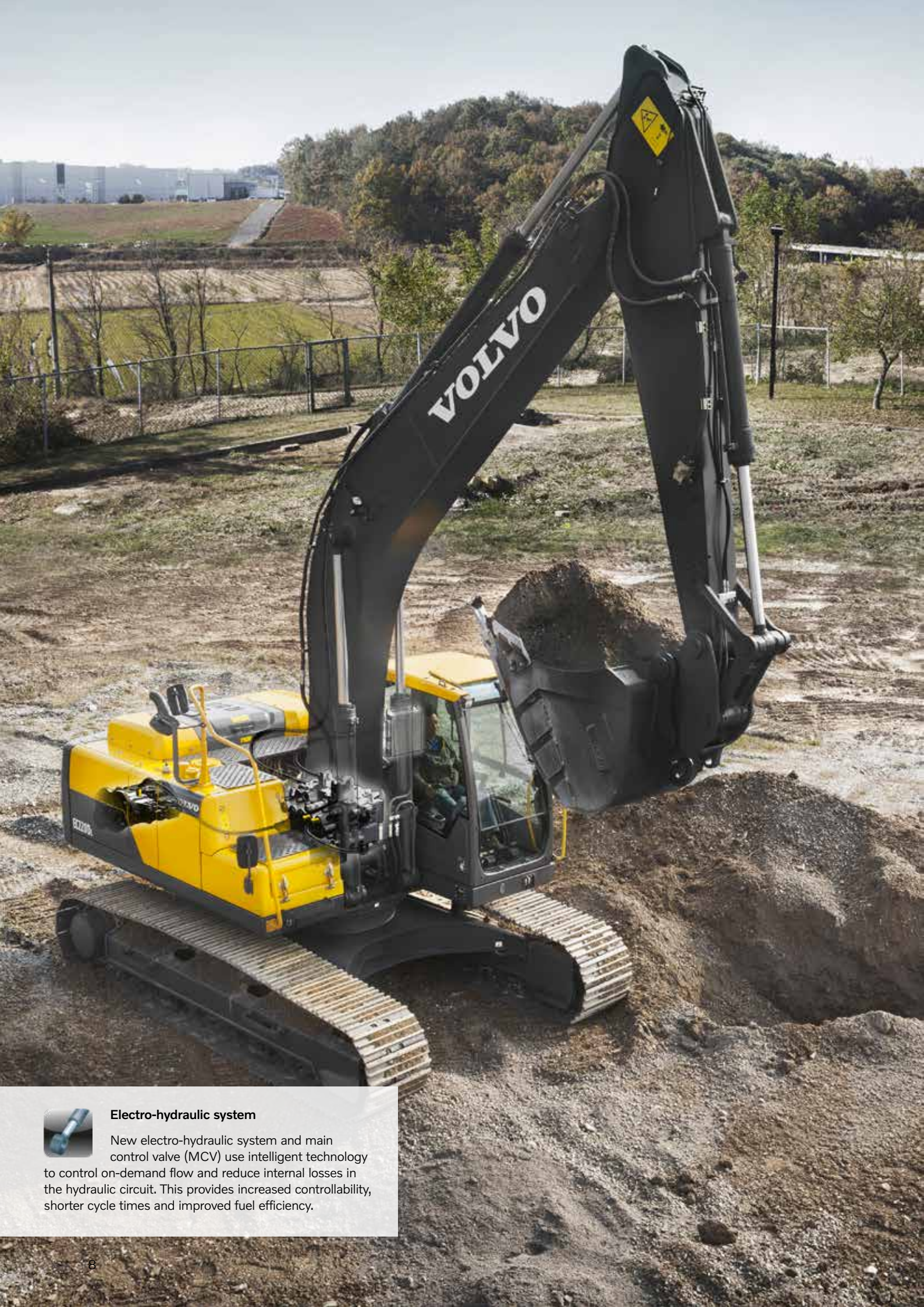
The new, color LCD monitor displays machine status information including fuel consumption details and service interval alerts. The large, anti-glare, tiltable screen and conveniently placed navigation controls facilitate easy operation and high productivity.





Cab

All-around visibility and an excellent operator environment are at the center of Volvo's cab design. The EC220D features new Volvo styling. The spacious and safe environment has been built strong and includes slim cab pillars, large expanses of glass, an adjustable seat and easy to access controls for reduced fatigue and increased productivity.



Electro-hydraulic system

New electro-hydraulic system and main control valve (MCV) use intelligent technology to control on-demand flow and reduce internal losses in the hydraulic circuit. This provides increased controllability, shorter cycle times and improved fuel efficiency.

Premium performance

Featuring a new electro-hydraulic system, the EC220D provides you with the power, controllability and versatility you need, when you need it. Whether you're working in the road construction, quarry, trenching or any other application, this machine will surpass your expectations.

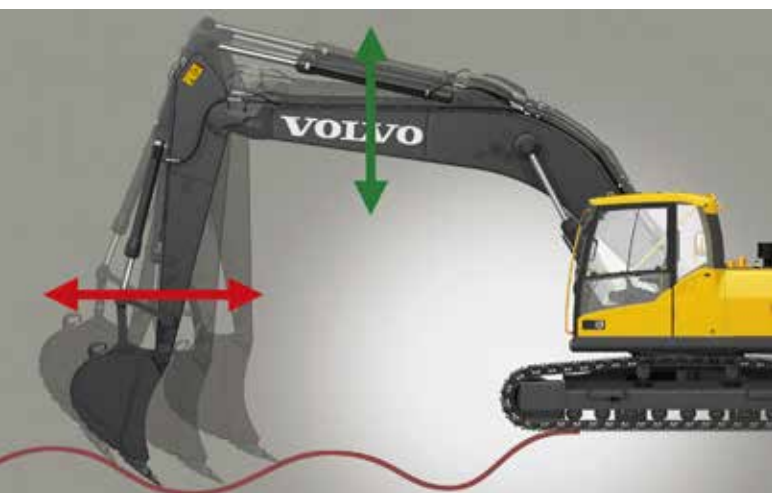
Improved controllability

Grading and combined operations are improved thanks to Volvo's smart hydraulic system which increases controllability. Benefit from smoother and easier movement when traveling and lifting simultaneously as well as better grading quality from the harmonized boom and arm movement.



Attachment Management System

The Attachment Management System (AMS) - controlled through the I-ECU - stores settings for up to 20 hydraulic attachments. The system can store flow, maximum pressure, single or double acting circuit, on/off or proportional control – increasing versatility and convenience.



Boom float option

Enables the boom to 'float' over the ground without pressure in the boom cylinders. Pump power is not used to lower the boom so there is more power available for other functions – like faster cycle times. The boom float provides easy controllability in grading and eliminates excessive shock when using a breaker.



Pressure preset

For ease of use, this system allows the operator to set the pressure through the I-ECU monitor. The settings can be stored in the Attachment Management System (AMS).

User-friendly service access

Access greater uptime and spend longer working on the jobsite with the EC220D. With safe and easy access to centralized filters and grouped greasing points, you'll spend less time maintaining your machine and more time earning money with Volvo.

Cooling system

The radiator, charged air cooler and hydraulic oil cooler are situated side-by-side on a single layer to maximize efficiency, reduce blockages and aid cleaning. The system is easily accessed for maintenance by simply opening the side door from ground level.



Extra water separator

An additional water separator is available to further prevent water from entering the engine and impurities from contaminating the fuel. This feature provides increased water separation and filtration capacity for extra durability and reliability.



Electrical Distribution Box

The fully-sealed Electrical Distribution Box contains all fuses and relays – inside the box cover these are identified on a map. The Volvo design protects against dirt and moisture for more machine uptime. It is accessible from ground level for easy service access.



Toolbox

Tools and a grease can are stored inside a spacious, well-designed toolbox for easy service access and more machine uptime.



Service access

Large doors and engine hood – which can be fully opened – provide easy service access to components. Centralized filters and greasing points allow regular checks to be done faster for maximum machine uptime and productivity. Durable, steel anti-slip plates ensure safe access for maintenance in more weather conditions and over time.

Adding value to your business

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to the positive return of your investment.



Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.



Service Network

In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.



Customer Support Agreements

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

A quality new design

Engine D6

Premium Volvo D6 diesel engine built with proven, advanced technology for high performance and low fuel consumption.



New I-ECU

The large, color LCD monitor clearly displays machine status information for easy operation and increased productivity.



ECO mode

Volvo's unique ECO mode contributes to up to 5% of the machine's total improved fuel efficiency without any loss of performance.



Cab design

All-around visibility, safety, comfort and easy to access controls are at the center of Volvo's operator environment.



Service access

Large doors and engine hood provide easy service access. Centralized filters and greasing points allow regular checks to be done faster.

Boom float

This option enables the boom to 'float' over the ground for easy controllability in grading and breaker operations.



Boom and arm

Proven Volvo design and manufacturing process, incorporating high strength tensile steel, provides maximum durability and uptime.

New D-series styling

The EC220D boasts new, modern D-series styling consistent with Volvo's product family.



Electro-hydraulic system

New electro-hydraulic system and MCV use intelligent technology to control on-demand flow for improved performance and efficiency.

New work modes

Volvo's unique work mode system now includes the G4 mode for optimum fuel efficiency and performance.



Customer solutions

Volvo provides the right solutions throughout the entire life cycle of your machine to lower total cost of ownership.

Oil cooler

Unique oil cooler is separated from the engine and radiator for superior cooling capacity, easier cleaning and servicing.

I-ECU monitor

Large color monitor provides excellent clarity in all light conditions and allows for quick visual and diagnostic checks.

Get the most from your excavator

Maximize your excavator's productivity and profitability with Volvo's comprehensive range of attachments – designed to work in perfect harmony with Volvo machines. Access more applications and effectively perform a variety of tasks while experiencing reduced fuel consumption and reduced cycle times.



Volvo buckets

Volvo offers a range of high quality buckets designed to perform in a variety of materials. Featuring exceptional design and built in durability, Volvo buckets efficiently handle the toughest of jobs.

INTERFACES



S1 and S2 quick couplers

Volvo's dedicated quick couplers are the ideal choice when you need high performance as well as the ability to easily switch between various attachments – including a tiltrotator. The lightweight design features a low build height and a tight fit to the attachment.



Universal quick coupler

For ultimate flexibility, the universal quick coupler picks up a wide range of both Volvo and other brand attachments. The coupler can be used with buckets in both the face shovel and backhoe position.



Direct fit

For maximum productivity when only operating in one application, Volvo's direct fit attachments provide the best performance and shortest tip radius.

BUCKETS & GROUND ENGAGING TOOLS



General purpose bucket

The perfect tool for digging and re-handling soft to medium material such as dirt, sand and loose clay soils.



Heavy-duty bucket

This bucket excels at digging compact materials including loose rock, hard clay and gravel. It can be used in applications such as quarrying or mining.



Volvo Tooth System

Volvo's robust range of teeth and adapters are designed to cover all applications.



Fixed ditching bucket

Ideal for ditch cleaning, grading, contouring, landscaping, backfilling and removing soft materials.



Tiltable ditching bucket

This bucket can be tilted 45° to each side making it ideal for use on slopes. It can be used for ditch cleaning, grading, contouring, landscaping, backfilling and removing soft materials.



Wear parts

For increased durability, Volvo provides segments, side shrouds, bottom shrouds, teeth, side cutters and bolt-on edges.

HYDRAULIC BREAKERS



Breaker package

The all-in-one hydraulic breaker package includes everything you need to start using your breaker. Depending on the machine, it contains a breaker, hydraulic hoses, a breaker bracket and tool.



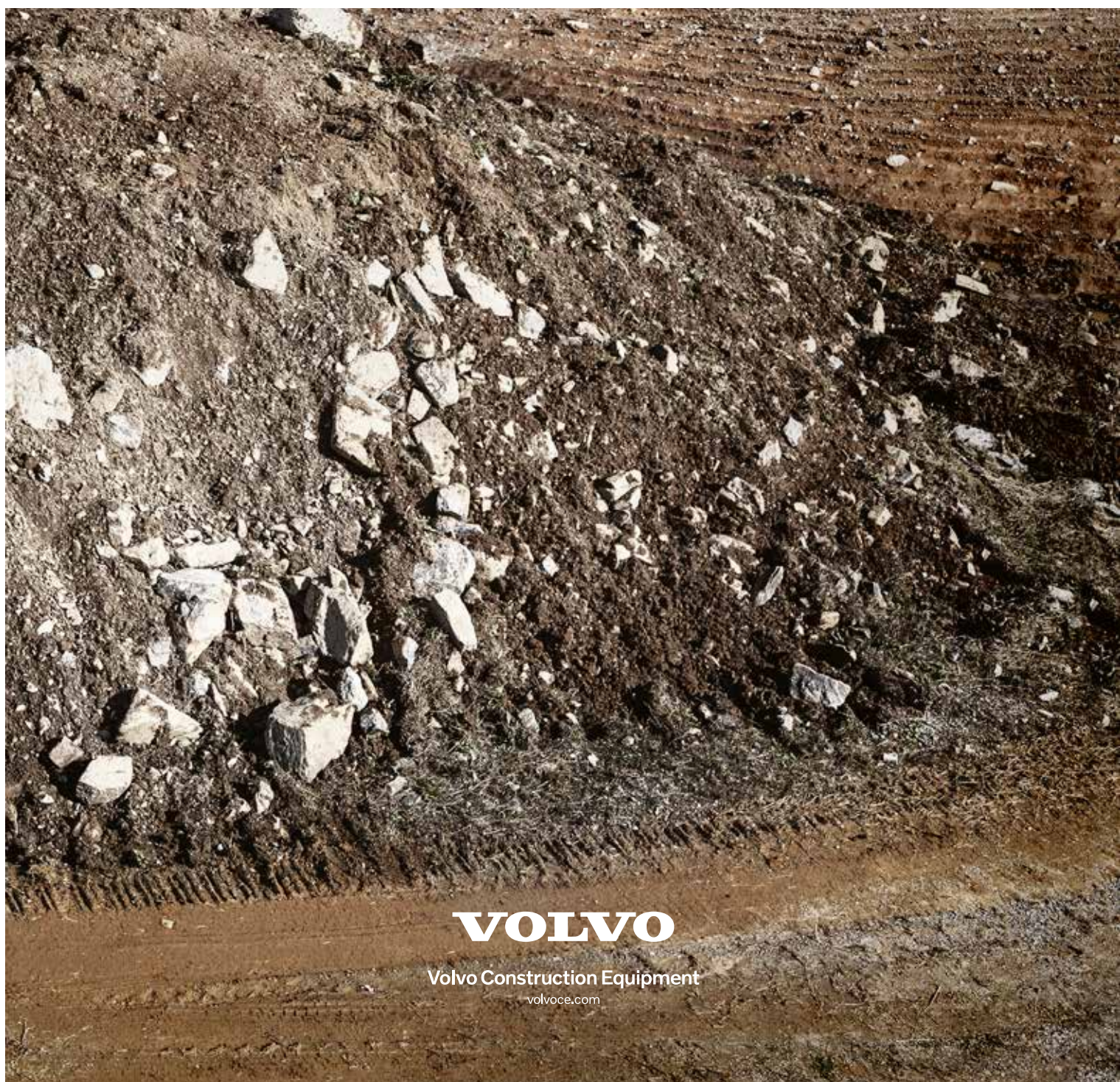
Breaker Tools

Volvo hydraulic breakers can be used in a variety of applications. To ensure optimum performance in your application select the right breaker tool from the range.

Specifications

EC220D

Operating weight	kg	20 900 - 24 400
Gross power	kW	123
. . . at engine speed	r/min	1 800
Bucket capacity	m ³	0.48 - 1.44
Lifting capacity, along undercarriage	kg	7 060
. . . at reach / height	m	6.0 / 1.5
Max. digging reach	mm	10 390
Max. digging depth	mm	7 330
Breakout force, SAE J1179 (Normal)	kN	130
Breakout force, SAE J1179 (Boost)	kN	137
Tear out force, SAE J1179 (Normal)	kN	93
Tear out force, SAE J1179 (Boost)	kN	98
Overall width	mm	2 700
Tail swing radius	mm	2 750
Based on machine configuration: Boom 5.7m/18'8"; Arm 3.5m/11'6"; Shoe 600mm/24"; CWT 4 200kg/9,260lb		



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