

VOLVO EXCAVATOR

EC700CL

68,3 – 70,6 t, 430 hp



MORE CARE. BUILT IN.



ALL WORK. ALL THE TIME.

[MORE PROFIT.]

- **Powerful Volvo V-ACT engine:** efficiently moves more tons per hour.
- **Industry-leading fuel efficiency.**
- **The digging reach, depth and capacity** to stretch your productivity further.
- **Advanced hydraulic system** is well matched for efficient, smooth control.
- **Excellent lifting capacity** - to pull out of the pile with no hesitation.
- **Volvo quick fit:** easy attachment change out for greater versatility.

[MORE SAFETY.]

- **The new-design Volvo Care Cab,** with operator protective structure provides security.
- **Anti-slip steps and platforms** with punched steel plates for superior grip even when wet or icy.
- **Low engine emission levels and low noise.**
- **Superior balance and stability** for peace of mind in any terrain.
- **Lead-free exterior paint** is in harmony with the environment.





[MORE COMFORT.]

- **New larger, more comfortable cab** puts you in command.
- **Roomy, adjustable seat** supports your whole body.
- **Improved noise insulation** helps keep the noise out and the fatigue away.
- **Vibration dampening:** reduced whole body vibration and fatigue.
- **High-capacity climate control system.**



[MORE UPTIME.]

- **Large, easy-opening service panels** for safe, complete access.
- **Easy access, centralized lubrication points.**
- **In-cab monitoring** through the easy-to-read, **color LCD monitor.**
- **Easy to learn. Easy to operate. Easy to get more done.**

[MORE QUALITY.]

- **Strong undercarriage frame:** endures daily abuse.
- **Heavy-duty boom and arm:** reliability and strength for difficult jobs.
- **Reinforced boom/arm and proven components** deliver every time.
- **Reinforced superstructure:** double welded stress points.
- **Lifetime greased, sealed track chain** prevents leaks and guarantees long life.

VOLVO – A PARTNER TO TRUST.

Big. Size alone won't get the job done. You have to back it up with production – every day. When the job is big, look to the excavator that does it all bigger, faster and stronger. The 70-ton Volvo EC700C will make you think it's in the 80-ton class. That's because it's built like it. Get to work in the machine that will be your money-making partner for a long time.

Volvo: your global, local partner

- Complete solutions since 1927.
- Built on the core values of quality, safety and environmental care.
- Construction equipment, commercial transport, buses, trucks and more.
- Global expertise: development of engines with leading fuel efficiency.

Top of its class

- The 70-ton excavator with key features found in the 80-ton class.
- Perfectly matched for quick, 40-ton articulated hauler loading – in four to six passes.
- Optimized operations by electronic control – balancing available engine and hydraulic power to conditions.

Big on production

- Tear away more material – faster and easier.
- Fast cycles mean more tons moved on every shift.
- Stout stability from wide-gauge tracks and heavy-duty counterweight.

Comfortably work longer

- Maximum performance you need with the efficiency, comfort and safety you expect from Volvo.
- Climate-controlled cab keeps you fresh, alert and focused – longer.
- Well-placed instruments and clear, all-around visibility.

Built to work for you

- Flexibility to handle a wide range of materials in a wide range of applications.
- Choose the work tools, boom/arm configuration and track shoes for your work.
- The leader on the jobsite: production trenching, mass excavation, quarry loading, rock-face stripping, mining, high-demand earthmoving, material-loading jobs and more.



• Volvo: the name you can trust for quality.



• Reinforced boom/arm handles all the jobs.



• Intelligent command means greater profits.



• Well-positioned monitor and controls.



VOLVO'S ENGINE LEADERSHIP SPANS LAND, SEA, SKY AND SPACE

As the world's largest manufacturer of 9-to-18-liter diesel engines, Volvo has unmatched expertise designing power systems that move the world. Volvo engines for Volvo Construction Equipment, Volvo

Aero, Volvo Buses, Volvo Penta and Volvo Trucks define productivity and fuel economy. Our performance has been honed on land, over the sea, across the sky and into space. Leading research and development

keeps all Volvo Group products at the forefront of productivity. So when we say Volvo engines are tested — and proven — you can believe it. Trust in it. It's the real advantage of Volvo Power.



BUILT TO LEAVE NO WORK BEHIND.

You might not have to move mountains – but it's nice to know you can. The Volvo EC700C has all the power you need, plus perfectly harmonized hydraulics to make the most difficult material quickly go wherever you want. Mass excavation. Production trenching. Rock-face stripping. Mine loading. The list goes on and on. Just like the Volvo EC700C.

Quality for the long haul

- Built with quality – through and through – from boom to counterweight.
- Loaded with proven, extra-duty components.
- Main pump, slew motor, bearing/track rollers and other key components live up to 80-ton class standards.
- Larger-diameter slew bearing provides smooth action and dependable, long life.

A reinforced force to behold

- Extra-duty undercarriage provides solid footing.
- Wide track gauge and an extra-heavy counterweight.
- Reinforced under-cover protects the high tensile-strength steel undercarriage and superstructure.
- Robotically-welded frame stands up to brutal stresses.
- Boom and arm is robotically welded and engineered for durability.

Power to tear through the work

- Powerful Volvo engine delivers high torque even at low RPMs.
- Class-leading power: 316 kW (430 hp).
- Harmonized engine and hydraulics for smooth, responsive digging and lifting.
- High breakout forces, crowding forces and slew speed.
- Quicker cycle times. More tons loaded. Faster job completion.





• More care built in through quality



• Lifetime greased and sealed track chain.



• Efficient Volvo engine delivers high torque at very low RPMs.



WHERE YOU WANT TO BE – ALL DAY LONG.

Volvo values the environment. Yours and ours. The Volvo EC700C is proof. The rock-solid exterior features a comfortable interior that helps you share the fatigue-free, work-all-day feeling your machine has. Safety and care is also covered inside and out. For you. For those working around you. For those living around you.

Your comfort zone

- Adjustable seat puts any size operator at ease.
- Ergonomic, low-effort controls/levers put all functions easily within reach.
- High-capacity climate control system: comfortable in all weather.
- Fine-particle air filtration: keeps dust away from the operator and electronics.

Volvo views safety as a priority

- Clear, all-around visibility from expansive glass and a thin front-window crossbar.
- Cab entry and exit is easier from wide access steps and sturdy hand rails.
- Sure grip step below the fuel port helps keep you anchored when refueling.
- Long, wide-gauge tracks, an extra-duty undercarriage and heavy counterweight provide sure-footed stability.

Environmental care

- Volvo Advanced Combustion Technology (V-ACT) engine provides low emissions.
- Robust cab suspension mounts suppress noise and dampen vibration.





• Greater floor space with ergonomic pedals.



• Industry's highest heating/cooling capacity with 14 vents.



• Safe, anti-slip steps and platforms.



INTELLIGENT DESIGN. SMART CHOICE.

Hard at work. Easy to keep running. Volvo dealer support built in around you. That is the Volvo EC700C way. You have less to worry about. Just the job in your sight and the profits in your pocket. It's the smart way to work. Do a quick check. Close the door. Turn the key and go to it.

Service your uptime

- Punched-plate, anti-slip walkways make machine checks safe and easy.
- Filters and components are conveniently located for quick replacement.
- Plenty of space and access to major components such as the main pump.
- In-cab diagnostic monitoring.
- Micro-particle filtration keeps the engine, hydraulics and electronics free from contaminants.

Your Volvo machine. Your Volvo dealer. The support you need:

VCADS at your service

- Optional computerized monitoring and diagnostics program.
- The perfect tool for the service technician.
- Makes troubleshooting diagnosis quick and accurate.

MATRIS gives you a full report

- Detailed operating history analysis, utilization and efficiency.
- Turns the data captured inside the machine's computer into easy-to-use graphs and reports.
- Check operating techniques, reduce maintenance costs and increase service life.

PROSIS makes parts ordering faster

- CD-ROM application makes it quick and easy for your dealer to order all your parts.
- Your dealer helps you find the right part and place your order to get you up and running fast.





• Simplified, easy service access.



• Easy access to hydraulic pumps and filters.



• Volvo is the partner you can grow with.



IT'S YOUR WORK. IT'S YOUR CHOICE.

Make your Volvo Excavator just right for you and your work. To customize your excavator with other optional equipment features to suit your application, contact your local Volvo dealer.

Hydraulic kits

A wide variety of hydraulic kits is available for various boom and arm combinations. Each kit maximizes performance according to the machine's boom and arm length/shape. Get the most out of rotating/tilting attachments, crushers and hammers. Choose between 1 or 2 pump flow for best performance.

Diesel-driven engine coolant heater

The diesel-driven engine coolant heater aids low temperature starting, while simultaneously warming the cab. Heating time duration can be adjusted, set and programmed in advance to engage at a specific date and time.

FOG and FOPS cab protection

For added safety and protection, FOG (Falling Object Guard) and FOPS (Falling Object Protective Structure) certified cabs provide peace-of-mind for tough conditions such as quarries and demolition. The front guard of the FOG unit is tiltable and supported by a gas strut for easy front window cleaning.

Operator seats

Volvo offers a wide variety of ergonomic operator seats designed specifically for comfort and protection. All seats, from various adjustable models to the most advanced air-suspension models, provide excellent support and are individually adjustable to suit operator preferences.

Straight travel pedal

A pedal located by the left foot rest operates both travel motors at the same time, providing convenience when traveling and efficient work control in applications such as pipe laying.

Full-length derailing shield

Keeps the track chain straight in uneven terrain, such as slopes and blasted rock – helping to avoid wear and extend life. The track chain is the most expensive wear part to replace, meaning the full-length derailing shield helps increase customer profit through lower repair costs.

Rear view camera

For improved safety on the jobsite, the manually-operated camera provides a clear rear view when reverse travel is selected or to the right hand side of the superstructure when the slew function is activated. A clear display is visible on the wide screen, color LCD of the IECU (Instrument Electronic Control Unit). The protected camera can be switched manually, using a selection switch on the keypad, to show either rear or side view.

Wrist control joysticks – proportional control

Low-effort, wrist control joysticks provide smooth, precision control for increased comfort, efficiency and production. Wrist control joysticks with proportional control switches are also available.

CareTrack

GPS monitoring program that works with the machine's diagnostic system. Allows the owner and dealer to remotely track usage, productivity, fuel consumption and more. Maximizes uptime through important service reminders. Also monitors geographic machine location and can even prevent unauthorized use.

Hydraulic quick fit

A Volvo hydraulic quick fit makes changing attachments quick and easy – all from the comfort and safety of the cab. Different Volvo quick fit types are available to fit new and existing customers' buckets/ attachments.



VOLVO OPTIONAL EQUIPMENT



Hydraulic kits

Diesel-driven engine coolant heater

FOG and FOPS cab protection

Operator seats

Straight travel pedal

Full-length derailing shield

Rear view camera

Wrist control joysticks - proportional control

CareTrack

NOTE: Some features listed as optional equipment are standard equipment in some markets. Some equipment features listed are not available in all markets. Not a complete list of available optional equipment features. See included specification sheet for a complete listing.

SPECIFICATIONS

Engine

The 4-stroke Volvo diesel engine with water cooling has been specifically developed for excavator use to deliver low emissions, good fuel efficiency, long service life and superior performance. The EU Stage IIIA compliant engine uses turbocharged air-to-air intercooling and direct injection electronic engine controls. The automatic idling system reduces the engine speed to idle when no machine functions are activated, resulting in lower fuel consumption and lower cab noise levels.

Engine	Volvo D16E EAE3
Max. power, at	30 r/s (1 800 r/min)
Net (ISO 9249, SAE J1349)	316 kW (430 hp)
Gross (SAE J1995)	346 kW (470 hp)
Max. torque at 1 350 r/min	2 250 Nm
No. of cylinders	6
Displacement	16,1 l
Bore	144 mm
Stroke	165 mm

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.

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	225 Ah
Alternator	28 V / 80 A

Service refill capacities

Fuel tank	840 l
Hydraulic system, total	655 l
Hydraulic tank	350 l
Engine oil	52 l
Engine coolant	65 l
Slew reduction unit	2 x 6 l
Travel reduction unit	2 x 20 l

Slew system

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

Max. slew speed	6,7 r/min
Max. slew torque	23,1 kNm

Drive

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

Max. drawbar pull	453 kN
Max. travel speed	4,6/3,0 km/h
Gradeability	35°

Undercarriage

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

Track pads	2 x 48
Link pitch	260,4 mm
Shoe width, double grouser	650/750/900 mm
Bottom rollers	2 x 8
Top rollers	2 x 3

Hydraulic system

The hydraulic system, also known as the "Integrated work mode control" is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and slew 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.

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.

Slew priority: Gives priority to slew 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: 2 x 436 l/min

Pilot pump:

Type: Gear pump
Maximum flow: 27,4 l/min

Hydraulic motors:

Travel: Variable displacement axial piston motor with mechanical brake

Slew: Fixed displacement piston motor with mechanical brake

Relief valve setting:

Implement 31,4/34,3 MPa
Travel circuit 34,3 MPa
Slew circuit 25,5 MPa
Pilot circuit 3,9 MPa

Hydraulic cylinders:

Boom 2
Bore x Stroke ø190 x 1 790 mm
Arm 1
Bore x Stroke ø215 x 2 070 mm
Bucket 1
Bore x Stroke ø190 x 1 450 mm
ME Bucket 1
Bore x Stroke ø200 x 1 450 mm

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 72 dB(A)

External sound level according to ISO 6395 and EU Directive 2000/14/EC

..... LwA 107 dB(A)

Ground pressure

- **EC700CL** with 6,6 m boom, 2,9 m arm, 3 730 kg bucket, 11 300 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Double grouser	650 mm	69 800 kg	101,5 kPa	4 095 mm
	750 mm	70 500 kg	88,9 kPa	4 100 mm
	900 mm	71 700 kg	75,3 kPa	4 250 mm

- **EC700CL** with 7,7 m boom, 3,55 m arm, 2 800 kg bucket, 11 300 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Double grouser	650 mm	69 300 kg	100,8 kPa	4 095 mm
	750 mm	70 000 kg	88,2 kPa	4 100 mm
	900 mm	71 000 kg	74,6 kPa	4 250 mm

Max. permitted buckets

- 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.
 4. LU: Light Utility
 5. GP: General Purpose, Excavation, Trenching
 6. HD: Heavy Duty, Heavy Excavation, Heavy Trenching
 7. RL: Rock Loading

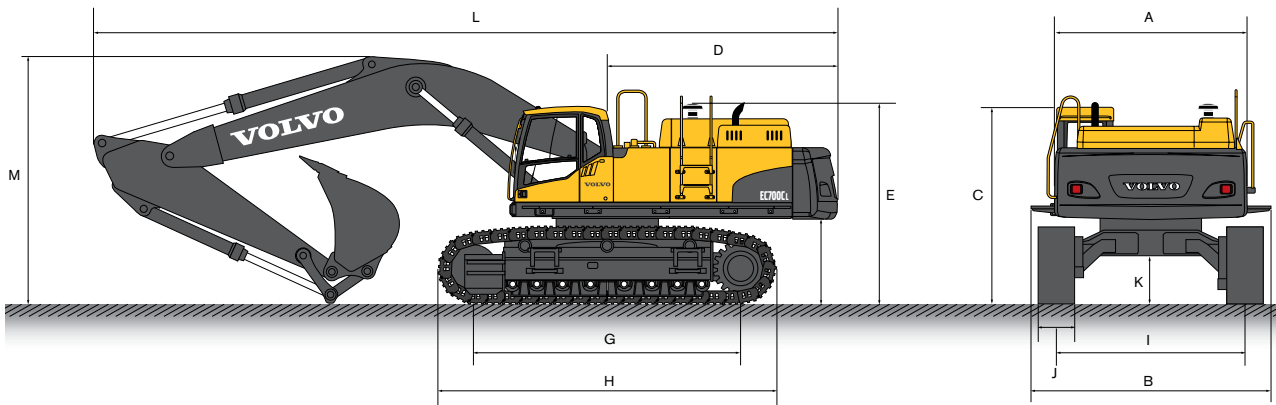
- **EC700CL** with 650 mm shoe, 11 300 kg counterweight

Description	Max. bucket volume / weight	6,6 m boom		7,7 m boom	
		2,9 m arm	2,9 m arm	3,55 m arm	4,2 m arm
LU bucket 1,2 t/m ³	l / kg	6 600 / 4 250	5 300 / 3 400	4 925 / 3 200	4 450 / 2 850
LU bucket 1,5 t/m ³	l / kg	5 675 / 3 650	4 550 / 2 950	4 225 / 2 700	3 825 / 2 450
GP bucket 1,3 t/m ³	l / kg	5 675 / 5 150	4 550 / 3 850	4 225 / 3 600	3 825 / 3 250
GP bucket 1,5 t/m ³	l / kg	5 200 / 4 400	4 175 / 3 500	3 875 / 3 250	3 500 / 2 950
GP bucket 1,8 t/m ³	l / kg	4 600 / 3 900	3 700 / 3 100	3 425 / 2 900	3 100 / 2 600
HD bucket 1,8 t/m ³	l / kg	4 350 / 4 350	3 500 / 3 500	3 250 / 3 250	2 925 / 2 900
HD bucket 2,0 t/m ³	l / kg	4 075 / 4 050	3 275 / 3 250	3 025 / 3 000	2 725 / 2 700
RL bucket 1,8 t/m ³	l / kg	3 925 / 5 100	3 150 / 4 050	2 925 / 3 800	2 650 / 3 400
RL bucket 2,0 t/m ³	l / kg	3 700 / 4 800	2 975 / 3 850	2 750 / 3 550	2 475 / 3 200
Max. permitted bucket width	mm	2 100	2 000	2 000	2 000

- **EC700CL** with 900 mm shoe, 11 300 kg counterweight

Description	Max. bucket volume / weight	7,7 m boom		
		2,9 m arm	3,55 m arm	4,2 m arm
LU bucket 1,2 t/m ³	l / kg	5 875 / 3 050	5 450 / 2 950	4 900 / 2 600
LU bucket 1,5 t/m ³	l / kg	5 050 / 2 550	4 675 / 2 450	4 225 / 2 150
GP bucket 1,3 t/m ³	l / kg	5 050 / 3 550	4 675 / 3 400	4 225 / 3 000
GP bucket 1,5 t/m ³	l / kg	4 625 / 3 200	4 275 / 3 050	3 875 / 2 650
GP bucket 1,8 t/m ³	l / kg	4 100 / 2 750	3 800 / 2 650	3 425 / 2 300
HD bucket 1,8 t/m ³	l / kg	3 875 / 3 150	3 600 / 3 000	3 250 / 2 600
HD bucket 2,0 t/m ³	l / kg	3 625 / 2 850	3 350 / 2 750	3 025 / 2 400
RL bucket 1,8 t/m ³	l / kg	3 500 / 3 800	3 250 / 3 600	2 925 / 3 200
RL bucket 2,0 t/m ³	l / kg	3 275 / 3 550	3 050 / 3 350	2 750 / 2 950
Max. permitted bucket width	mm	2 000	2 000	2 000

Dimensions

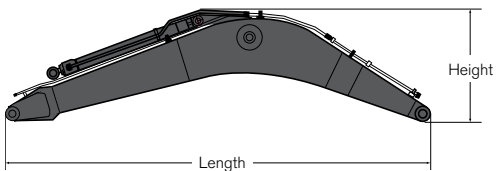


• **EC700CL** with 650 mm shoe, 11 300 kg counterweight

Description		6,6 m boom		7,7 m boom	
		2,9 m arm	2,9 m arm	3,55 m arm	4,2 m arm
A. Overall width of upper structure	mm	3 420	3 420	3 420	3 420
B. Overall width	mm	4 286	4 286	4 286	4 286
C. Overall height of cab	mm	3 520	3 520	3 520	3 520
D. Tail slew radius	mm	4 090	4 090	4 090	4 090
E. Overall height of engine hood	mm	3 590	3 590	3 590	3 590
F. Counterweight clearance *	mm	1 507	1 507	1 507	1 507
G. Tumbler length	mm	4 750	4 750	4 750	4 750
H. Track length	mm	5 990	5 990	5 990	5 990
I. Track gauge (extended)	mm	3 350	3 350	3 350	3 350
Track gauge (retracted)	mm	2 750	2 750	2 750	2 750
J. Shoe width	mm	650	650	650	650
K. Min. ground clearance *	mm	858	858	858	858
L. Overall length	mm	12 200	13 320	13 220	13 170
M. Overall height of boom	mm	4 855	4 660	4 600	4 950

* Without shoe grouser

• Boom

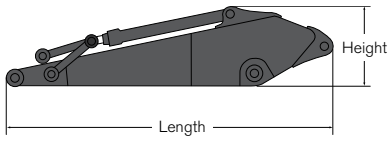


Description		6,6 m	7,7 m
Length	mm	6 890	8 020
Height	mm	2 530	1 970
Width	mm	1 110	1 110
Weight	kg	6 550	6 900

* Includes arm cylinder, piping and pin

Dimensions

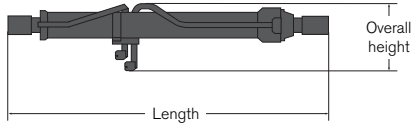
• Arm



Description		2,9 m	3,55 m	4,2 m
Length	mm	4 260	4 940	5 590
Height	mm	1 530	1 390	1 390
Width	mm	740	740	740
Weight	kg	3 510	3 670	3 900

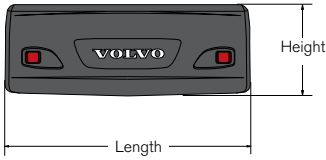
* Includes bucket cylinder, linkage and pin

• Cylinder



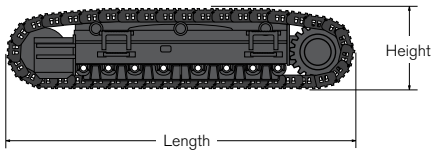
Length	Height	Width	Weight
2 765 mm	560 mm	370 mm	540 kg x 2 set = 1 080 kg

• Counterweight



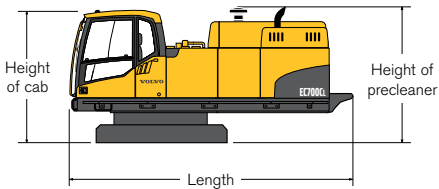
Length	Height	Width	Weight
3 420 mm	1 280 mm	800 mm	11 400 kg

• Shoes



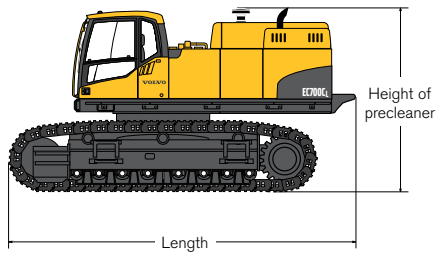
Shoe width	Length	Height	Overall width	Weight / unit
650 mm	5 990 mm	1 375 mm	700 mm	10 400 kg
750 mm	5 990 mm	1 375 mm	750 mm	10 750 kg
900 mm	5 990 mm	1 375 mm	900 mm	11 250 kg

• Cab



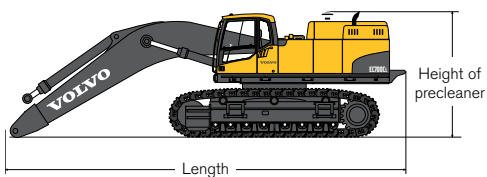
Length	Height of cab	Height of precleaner	Width	Weight
5 500 mm	2 655 mm	2 735 mm	3 430 mm	21 700 kg

• Cab with shoes



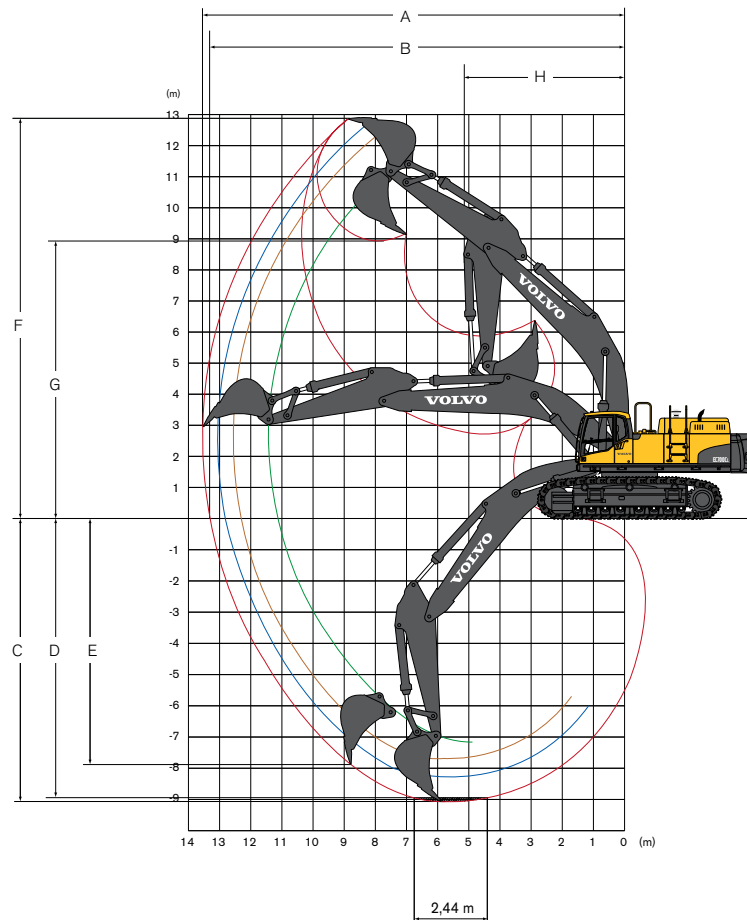
Shoe width	Length	Height of precleaner	Overall width (retracted)	Weight
650 mm	6 730 mm	3 590 mm	3 520 mm	44 500 kg
750 mm	6 730 mm	3 590 mm	3 520 mm	44 500 kg
900 mm	6 730 mm	3 590 mm	3 520 mm	44 500 kg

• Cab with shoes and boom



Boom	Shoe width	Length	Height of precleaner	Overall width (retracted)	Weight
6,6 m	650 mm	10 140 mm	3 590 mm	3 495 mm	50 550 kg
	750 mm	10 140 mm	3 590 mm	3 595 mm	51 250 kg
	900 mm	10 140 mm	3 590 mm	3 745 mm	52 250 kg
7,7 m	650 mm	11 280 mm	3 590 mm	3 495 mm	50 900 kg
	750 mm	11 280 mm	3 590 mm	3 595 mm	51 600 kg
	900 mm	11 280 mm	3 590 mm	3 745 mm	52 600 kg

Working ranges & digging force



• EC700CL

Machine with direct fit bucket		6,6 m boom		7,7 m boom	
		2,9 m arm	2,9 m arm	3,55 m arm	4,2 m arm
A. Max. digging reach	mm	11 500	12 600	13 170	14 780
B. Max. digging reach on ground	mm	11 200	12 335	12 910	13 540
C. Max. digging depth	mm	7 250	7 755	8 400	9 055
D. Max. digging depth (2,44 m level)	mm	7 100	7 605	8 270	8 935
E. Max. vertical wall digging depth	mm	5 065	6 780	7 250	7 855
F. Max. cutting height	mm	10 980	12 490	12 620	12 940
G. Max. dumping height	mm	6 960	8 410	8 610	8 930
H. Min. front slew radius	mm	5 160	5 480	5 410	5 470
















Digging forces with direct fit bucket			6,6 m boom		7,7 m boom	
			2,9 m arm	2,9 m arm	3,55 m arm	4,2 m arm
Bucket radius	mm	2 215	2 150	2 150	2 150	
Breakout force - bucket (Normal/Power boost)	ISO 6015 kN	342 / 374	326 / 356	326 / 356	326 / 356	
Tearout force - arm (Normal/Power boost)	ISO 6015 kN	298 / 326	303 / 332	265 / 290	236 / 258	
Rotation angle, bucket	deg.	172	173	173	173	

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 fit from the following values.

• EC700CL

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	4,5 m		6,0 m		7,5 m		9,0 m		10,5 m		Max. reach							
															Max. m				
Boom 6,6 m ME + Arm 2,9 m ME + Shoe 650 mm + Counterweight 11 300 kg	10,5 m kg																		
	9 m kg																		
	7,5 m kg																		
	6 m kg																		
	4,5 m kg	*28 900	*28 900																
	3 m kg																		
	1,5 m kg	*31 660	*31 660																
	0 m kg	*35 300	*35 300																
	-1,5 m kg	*32 850	*32 850																
	-3 m kg	*28 440	*28 440																
-4,5 m kg	*20 640	*20 640																	
-6 m kg																			
-7,5 m kg																			
Boom 7,7 m + Arm 2,9 m + Shoe 650 mm + Counterweight 11 300 kg	10,5 m kg																		
	9 m kg																		
	7,5 m kg																		
	6 m kg																		
	4,5 m kg																		
	3 m kg																		
	1,5 m kg																		
	0 m kg																		
	-1,5 m kg	*26 480	*26 480																
	-3 m kg	*25 020	*25 020																
-4,5 m kg	*19 620	*19 620																	
-6 m kg																			
-7,5 m kg																			
Boom 7,7 m + Arm 3,55 m + Shoe 650 mm + Counterweight 11 300 kg	10,5 m kg																		
	9 m kg																		
	7,5 m kg																		
	6 m kg																		
	4,5 m kg																		
	3 m kg																		
	1,5 m kg																		
	0 m kg																		
	-1,5 m kg	*27 040	*27 040																
	-3 m kg	*27 750	*27 750																
-4,5 m kg	*22 930	*22 930																	
-6 m kg	*15 520	*15 520																	
-7,5 m kg																			
Boom 7,7 m + Arm 4,2 m + Shoe 650 mm + Counterweight 11 300 kg	10,5 m kg																		
	9 m kg																		
	7,5 m kg																		
	6 m kg																		
	4,5 m kg																		
	3 m kg																		
	1,5 m kg																		
	0 m kg	*19 060	*19 060																
	-1,5 m kg	*25 980	*25 980																
	-3 m kg	*29 540	*29 540																
-4,5 m kg	*25 370	*25 370																	
-6 m kg	*19 090	*19 090																	
-7,5 m kg																			
Boom 7,7 m + Arm 5,2 m + Shoe 650 mm + Counterweight 11 300 kg	10,5 m kg																		
	9 m kg																		
	7,5 m kg																		
	6 m kg																		
	4,5 m kg																		
	3 m kg																		
	1,5 m kg																		
	0 m kg	*21 590	*21 590																
	-1,5 m kg	*25 000	*25 000																
	-3 m kg	*31 530	*31 530																
-4,5 m kg	*28 400	*28 400																	
-6 m kg	*23 560	*23 560																	
-7,5 m kg	*16 070	*16 070																	

















- 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.

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 fit from the following values.

• EC700CL

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	4,5 m		6,0 m		7,5 m		9,0 m		10,5 m		Max. reach						
																Max. m		
Boom 6,6 m + Arm 2,9 m without bucket + Shoe 750 mm + Counterweight 11 300 kg	10,5 m kg																	
	9 m kg																	
	7,5 m kg																	
	6 m kg																	
	4,5 m kg	*28 900	*28 900															
	3 m kg																	
	1,5 m kg	*31 660	*31 660															
	0 m kg	*35 300	*35 300															
	-1,5 m kg	*32 850	*32 850															
	-3 m kg	*28 440	*28 440															
-4,5 m kg	*20 640	*20 640																
-6 m kg																		
-7,5 m kg																		
Boom 7,7 m + Arm 2,9 m without bucket + Shoe 750 mm + Counterweight 11 300 kg	10,5 m kg																	
	9 m kg																	
	7,5 m kg																	
	6 m kg																	
	4,5 m kg																	
	3 m kg																	
	1,5 m kg																	
	0 m kg																	
	-1,5 m kg	*26 480	*26 480															
	-3 m kg	*25 020	*25 020															
-4,5 m kg	*19 620	*19 620																
-6 m kg																		
-7,5 m kg																		
Boom 7,7 m + Arm 3,55 m without bucket + Shoe 750 mm + Counterweight 11 300 kg	10,5 m kg																	
	9 m kg																	
	7,5 m kg																	
	6 m kg																	
	4,5 m kg																	
	3 m kg																	
	1,5 m kg																	
	0 m kg																	
	-1,5 m kg	*27 070	*27 070															
	-3 m kg	*27 790	*27 790															
-4,5 m kg	*22 960	*22 960																
-6 m kg	*15 550	*15 550																
-7,5 m kg																		
Boom 7,7 m + Arm 4,2 m without bucket + Shoe 750 mm + Counterweight 11 300 kg	10,5 m kg																	
	9 m kg																	
	7,5 m kg																	
	6 m kg																	
	4,5 m kg																	
	3 m kg																	
	1,5 m kg																	
	0 m kg	*19 060	*19 060															
	-1,5 m kg	*25 980	*25 980															
	-3 m kg	*29 540	*29 540															
-4,5 m kg	*25 370	*25 370																
-6 m kg	*19 090	*19 090																
-7,5 m kg																		
Boom 7,7 m + Arm 5,2 m without bucket + Shoe 750 mm + Counterweight 11 300 kg	10,5 m kg																	
	9 m kg																	
	7,5 m kg																	
	6 m kg																	
	4,5 m kg																	
	3 m kg																	
	1,5 m kg																	
	0 m kg	*21 590	*21 590															
	-1,5 m kg	*25 000	*25 000															
	-3 m kg	*31 530	*31 530															
-4,5 m kg	*28 400	*28 400																
-6 m kg	*23 560	*23 560																
-7,5 m kg	*16 070	*16 070																
















- Notes:
1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities.
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 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

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 fit from the following values.

• EC700CL

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	4,5 m		6,0 m		7,5 m		9,0 m		10,5 m		Max. reach							
															Max. m				
Boom 6,6 m ME + Arm 2,9 m ME + Shoe 900 mm + Counterweight 11 300 kg	10,5 m kg																		
	9 m kg																		
	7,5 m kg						*16 950	*16 950							*15 090	*15 090	6,7		
	6 m kg			*19 480	*19 480	*17 360	*17 360								*14 020	*14 020	7,9		
	4,5 m kg	*28 900	*28 900	*21 940	*21 940	*18 480	18 380	*15 500	13 760						*13 680	*13 680	8,6		
	3 m kg			*24 440	*24 440	*19 740	17 710	*17 000	13 460						*13 820	13 570	9,1		
	1,5 m kg	*31 660	*31 660	*26 110	23 730	*20 670	17 150	*17 230	13 190						*14 410	12 860	9,3		
	0 m kg	*35 300	*35 300	*26 450	23 200	*20 840	16 800								*15 490	12 750	9,2		
	-1,5 m kg	*32 850	*32 850	*25 280	23 080	*19 800	16 730								*16 950	13 240	8,9		
	-3 m kg	*28 440	*28 440	*22 150	*22 150										*16 990	14 550	8,3		
-4,5 m kg	*20 640	*20 640												*16 590	*16 590	7,4			
-6 m kg														*14 760	*14 760	6,0			
-7,5 m kg																			
Boom 7,7 m + Arm 2,9 m + Shoe 900 mm + Counterweight 11 300 kg	10,5 m kg																*16 980	*16 980	6,8
	9 m kg						*15 660	*15 660									*15 490	*15 490	8,2
	7,5 m kg						*15 940	*15 940	*14 820	13 980					*14 710	13 390	9,2		
	6 m kg			*20 130	*20 130	*16 910	*16 910	*15 040	13 750						*14 420	11 740	9,9		
	4,5 m kg			*22 670	*22 670	*18 180	17 570	*15 610	13 340						*14 230	10 800	10,3		
	3 m kg			*24 740	23 080	*19 350	16 800	*16 190	12 920						*14 140	10 330	10,5		
	1,5 m kg			*25 550	22 270	*20 030	16 230	*16 520	12 570						*14 070	10 250	10,4		
	0 m kg			*25 100	21 960	*19 990	15 910	*16 360	12 360						*13 960	10 560	10,1		
	-1,5 m kg	*26 480	*26 480	*23 610	21 970	*19 070	15 840	*15 380	12 350						*13 720	11 360	9,6		
	-3 m kg	*25 020	*25 020	*20 970	*20 970	*16 970	16 030								*13 120	12 950	8,8		
-4,5 m kg	*19 620	*19 620	*16 580	*16 580	*12 410	*12 410								*11 670	*11 670	7,7			
-6 m kg																			
-7,5 m kg																			
Boom 7,7 m + Arm 3,55 m + Shoe 900 mm + Counterweight 11 300 kg	10,5 m kg						14 120	14 120									*13 080	*13 080	7,6
	9 m kg																*12 030	*12 030	8,9
	7,5 m kg						*14 970	*14 970	*13 890	*13 890					*11 540	*11 540	9,9		
	6 m kg			*18 860	*18 860	*16 060	*16 060	*14 350	14 070						*11 400	10 870	10,5		
	4,5 m kg			*21 520	*21 520	*17 470	*17 470	*15 070	13 620	*13 540	10 640				*11 550	10 070	10,9		
	3 m kg			*23 930	23 760	*18 830	17 180	*15 810	13 150	*13 820	10 410				*11 950	9 650	11,0		
	1,5 m kg			*25 320	22 720	*19 780	16 510	*16 350	12 740	*13 950	10 190				*12 640	9 560	11,0		
	0 m kg			*25 470	22 200	*20 080	16 090	*16 470	12 460	*13 680	10 060				*13 260	9 790	10,7		
	-1,5 m kg	*27 070	*27 070	*24 500	22 060	*19 570	15 910	*15 930	12 350						*13 170	10 430	10,2		
	-3 m kg	*27 790	*27 790	*22 410	22 210	*18 040	15 980	*14 290	12 460						*12 860	11 660	9,5		
-4,5 m kg	*22 960	*22 960	*18 840	*18 840	*14 910	*14 910								*12 030	*12 030	8,4			
-6 m kg	*15 550	*15 550	*12 550	*12 550										*9 820	*9 820	6,9			
-7,5 m kg																			
Boom 7,7 m + Arm 4,2 m + Shoe 900 mm + Counterweight 11 300 kg	10,5 m kg																*10 430	*10 430	8,5
	9 m kg								*12 710	*12 710							*9 670	*9 670	9,7
	7,5 m kg								*12 810	*12 810	*9 630	*9 630			*9 310	*9 310	10,5		
	6 m kg					*14 880	*14 880	*13 390	*13 390	*12 430	10 810				*9 200	*9 200	11,1		
	4,5 m kg			*19 930	*19 930	*16 370	*16 370	*14 200	13 570	*12 790	10 550				*9 290	9 040	11,5		
	3 m kg			*22 580	*22 580	*17 870	17 140	*15 070	13 030	*13 210	10 250				*9 580	8 670	11,6		
	1,5 m kg			*24 430	22 630	*19 060	16 360	*15 770	12 550	*13 530	9 970				*10 080	8 570	11,6		
	0 m kg	*19 060	*19 060	*25 120	21 880	*19 660	15 820	*16 110	12 190	*13 560	9 770				*10 880	8 740	11,4		
	-1,5 m kg	*25 980	*25 980	*24 670	21 570	*19 520	15 530	*15 910	12 000	*13 030	9 690				*12 120	9 240	10,9		
	-3 m kg	*29 540	*29 540	*23 120	21 590	*18 470	15 500	*14 880	12 000						*12 030	10 190	10,2		
-4,5 m kg	*25 370	*25 370	*20 270	*20 270	*16 160	15 720	*12 250	*12 250						*11 530	*11 530	9,2			
-6 m kg	*19 090	*19 090	*15 400	*15 400	*11 380	*11 380								*10 200	*10 200	7,8			
-7,5 m kg																			
Boom 7,7 m + Arm 5,2 m + Shoe 900 mm + Counterweight 11 300 kg	10,5 m kg																*7 670	*7 670	9,8
	9 m kg										*8 810	*8 810					*7 180	*7 180	10,8
	7,5 m kg										*10 890	*10 890			*6 930	*6 930	11,6		
	6 m kg								*11 990	*11 990	*11 200	*10 970			*6 850	*6 850	12,1		
	4,5 m kg					*14 690	*14 690	*12 920	*12 920	*11 720	10 640				*6 900	*6 900	12,4		
	3 m kg			*20 410	*20 410	*16 390	*16 390	*13 940	13 140	*12 310	10 260				*7 080	*7 080	12,6		
	1,5 m kg			*22 850	*22 850	*17 890	16 500	*14 870	12 560	*12 840	9 890				*7 420	7 410	12,5		
	0 m kg	*21 590	*21 590	*24 290	21 910	*18 910	15 770	*15 510	12 080	*13 160	9 590				*7 940	7 520	12,3		
	-1,5 m kg	*25 000	*25 000	*24 620	21 310	*19 270	15 310	*15 710	11 760	*13 120	9 400				*8 720	7 860	11,9		
	-3 m kg	*31 530	*31 530	*23 870	21 100	*18 840	15 110	*15 290	11 620	*12 450	9 360				*9 910	8 520	11,3		
-4,5 m kg	*28 400	*28 400	*21 960	21 220	*17 440	15 160	*13 930	11 690						*10 670	9 680	10,4			
-6 m kg	*23 560	*23 560	*18 530	*18 530	*14 570	*14 570	*10 670	*10 670						*10 050	*10 050	9,2			
-7,5 m kg	*16 070	*16 070	*12 560	*12 560										*8 370	*8 370	7,5			

- Notes:
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STANDARD EQUIPMENT

Engine

Turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage IIIA requirements
Automatic idling system
Air filter with indicator
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Fuel filler pump: 100 l/min, with automatic shut-off
Alternator, 80 A

Electric/Electronic control system

Contronics:

- Advanced mode control system
- Self-diagnostic system

Machine status indication

Engine speed sensing power control

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 3
- Boom-mounted 4

Batteries, 2 x 12 V / 225 Ah

Start motor, 28 V / 6,6 kW

Hydraulic system

Hose rupture valve: boom

Overload warning device

Automatic sensing hydraulic system:

- Summation system

- Boom priority

- Arm priority

- Slew priority

Boom and arm regeneration valves

Slew anti-rebound valves

Boom and arm holding valves

Boom float function

Pump flow control for hammer & shear

Multi-stage filtering system

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic two-speed travel motors

Hydraulic oil, ISO VG 46

Superstructure

Access way with handrail

Full height counterweight 11 300 kg

Tool storage area

Service walkway with anti-slip grating

Undercover (heavy-duty 4,5 mm)

Side walk-way

Cab and interior

Fabric seat with heater

Pilot-operated wrist control joysticks

with 3 switches each

Heater & air-conditioner, automatic

Hydraulic dampening cab mounts

Adjustable operator seat and joystick

control console

Flexible antenna

Hydraulic safety lock lever

Cab, all-weather sound suppressed, includes:

- Ashtray

- Cup holder

- Lighter

- Door locks

- Tinted glass

- Floor mat

- Horn

- Large storage area

- Pull-up type front window

- Removable lower windshield

- Seat belt

- Safety glass

- Rain shield, front

- Windshield wiper with intermittent feature

- Stereo cassette radio

Anti-vandalism kit assembly preparation

Master key

Undercarriage

Hydraulic track adjusters

Greased and sealed track chain

Track guard

Undercover (10 mm)

Mechanically retractable track gauge

Track shoes

Track shoes, 650 mm with double grouser

Digging equipment

Boom: ME 6,6 m

Arm: 2,9 m

Centralized lubrication

Service

Special tool for retractable frame

OPTIONAL EQUIPMENT

Engine

Block heater: 240V

Dual stage precleaner

Diesel coolant heater

Water separator with heater

Low noise kit

Electric

Extra lamps:

- Cab-mounted 1
- Upper structure-mounted 1

Travel alarm

Slew alarm

Anti-theft system

Rotating warning beacon

Hydraulic system

Hose rupture valve: arm

Boom float function

Hammer & shear:

- 1 and 2 pump flow

- Additional return filter

- 1 switch control

- 2 switch control

- Pedal switch control

Hydraulic oil, ISO VG 32

Hydraulic oil, ISO VG 68

Hydraulic oil, biodegradable 32

Hydraulic oil, biodegradable 46

Cab and interior

Fabric seat

Fabric seat with heater and air suspension

Control joystick with semi-long levers

Control joystick with 5 switches each

Falling object guard (FOG)

- Frame-mounted (356 kg)

- Cab-mounted (153 kg)

Cab-mounted falling object

protective structure (FOPS: 80 kg)

Sunlight protection, roof (steel)

Foot support bar

Safety screen for front window

Lower wiper

Anti-vandalism kit

Undercarriage

Full track guard (190 kg / unit)

Track shoes

750 mm, 900 mm track shoes with double grousers

Digging equipment

Boom: 7,7 m

Arm: 3,55 m/4,2 m

Service

Electric grease gun

Hand lamp

Spare parts

Tool kit, full scale

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.

NOTES



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 175 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. And we're proud of what makes Volvo different – **More care. Built in.**



Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

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