



Volvo Construction Equipment

EC750D

Volvo Excavators 72.7-74.7 t 508 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



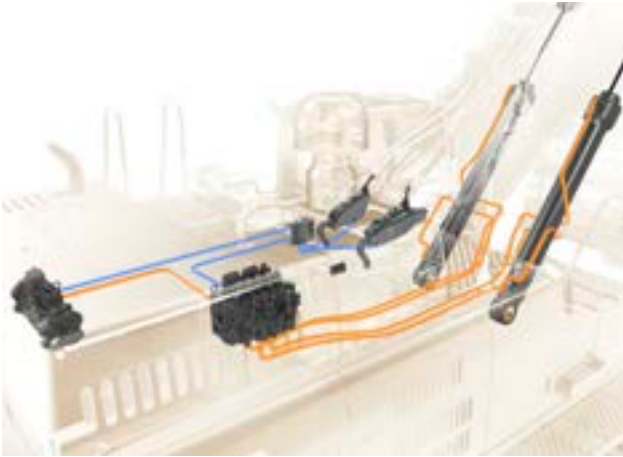
Volvo Financial Services

Gain more, pay less

Secure more profit and reduce your Total Cost of Ownership by increasing productivity and fuel efficiency. Do more for less on your job site with the EC750D's Volvo D16 engine, which delivers increased horsepower and fuel efficiency. The machine's electro hydraulic system provides high productivity and excellent control.

Electro hydraulic system

Enhance fuel efficiency while increasing productivity and performance. The new and improved Volvo designed electro-hydraulic system uses intelligent technology to control on-demand flow and reduces internal losses in the hydraulic circuit. This provides superior digging force, shortens cycle times and increases controllability.



Increased bucket capacity

The EC750D delivers more tons per hour, fitted with larger buckets for faster and more efficient on site production. To gain profitability, the increased horsepower, hydraulic pressure and flow enable the machine to perform at optimal capacity, loading more material in one load for greater productivity.



Work modes

Volvo's unique integrated work mode system now includes the G4 mode for optimum fuel efficiency and performance, incorporating the work modes within the throttle control. When the operator selects the best work mode for the task at hand - I (idle), F (fine), G (General), H (Heavy) and P (Power) - the rpm is already set for maximum efficiency.



Volvo Cab

The comfortable, low noise environment and adjustable seat increases operator efficiency and capacity to improve production. Volvo's industry-leading cab boasts superior visibility from large expanses of front and side glass with slim cab pillars and the spacious environment provides ample storage and leg room.

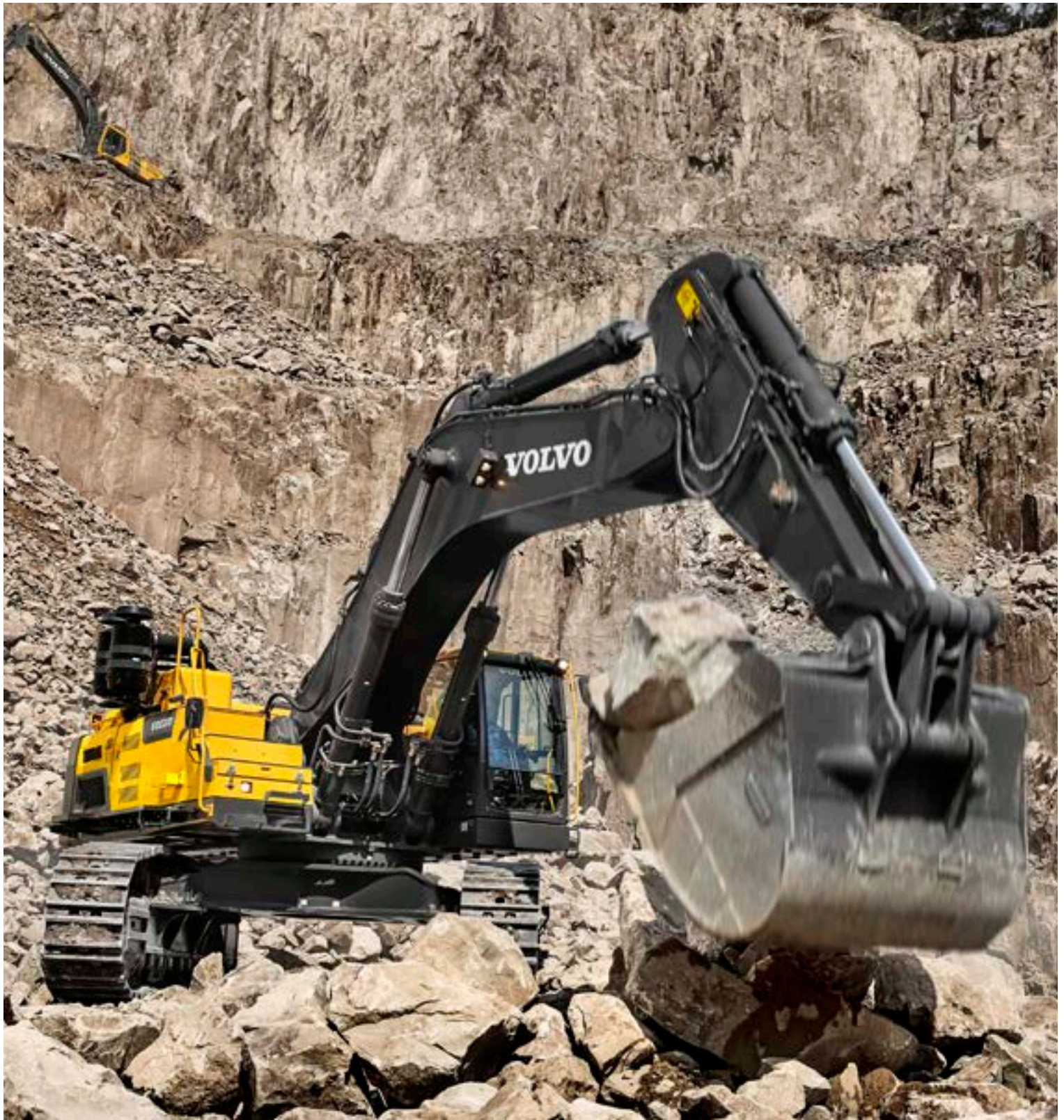




VOLVO D16 ENGINE



Featuring advanced technology and built on decades of experience, the new Volvo D16 engine delivers 11% increased horsepower for the ultimate combination of high productivity and increased fuel efficiency.



DIGGING FORCE



Get the job done faster with ease because of the EC750D's constant high system pressure, which delivers greater digging force and reduced cycle times, particularly when working with hard and heavy materials.

A star performance

The EC750D's outstanding digging force gets the job done whether you're working at a mine, quarry or in heavy construction applications. The EC750D digs, swings and loads using the most efficient technology and its improved stability, tractive force and Eco Mode, delivers low fuel consumption and improved cycle times for a star performance.

Improved stability

Improve your stability and work in more challenging environments with the machine's wider track gauge and heavier counterweight, which both contribute towards a well-balanced and solid machine when operating in adverse terrains.



Tractive force

For more power, better productivity and ease of moving around your jobsite, the machine's high system pressure and durable track ensure impressive tractive force when climbing gradients and travelling over unstable ground. Perform more tasks in hard to reach areas of your jobsite.



ECO Mode

Save fuel without any loss of performance in most operating conditions. Volvo's unique ECO Mode optimizes the hydraulic system to reduce flow and pressure losses, for improved fuel efficiency. ECO Mode is automatically selected but can be switched off via the keypad.



Improved cycle time

Get more done in less time. The Volvo hydraulic system, leads to a more powerful and combined pump flow to the bucket for smooth operation, improved cycle time and increased fuel efficiency. The optional boom float delivers more control, fast minimizes operation costs and maximizes uptime.

Strong, solid and superior

Use the best machine for the job in tough working conditions. The EC750D is built using durable Volvo components, a reinforced structure and machine protection for a longer life in tough environments. Robust parts and easy service access increase uptime and keep maintenance to a minimum to reduce operating costs.

Durable Volvo components

Volvo's tried and tested components have proven to be reliable even in the toughest applications, delivering maximum uptime. Volvo's commitment to its development process and quality levels ensures that its rigorous testing procedures produce the best quality components and machines.



Reinforced structure

The reinforced upper and lower frame are built to withstand tougher conditions for improved durability and reliability. The reinforced idler frame, track links and bottom rollers are designed and built for constant impact, leading to machine longevity and a sustained level of uptime in demanding applications.



Easy service access

Grouped filters and the electric distribution box are easily accessed via the wide-opening compartment doors and walkways. Greasing points can all be accessed in one machine position and the EC750D's design facilitates easy cleaning, inspection and maintenance for increased uptime.



Undercover protection

For increased durability and to protect components, the built-in heavy-duty plate provides additional protection to the underside of the machine in hard applications – preventing damage from rocks and debris.





BOOM AND ARM



The reinforced heavy-duty boom and arm built from high strength tensile steel increases reliability and machine uptime, even in severe applications. Steel strips are welded under the arm to further increase protection and various boom and arm configurations are available to suit any bucket size or application.



ATTACHMENTS



Volvo's attachments have been purpose-built to work in perfect harmony with Volvo machines, forming one solid, reliable unit. With functions and properties ideally matched, Volvo attachments are an integrated part of the excavator for which they're intended – delivering maximum productivity.

Strength in numbers

Maximize your productivity and profitability with Volvo's EC750D excavator and a range of durable attachments. Increase your versatility, access more applications and perform a variety of tasks on one job – all while experiencing faster cycle times and excellent control.

HD Buckets

Volvo's heavy-duty bucket, built using wear resistant plates, excels at digging compact materials including loose rock, hard clay and gravel. It's perfect for quarrying and mining applications and is made out of reinforced high quality durable materials for a long life and superior performance.



Universal Quick Coupler

Volvo offers a Universal quick coupler which perfectly matches Volvo's bucket range. The Volvo Universal quick coupler also picks up a variety of attachments from various manufacturers and the Volvo front-pin lock quick coupler meets the latest safety regulations.



Genuine Volvo Wear Parts

The positioning of Genuine Volvo wear parts cover critical areas, which protect the bucket and prolongs its lifespan. A wide range of wear parts are offered to protect your complete bucket, such as teeth, adapter, segments, side cutter and shroud. Strong high tensile steel has been used to increase the bucket's durability.



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 and pressure inside the cab through the monitor, which ensures the use of various attachments for increased versatility.



Tough it out

ECO Mode

Save fuel without any loss of performance in most operating conditions with Volvo's unique ECO Mode.

BOOM AND ARM



The reinforced heavy-duty boom and arm increases reliability and machine uptime, even in challenging applications.

Electro hydraulic system

The electro-hydraulic system uses intelligent technology to control on-demand flow and reduce losses in the hydraulic circuit.

Durable Volvo components

Volvo's tried and tested components have proven to be reliable even in the toughest applications.

DIGGING FORCE



The constant high system pressure delivers greater digging force and reduced cycle times to get the job done faster.

ATTACHMENTS



A range of Volvo attachments including hard wearing buckets are an integrated part of the excavator, delivering maximum productivity.

Increased bucket capacity

The EC750D delivers more tons per hour, fitted with larger buckets for faster and more efficient on site production.



CUSTOMER SUPPORT AGREEMENTS



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

Volvo Cab

The comfortable, low noise environment and adjustable seat increases operator efficiency and capacity to improve production.

VOLVO D16 ENGINE



The high quality D16 engine delivers 11% increased horsepower for high productivity and increased fuel efficiency.



Reinforced structure

The reinforced upper and lower frame are built to withstand tougher conditions for improved durability and reliability.

Easy service access

The EC750D's design facilitates easy cleaning, inspection and maintenance for increased uptime.

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.



UAT 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.





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 EC750D in detail

Engine

The Volvo diesel engine delivers lower emissions, superior performance and fuel efficiency. The engine uses precise, high-pressure fuel injectors, turbo charger and intercooler, and electronic engine controls to optimize machine performance. Air Filter: 3-stage with precleaner. 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 | D16E |
| Max power at | r/s | 30 |
| | r/min | 1 800 |
| Net, ISO 9249/SAE J1349 | kW | 374 |
| | hp | 508 |
| Gross, ISO 14396/SAE J1995 | kW | 385 |
| | hp | 523 |
| Max torque at engine speed | N m | 2 500 |
| | r/min | 1 340 |
| No. of cylinders | | 6 |
| Displacement | L | 16.1 |
| Bore | mm | 144 |
| Stroke | mm | 165 |

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 | V | 24 |
| Batteries | V | 2 x 12 |
| Battery capacity | Ah | 210 |
| Alternator | V/Ah | 28 / 80 |

Service Refill

| | | |
|-------------------------|---|----------|
| Fuel tank | L | 840 |
| Hydraulic system, total | L | 655 |
| Hydraulic tank | L | 350 |
| Engine oil | L | 49 |
| Engine coolant | L | 66 |
| Slew reduction unit | L | 2 x 6.8 |
| Travel reduction unit | L | 2 x 13.5 |

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 | 7 |
| Max. slew torque | kN m | 275.40 |

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 | 478 |
| Max. travel speed | km/h | 2.9 / 4.6 |
| Gradeability | ° | 35 |

Undercarriage

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

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

Hydraulic System

The new electro-hydraulic system and new 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, 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.

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.

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 | 2 x 450 |
|--------------|-------|---------|

Pilot pump. Type Gear pump

| | | |
|--------------|-------|----------|
| Maximum flow | L/min | 1 x 34.5 |
|--------------|-------|----------|

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 |
| Travel circuit | MPa | 34.3 |
| Slew circuit | MPa | 26.5 |
| Pilot circuit | MPa | 3.9 |

Hydraulic Cylinders

| | | |
|-----------------|--------|-------------|
| Mono boom | | 2 |
| Bore and Stroke | ø x mm | 190 x 1 790 |
| Arm | | 1 |
| Bore and Stroke | ø x mm | 215 x 2 070 |
| Bucket | | 1 |
| Bore and Stroke | ø x mm | 190 x 1 450 |
| ME Bucket | | 1 |
| Bore and Stroke | ø x mm | 200 x 1 450 |

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 12 different adjustments plus a seat belt for the operator's comfort and safety.

Sound Level

Sound level in cab according to ISO 6396

| | | |
|-----|-------|----|
| LpA | dB(A) | 72 |
|-----|-------|----|

External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009

| | | |
|-----|-------|-----|
| LwA | dB(A) | 110 |
|-----|-------|-----|

Specifications

GROUND PRESSURE

| Description | | EC750D | | | | | | | | |
|----------------|------------------|--|---------------|------------------|---|---------------|------------------|--|---------------|-------|
| | | Boom 6.6m, Arm 2.9m, Bucket 4 850kg | | | Boom 7.7 m, Arm 2.9m, Bucket 4 000kg | | | Boom 7.7 m, Arm 3.55m, Bucket 4 200kg | | |
| | | Counterweight 12 700kg | | | Counterweight 12 700kg | | | Counterweight 12 700kg | | |
| Shoe width | Operating weight | Ground pressure | Overall width | Operating weight | Ground pressure | Overall width | Operating weight | Ground pressure | Overall width | |
| mm | kg | kPa | mm | kg | kPa | mm | kg | kPa | mm | |
| Double grouser | 650 | 73 180 | 106.4 | 4 185 | 73 000 | 106.1 | 4 185 | 73 400 | 106.7 | 4 185 |
| | 750 | 73 880 | 93.1 | 4 190 | 73 700 | 92.8 | 4 190 | 74 100 | 93.3 | 4 190 |
| | 900 | 74 980 | 78.7 | 4 340 | 74 800 | 78.5 | 4 340 | 75 200 | 78.9 | 4 340 |

BUCKET SELECTION GUIDE

| Bucket type | | Capacity | Cutting width | Tip radius | Weight | Teeth | EC750D | | |
|--|-----------------|----------------|---------------|------------|--------|-------|------------------------------------|------|-----------|
| | | | | | | | 6.6m boom | | 7.7m boom |
| | | | | | | | 650mm shoe, 12 700kg counterweight | | |
| | | m ³ | mm | mm | kg | EA | 2.9m | 2.9m | 3.55m |
| Direct fit Buckets (V4) | General purpose | 3.30 | 1 720 | 67 | 3 280 | 5 | C | C | C |
| | | 4.00 | 2 000 | 78 | 3 690 | 5 | C | C | C |
| | | 4.40 | 2 150 | 84 | 3 986 | 5 | C | C | B |
| | | 4.65 | 2 250 | 88 | 3 986 | 5 | C | C | B |
| | | 4.85 | 2 330 | 91 | 4 099 | 5 | C | B | B |
| | 5.16 | 2 450 | 96 | 4 311 | 6 | C | B | A | |
| | Heavy duty | 3.30 | 1 720 | 67 | 3 666 | 4 | D | D | D |
| | | 4.00 | 2 000 | 78 | 4 125 | 5 | D | D | C |
| | | 4.40 | 2 150 | 84 | 4 324 | 5 | D | C | B |
| | | 4.65 | 2 250 | 88 | 4 439 | 5 | D | B | B |
| 4.85 | | 2 330 | 91 | 4 590 | 5 | D | B | A | |
| 5.16 | 2 450 | 96 | 4 832 | 6 | D | B | A | | |
| Direct fit Buckets (V1) *China only | Heavy duty | 3.30 | 2 100 | 82 | 3 746 | 5 | D | D | D |
| | | 3.70 | 2 300 | 90 | 3 971 | 5 | D | D | D |
| | | 4.00 | 2 000 | 78 | 4 616 | 5 | D | D | B |
| | | 4.60 | 2 240 | 87 | 4 969 | 5 | D | 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.

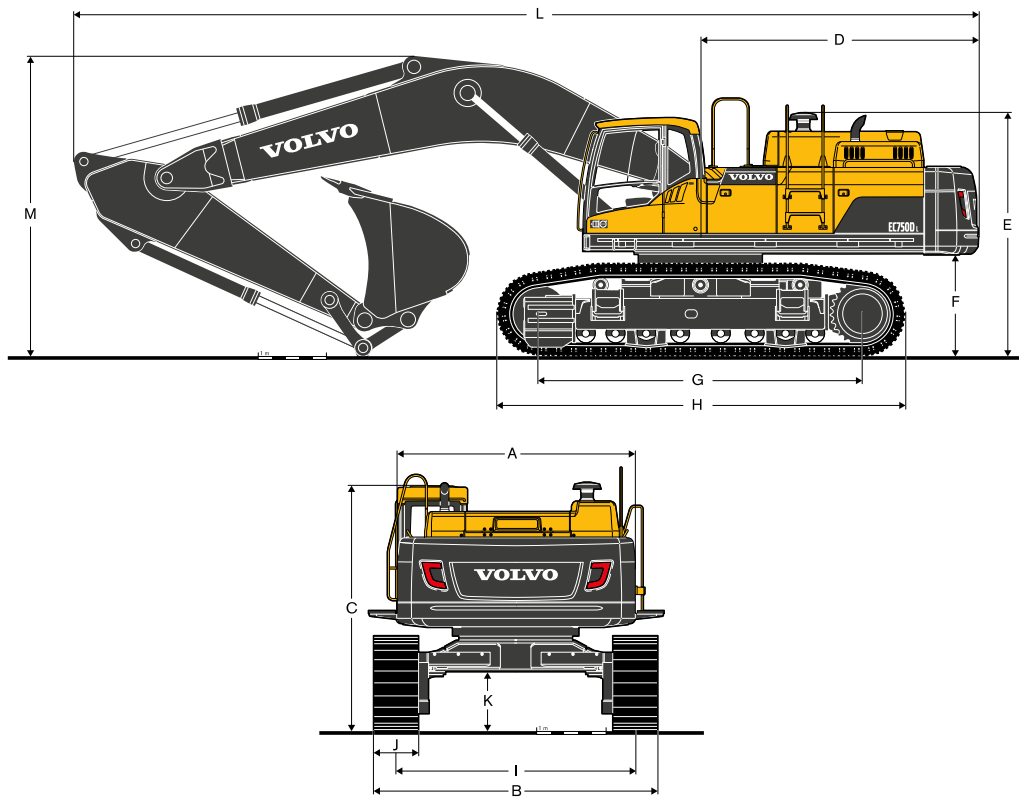
Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

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 |

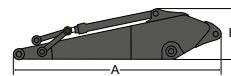
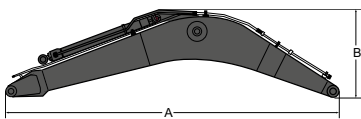
Specifications

DIMENSIONS



| Description | Unit | EC750D | | |
|-------------------------------------|----------|------------|------------|-------------|
| | | 6.6 | 7.7 | 3.55 |
| Boom | m | 6.6 | 7.7 | 3.55 |
| Arm | m | 2.9 | 2.9 | 3.55 |
| A Overall width of upper structure | mm | 3 420 | 3 420 | 3 420 |
| B Overall width | mm | 4 290 | 4 290 | 4 290 |
| C Overall height of cab | mm | 3 520 | 3 520 | 3 520 |
| D Tail slew radius | mm | 4 140 | 4 140 | 4 140 |
| E Overall height of air cleaner cap | mm | 3 590 | 3 590 | 3 590 |
| Overall height of engine hood | mm | 3 310 | 3 310 | 3 310 |
| F Counterweight clearance* | mm | 1 507 | 1 507 | 1 507 |
| G Tumbler length | mm | 4 750 | 4 750 | 4 750 |
| H Track length | mm | 5 990 | 5 990 | 5 990 |
| I Track gauge (extended) | mm | 3 440 | 3 440 | 3 440 |
| Track gauge (retracted) | mm | 2 750 | 2 750 | 2 750 |
| J Shoe width | mm | 650 | 650 | 650 |
| K Min. ground clearance* | mm | 858 | 858 | 858 |
| L Overall length | mm | 12 200 | 13 320 | 13 220 |
| M Overall height of boom | mm | 4 855 | 4 660 | 4 600 |

* With shoe grouser



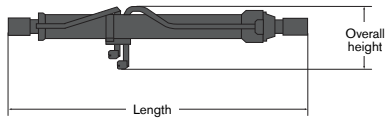
| Description | Unit | EC750D | | Description | Unit | EC750D | |
|-------------|----------|------------|------------|-------------|----------|------------|-------------|
| | | 6.6 | 7.7 | | | 2.9 | 3.55 |
| Boom | m | 6.6 | 7.7 | Arm | m | 2.9 | 3.55 |
| Length (A) | mm | 6 940 | 8 040 | Length (A) | mm | 4 280 | 4 960 |
| Height (B) | mm | 2 530 | 2 210 | Height (B) | mm | 1 530 | 1 410 |
| Width | mm | 1 100 | 1 100 | Width | mm | 740 | 740 |
| Weight | kg | 7 130 | 7 450 | Weight | kg | 4 050 | 4 180 |

* Includes cylinder, piping and pin

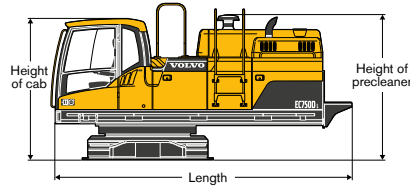
* Includes bucket cylinder, linkage and pin

DIMENSIONS

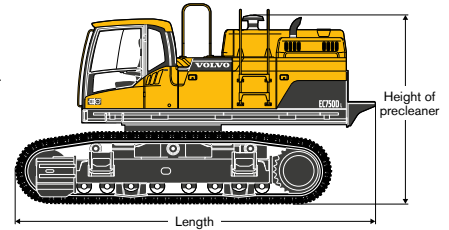
Cylinder



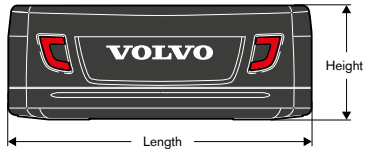
Cab



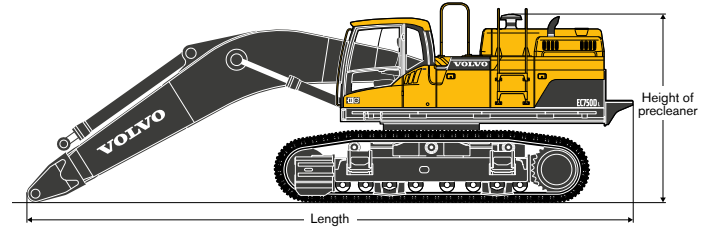
Cab with shoes



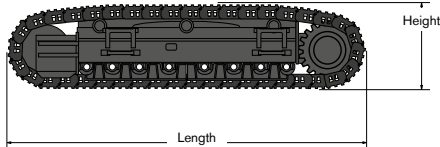
Counterweight



Cab with shoes and boom



Shoes



Cylinder

| Length | Height | Width | Weight |
|--------|--------|-------|---------------------|
| mm | mm | mm | kg |
| 2 525 | 560 | 370 | 630 x 2 set = 1 260 |

Counterweight

| Length | Height | Width | Weight |
|--------|--------|-------|--------|
| mm | mm | mm | kg |
| 3 420 | 1 280 | 800 | 12 700 |

Shoes

| Shoe width | Length | Height | Overall width | Weight / unit |
|------------|--------|--------|---------------|---------------|
| mm | mm | mm | mm | kg |
| 650 | 5 990 | 1 375 | 1 080 | 10 600 |
| 750 | 5 990 | 1 375 | 1 080 | 10 950 |
| 900 | 5 990 | 1 375 | 1 160 | 11 500 |

Cab

| Length | Height of cab | Height of precleaner | Width | Weight |
|--------|---------------|----------------------|-------|--------|
| mm | mm | mm | mm | kg |
| 5 600 | 2 655 | 2 735 | 3 430 | 22 400 |

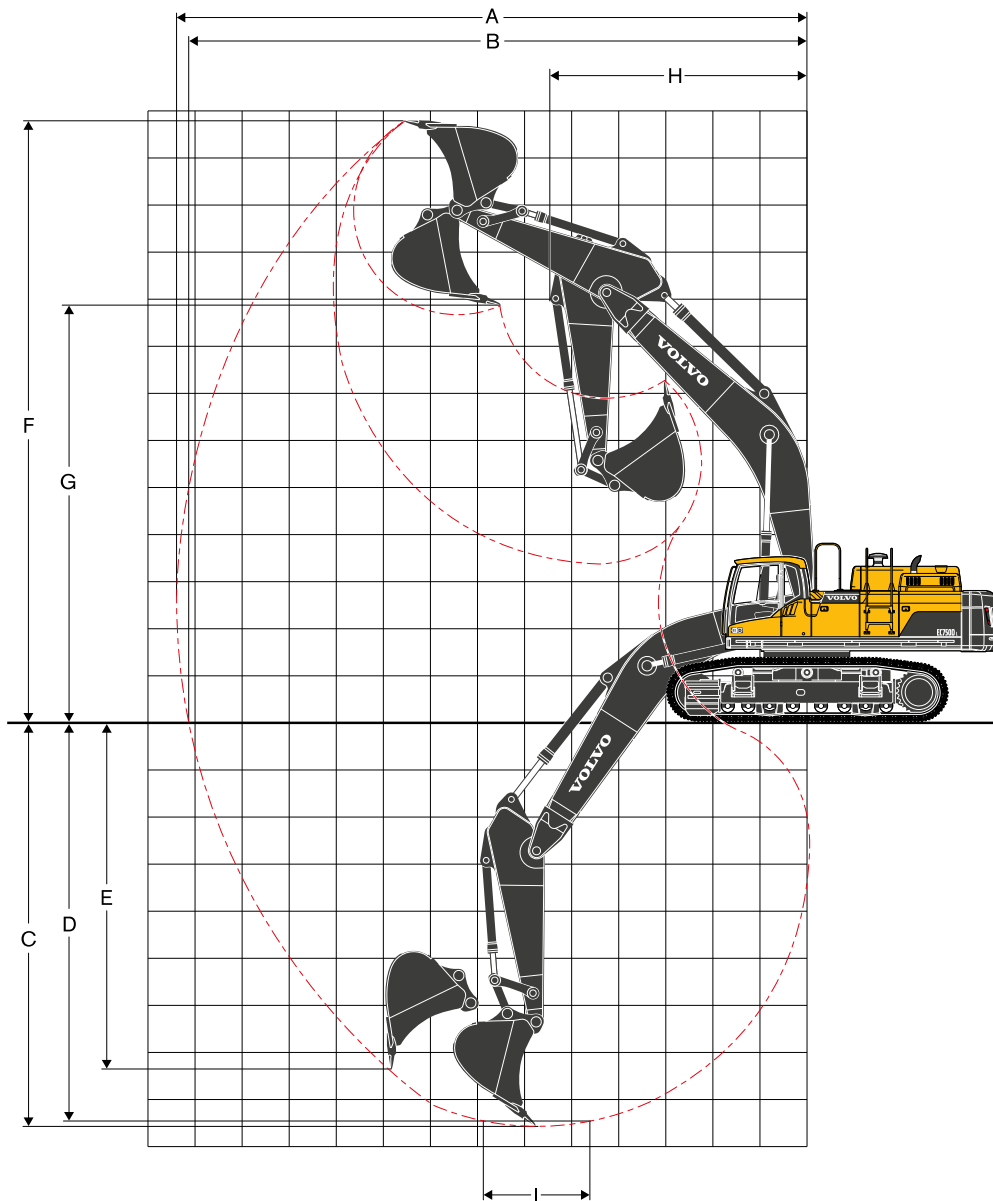
Cab with shoes

| Shoe width | Length | Height of precleaner | Overall width (retracted) | Weight |
|------------|--------|----------------------|---------------------------|--------|
| mm | mm | mm | mm | kg |
| 650 | 6 830 | 3 590 | 3 495 | 43 600 |
| 750 | 6 830 | 3 590 | 3 500 | 44 300 |
| 900 | 6 830 | 3 590 | 3 650 | 45 400 |

Cab with shoes and boom

| Boom | Shoe width | Length | Height of precleaner | Overall width (retracted) | Weight |
|------|------------|--------|----------------------|---------------------------|--------|
| m | mm | mm | mm | mm | kg |
| 6.6 | 650 | 10 240 | 3 590 | 3 495 | 51 990 |
| | 750 | 10 240 | 3 590 | 3 500 | 52 690 |
| | 900 | 10 240 | 3 590 | 3 650 | 53 790 |
| 7.7 | 650 | 11 400 | 3 590 | 3 495 | 52 310 |
| | 750 | 11 400 | 3 590 | 3 500 | 53 010 |
| | 900 | 11 400 | 3 590 | 3 650 | 54 110 |

Specifications



WORKING RANGES

| Description | Unit | EC750D | | |
|---|------|--------|--------|--------|
| Boom | m | 6.6 | 7.7 | |
| Arm | m | 2.9 | 2.9 | 3.55 |
| A Max. digging reach | mm | 11 460 | 12 630 | 13 200 |
| B Max. digging reach on ground | mm | 11 160 | 12 370 | 12 940 |
| C Max. digging depth | mm | 7 210 | 7 780 | 8 430 |
| D Max. digging depth (l = 2.44 m level) | mm | 7 060 | 7 640 | 8 300 |
| E Max. vertical wall digging depth | mm | 5 650 | 6 830 | 7 260 |
| F Max. cutting height | mm | 10 940 | 12 460 | 12 630 |
| G Max. dumping height | mm | 7 000 | 8 380 | 8 580 |
| H Min. front swing radius | mm | 5 130 | 5 460 | 5 390 |

DIGGING FORCES WITH DIRECT FIT BUCKET

| | | | | | |
|---------------------------|-----------|----|-------|-------|-------|
| Bucket radius | | mm | 2 215 | 2 150 | 2 150 |
| Breakout force -bucket | SAE J1179 | kN | 325 | 301 | 301 |
| | ISO 6015 | kN | 389 | 356 | 356 |
| Tearout force -dipper arm | SAE J1179 | kN | 314 | 316 | 278 |
| | ISO 6015 | kN | 326 | 332 | 290 |
| Rotation angle, bucket | | ° | 172 | 173 | 173 |

LIFTING CAPACITY EC750D

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 | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | 10.5 m | | Max. reach | | | | |
|--|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|--------|--------|------|
| | | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | m | | |
| Boom: 6.6m Arm: 2.9m Shoe: 650mm CWT: 12 700kg | 9.0 m | kg | | | | | | | | | | | | 15 720 | 15 720 | 6.7 |
| | 7.5 m | kg | | | | | 16 950 | 16 950 | | | | | | 14 600 | 14 600 | 7.8 |
| | 6.0 m | kg | | | 19 480 | 19 480 | 17 360 | 17 360 | | | | | | 14 250 | 14 250 | 8.6 |
| | 4.5 m | kg | 28 900 | 28 900 | 21 940 | 21 940 | 18 480 | 18 240 | 16 120 | 14 590 | | | | 14 410 | 14 390 | 9.1 |
| | 3.0 m | kg | | | 24 440 | 24 140 | 19 740 | 18 830 | 17 000 | 14 280 | | | | 15 020 | 13 640 | 9.3 |
| | 1.5 m | kg | 32 950 | 32 950 | 26 110 | 25 290 | 20 670 | 18 230 | 17 230 | 13 990 | | | | 16 180 | 13 510 | 9.2 |
| | 0 m | kg | 35 300 | 35 300 | 26 450 | 24 720 | 20 840 | 17 850 | | | | | | 16 950 | 14 030 | 8.9 |
| | -1.5 m | kg | 32 850 | 32 850 | 25 280 | 24 580 | 19 800 | 17 770 | | | | | | 16 990 | 15 410 | 8.3 |
| | -3.0 m | kg | 28 440 | 28 440 | 22 150 | 22 150 | | | | | | | | 16 590 | 16 590 | 7.4 |
| | -4.5 m | kg | 20 640 | 20 640 | | | | | | | | | | 14 760 | 14 760 | 6.0 |
| Boom: 7.7m Arm: 2.9m Shoe: 650mm CWT: 12 700kg | 10.5 m | kg | | | | | | | | | | | | 16 980 | 16 980 | 6.8 |
| | 9.0 m | kg | | | | | 15 660 | 15 660 | | | | | | 15 490 | 15 490 | 8.2 |
| | 7.5 m | kg | | | | | 15 940 | 15 940 | 14 820 | 14 580 | | | | 14 710 | 14 200 | 9.2 |
| | 6.0 m | kg | | | 20 130 | 20 130 | 16 910 | 16 910 | 15 040 | 14 590 | | | | 14 420 | 12 440 | 9.9 |
| | 4.5 m | kg | | | 22 670 | 22 670 | 18 180 | 17 900 | 15 610 | 14 160 | | | | 14 230 | 11 440 | 10.2 |
| | 3.0 m | kg | | | 24 740 | 24 340 | 19 350 | 17 860 | 16 190 | 13 700 | | | | 14 140 | 10 940 | 10.4 |
| | 1.5 m | kg | | | 25 550 | 23 730 | 20 030 | 17 250 | 16 520 | 13 330 | | | | 14 070 | 10 850 | 10.4 |
| | 0 m | kg | | | 25 100 | 23 390 | 19 990 | 16 900 | 16 360 | 13 110 | | | | 13 960 | 11 180 | 10.1 |
| | -1.5 m | kg | 27 460 | 27 460 | 23 610 | 23 170 | 19 070 | 16 830 | 15 380 | 13 090 | | | | 13 720 | 12 020 | 9.6 |
| | -3.0 m | kg | 25 020 | 25 020 | 20 970 | 20 970 | 16 970 | 16 620 | | | | | | 13 120 | 12 800 | 8.8 |
| -4.5 m | kg | 19 620 | 19 620 | 16 580 | 16 580 | 12 410 | 12 410 | | | | | | 11 670 | 11 670 | 7.7 | |
| Boom: 7.7m Arm: 3.55m Shoe: 650mm CWT: 12 700kg | 10.5 m | kg | | | | | | | | | | | | 13 600 | 13 600 | 7.6 |
| | 9.0 m | kg | | | | | 14 930 | 14 930 | 13 860 | 13 860 | | | | 12 490 | 12 490 | 8.9 |
| | 7.5 m | kg | | | | | 16 020 | 16 020 | 14 310 | 14 020 | | | | 11 990 | 11 990 | 9.8 |
| | 6.0 m | kg | | | 18 820 | 18 820 | 16 020 | 16 020 | 14 310 | 14 020 | | | | 11 840 | 11 390 | 10.4 |
| | 4.5 m | kg | | | 21 490 | 21 490 | 17 430 | 17 430 | 15 030 | 14 300 | 13 500 | 11 140 | | 11 990 | 10 530 | 10.8 |
| | 3.0 m | kg | | | 23 900 | 23 420 | 18 790 | 18 070 | 15 780 | 13 790 | 13 780 | 10 880 | | 12 380 | 10 080 | 11.0 |
| | 1.5 m | kg | | | 25 290 | 23 950 | 19 750 | 17 350 | 16 310 | 13 350 | 13 920 | 10 650 | | 12 890 | 9 980 | 10.9 |
| | 0 m | kg | | | 25 440 | 23 380 | 20 050 | 16 890 | 16 430 | 13 040 | 13 650 | 10 510 | | 13 220 | 10 220 | 10.7 |
| | -1.5 m | kg | 28 090 | 28 090 | 24 470 | 23 230 | 19 540 | 16 690 | 15 890 | 12 920 | | | | 13 130 | 10 890 | 10.2 |
| | -3.0 m | kg | 27 750 | 27 750 | 22 370 | 21 830 | 18 010 | 16 760 | 14 250 | 13 040 | | | | 12 830 | 12 190 | 9.5 |
| -4.5 m | kg | 22 930 | 22 930 | 18 810 | 18 810 | 14 870 | 14 870 | | | | | | 12 000 | 12 000 | 8.4 | |
| -6.0 m | kg | 15 520 | 15 520 | 12 510 | 12 510 | | | | | | | | 9 780 | 9 780 | 6.9 | |
| Boom: 6.6m Arm: 2.9m Shoe: 750mm CWT: 12 700kg | 9.0 m | kg | | | | | | | | | | | | 15 720 | 15 720 | 6.7 |
| | 7.5 m | kg | | | | | 16 950 | 16 950 | | | | | | 14 600 | 14 600 | 7.8 |
| | 6.0 m | kg | | | 19 480 | 19 480 | 17 360 | 17 360 | | | | | | 14 250 | 14 250 | 8.6 |
| | 4.5 m | kg | 28 900 | 28 900 | 21 940 | 21 940 | 18 480 | 18 240 | 16 120 | 14 720 | | | | 14 410 | 14 410 | 9.1 |
| | 3.0 m | kg | | | 24 440 | 24 140 | 19 740 | 19 000 | 17 000 | 14 420 | | | | 15 020 | 13 770 | 9.3 |
| | 1.5 m | kg | 32 950 | 32 950 | 26 110 | 25 530 | 20 670 | 18 400 | 17 230 | 14 130 | | | | 16 180 | 13 640 | 9.2 |
| | 0 m | kg | 35 300 | 35 300 | 26 450 | 24 960 | 20 840 | 18 020 | | | | | | 16 950 | 14 160 | 8.9 |
| | -1.5 m | kg | 32 850 | 32 850 | 25 280 | 24 820 | 19 800 | 17 940 | | | | | | 16 990 | 15 560 | 8.3 |
| | -3.0 m | kg | 28 440 | 28 440 | 22 150 | 22 150 | | | | | | | | 16 590 | 16 590 | 7.4 |
| | -4.5 m | kg | 20 640 | 20 640 | | | | | | | | | | 14 760 | 14 760 | 6.0 |
| Boom: 7.7m Arm: 2.9m Shoe: 750mm CWT: 12 700kg | 10.5 m | kg | | | | | | | | | | | | 16 980 | 16 980 | 6.8 |
| | 9.0 m | kg | | | | | 15 660 | 15 660 | | | | | | 15 490 | 15 490 | 8.2 |
| | 7.5 m | kg | | | | | 15 940 | 15 940 | 14 820 | 14 580 | | | | 14 710 | 14 340 | 9.2 |
| | 6.0 m | kg | | | 20 130 | 20 130 | 16 910 | 16 910 | 15 040 | 14 720 | | | | 14 420 | 12 570 | 9.9 |
| | 4.5 m | kg | | | 22 670 | 22 670 | 18 180 | 17 900 | 15 610 | 14 290 | | | | 14 230 | 11 560 | 10.3 |
| | 3.0 m | kg | | | 24 740 | 24 340 | 19 350 | 18 040 | 16 190 | 13 840 | | | | 14 140 | 11 050 | 10.4 |
| | 1.5 m | kg | | | 25 550 | 23 970 | 20 030 | 17 420 | 16 520 | 13 470 | | | | 14 070 | 10 960 | 10.4 |
| | 0 m | kg | | | 25 100 | 23 630 | 19 990 | 17 080 | 16 360 | 13 250 | | | | 13 960 | 11 290 | 10.1 |
| | -1.5 m | kg | 27 460 | 27 460 | 23 610 | 23 170 | 19 070 | 17 000 | 15 380 | 13 230 | | | | 13 720 | 12 150 | 9.6 |
| | -3.0 m | kg | 25 020 | 25 020 | 20 970 | 20 970 | 16 970 | 16 620 | | | | | | 13 120 | 12 800 | 8.8 |
| -4.5 m | kg | 19 620 | 19 620 | 16 580 | 16 580 | 12 410 | 12 410 | | | | | | 11 670 | 11 670 | 7.7 | |
| Boom: 7.7m Arm: 3.55m Shoe: 750mm CWT: 12 700kg | 10.5 m | kg | | | | | | | | | | | | 13 600 | 13 600 | 7.6 |
| | 9.0 m | kg | | | | | 14 970 | 14 970 | 13 890 | 13 890 | | | | 12 490 | 12 490 | 8.9 |
| | 7.5 m | kg | | | | | 16 060 | 16 060 | 14 350 | 14 020 | | | | 11 990 | 11 990 | 9.8 |
| | 6.0 m | kg | | | 18 860 | 18 860 | 16 060 | 16 060 | 14 350 | 14 020 | | | | 11 840 | 11 500 | 10.5 |
| | 4.5 m | kg | | | 21 520 | 21 520 | 17 470 | 17 470 | 15 070 | 14 430 | 13 540 | 11 250 | | 11 990 | 10 640 | 10.8 |
| | 3.0 m | kg | | | 23 930 | 23 420 | 18 830 | 18 240 | 15 810 | 13 920 | 13 820 | 11 000 | | 12 380 | 10 190 | 11.0 |
| | 1.5 m | kg | | | 25 320 | 24 190 | 19 780 | 17 520 | 16 350 | 13 480 | 13 950 | 10 760 | | 12 890 | 10 090 | 11.0 |
| | 0 m | kg | | | 25 470 | 23 620 | 20 080 | 17 060 | 16 470 | 13 180 | 13 680 | 10 620 | | 13 260 | 10 330 | 10.7 |
| | -1.5 m | kg | 28 090 | 28 090 | 24 500 | 23 460 | 19 570 | 16 870 | 15 930 | 13 060 | | | | 13 170 | 11 000 | 10.2 |
| | -3.0 m | kg | 27 790 | 27 790 | 22 410 | 21 830 | 18 040 | 16 940 | 14 290 | 13 170 | | | | 12 860 | 12 310 | 9.5 |
| -4.5 m | kg | 22 960 | 22 960 | 18 840 | 18 840 | 14 910 | 14 910 | | | | | | 12 030 | 12 030 | 8.4 | |
| -6.0 m | kg | 15 550 | 15 550 | 12 550 | 12 550 | | | | | | | | 9 820 | 9 820 | 6.9 | |
| Boom: 6.6m Arm: 2.9m Shoe: 900mm CWT: 12 700kg | 9.0 m | kg | | | | | | | | | | | | 15 720 | 15 720 | 6.7 |
| | 7.5 m | kg | | | | | 16 950 | 16 950 | | | | | | 14 600 | 14 600 | 7.8 |
| | 6.0 m | kg | | | 19 480 | 19 480 | 17 360 | 17 360 | | | | | | 14 250 | 14 250 | 8.6 |
| | 4.5 m | kg | 28 900 | 28 900 | 21 940 | 21 940 | 18 480 | 18 240 | 16 120 | 14 930 | | | | 14 410 | 14 410 | 9.1 |
| | 3.0 m | kg | | | 24 440 | 24 440 | 19 740 | 19 260 | 17 000 | 14 620 | | | | 15 020 | 13 970 | 9.3 |
| | 1.5 m | kg | 32 950 | 32 950 | 26 110 | 25 770 | 20 670 | 18 660 | 17 230 | 14 330 | | | | 16 180 | 13 840 | 9.2 |
| | 0 m | kg | 35 300 | 35 300 | 26 450 | 25 310 | 20 840 | 18 280 | | | | | | 16 950 | 14 370 | 8.9 |
| | -1.5 m | kg | 32 850 | 32 850 | 25 280 | 24 920 | 19 800 | 18 200 | | | | | | 16 990 | 15 790 | 8.3 |
| | -3.0 m | kg | 28 440 | 28 440 | 22 150 | 22 150 | | | | | | | | 16 590 | 16 590 | 7.4 |
| | -4.5 m | kg | 20 640 | 20 640 | | | | | | | | | | 14 760 | 14 760 | 6.0 |
| Boom: 7.7m Arm: 2.9m Shoe: 900mm CWT: 12 700kg | 10.5 m | kg | | | | | | | | | | | | 16 980 | 16 980 | 6.8 |
| | 9.0 m | kg | | | | | 15 660 | 15 660 | | | | | | 15 490 | | |

Equipment

STANDARD EQUIPMENT

Engine

| |
|--|
| Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler |
| Air filter with indicator |
| Air intake heater |
| Cyclone pre-cleaner |
| Electric engine shut-off |
| Fuel filter and water separator |
| Alternator, 80 A |
| Fuel filler pump, 100 lpm with automatic shut-off |

Electric/Electronic control system

| |
|-------------------------------------|
| Contronics |
| Advanced mode control system |
| Self-diagnostic system |
| Machine status indication |
| Engine speed sensing power control |
| Emergency engine stop switch |
| Automatic idling system |
| Safety stop/start function |
| Adjustable LCD color monitor |
| Master electrical disconnect switch |
| Engine restart prevention circuit |
| High-capacity halogen lights: |
| Cab-mounted 2 |
| Frame-mounted 1 |
| Boom-mounted 4 |
| Batteries, 2 x 12 V / 210 Ah |
| Start motor, 28 V / 6.6 kW |

Hydraulic system

| |
|------------------------------------|
| Automatic sensing hydraulic system |
| Summation system |
| Boom priority |
| Arm priority |
| Swing priority |
| ECO mode fuel saving technology |
| Boom and arm 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 |
| Hydraulic oil, ISO VG 46 |

Frame

| |
|------------------------------------|
| Access way with handrail |
| Full height counterweight 12 700kg |
| Tool storage area |
| Side walk-way |
| Under cover (heavy duty 4.5mm) |
| Punched metal anti-slip plates |

Cab and interior

| |
|---|
| Silicon oil and rubber mounts with spring |
| Adjustable operator seat with heater and joystick control console |
| Control joysticks with semi-long |
| Heater & air-conditioner, automatic |
| Flexible antenna |
| Radio with CD player & MP3 player and USB |
| 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 |
| Windshield wiper with intermittent feature |
| Master key |

Undercarriage

| |
|--------------------------------------|
| Mechanically retractable track gauge |
| Hydraulic track adjusters |
| Greased and sealed track link |
| Track Guard |
| Under cover (10mm) |

Track shoes

| |
|---|
| Track shoes, 650 mm with double grouser |
|---|

Digging equipment

| |
|--------------------------------|
| Boom: ME 6.6 m |
| Arm: ME 2.9 m |
| Manual centralized lubrication |

OPTIONAL EQUIPMENT

Engine

| |
|---------------------------------|
| Block heater: 240 V |
| Dual stage oil bath pre-cleaner |
| Diesel coolant heater, 10 kW |
| Water separator with heater |
| Extra water separator |
| Auto engine shutdown |

Electric

| |
|---------------------------------|
| Extra lights : |
| Cab-mounted 3 (front 2, rear 1) |
| Boom-mounted 4 |
| Frame-mounted 1 |
| Counterweight-mounted 1 |
| Travel alarm |
| Anti-theft system |
| Rotating warning beacon |

OPTIONAL EQUIPMENT

Hydraulic system

| |
|--|
| Hose rupture valve: boom, arm |
| Straight travel pedal |
| Bucket conflux |
| 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 |
| Grapple |
| Quick coupler piping |
| Volvo hydraulic quick coupler EQD FPL Eye 75t_C |
| Hydraulic oil, ISO VG 32, 68 |
| Hydraulic oil, biodegradable 46 |
| Hydraulic oil, longlife oil 32, 46, 68 |

Cab and interior

| |
|--|
| One-piece fixed front windshield |
| Fabric seat without heater |
| Fabric seat with heater and air suspension |
| Control joysticks with 4 switches each |
| Control joysticks with 3 switch & 1 proportional |
| Opening top hatch |
| Front rain shield |

Cab and interior

| |
|--|
| 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 |
| Sunlight protection, roof (steel) |
| Lower wiper with intermittent control |
| Cleaning air gun |
| Rear view camera |
| Side view camera |
| Specific key |

Frame

| |
|----------------------------|
| Full height counterweight: |
| 12 700kg removal type |

Undercarriage

| |
|------------------|
| Full track guard |
|------------------|

Track shoes

| |
|--|
| 750/900mm track shoes with double grousers |
|--|

Digging equipment

| |
|------------------|
| Boom: 7.7m |
| Arm: 2.9m, 3.55m |

Service

| |
|------------------------------------|
| Tool kit, daily maintenance |
| Tool kit, full scale |
| Special tool for retractable frame |

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Dual stage oil bath pre-cleaner



FOPS/FOG

(Falling object protection system/Falling object guard)



Boom float



Bucket conflux



Side-view camera



One-piece fixed windshield



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

Volvo Construction Equipment

www.volvoce.com