

VOLVO EXCAVATORS

EC235D

22.6-24.9 t 175 hp



A PASSION FOR PERFORMANCE.

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



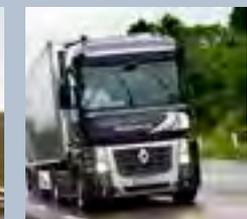
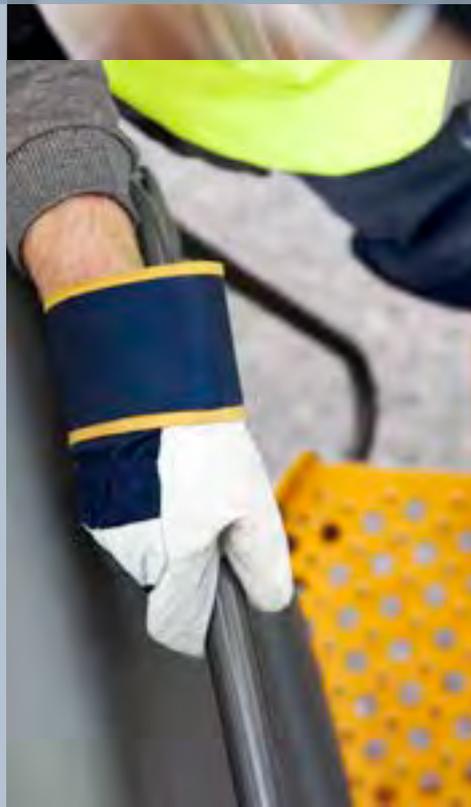
You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.



Volvo Trucks

Renault Trucks

Mack Trucks





UD Trucks



Volvo Buses



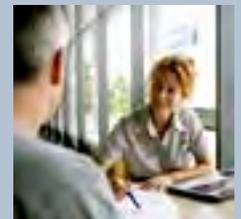
Volvo Construction Equipment



Volvo Penta



Volvo Aero



Volvo Financial Services

DESIGNED FOR EFFICIENCY.

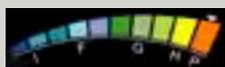
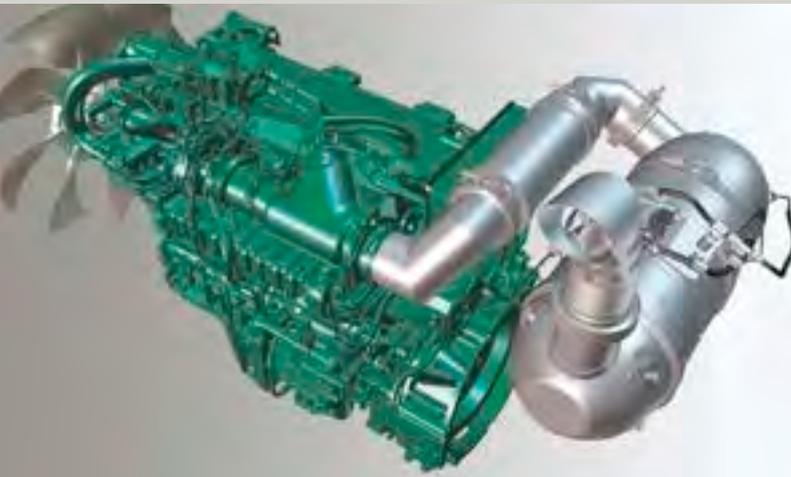
Introducing Volvo's powerful, fuel efficient and environmentally responsible D-Series crawler excavators. Featuring Volvo's unique, award-winning ECO mode, the D6 Stage IIIB/ Tier 4 Interim engine and improved hydraulics, these machines deliver reduced fuel consumption and cycle times resulting in up to 12% rise in fuel efficiency improvement as well as increased digging performance.

Volvo D6 Stage IIIB/ Tier 4 Interim engine

Volvo's new fuel efficient engine features an active-type Diesel Particulate Filter (DPF) and a regeneration process to lower emissions. The unique method does not interrupt operation, performance or productivity.

ECO mode

Volvo's unique, award-winning ECO mode features sophisticated electronic pump control technology which contributes to up to 5% of the machine's total improved fuel efficiency without any loss of performance in most operating conditions.

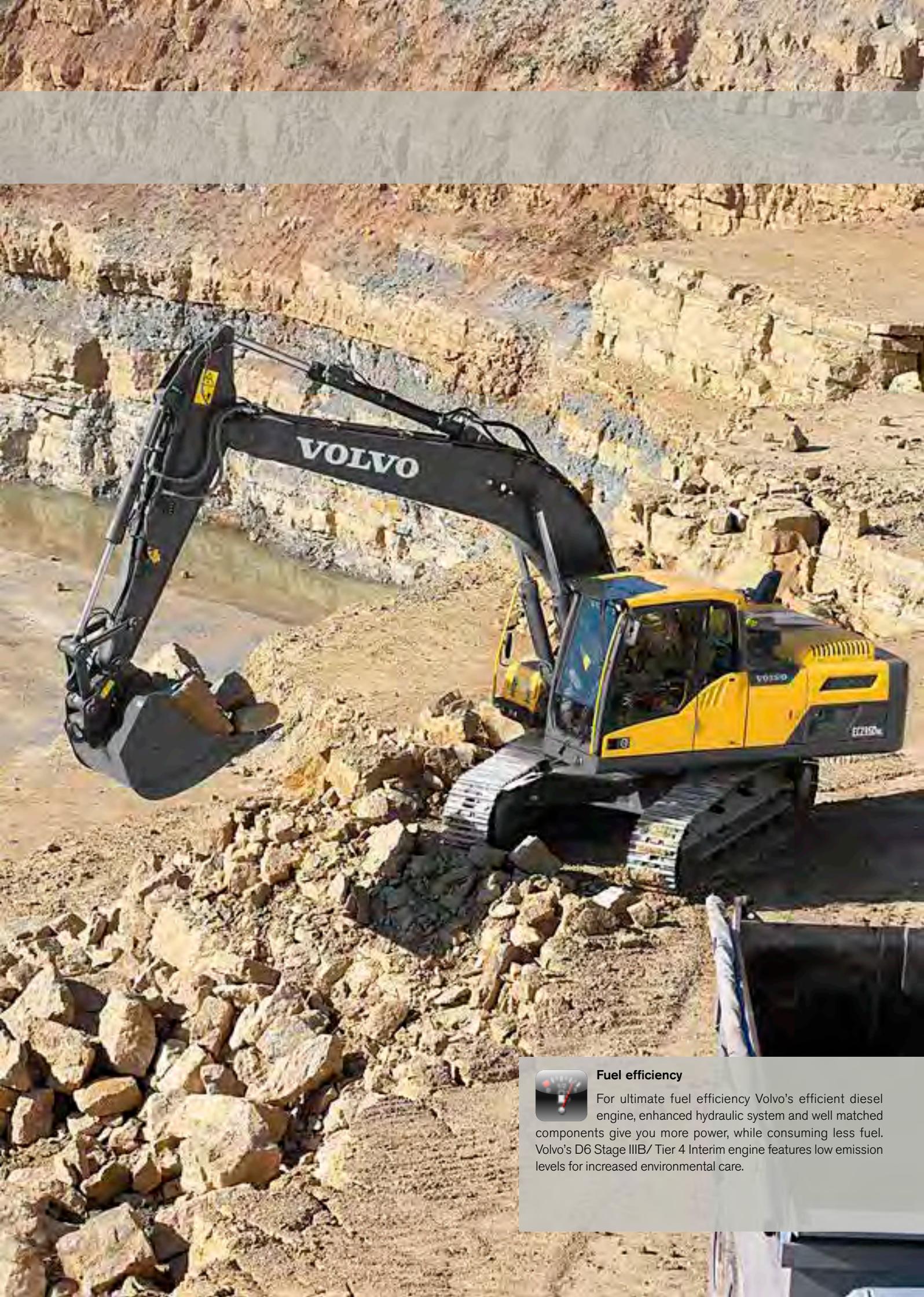


Work modes

Operators can select the best work mode for the task at hand to ensure optimum performance and fuel efficiency. Choose the correct mode according to your working conditions for added versatility and increased performance.

Proportional controlled viscous-clutch

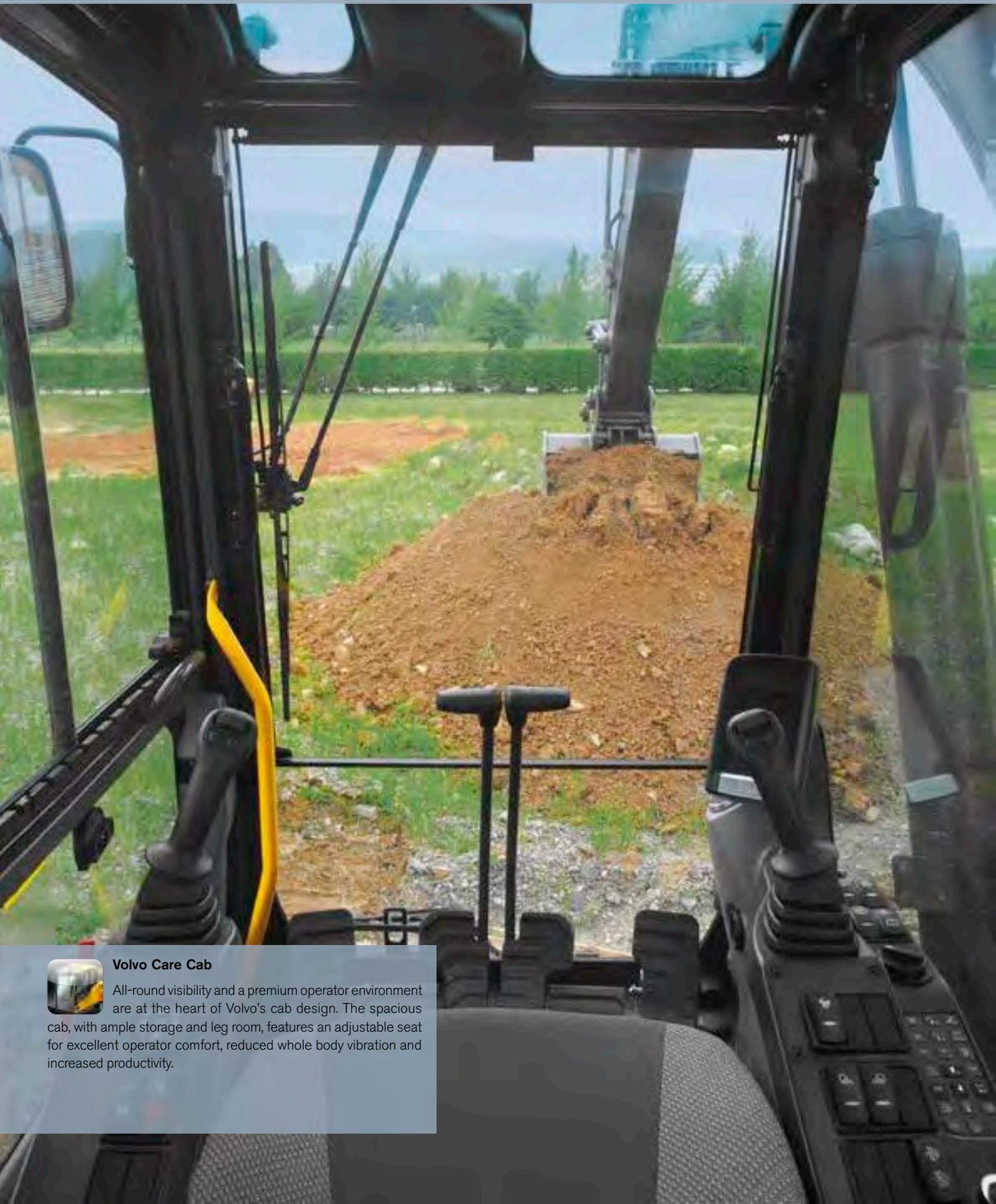
Optimized fan speed control from the new proportional controlled viscous-clutch for reduced fuel consumption.



Fuel efficiency

For ultimate fuel efficiency Volvo's efficient diesel engine, enhanced hydraulic system and well matched components give you more power, while consuming less fuel. Volvo's D6 Stage IIIB/ Tier 4 Interim engine features low emission levels for increased environmental care.

CONTROL IN COMFORT.



Volvo Care Cab

All-round visibility and a premium operator environment are at the heart of Volvo's cab design. The spacious cab, with ample storage and leg room, features an adjustable seat for excellent operator comfort, reduced whole body vibration and increased productivity.

Step inside Volvo's care cab and enjoy excellent all-round visibility. In this safe and comfortable environment operators will feel efficient and in control all day long. See more and do more with Volvo.

Rubber/Silicone oil viscous mounts

Spring is added to the mounts to improve shock absorption and reduce vibration. Increased operator comfort means more productivity.

I-ECU monitor

Large color monitor provides excellent clarity in all light conditions. Using a control panel the operator and service technician can make quick visual and diagnostic checks, increasing uptime and productivity. The monitor also displays camera images – up to four at a time.

ROPS

The cab features Roll Over Protective Structure (ROPS) which meets the ISO 12117-2 safety standard for increased peace of mind in the unlikely event of machine roll over.



Smart consoles and switches

High quality consoles and conveniently located switches for easy access and improved operator efficiency.

Automatic climate control system

Operators can set their ideal temperature with Volvo's powerful climate control system. Industry leading air circulation and defrosting capability is delivered with 14 well-spaced vents for increased comfort and productivity.

Rear view camera

Rear view camera provides visibility via the color I-ECU monitor for increased safety. The camera sits on top of the counterweight to project the area behind the machine.

TOUGH JOBS FOR A TOUGH MACHINE.

Volvo's new EC235D excels in the most demanding terrain – from rocks to riverbeds and construction sites to demolition sites. This robust machine features increased total performance from an improved hydraulic system. Trust Volvo to put you in control.

Digging power and speed

Enhanced digging force and faster cycle times, particularly when working with hard materials, from increased engine power and improved hydraulics.

Controllability

Smart hydraulic system enables smooth and highly responsive combined operation and travel. The system automatically prioritizes oil flow to the boom, arm or slew function according to requirements, resulting in faster cycle times.



Grading

Superb grading performance from improved hydraulic system. Effortlessly smooth surfaces with harmonized flow control and well-matched attachment speed.

Attachment Management System

Allows storage of up to 18 different attachment presets and permits hydraulic flow (standard) and pressure (optional) to be adjusted to enable the use of various attachments for increased versatility. Operators can change attachments quickly without manual setup.



VOLVO



EC235D ML

VOLVO



Heavy-duty undercarriage

Oversized heavy-duty undercarriage and excellent tractive force for improved durability and reliability in demanding terrain. Strong undercarriage increases machine lifetime.

SERVICEABILITY. SIMPLIFIED.



Serviceability

Grouped filters and accessible radiators are quick to access from ground level via large, wide compartment doors – increasing safety. Easy access for maintenance means regular checks get done faster, giving you more uptime.

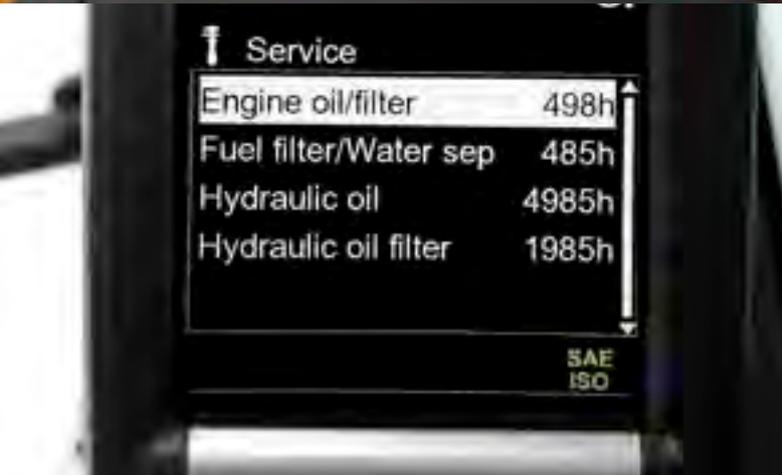
With built in serviceability the new Volvo D-Series crawler excavators guarantee you more uptime. Easy access to grouped service points allows for fast and effortless maintenance and service checks. Achieve more with Volvo.

Grouped filters

Grouped, ground level filters in the pump compartment are accessible via one door for faster servicing and more machine uptime. This reduces the need for conducting maintenance at height, increasing safety.

Safe access

Safe and convenient access to service points from ground level for reduced maintenance time and more machine uptime. Volvo's automatic stays prevent doors being blown closed and automatic locks ensure doors shut.



Service intervals on I-ECU

A service mode is incorporated into the I-ECU color monitor to enable diagnostic checks. Four separate service intervals – the engine oil/filter, fuel filter/water separator, hydraulic oil and hydraulic oil filter – are displayed on the monitor.

Anti-slip plates

Added operator and service mechanic safety from punched anti-slip plate which provides superb grip, especially in wet or icy conditions.

TOP PERFORMANCE DESERVES SUPPORT.

The day you receive your new Volvo Excavator is just the start of your working relationship with Volvo. From service and maintenance to our CareTrack telematics system – Volvo has a comprehensive and sophisticated aftermarket portfolio to continuously add value to your business.

Volvo designed and built your machines, so no-one knows how to keep them working in top condition more than us. When it comes to your machine, our Volvo trained technicians are the experts.

Our technicians work with industry leading diagnostic tools and techniques, using only Genuine Volvo Parts to deliver the highest levels of quality and service. Talk to your Volvo dealer about how genuine Volvo services can best provide the service and maintenance plan that is the right fit for you and your business.



State-of-the-art machines require state-of-the-art support and your Volvo dealer can provide a catalogue of services designed to get the most out of your machine, helping you maximise uptime, productivity and residual value. Your Volvo dealer can provide a number of sophisticated support offers, including:

Service plans ranging from routine wear inspections, through to comprehensive maintenance and repair agreements.

Analysis and diagnostics to help you understand how your machine is running, highlight potential maintenance issues and identify where performance can be improved.

Eco Operator training courses can help your operators work towards a safer, more productive and fuel efficient performance.



CareTrack*

Each Volvo Excavator comes standard equipped with CareTrack, the Volvo telematics system. CareTrack provides information for better planning and smarter working; including fuel consumption reports, location reports and service reminders. Save fuel. Reduce costs. Maximise profitability. You can with CareTrack.

* In markets where CareTrack is available

TAKE A LOOK AROUND.

ECO mode

Volvo's unique, award-winning ECO mode gives more fuel efficiency without any loss of performance.

Work modes

Achieve optimum performance and increased fuel efficiency by selecting the best work mode for the task at hand.

Digging power and speed

Perform at a higher level with increased digging power and faster cycle times for greater productivity.

Controllability

Smart hydraulic system for smooth and highly responsive combined operation and travel by prioritizing oil flow according to requirements.



Heavy-duty undercarriage

Oversized heavy-duty undercarriage and excellent tractive force for improved durability and reliability in demanding terrain.



Fuel efficiency

The Volvo D6 Stage IIIB/ Tier 4 Interim engine together with improved hydraulics deliver up to 12% rise in fuel efficiency and shorter cycle times for increased performance.



CareTrack*

Volvo's telematics system guides machine owners towards optimized productivity and their next service – remotely.



Volvo Care Cab

Enjoy all-round visibility, easy to access controls and excellent air ventilation in Volvo's spacious cab which meets ROPS safety standards.

Grouped filters

Grouped, ground level filters in the pump compartment enable faster servicing and more machine uptime.

Powerful engine

Volvo's efficient D6 Stage IIIB/ Tier 4 Interim engine gives you more power while consuming less fuel for low emission levels.



Serviceability

Premium serviceability from large, wide opening doors featuring automatic stays and locking devices.

* In markets where CareTrack is available

VOLVO EC235D IN DETAIL.

Engine

The latest generation, Volvo engine Tier 4i (Stage IIIB) emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. The engine uses precise, high-pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

Air Filter: 3-stage with pre-cleaner.

Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

Engine	Volvo	D6H
Max power at	r/s / r/min	30 / 1 800
Net, ISO 9249/SAE J1349	kW / hp	128 / 174
Gross, ISO 14396/SAE J1995	kW / hp	129 / 175
Max torque at	Nm/ r/min	849 / 1 350
No. of cylinders		6
Displacement	l	5.7
Bore	mm	98
Stroke	mm	126

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Contronics provides advanced monitoring of machine functions and important diagnostic information on the I-ECU.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	140
Alternator	V / Ah	28 / 110

Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

Max. slew speed	r/min	12.1
Max. slew torque	kNm	76.7

Drive

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Max. drawbar pull	kN	206
Max. travel speed	km/h	3.2 / 4.5
Gradeability	°	35

Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.

Track shoe		2 x 45
Link pitch	mm	203.2
Shoe width, triple grouser	mm	500/600/700
Bottom rollers		2 x 7
Top rollers		2 x 2

Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, arm and swing priority along with boom, arm and bucket regeneration provides optimum performance. The following important functions are included in the system: Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity. Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.

Hydraulic system

Swing priority: Gives priority to swing functions for faster simultaneous operations. Regeneration system: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity. Power boost: All digging and lifting forces are increased. Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

Main pump, Type 2 x variable displacement axial piston pumps		
Maximum flow	l/min	2x207
Pilot pump, Type Gear pump		
Maximum flow	l/min	1x18

Hydraulic motors

Travel: Variable displacement axial piston motor with mechanical brake
Slew: Fixed displacement axial piston motor with mechanical brake

Relief valve setting		
Implement	MPa	34.3 / 36.2
Travel circuit	MPa	36.3 / 36.3
Slew circuit	MPa	27.9 / 27.9
Pilot circuit	MPa	3.9 / 3.9

Hydraulic cylinders

Mono boom		2
Bore x Stroke	ø x mm	125 x 1 235
2 piece boom		1
Bore x Stroke	ø x mm	160 x 1 070
Arm		1
Bore x Stroke	ø x mm	135 x 1 540
Bucket		1
Bore x Stroke	ø x mm	120 x 1 065
ME Bucket		1
Bore x Stroke	ø x mm	130 x 1 040
Bucket for LR boom		1
Bore x Stroke	ø x mm	100 x 865

Service refill capacities

Fuel tank	l	335
Hydraulic system, total	l	300
Hydraulic tank	l	150
Engine oil	l	32
Engine coolant	l	41
Swing reduction unit	l	6
Travel reduction unit	l	2 x 5.8

Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.

Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.

Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

Sound Level

Sound level in cab according to ISO 6396		
LpA (standard)	dB(A)	69
LpA (tropical)	dB(A)	70
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009		
LwA (standard)	dB(A)	102
LwA (tropical)	dB(A)	103

SPECIFICATIONS.

VOLVO BUCKETS

Loose soil, re-handling material or abrasive rock; excavators and attachments work hand in hand to move almost any type of material. Volvo's experience together with excavator and attachment technology ensures a reduction in cycle times, increased productivity and lower fuel costs through higher breakout forces and quicker bucket fill times.

The efficiency of any type of excavation depends upon the selection of the right bucket therefore a broad bucket offering available from the same retailer as your excavator means the machine can be easily adjusted to operate in any conditions.

As the technology and experience in design for both Volvo's attachments and excavators stems from the same origin, availing from another service like Volvo's aftermarket support ensures the machine is running harder for longer.



(GP) General purpose bucket

Designed for digging and re-handling soft to medium materials e.g. soils with low wear characteristics. the GP bucket has anti-abrasive side cutters, a hardened lip plate and self-sharpening bucket teeth.

(HD) Heavy-duty bucket

Intended for digging in dense materials such as hard packed clay and gravel. The HD bucket has heavier overall fabrication with a thicker side cutting edge and hardened plating on all critical ground-engaging areas.

(RK) Rock bucket

Together with harder and thicker plating on all critical leading edges the rock bucket provides digging performance in soils with a high degree of rock content and well blasted rock.

(FD) Fixed ditching bucket

A wide face, round profile and drain holes make the FD bucket ideal for ditch cleaning or removal of other soft material. An inner stiffener and optional bolt-on cutting edge bolster performance.

Volvo quick couplers

Direct fit attachments will always deliver a high performance however with the need for excavators to handle more tasks than ever before, Volvo offer a diverse range of Attachment Quick Couplers providing various levels of versatility and performance to meet every need.

VOLVO TOOTH SYSTEM



Self-Sharpening Tooth System Cuts Through the Toughest Jobs

Volvo perfects the excavator bucket's point of attack with a robust tooth system that delivers performance and long life. Cast and tempered from a high-strength alloy, Volvo teeth resist stress and deliver optimum penetration in hard or abrasive material. An innovative design lessens internal wear between tooth and adapter — and makes it easy to change teeth.

LOCKING DEVICE

Patented vertical locking device. The steel pin with flexible lock retainer tightly secures the tooth to the adapter. Smart design transfers working stresses away from the locking device, saving wear on the steel pin and extending pin life. Self-sharpening Volvo teeth are designed for a small penetration area, which reduces stress and wear at the point of contact.

GPE

Self-sharpening general-purpose tooth with good penetration and long service life.

AMRE / ARXE

Tooth with extra-wear metal and longer service life intended for rock and abrasive material. Self sharpening.

PPE

Pick-point excavator tooth delivers maximum penetration in hard clay or frozen ground.

SNE

Spade nose tooth is designed for finishing work such as leveling, grading, cleaning & backfilling.

TPE

Twin pick point with sharp, dual-point profile is ideal for compact or frozen ground.

Wear Cap & BLW Adapter

Wear cap protects the adapter from unnecessary wear.

BLW: Bottom leg adapter for wear cap with extra long top leg for welding to both sides of the cutting edge. Long bottom leg.

BL: 1 1/2 bottom leg adapter for welding to both sides of the cutting edge

SPECIFICATIONS.

MAXIMUM PERMITTED BUCKETS

EC235DNL with 5 000kg counterweight

Direct Fit	m	5.7 Boom				5.57 2 piece Boom		
Arm	m	2.0	2.5	2.9	3.5	2.0	2.5	2.9
Max. bucket	t/m ³	liter	liter	liter	liter	liter	liter	liter
GP Bucket	1.5	1 550	1 425	1 350	1 200	1 550	1 450	1 350
	1.8	1 375	1 275	1 200	1 075	1 375	1 300	1 200
HD Bucket	1.8	1 300	1 200	1 125	1 000	1 300	1 225	1 125
	2.0	1 225	1 125	1 050	950	1 225	1 150	1 050

Quick Coupler	m	5.7 Boom				5.57 2 piece Boom		
Arm	m	2.0	2.5	2.9	3.5	2.0	2.5	2.9
Max. bucket	t/m ³	liter	liter	liter	liter	liter	liter	liter
GP Bucket	1.5	1 425	1 300	1 225	1 075	1 425	1 325	1 225
	1.8	1 275	1 150	1 075	950	1 275	1 175	1 075
HD Bucket	1.8	1 200	1 100	1 025	900	1 200	1 100	1 025
	2.0	1 125	1 025	950	825	1 125	1 025	950

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.

2. "Max, permitted sizes" are for reference only and are not necessarily available from the factory.

3. Bucket widths are less than bucket's tip radius.

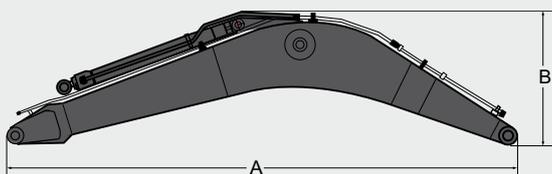
MACHINE WEIGHTS AND GROUND PRESSURE

EC235DNL 5.7m HD boom 2.9m HD arm 776kg bucket 5 000kg counterweight					5.7m GP boom 2.9m GP arm 776kg bucket 5 000kg counterweight			
Description	Shoe width	Operating weight	Ground pressure	Overall width	Shoe width	Operating weight	Ground pressure	Overall width
	mm	kg	kPa	mm	mm	kg	kPa	mm
Triple grouser	500	24 060	61.8	2 540	500	23 990	61.8	2 540
	600	24 370	52.0	2 640	600	24 310	52.0	2 640
	700	24 880	46.1	2 740	700	24 810	45.1	2 740

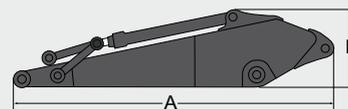
EC235DNL 5.57m 2-piece boom 2.9m HD arm 776kg bucket 5 000kg counterweight					5.57m 2-piece boom 2.9m GP arm 776kg bucket 5 000kg counterweight			
Description	Shoe width	Operating weight	Ground pressure	Overall width	Shoe width	Operating weight	Ground pressure	Overall width
	mm	kg	kPa	mm	mm	kg	kPa	mm
Triple grouser	500	24 570	62.8	2 540	500	24 510	62.8	2 540
	600	24 890	53.0	2 640	600	24 830	53.0	2 640
	700	25 390	47.1	2 740	700	25 330	46.1	2 740

DIMENSIONS

Boom



Arm



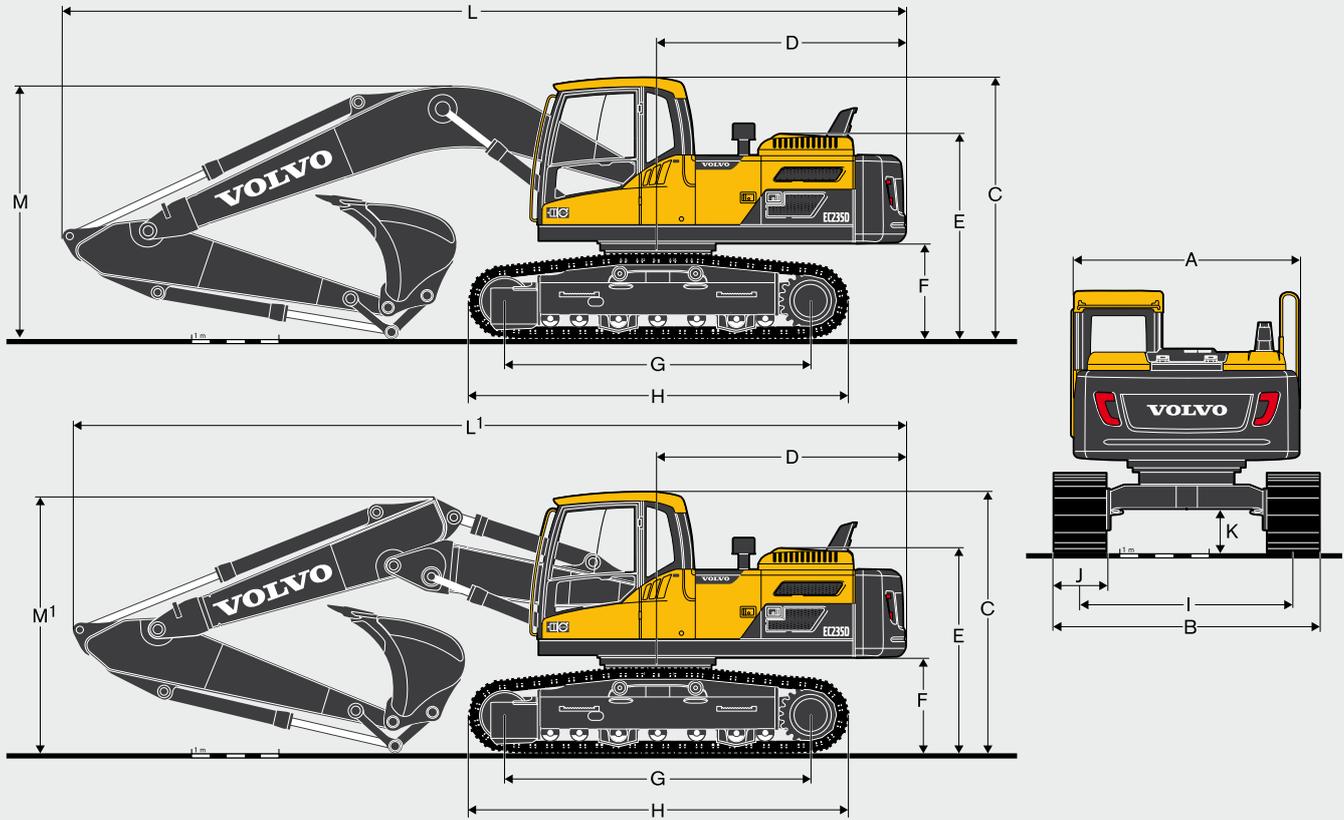
EC235DNL

Description	Unit	mono	mono	2-piece	Description	Unit	2.0 ME	2.5 HD	2.9 GP	2.9 HD	3.5 GP
Boom	m	5.7 GP	5.7 HD	5.57	Arm	m	2.0 ME	2.5 HD	2.9 GP	2.9 HD	3.5 GP
Length (A)	mm	5 910	5 910	5 780	Length (A)	mm	3 065	3 525	3 910	3 910	4 540
Height (B)	mm	1 585	1 585	1 570	Height (B)	mm	980	860	860	860	855
Width	mm	670	670	670	Width	mm	440	440	440	440	440
Weight	kg	1 995	2 135	2 585	Weight	kg	1 091	1 126	1 121	1 176	1 226

* Includes cylinder, piping and pin, excludes boom cylinder Pin

* Includes cylinder, linkage and pin

DIMENSIONS



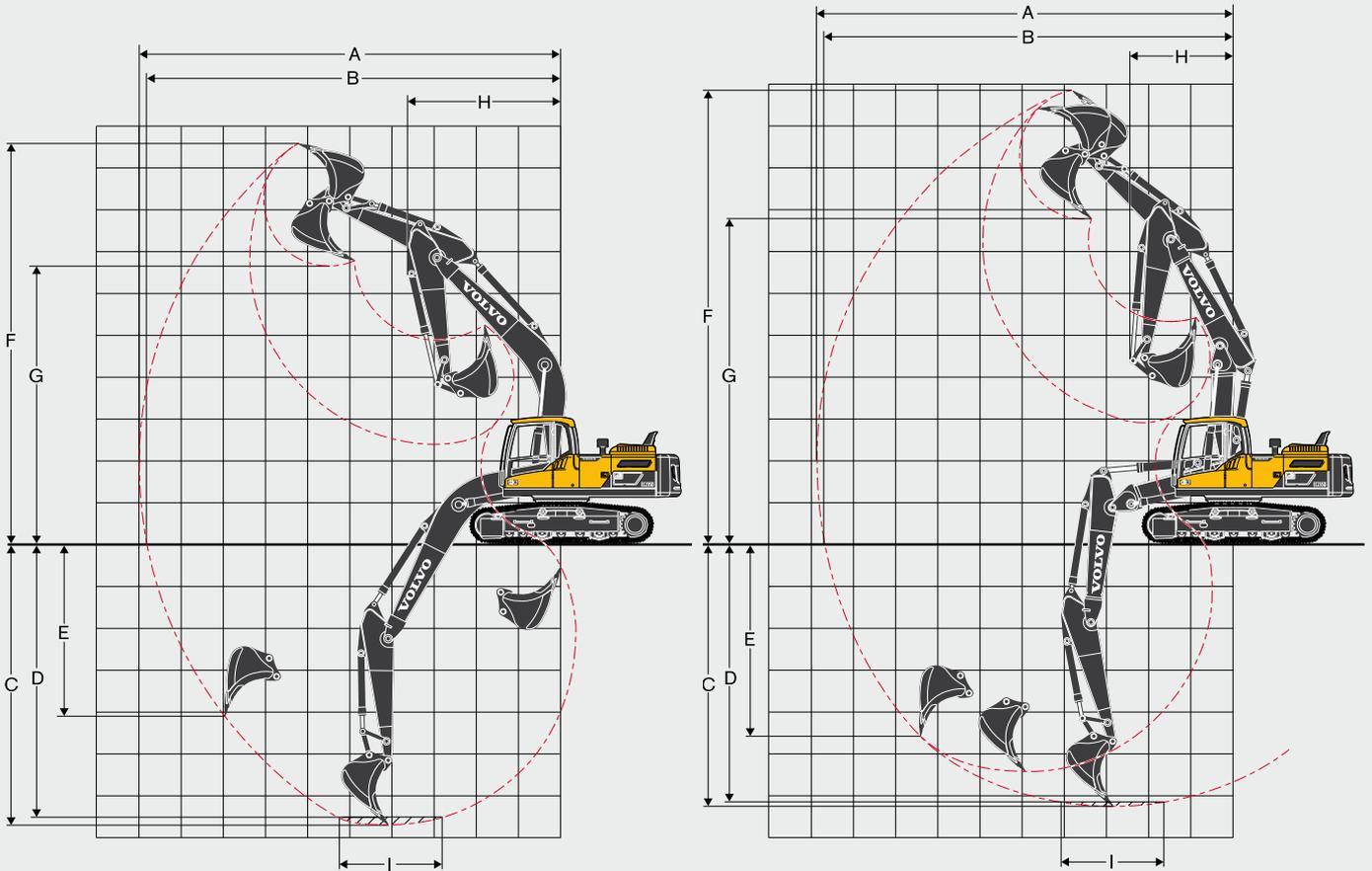
Description	Unit	EC235DNL			
		5.7 mono or 5.57 2-piece			
Boom	m				
Arm	m	2.0	2.5	2.9	3.5
A Overall width of upper structure	mm	2 540	2 540	2 540	2 540
B Overall width	mm	2 540	2 540	2 540	2 540
C Overall height of cab	mm	2 980	2 980	2 980	2 980
D Tail slew radius	mm	2 850	2 850	2 850	2 850
E Overall height of engine hood	mm	2 355	2 533	2 355	2 355
F Counterweight clearance *	mm	1 075	1 075	1 075	1 075
G Tumbler length	mm	3 510	3 510	3 510	3 510
H Track length	mm	4 360	4 360	4 360	4 360
I Track gauge	mm	2 040	2 040	2 040	2 040
J Shoe width	mm	500	500	500	500
K Minimum ground clearance *	mm	480	480	480	480
L Overall length	mm	9 790	9 745	9 670	9 730
L ¹ Overall length	mm	9 660	9 610	9 560	9 580
M Overall height of boom	mm	3 140	3 100	2 950	3 260
M ¹ Overall height of boom	mm	3 100	3 090	2 965	3 305

* Without shoe grouser

¹ 2-piece boom

SPECIFICATIONS.

WORKING RANGES



Description		Unit	EC235DNL							
Boom		m	5.7				5.57			
			mono				2-piece			
Arm		m	2.0	2.5	2.9	3.5	2.0	2.5	2.9	3.5
A	Max. digging reach	mm	9 090	9 550	9 930	10 390	8 980	9 450	9 840	10 310
B	Max. digging reach on ground	mm	8 890	9 360	9 760	10 220	8 790	9 260	9 660	10 140
C	Max. digging depth	mm	5 760	6 260	6 660	7 260	5 340	5 830	6 230	6 780
D	Max. digging depth (l = 2440 mm level)	mm	5 490	6 030	6 460	7 060	5 210	5 720	6 120	6 680
E	Max. vertical wall digging depth	mm	4 810	5 550	6 020	6 400	4 320	4 920	5 340	5 860
F	Max. cutting height	mm	9 010	9 290	9 530	9 530	10 080	10 460	10 780	10 990
G	Max. dumping height	mm	6 260	6 500	6 730	6 770	7 170	7 530	7 850	8 080
H	Min. front swing radius	mm	3 790	3 670	3 640	3 660	2 890	2 740	2 470	2 730
Digging forces with direct fit bucket										
Bucket radius		mm	1 470	1 470	1 470	1 470	1 470	1 470	1 470	1 470
Breakout force - bucket	Normal	SAE	kN	151	130	130	130	151	130	130
	Power boost	SAE	kN	160	137	137	137	160	137	137
	Normal	ISO	kN	168	145	145	145	168	145	145
	Power boost	ISO	kN	178	153	153	153	178	153	153
Tearout force - dipper arm	Normal	SAE	kN	146	119	102	93	146	119	102
	Power boost	SAE	kN	155	125	108	98	155	125	108
	Normal	ISO	kN	150	122	105	95	150	122	105
	Power boost	ISO	kN	159	129	111	100	159	129	111
Rotation angle, bucket		°	175	175	175	175	175	175	175	175

LIFTING CAPACITY EC235DNL

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
		Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	m
Boom 5.7m	7.5 m kg													*6 290	*6 290	5.0
Arm 2.0m	6.0 m kg							*6 070	5 120					*6 110	4 660	6.4
Shoe 500mm	4.5 m kg					*7 780	7 580	*6 490	4 970					*6 160	3 820	7.1
CWT 5 000kg	3.0 m kg					*9 780	7 020	*7 310	4 750	5 800	3 450			5 770	3 430	7.5
	1.5 m kg							7 890	4 540	5 710	3 370			5 590	3 300	7.6
	0 m kg							*11 620	6 520	7 760	4 430			5 790	3 390	7.4
	-1.5 m kg							*11 190	6 550	7 760	4 430			6 480	3 780	6.8
	-3.0 m kg			*13 290	12 590	*9 880	6 700							*7 400	4 760	5.8
Boom 5.7m	7.5 m kg													*5 670	*5 670	5.7
Arm 2.5m	6.0 m kg							*5 520	5 230					*5 610	4 160	6.9
Shoe 500mm	4.5 m kg					*7 090	*7 090	*6 070	5 070	*5 700	3 590			*5 700	3 490	7.6
CWT 5 000kg	3.0 m kg					*9 120	7 210	*6 960	4 830	5 850	3 500			5 300	3 170	8.0
	1.5 m kg					*10 840	6 770	*7 850	4 610	5 740	3 390			5 160	3 060	8.1
	0 m kg					*11 590	6 570	7 800	4 470	5 660	3 320			5 300	3 130	7.9
	-1.5 m kg					*11 190	*11 190	*11 470	6 550	7 750	4 430			5 840	3 420	7.3
	-3.0 m kg			*14 670	12 470	*10 510	6 650	*7 740	4 500					*7 030	4 150	6.4
	-4.5 m kg			*11 200	*11 200	*7 970	6 940							*7 160	6 230	4.9
Boom 5.7m	7.5 m kg							*5 160	*5 160					*4 900	*4 900	6.2
Arm 2.9m	6.0 m kg							*5 100	*5 100					*4 580	3 810	7.3
Shoe 500mm	4.5 m kg							*5 700	5 140	*5 370	3 640			*4 530	3 250	8.0
CWT 5 000kg	3.0 m kg							*8 550	7 360	*6 650	4 890	*5 780	3 530	*4 660	2 970	8.4
	1.5 m kg							*10 450	6 860	*7 610	4 650	5 760	3 420	4 830	2 870	8.5
	0 m kg					*5 630	*5 630	*11 460	6 610	7 820	4 490	5 660	3 330	4 950	2 930	8.3
	-1.5 m kg	*6 510	*6 510	*10 580	*10 580	*11 590	6 540	7 740	4 420	5 640	3 300			5 390	3 170	7.8
	-3.0 m kg	*11 640	*11 640	*15 580	12 360	*10 890	6 610	7 790	4 460					6 410	3 740	6.9
	-4.5 m kg			*12 570	*12 570	*8 920	6 830							*6 940	5 220	5.5
Boom 5.7m	7.5 m kg													*4 900	3 990	7.2
Arm 3.5m	6.0 m kg													*4 860	3 210	8.2
Shoe 500mm	4.5 m kg							*4 900	*4 900	*4 770	3 670			4 680	2 800	8.8
CWT 5 000kg	3.0 m kg							*5 790	4 940	*5 200	3 540	4 440	2 640	4 360	2 590	9.1
	1.5 m kg							*6 770	4 660	*5 710	3 390	4 380	2 580	4 260	2 510	9.2
	0 m kg							*7 560	4 450	5 620	3 280			4 340	2 550	9.0
	-1.5 m kg							*7 660	4 340	5 550	3 220			4 660	2 730	8.5
	-3.0 m kg					*10 770	6 430	*10 450	6 440	7 660	4 330	5 580	3 250	5 350	3 120	7.8
	-4.5 m kg	*17 190	*17 190	*12 890	12 350	*9 180	6 600	*6 750	4 460					*5 850	4 020	6.5
Boom 5.57m	7.5 m kg							*8 570	8 120					*8 410	7 140	4.9
Arm 2-piece	6.0 m kg							*8 620	8 030	*7 470	5 060			*7 390	4 740	6.2
Shoe 500mm	4.5 m kg							*9 640	7 570	*7 700	4 920			6 510	3 830	7.0
CWT 5 000kg	3.0 m kg							*10 950	6 950	8 110	4 670			5 860	3 420	7.4
	1.5 m kg									7 860	4 450	5 670	3 290	5 670	3 280	7.5
	0 m kg							*10 830	6 380	7 720	4 330			5 880	3 380	7.3
	-1.5 m kg							*9 280	6 420	*7 060	4 340			*5 870	3 790	6.7
Boom 5.57m	9.0 m kg													*8 730	*8 730	3.3
Arm 2-piece	7.5 m kg							*7 830	*7 830					*6 770	5 850	5.6
Shoe 500mm	6.0 m kg							*8 040	*8 040	*7 040	5 190			*6 230	4 210	6.8
CWT 5 000kg	4.5 m kg					*12 920	*12 920	*9 110	7 780	*7 400	5 030	5 920	3 510	5 900	3 500	7.5
	3.0 m kg							*10 560	7 160	*7 970	4 770	5 830	3 420	5 370	3 150	7.9
	1.5 m kg							*11 450	6 660	7 940	4 520	5 710	3 310	5 210	3 030	8.0
	0 m kg							*11 230	6 430	7 760	4 370	5 630	3 250	5 370	3 110	7.8
	-1.5 m kg					*11 840	*11 840	*10 010	6 410	*7 550	4 330			*5 690	3 420	7.2
	-3.0 m kg							*7 710	6 540	*5 540	4 440			*4 980	4 190	6.3
Boom 5.57m	9.0 m kg													*6 040	*6 040	4.2
Arm 2-piece	7.5 m kg							*7 030	*7 030	*5 370	5 270			*4 930	*4 930	6.1
Shoe 500mm	6.0 m kg							*7 120	*7 120	*6 700	5 290			*4 560	3 840	7.2
CWT 5 000kg	4.5 m kg					*9 680	*9 680	*8 640	7 940	*7 120	5 110	6 000	3 580	*4 480	3 250	7.9
	3.0 m kg							*10 170	7 320	*7 760	4 840	5 880	3 470	*4 590	2 950	8.3
	1.5 m kg							*11 310	6 770	8 000	4 570	5 730	3 340	4 880	2 840	8.4
	0 m kg							*6 140	*6 140	*11 400	6 470	7 790	4 390	5 630	3 250	8.2
	-1.5 m kg					*11 110	*11 110	*10 470	6 400	*7 710	4 320	5 620	3 230	5 470	3 150	7.7
	-3.0 m kg					*10 830	*10 830	*8 490	6 480	*6 280	4 380			*4 960	3 760	6.8
Boom 5.57m	9.0 m kg													*7 220	6 120	5.5
Arm 2-piece	7.5 m kg									*6 150	5 440			*6 180	4 060	7.0
Shoe 500mm	6.0 m kg									*6 050	5 400	*5 750	3 690	5 410	3 220	8.0
CWT 5 000kg	4.5 m kg									*6 410	5 200	*5 790	3 620	4 740	2 790	8.7
	3.0 m kg									*7 020	4 910	5 910	3 480	4 410	2 570	9.0
	1.5 m kg									*7 610	4 590	5 730	3 330	4 350	2 510	9.1
	0 m kg									7 770	4 360	5 590	3 200	4 390	2 520	8.9
	-1.5 m kg									*10 180	6 280	7 620	4 230	5 520	3 140	8.4
	-3.0 m kg					*11 710	*11 710	*8 760	6 310	*6 630	4 240	*4 620	3 190	*4 350	3 130	7.6
	-4.5 m kg							*6 080	*6 080							6.4

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

EQUIPMENT.

STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4i EU (Stage IIIB) requirements

Air filter with indicator

Air intake heater

Cyclone pre-cleaner

Electric engine shut-off

Fuel filter and water separator

Fuel filler pump: 50 l/min, with automatic shut-off

Alternator, 110 A

Standard cooling system by fan clutch (40 deg. C)

Electric/Electronic control system

Contronics

Advanced mode control system

Self-diagnostic system

Caretrack GSM/GPS

3yr-Caretrack subscription

Machine status indication

Engine speed sensing power control

Automatic idling system

One-touch power boost

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

High-capacity halogen lights:

Frame-mounted 2

Boom-mounted 2

Batteries, 2 x 12 V / 200 Ah

Start motor, 24 V / 5.5 kW

Hydraulic system

Hose rupture valve: boom

Overload warning device

Automatic sensing hydraulic system

Summation system

Arm priority

Swing priority

"ECO" mode fuel saving technology

Boom, arm and bucket regeneration valves

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic two-speed travel motors

Longlife Hyd oil mineral 46

Frame

Access way with handrail

Tool storage area

Punched metal anti-slip plates

Undercover (heavy-duty)

Full height counterweight:

5000 kg - Narrow Long Crawler (NL)

Cab and interior

ROPS (ISO12117-2) certified cab

Silicon oil and rubber mounts with spring

Travel pedals and hand levers

Adjustable operator seat with heater and joystick control console

Control joysticks with 4 switches each

Heater & air-conditioner, automatic

Flexible antenna

AM/FM stereo with CD player and MP3 input

Hydraulic safety lock lever

Cab, all-weather sound suppressed, includes:

Cup holders

Door locks

Tinted glass

Floor mat

Horn

Large storage area

Pull-up type front window

Removable lower windshield

Seat belt

Safety glass

Sun screens, front, roof, rear

Rain shield

Windshield wiper with intermittent feature

Rear view camera

Master key

Undercarriage

Undercover (heavy-duty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

Track shoes

500 mm with triple grousers

Digging equipment

Boom: 5.7 m monoblock

Arm: 2.9 m

Manual centralized lubrication

OPTIONAL EQUIPMENT

Engine

- Block heater: 120 V, 240 V
- Oil bath pre-cleaner
- Diesel coolant heater, 5 kW
- Water separator with heater
- Auto engine shutdown
- Fuel filler pump, 35 lpm
- Tropical cooling system (50 deg. C)

Electric

- Extra work lights:
 - Cab-mounted 3
 - Counterweight-mounted 1
- Travel alarm
- Anti-theft system
- Rotating warning beacon

Hydraulic system

- Hose rupture valve: arm
- Boom float function with HRV
- Boom float function without HRV
- Hydraulic piping:
 - Work tool management system (up to 20 programmable memories)
 - Hammer & shear, 1 and 2 pump flow
 - Hammer & shear: variable flow and pressure pre-setting
 - Additional return filter
 - Slope & rotator (40lpm, 60lpm)
 - Grapple
 - Oil leak (drain) line
 - Quick coupler piping
 - Volvo hydraulic quick coupler S1
 - Volvo hydraulic quick coupler S1 without hook
 - Volvo hydraulic quick coupler U21
- Hydraulic oil, biodegradable 46
- Hydraulic oil, longlife oil 32
- Hydraulic oil, longlife oil 68

Cab and interior

- Fabric seat without heater
- Fabric seat with heater and air suspension
- Opening top hatch
- Falling object guard (FOG)
 - Frame-mounted
 - Cab-mounted
- Cab-mounted falling object protective structure (FOPS)
- Smoker kit (ashtray and lighter)
- Safety net for front window
- Lower wiper with intermittent control
- Anti-vandalism kit
- Specific key

Undercarriage

- Full track guard

Track shoes

- 600/700 mm with triple grousers

Digging equipment

- Boom: 5.7 m monoblock, heavy duty
- Boom: 5.57 m 2 piece boom
- Arm: 2.0 m; 2.5 m; 2.9 m; 3.5 m
- Linkage with lifting eye

Service

- Tool kit, daily maintenance
- Tool kit, full scale

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Auto engine shutdown



Boom float



2 piece boom



X3



Lifting eye



FOG



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.

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