



Volvo Construction Equipment

EC120D, EC140D

Volvo Excavators 12.3-16.7 t 105 hp



Courtesy of Machine.Market

Do more and increase profit

Make more profit with the EC120D/EC140D. This machine's reliability and durability increases your uptime allowing you to keep working and earning. With outstanding fuel efficiency and power for excellent productivity, it allows you to work faster and get more done.

ECO mode

Work efficiently and profitably with Volvo's intelligent ECO mode. This feature contributes to the machine's total improved fuel efficiency –without any loss of performance. The design optimizes flow and pressure while maintaining digging power and swing torque. Choose the right work setting for the job at hand.



Durability

Deliver a strong performance shift after shift, day after day. Built with durable components, the robust superstructure, undercarriage and boom and arm, will help you to achieve the best results in all applications.



Reliability

Quality, long lasting components and the machine's design increases uptime as well as profits. The EC120D/EC140D has a robust structure and parts ensure it's reliable on your job site so you can depend on your machine to perform and work hard.



Serviceability

The EC120D/EC140D is built to ensure servicing is safe, quick and easy, featuring anti-slip plates, ground-level service access and centralized filters and greasing points. Long service intervals enhance machine availability and increase uptime for maximum productivity.





OUTSTANDING FUEL EFFICIENCY



Reduce fuel consumption, increase profitability and deliver higher productivity with the EC120D/EC140D, featuring best-in-class fuel efficiency. The powerful engine works in harmony with the optimized hydraulics and machine auto-idle function for lower fuel consumption.



SUPERIOR MACHINE PERFORMANCE



The EC120D/EC140D is designed to help you do more. This excavator delivers a strong, versatile performance in a wide range of applications. A robust frame combines with excellent engine power and hydraulic system to provide superior digging forces and fast cycle times for first-rate productivity in all operations.

Outperform your competition

The EC120D/EC140D has outstanding power and controllability for a star performance. Superior digging power and machine stability results in faster cycle times and increased productivity.

Efficient new work mode

For fast cycle times and optimum fuel consumption, the EC120D/EC140D is equipped with intelligent work modes, including the new G4 work mode. Operators can choose the best mode to suit the task at hand, selecting from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max) mode. Choose the correct mode according to your working conditions for added versatility and increased performance.



Operator performance

Operate in a comfortable cab for a more productive working day. The EC120D/EC140D has a premium cab equipped with an easy-to-view monitor, spacious and safe operator environment, offering enhanced all-around visibility, an adjustable seat and ergonomic controls.



Powerful Volvo engine

The engine boasts the best power and performance in its class, and its effective cooling capacity increases its longevity and performance.



Machine stability

Improve your stability and work in more challenging environments with the machine's long, wide undercarriage and heavy counterweight for a well-balanced and solid machine when operating in all terrains.



One machine for many jobs

Volvo offers a wide range of attachment combinations that are suitable for any job site. Volvo attachments are an integrated part of the excavator for which they are intended – delivering maximum productivity and versatility.

Quality Volvo buckets

Volvo's General Purpose bucket is ideal for digging in low impact materials such as soft ground and comes with a standard GP tooth and lifting hook. The Volvo Heavy-Duty bucket is heavier and more robust with a rigid top structure and double wear shrouds on each side of the bucket. It is thicker for aggressive digging and bucket loading, and the RC tooth comes as standard.



Breakers

Volvo's durable hydraulic breaker has been designed for ultimate compatibility with Volvo excavators and is built to break even the most demanding materials. With consistent power and high breaking force you'll benefit from maximum impact and durability. Set your Volvo breaker at the right frequency to suit your application needs.



Attachment Management System

The password protected attachment management system allows storage for up to 20 different attachments. The system allows the operator to pre-set hydraulic flow inside the cab through the monitor, which ensures the use of various attachments for increased versatility.



Optional auxiliary piping

The Volvo-designed hydraulic breaker/shear piping and quick coupler piping option provides optimum flow to the hydraulic attachments. State-of-the-art auxiliary lines allow the correct flow and pressure for special attachments.





A VERSATILE MACHINE



Access more applications and efficiently perform a variety of tasks with Volvo's extensive attachment range. The EC120D/EC140D is compatible with a selection of robust buckets, breakers and piping options that allow you to adapt to any job with ease.

A valued performance

A VERSATILE MACHINE



Access more applications and efficiently perform a variety of tasks with Volvo's extensive attachment range.

Operator performance

The EC120D/EC140D's premium cab is equipped with an easy-to-view monitor and features a spacious and safe operator environment.

Durability

Robust superstructure, undercarriage and boom and arm, helps to achieve the best results.

Reliability

The machine's durable components and parts ensure it's reliable on your job site.

SUPERIOR MACHINE PERFORMANCE



This excavator delivers a strong, versatile performance in a wide range of applications.

Serviceability

Built to ensure servicing is safe, quick and easy, featuring anti-slip plates, ground-level service access, centralized filters and greasing points.



ECO mode

This feature contributes to the machine's total improved fuel efficiency – without any loss of performance.

OUTSTANDING FUEL EFFICIENCY



Reduce fuel consumption, increase profitability and deliver higher productivity.

Efficient new work mode

For fast cycle times and optimum fuel consumption, the EC120D/EC140D is equipped with intelligent work modes.

Powerful Volvo engine

The engine boasts the best power and performance in its class.

Machine stability

A well-balanced and solid machine when operating in all terrains with the machine's long, wide undercarriage and heavy counterweight.

CUSTOMER SUPPORT AGREEMENTS



Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services.

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 increasing the positive return on your investment and maximising uptime.



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 the 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.



CareTrack

CareTrack is the state-of-the-art Volvo telematics system that provides access to a wide range of machine monitoring information designed to save time and money. Proactively manage service and maintenance schedules, optimize machine and operator performance and reduce fuel costs with CareTrack.





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.

Volvo EC120D in detail

Engine

The engine, which provide excellent performance, is equipped with four cylinder, vertical, electronic-controlled high pressure fuel injectors, cooled EGR, 3.8 liter in-line waste gate turbo charger, air-to-air intercooler and water cooled diesel engine type.

Engine	Volvo	D3.8E
Max power at	r/min	2 200
Net, ISO 9249/SAE J1349	kW	73.3
	hp	100
Gross, ISO 14396/SAE J1995	kW	77.4
	hp	105
Max torque	Nm	369.5
at engine speed	r/min	1 500
No. of cylinders		4
Displacement	l	3.77
Bore	mm	100
Stroke	mm	120

Electrical System

Well protected high-capacity electrical system. Waterproof double-lock connectors are used to ensure corrosion-free connection. Main relays and fuses are located in a shielded electrical distribution box. The master switch is standard. Advanced monitoring of machine functions and important diagnostic information is displayed on the I-ECU.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	100
Alternator	V/Ah	28/80
Start motor	V - kW	24 - 3.2

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	11.2
Max. slew torque	kNm	30.2

Travel system

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	119
Max. travel speed (low)	km/h	2.9
Max. travel speed (high)	km/h	5.2
Gradeability	°	35

Undercarriage

Robust X-shaped frame with greased and sealed track chains as standard.

Track shoes		2 x 44
Link pitch	mm	171.5
Shoe width, triple grouser	mm	500
Shoe width, triple grouser (HD)	mm	700
Bottom rollers		2 x 6
Top rollers		2 x 1

Hydraulic System

The electro-hydraulic system and MCV (main control valve) use intelligent technology to control on-demand flow for high productivity, high-digging capacity and excellent fuel economy. The summation system, boom, arm and swing priority along with boom and arm 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. Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations. Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging. 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, 2 x variable displacement axial piston pumps

Maximum flow	l/min	2 x 118
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Pilot pump, Gear pump

Maximum flow	l/min	1 x 22
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Relief value setting pressure

Implement	MPa	32.4 / 34.3
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Travel circuit	MPa	34.3
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Slew circuit	MPa	24.5
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Pilot circuit	MPa	3.9
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Hydraulic Cylinders

Mono boom		2
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Bore x Stroke	ø x mm	105 x 980
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Arm		1
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Bore x Stroke	ø x mm	120 x 1 045
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Bucket		1
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Bore x Stroke	ø x mm	100 x 865
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Service Refill

Fuel tank	l	250
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Hydraulic system, total	l	230
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Hydraulic tank	l	85
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Engine oil	l	13.2
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Engine coolant	l	22.3
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Slew reduction unit	l	3.9
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Travel reduction unit	l	2 x 2.2
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Cab

The Volvo cab features a brand new Volvo styling including a strong cab structure, slim pillars and a large glass area for good visibility, a spacious cab, an ergonomic switch layout, efficient air ventilation and a pressurized cab.

Sound Level

Sound level in cab according to ISO 6396

LpA	dB(A)	69
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External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC)

LwA	dB(A)	101
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Volvo EC140D in detail

Engine

The engine, which provide excellent performance, is equipped with four cylinder, vertical, electronic-controlled high pressure fuel injectors, cooled EGR, 3.8 liter in-line waste gate turbo charger, air-to-air intercooler and water cooled diesel engine type.

Engine	Volvo	D3.8E
Max power at	r/min	2 200
Net, ISO 9249/SAE J1349	kW	73.3
	hp	100
Gross, ISO 14396/SAE J1995	kW	77.4
	hp	105
Max torque	Nm	369.5
at engine speed	r/min	1 500
No. of cylinders		4
Displacement	l	3.77
Bore	mm	100
Stroke	mm	120

Electrical System

Well protected high-capacity electrical system. Waterproof double-lock connectors are used to ensure corrosion-free connection. Main relays and fuses are located in a shielded electrical distribution box. The master switch is standard. Advanced monitoring of machine functions and important diagnostic information is displayed on the I-ECU.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	100
Alternator	V/Ah	28/80
Start motor	V - kW	24 - 3.2

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	11.2
Max. slew torque	kNm	30.2

Travel system

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.

EC140DL

Max. drawbar pull	kN	119
Max. travel speed (low)	km/h	2.9
Max. travel speed (high)	km/h	5.2
Gradeability	°	35

EC140DLM

Max. drawbar pull	kN	137
Max. travel speed (low)	km/h	2.5
Max. travel speed (high)	km/h	4.4
Gradeability	°	35

Undercarriage

Robust X-shaped frame with greased and sealed track chains as standard.

EC140DL

Track shoe		2 x 46
Link pitch	mm	171.5
Shoe width, triple grouser	mm	500 / 600 / 750
Shoe width, triple grouser (HD)	mm	600 / 700
Bottom rollers		2 x 7
Top rollers		2 x 12

EC140DLM

Track shoe		2 x 42
Link pitch	mm	190
Shoe width, triple grouser	mm	600 / 700 / 800 / 900
Shoe width, single grouser	mm	900
Bottom rollers		2 x 6
Top rollers		2 x 2

Hydraulic System

The electro-hydraulic system and MCV (main control valve) use intelligent technology to control on-demand flow for high productivity, high-digging capacity and excellent fuel economy. The summation system, boom, arm and swing priority along with boom and arm 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. Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations. Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging. 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, 2 x variable displacement axial piston pumps

Maximum flow	l/min	2 x 118
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Pilot pump, Gear pump

Maximum flow	l/min	1 x 22
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Relief value setting pressure

Implement	MPa	32.4 / 34.3
-----------	-----	-------------

Travel circuit	MPa	34.3
----------------	-----	------

Slew circuit	MPa	24.5
--------------	-----	------

Pilot circuit	MPa	3.9
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Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm	105 x 980
Arm		1
Bore x Stroke	ø x mm	120 x 1 045
Bucket		1
Bore x Stroke	ø x mm	100 x 865
Dozer blade		1
Bore x Stroke	ø x mm	130 x 270

Service Refill

Fuel tank	l	250
Hydraulic system, total	l	230
Hydraulic tank	l	85
Engine oil	l	13.2
Engine coolant	l	22.3
Slew reduction unit	l	3.9
Travel reduction unit (LC)	l	2 x 2.2
Travel reduction unit (LM)	l	2 x 5.8

Cab

The Volvo cab features a brand new Volvo styling including a strong cab structure, slim pillars and a large glass area for good visibility, a spacious cab, an ergonomic switch layout, efficient air ventilation and a pressurized cab.

Sound Level

Sound level in cab according to ISO 6396

LpA	dB(A)	70
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External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC)

LwA	dB(A)	101
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Specifications

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width	Operating weight		Ground pressure			Overall width	
Units	mm	kg		kPa			mm	
EC120D, 4.6m boom, 2.5m arm, 0.52m³ / 446kg bucket, 2 100kg counterweight								
Triple grouser	500	12 800		40.2			2 490	
Triple grouser, HD	700	13 150		29.4			2 690	
EC140DL, 4.6m boom, 2.5m arm, 0.64m³ / 460kg bucket, 2 100kg counterweight								
EC140DL, 4.6m boom, 2.5m arm, 0.64m³ / 460kg bucket, 2 450kg counterweight								
Triple grouser	500	13 130	39.2	2 490	13 480	40.2	2 490	
	600	13 320	33.3	2 590	13 670	34.3	2 590	
	750	13 710	27.5	2 740	14 060	27.5	2 740	
Triple grouser, HD	600	13 390	33.3	2 590	13 740	34.3	2 590	
	700	13 600	28.4	2 690	13 950	29.4	2 690	
EC140DLM, 4.6m boom, 2.5m arm, 0.52m³ / 460kg bucket, 2 100kg counterweight								
EC140DLM, 4.6m boom, 2.5m arm, 0.52m³ / 460kg bucket, 2 450kg counterweight								
Triple grouser	600	14 770	36.3	2 590	15 120	37.3	2 590	
	700	14 980	31.4	2 690	15 330	32.4	2 690	
	800	15 400	28.4	2 790	15 750	29.4	2 790	
	900	15 650	25.5	2 890	16 000	26.5	2 890	
Single grouser	900	15 720	26.5	2 890	16 070	26.5	2 890	

BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC120D					
						4.6m boom					
						500mm shoe, 2 100kg counterweight			500mm shoe, 2 450kg counterweight		
						m ³	mm	kg	EA	2.1m arm	2.5m arm
Direct fit buckets	General purpose	0.20	450	265	2	C	C	C	C	C	C
		0.52	1 020	446	5	C	C	C	C	C	C
	Heavy duty	0.52	1 040	530	5	C	C	C	C	C	C
		0.52	1 040	541	5	C	C	C	C	C	C
Bucket type		Capacity	Cutting width	Weight	Teeth	EC140DL					
						4.6m boom					
						600mm shoe, 2 100kg counterweight			600mm shoe, 2 450kg counterweight		
						m ³	mm	kg	EA	2.1m arm	2.5m arm
Direct fit buckets	General purpose	0.64	1 090	460	5	B	A	A	B	A	A
	Heavy duty	0.60	1 120	569	5	C	B	A	C	B	A

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.

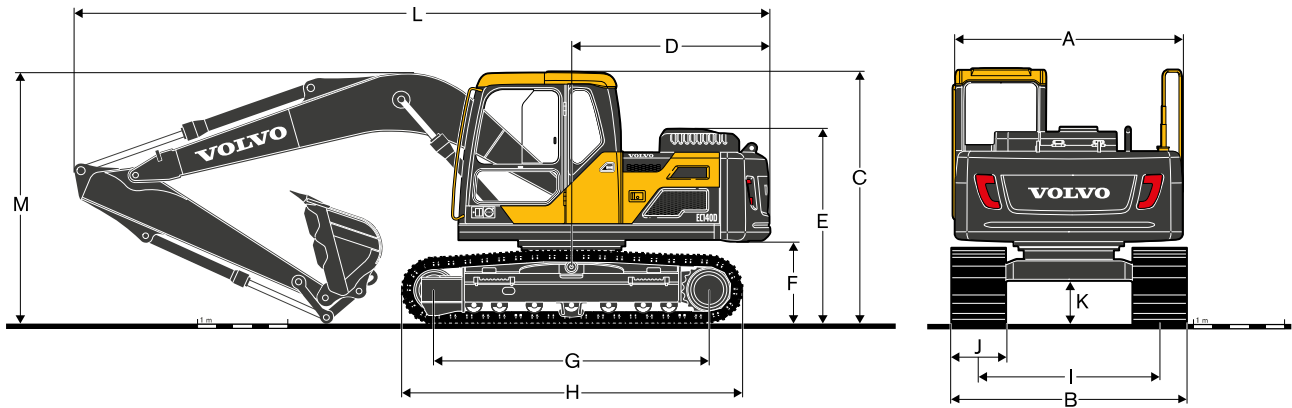
The recommendations are given as a guide only, based on typical operation conditions.

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

Maximum material density

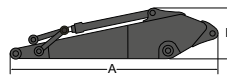
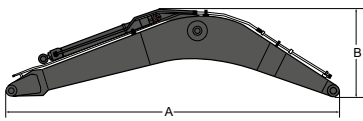
A	1 200~1 300 kg/m ³	Coal, Caliche, Shale
B	1 400~1 600 kg/m ³	Wet earth and clay, Limestone, Sandstone
C	1 700~1 800 kg/m ³	Granite, Wet sand, Well blasted rock
D	1 900 kg/m ³ ~	Wet mud, Iron ore
X	Not recommended	

DIMENSIONS



Description	Unit	EC120D			EC140DL			EC140DLM		
Boom	m	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Arm	m	2.1	2.5	3.0	2.1	2.5	3.0	2.1	2.5	3.0
A Overall width of upper structure	mm	2 490	2 490	2 490	2 490	2 490	2 490	2 490	2 490	2 490
B Overall width	mm	2 490	2 490	2 490	2 590	2 590	2 590	2 690	2 690	2 690
C Overall height of cab	mm	2 800	2 800	2 800	2 800	2 800	2 800	2 980	2 980	2 980
D Tail swing radius	mm	2 200	2 200	2 200	2 200	2 200	2 200	2 200	2 200	2 200
E Overall height of engine hood	mm	2 160	2 160	2 160	2 170	2 170	2 170	2 350	2 350	2 350
F Counterweight clearance *	mm	920	920	920	920	920	920	1 113	1 113	1 113
G Tumbler length	mm	2 870	2 870	2 870	3 040	3 040	3 040	3 000	3 000	3 000
H Track length	mm	3 580	3 580	3 580	3 760	3 760	3 760	3 790	3 790	3 790
I Track gauge	mm	1 990	1 990	1 990	1 990	1 990	1 990	1 990	1 990	1 990
J Shoe width	mm	500	500	500	600	600	600	700	700	700
K Min. ground clearance *	mm	436	436	436	436	436	436	580	580	580
L Overall length	mm	7 720	7 720	7 650	7 720	7 720	7 650	7 690	7 720	7 690
M Overall height of boom	mm	2 710	2 830	3 210	2 670	2 800	3 180	2 730	2 850	3 160

* Without shoe grouser

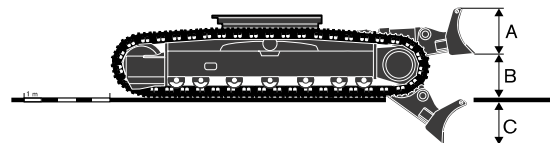


Description	Unit	EC120D	EC140D	Description	Unit	EC120D/EC140D		
Boom	m	4.6	4.6	Arm	m	2.1	2.5	3.0
A Length	mm	4 770	4 770	A Length	mm	2 800	3 200	3 700
B Height	mm	1 370	1 370	B Height	mm	710	710	780
Width	mm	545	545	Width	mm	300	300	300
Weight	kg	1 060	1 100	Weight	kg	585	625/665	695

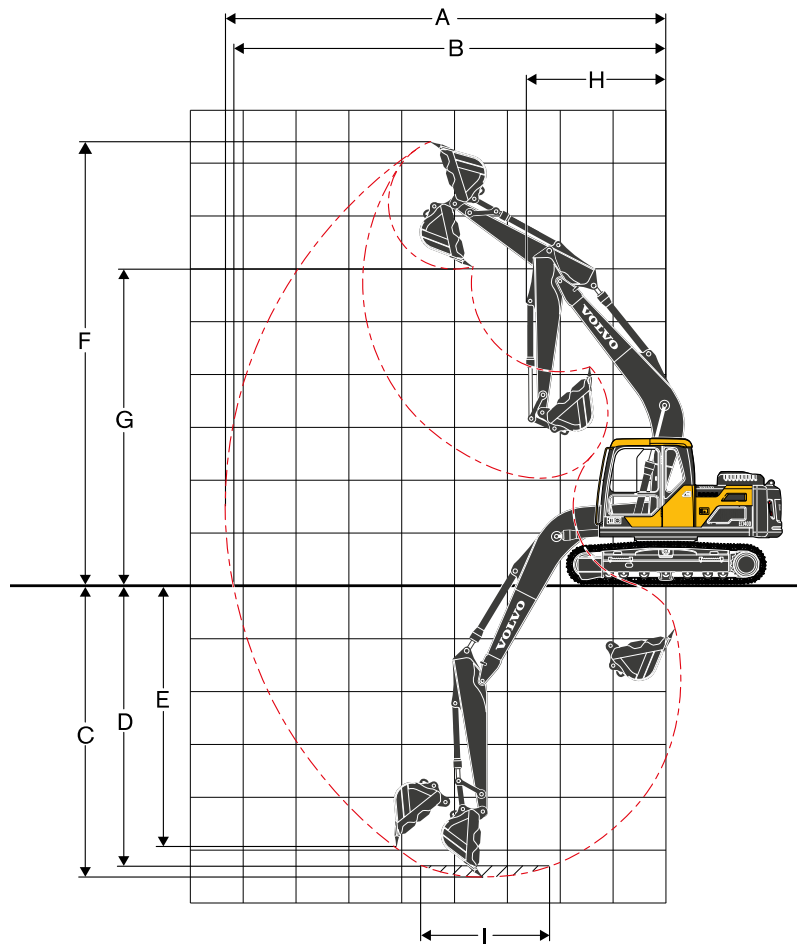
Includes cylinder, piping and pin, excludes boom cylinder pin

* Includes bucket cylinder, linkage and pin

Description	Unit	EC140D
Front dozer blade		
A Height	mm	580
Width	mm	2 590
Weight	kg	458
B Lift height	mm	480
C Digging depth	mm	600



Specifications



WORKING RANGES

Description	Unit	EC120D			EC140DL			EC140DLM		
Boom	m	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Arm	m	2.1	2.5	3.0	2.1	2.5	3.0	2.1	2.5	3.0
A Max. digging reach	mm	7 960	8 330	8 820	7 960	8 330	8 820	7 960	8 330	8 820
B Max. digging reach on ground	mm	7 820	8 190	8 680	7 820	8 190	8 680	7 780	8 160	8 660
C Max. digging depth	mm	5 130	5 530	6 030	5 130	5 530	6 030	4 960	5 360	5 860
D Max. digging depth (2.44 m level)	mm	4 870	5 310	5 850	4 870	5 310	5 850	4 710	5 140	5 680
E Max. vertical wall digging depth	mm	4 580	4 960	5 460	4 580	4 960	5 460	4 400	4 780	5 320
F Max. cutting height	mm	8 160	8 390	8 720	8 160	8 390	8 720	8 330	8 560	8 900
G Max. dumping height	mm	5 790	6 020	6 300	5 790	6 020	6 300	5 910	6 150	6 490
H Min. front swing radius	mm	2 570	2 630	2 740	2 570	2 630	2 740	2 570	2 630	2 740

DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius		mm	1 247.5	1 247.5	1 247.5	1 247.5	1 247.5	1 247.5	1 247.5	1 247.5	1 247.5
Breakout force - bucket	Normal	SAE J1179	kN	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
	Power boost	SAE J1179	kN	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
	Normal	ISO 6015	kN	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
	Power boost	ISO 6015	kN	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
Tearout force - dipper arm	Normal	SAE J1179	kN	69.2	61.8	55.0	69.2	61.8	55.0	69.2	61.8
	Power boost	SAE J1179	kN	73.4	65.5	58.3	73.4	65.5	58.3	73.4	65.5
	Normal	ISO 6015	kN	71.4	63.4	56.2	71.4	63.4	56.2	71.4	63.4
	Power boost	ISO 6015	kN	75.7	67.3	59.6	75.7	67.3	59.6	75.7	67.3
Rotation angle, bucket		°	175	175	175	175	175	175	175	175	175

LIFTING CAPACITY

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		Max. reach		m	
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC		
EC120D															
Boom : 4.6m	6.0 m	kg					*3 330	*3 330					*3 510	3 010	4.9
Arm : 2.1m	4.5 m	kg					*3 480	3 430					3 130	2 160	6.0
Shoe : 500mm	3.0 m	kg			*6 240	6 050	*4 340	3 250	3 060	2 100			2 670	1 830	6.5
CWT : 2 100kg	1.5 m	kg					4 600	3 050	2 970	2 020			2 510	1 710	6.7
	0 m	kg			*5 400	5 290	4 450	2 910	2 910	1 960			2 570	1 740	6.5
	-1.5 m	kg	*5 010	*5 010	8 870	5 300	4 400	2 880					2 910	1 960	6.0
	-3.0 m	kg			*8 240	5 420	4 480	2 940					3 940	2 620	4.9
Boom : 4.6m	6.0 m	kg					*2 840	*2 840					*3 220	2 580	5.4
Arm : 2.5m	4.5 m	kg					*3 080	*3 080	3 150	2 180			2 810	1 940	6.4
Shoe : 500mm	3.0 m	kg			*5 340	*5 340	*3 960	3 290	3 080	2 110			2 440	1 670	6.9
CWT : 2 100kg	1.5 m	kg					4 620	3 070	2 980	2 020			2 300	1 560	7.1
	0 m	kg			*5 960	5 270	4 440	2 910	2 890	1 940			2 350	1 580	6.9
	-1.5 m	kg	*4 550	*4 550	8 800	5 230	4 370	2 840	2 860	1 910			2 610	1 750	6.4
	-3.0 m	kg	*8 930	*8 930	*8 710	5 320	4 410	2 880					3 360	2 240	5.4
Boom : 4.6m	7.5 m	kg											*2 880	*2 880	4.5
Arm : 3.0m	6.0 m	kg							*2 880	2 200			*2 820	2 170	6.0
Shoe : 500mm	4.5 m	kg							*2 790	2 200			2 470	1 700	6.9
CWT : 2 100kg	3.0 m	kg					*3 450	3 340	3 090	2 120			2 180	1 480	7.4
	1.5 m	kg			*7 350	5 670	*4 640	3 090	2 980	2 010	2 100	1 410	2 060	1 390	7.6
	0 m	kg			*6 510	5 250	4 430	2 890	2 870	1 920			2 090	1 400	7.4
	-1.5 m	kg	*3 990	*3 990	8 710	5 150	4 320	2 790	2 810	1 860			2 290	1 530	6.9
	-3.0 m	kg	*7 370	*7 370	8 770	5 200	4 330	2 800	2 840	1 890			2 810	1 870	6.0
	-4.5 m	kg			*7 240	5 390							*4 500	2 950	4.5
Boom : 4.5m	6.0 m	kg					*3 330	*3 330					*3 510	3 210	4.9
Arm : 2.1m	4.5 m	kg					*3 480	*3 480					3 320	2 320	6.0
Shoe : 500mm	3.0 m	kg			*6 240	*6 240	*4 340	3 480	3 260	2 260			2 840	1 970	6.5
CWT : 2 450kg	1.5 m	kg					4 890	3 280	3 170	2 180			2 680	1 850	6.7
	0 m	kg			*5 400	*5 400	4 740	3 140	3 100	2 120			2 740	1 880	6.5
	-1.5 m	kg	*5 010	*5 010	9 440	5 710	4 690	3 110					3 110	2 120	6.0
	-3.0 m	kg			*8 240	5 820	4 770	3 170					4 200	2 830	4.9
Boom : 4.5m	6.0 m	kg					*2 840	*2 840					*3 220	2 760	5.4
Arm : 2.5m	4.5 m	kg					*3 080	*3 080	*3 200	2 340			2 990	2 090	6.4
Shoe : 500mm	3.0 m	kg			*5 340	*5 340	*3 960	3 520	3 270	2 270			2 600	1 800	6.9
CWT : 2 450kg	1.5 m	kg					4 910	3 300	3 170	2 180			2 460	1 690	7.1
	0 m	kg			*5 960	5 670	4 730	3 140	3 090	2 100			2 510	1 720	6.9
	-1.5 m	kg	*4 550	*4 550	9 370	5 640	4 660	3 070	3 060	2 070			2 790	1 900	6.4
	-3.0 m	kg	*8 930	*8 930	*8 710	5 730	4 700	3 110					3 580	2 420	5.4
Boom : 4.5m	7.5 m	kg											*2 880	*2 880	4.5
Arm : 2.5m	6.0 m	kg							*2 880	2 360			*2 820	2 330	6.0
Shoe : 500mm	4.5 m	kg							*2 790	2 360			2 630	1 830	6.9
CWT : 2 450kg	3.0 m	kg					*3 450	*3 450	*3 160	2 280			2 330	1 600	7.4
	1.5 m	kg			*7 350	6 080	*4 640	3 320	3 170	2 170	2 250	1 540	2 210	1 510	7.6
	0 m	kg			*6 510	5 660	4 720	3 120	3 070	2 080			2 240	1 520	7.4
	-1.5 m	kg	*3 990	*3 990	*8 760	5 560	4 610	3 030	3 010	2 030			2 450	1 660	6.9
	-3.0 m	kg	*7 370	*7 370	*9 120	5 610	4 620	3 030	3 040	2 050			3 000	2 030	6.0
	-4.5 m	kg			*7 240	5 800							*4 500	3 180	4.5
EC140DL															
Boom : 4.6m	6.0 m	kg					*2 820	*2 820					*3 190	2 590	5.4
Arm : 2.5m	4.5 m	kg					*3 060	*3 060	*3 170	2 180			3 040	1 930	6.4
Shoe : 500mm	3.0 m	kg			*5 300	*5 300	*3 930	3 300	3 330	2 110			2 630	1 650	6.9
CWT : 2 100kg	1.5 m	kg					*5 040	3 060	3 220	2 010			2 480	1 550	7.1
	0 m	kg			*5 960	5 230	4 840	2 880	3 130	1 920			2 530	1 560	6.9
	-1.5 m	kg	*4 540	*4 540	*9 540	5 200	4 760	2 820	3 090	1 890			2 820	1 730	6.4
	-3.0 m	kg	*8 920	*8 920	*8 620	5 290	4 810	2 850					3 640	2 220	5.4
Boom : 4.6m	6.0 m	kg					*2 820	*2 820					*3 190	2 770	5.4
Arm : 2.5m	4.5 m	kg					*3 060	*3 060	*3 170	2 340			*3 150	2 080	6.4
Shoe : 500mm	3.0 m	kg			*5 300	*5 300	*3 930	3 530	*3 460	2 270			2 800	1 790	6.9
CWT : 2 450kg	1.5 m	kg					*5 040	3 290	3 420	2 170			2 640	1 680	7.1
	0 m	kg			*5 960	5 640	5 150	3 120	3 330	2 080			2 700	1 700	6.9
	-1.5 m	kg	*4 540	*4 540	*9 540	5 600	5 070	3 050	3 300	2 050			3 010	1 880	6.4
	-3.0 m	kg	*8 920	*8 920	*8 620	5 700	5 110	3 090					3 870	2 400	5.4

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

	EC120D	EC140D
Engine		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Fuel filter and water separator	•	•
Extra water separator	•	•
Rain cap		•
Alternator, 80 A	•	•
Electric/Electronic control system		
Contronics	•	•
Advanced mode control system	•	•
Self-diagnostic system	•	•
Machine status indication	•	•
Caretrack and subscription	•	•
Engine speed sensing power control	•	•
Automatic idling system	•	•
One-touch power boost	•	•
Power max mode (P)	•	•
Anti-theft with code lock system	•	•
Safety stop/start function	•	•
Adjustable LCD color monitor	•	•
Master electrical disconnect switch	•	•
Engine restart prevention circuit	•	•
Highcapacity halogen lights:	•	•
Frame-mounted 2	•	•
Boom-mounted 1	•	•
Batteries, 2 x 12 V / 100 Ah	•	•
Start motor, 24 V / 3.2 kW	•	•
Hydraulic system		
Automatic sensing hydraulic system	•	•
Summation system	•	•
Boom priority	•	•
Arm priority	•	•
Swing priority	•	•
Boom and arm regeneration valves	•	•
ECO mode fuel saving technology	•	•
Swing anti-rebound valves	•	•
Boom and arm holding valves	•	•
Multi-stage filtering system	•	•
Cylinder cushioning	•	•
Cylinder contamination seals	•	•
Automatic two-speed travel motors	•	•
Hydraulic oil, ISO VG 46	•	•
Superstructure		
Counterweight: 2 100kg	•	•
Counterweight: 2 450kg		•
Rear view mirror on counterweight	•	•
Access way with handrail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Undercovers	•	•

	EC120D	EC140D
Cab and interior		
Cab with roof hatch	•	•
Control lock out lever	•	•
Travel pedals and hand levers	•	•
Adjustable operator seat and joystick control console	•	•
Semi-long control joysticks	•	•
Heater & air conditioner	•	•
Flexible antenna	•	•
Radio	•	•
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	•	•
Windshield wiper with intermittent feature	•	•
Master key	•	•
Sun screens, front, roof, rear	•	•
Undercarriage		
Undercover		•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track guard		•
500 mm with triple grousers	•	•
Digging equipment		
Boom: 4.6 m mono	•	•
Arm: 2.5 m	•	•
Linkage	•	•
Service		
Spare parts kit	•	•
Tool kit, full scale	•	

OPTIONAL EQUIPMENT

	EC120D	EC140D
Engine		
Air cleaner only		•
Cyclone pre-cleaner		•
Block heater: 240 V	•	•
Diesel coolant heater, 5 kW	•	•
Water separator with heater	•	•
Fuel filler pump: 35 l/min	•	•
Auto engine shutdown	•	•
Electric		
Extra work lights:	•	•
Boom-mounted 1	•	•
Cab-mounted 3	•	•
Counterweight-mounted 1	•	•
Rotating warning beacon	•	•
Hydraulic system		
Boom hose rupture valve (HRV) with overload warning device	•	•
Arm hose rupture valve (HRV)	•	•
Boom float with HRV	•	•
Boom float without HRV	•	•
Hydraulic piping:	•	•
Breaker & shear, 1 or 2 pump flow	•	•
Quick coupler	•	•
Grapple		•
Oil leak (drain) line	•	•
Hydraulic oil, ISO VG 32, 68	•	•
Hydraulic oil, longlife oil 32, 46, 68	•	•

	EC120D	EC140D
Cab and interior		
Electric pedal for breaker and shear	•	•
Control joysticks (4 switches, 3 switch & propotional)	•	•
Cab-mounted falling object guard (FOG)	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Radio with MP3/AUX	•	•
Rain shield	•	•
Rear view camera	•	•
Ashtray and lighter	•	•
Safety net (lower net)	•	•
Specific key	•	•
Superstructure		
Counterweight: 2 450kg	•	
Counterweight: 2 100kg		•
Undercarriage		
Track guard	•	
700 mm with triple grousers	•	
500 / 600 / 750 / 800 / 900 mm with triple grousers		•
600 / 700 mm HD with triple grousers		•
900 mm with single grousers		•
Digging equipment		
Arm: 2.1m, 3.0m	•	•
Service		
Tool kit, daily maintenance	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Auto engine shutdown



Rear view camera



Auxiliary piping



Fuel filler pump



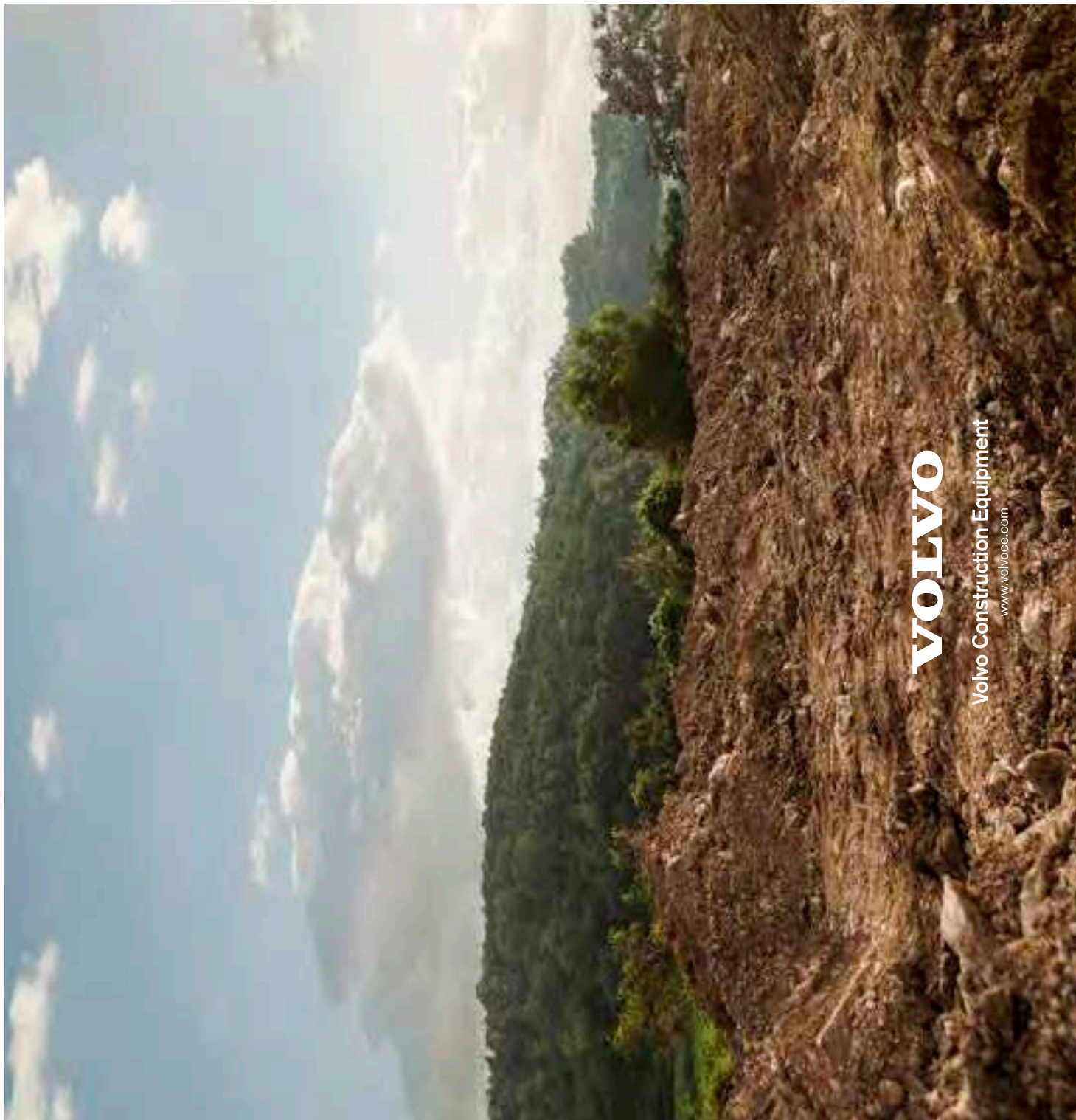
Boom float



FOG



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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