

V O L V O



Volvo Excavators 34.7-40.6 t 299 hp

EC350E

Volvo Construction Equipment



Welcome to our world

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

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

Working harder, working smarter

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

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



Solutions for you

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

Designed for your business

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

There when you need us

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

| | | |
|---|---|---|
|  Fuel Efficiency Services |  Productivity Services |  Safety Services |
|  Financial Services |  Uptime Services |  Rental Services |
|  Volvo Attachments |  Genuine Volvo Parts |  New life Services |

BUILDING TOMORROW

The value of versatility

Introducing the Volvo EC350E, a true 35-tonne machine. The new size class excavator features the very latest in engineering excellence, including D8M Volvo engine and electro-hydraulic control system. The EC350E is designed to deliver outstanding versatility, efficiency and productivity, making it the perfect partner for general construction projects.

Transport with ease

When loaded on a trailer, the total height of the vehicle and machine is less than 4-meters, meaning the 35-tonne excavator can be easily transported without the need for dismantling, allowing you to move between jobsites in no time. Just load and go.



Adapt to the job

Operators can easily select and adjust a number of functions depending on personal preferences and the task at hand, including Boom/Swing and Boom/Travel priority which enables to prioritize one function over another. Operators can also easily adjust the boom down speed, ideal for precision tasks which require optimum control.



Productivity up, fuel down

Count on the EC350E to deliver outstanding levels of productivity and fuel efficiency. The next generation electro-hydraulic system provides on-demand flow and reduces internal losses in the hydraulic circuit, while the Volvo D8M engine features a rated power of 1600rpm and delivers impressively high torque at low rpm. Auto-engine idle and auto-engine shutdown further reduce unnecessary fuel consumption.



Do it all

Take on any job with a range of factory-delivered attachments, such as Volvo buckets, breakers and quick couplers. Volvo Attachments are perfectly matched to your machine, helping to get the job done with optimum efficiency, productivity and performance.





A PURPOSE-BUILT 35-TONNER

In the EC350E Volvo has extended its excavator range to offer a 35-tonne machine which combines quality with exceptional value. The result is a machine which delivers performance, efficiency and maximum profitability in general construction applications.

Operate efficiently

Operators can work in comfort and control thanks to a host of features designed to boost operator efficiency. Bouncing reduction technology, customizable settings, Dig Assist apps and the best cab on the market all combine to help operators achieve optimum results and a profitable performance.

How you like it

Get ready for the working day in no time with customizable settings, including preferred control patterns and joystick responsiveness easily selected from the monitor. A 'long push' function on the joystick allows another shortcut to be set, and with the L8 joystick operators can create a shortcut to hydraulic priority functions.



Industry-renowned cab

Step inside the best cab on the market, the Volvo Care Cab. With low noise, low vibration and best-in-class visibility, operators will experience the ultimate in comfort and productivity. A convenient cab layout and ergonomic controls add to the unrivalled operator environment, all contributing towards an enhanced operator performance.



More precision

Unlock the full potential of your machine's productivity with Dig Assist, powered by the 10" Volvo Co-Pilot display. Gain access to a set of smart apps, including 2D, In-Field Design, 3D software packages, On-Board Weighing and Volvo Active Control, designed to optimize the digging process.



More control

The working day just got easier with Volvo Active Control functions, including automated boom and bucket movements, making the digging process more accurate and twice as fast. Simply set the grade from the Volvo Co-Pilot display, push the button and get to work – all controlled using a single lever.





A SMOOTHER SHIFT

Boom and arm bouncing reduction technology reduces machine shock, resulting in a more comfortable and productive operator performance. Optional Comfort Drive Control further helps to reduce fatigue by enabling operators to steer the machine using the L8 joystick rollers instead of the pedals.

Safety, inside and out

Whether working inside or on the machine, features such as unrivalled visibility and 3-point right-hand side access mean you can be sure that the highest levels of safety have been considered in every design detail of the EC350E.

Get around safely

Industry renowned features such as bolted anti-slip plates, high visibility handrails and guardrails ensure the highest levels of safety when negotiating the machine. For further convenience, the optional foldable cab entrance step and side walkways easily fold away to enable easy transportation.



Industry-leading visibility

The low machine hood design contributes to best-in-class visibility to the side and rear of the machine from the operator's seat. This direct visibility is complemented by rear and side view cameras.



Volvo Smart View

The optional Volvo Smart View uses front, rear and side cameras to provide a real-time, overhead view of the machine, resulting in safer machine rotation while working, especially in confined spaces.



Know your limits

With Volvo Active Control, operators can easily set swing fence, height limit and depth limit from the Volvo Co-Pilot. This helps to avoid contact with side obstacles, overhead obstacles such as power lines and underground hazards such as pipes and cables.





EASY AS 1, 2, 3

Reach the upper structure with safety and confidence thanks to 3-point right-hand side access, also providing access to the handily located UREA tank. A splash guard on the UREA tank makes filling quicker and easier, reducing the risk of spillage and subsequent corrosion.

Lower maintenance costs

Keep uptime to a maximum and maintenance costs to a minimum in the EC350E. Reduced maintenance requirements and easy servicing ensures your machine stays productive, for longer. A comprehensive range of Uptime Services further help to minimize downtime and keep your operation moving.

Ground-level access to filters

Grouped service points accessed from the ground level make routine maintenance quick and easy.



Engine protection

Keep your turbocharger working in top condition for longer with the optional delayed engine shutdown. To avoid overheating, the intelligent function turns the machine off when the turbocharger has cooled down to the appropriate temperature – and can be set to activate automatically by the operator.



Machine monitoring made easy

Maximize machine uptime and reduce repair costs with the CareTrack telematic system. Choose to keep track of your machine yourself or let us take care of it with Volvo Active Care. Our Volvo Uptime Center will provide 24/7 machine monitoring, supplying weekly reports and notifying you should preventive maintenance action be required.



Keeping you moving

Maintain productivity and machine uptime with our range of widely available, tested and approved Genuine Volvo Parts – all backed by Volvo warranty. Your Volvo dealer can help you stay on track, offering flexible maintenance and repair options, as well as planned servicing, to extend the life of your excavator.





SIMPLE TO SERVICE

Maintenance is quicker and easier thanks to the electro-hydraulic system which requires less hoses. This reduces the need for couplings, which in turn minimizes maintenance requirements and increases reliability. 1000hr engine oil and engine oil filter change intervals further ensure the time and cost spent on maintenance is kept to a minimum.

35-tonnes of excellence

A versatile performer

- Easy machine transportation: load and go
- Selectable boom/swing and boom/travel priority
- Adjustable boom down speed
- Range of Volvo Attachments: buckets, breakers and quick couplers

The operator's choice

- Volvo Care Cab
- Boom and arm bouncing reduction
- Comfort Drive Control
- Customizable joystick responsiveness
- Selectable pattern changes
- Range of Dig Assist apps, powered by Volvo Co-Pilot



Outstanding fuel efficiency

- Next generation electro-hydraulic system
- Rated engine power of 1600rpm, high torque at low rpm
- Automatic engine idle & shutdown
- ECO mode, Work modes
- Fuel Efficiency Report

For a dramatic improvement in fuel efficiency, look no further than the EC350E Hybrid.



Safety, inside and out

- Best-in-class side and rear visibility
- Volvo Smart View
- Swing fence, height/depth limits (Volvo Active Control)
- 3-point right-hand side access to the upper structure
- Anti-slip plates, high visibility guardrails/handrails
- Foldable cab entrance step and side walkways (Options)

Lower maintenance costs

- Electro-hydraulic system: less hoses/couplings required
- Ground-level access to grouped filters
- Splash guard on the UREA tank
- 1000hr engine oil and engine oil filter change intervals
- Engine auto-regeneration
- Delayed engine shutdown: extend turbocharger lifetime (Option)

Uptime Services: boost your profits

- CareTrack telematic system
- Volvo Active Care: 24/7 machine monitoring
- Care Inspection
- Maintenance and repair agreements
- Oil Analysis
- Undercarriage Inspections

Volvo EC350E in detail

Engine

The next-generation Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver 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.

| | | |
|----------------------------|-------|-------|
| Engine | Volvo | D8M |
| Max power at | r/min | 1 600 |
| Net, ISO 9249/SAE J1349 | kW | 219 |
| | hp | 298 |
| Gross, ISO 14396/SAE J1995 | kW | 220 |
| | hp | 299 |
| Max torque | Nm | 1 400 |
| at engine speed | r/min | 1 400 |
| No. of cylinders | | 6 |
| Displacement | l | 7.7 |
| Bore | mm | 110 |
| Stroke | mm | 135 |

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.

| | | |
|------------------|--------|----------|
| Voltage | V | 24 |
| Batteries | V | 2 x 12 |
| Battery capacity | Ah | 170 |
| Alternator | V/A | 28/120 |
| Start motor | V - kW | 24 - 5.5 |

Undercarriage

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

| | | |
|---------------------------------|----|-----------------------|
| Track shoe | | 2 x 48 |
| Link pitch | mm | 215.9 |
| Shoe width, triple grouser | mm | 600 / 700 / 800 / 900 |
| Shoe width, triple grouser (HD) | mm | 600 |
| Shoe width, double grouser | mm | 600 |
| Bottom rollers | | 2 x 8 |
| Top rollers | | 2 x 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 | 10.3 |
| Max. slew torque | kNm | 126.2 |

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 | 261 |
| Max. travel speed (low) | km/h | 3.3 |
| Max. travel speed (high) | km/h | 5.1 |
| Gradeability | ° | 35 |

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. Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO₂-eq.

Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, 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.

Power boost: All digging and lifting forces are increased.

Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

Main pump, Type 2 x Variable displacement axial piston pumps

| | | |
|--------------|-------|---------|
| Maximum flow | l/min | 2 x 288 |
|--------------|-------|---------|

Pilot pump, Type Gear pump

| | | |
|--------------|-------|----|
| Maximum flow | l/min | 20 |
|--------------|-------|----|

Relief valve setting pressure

| | | |
|----------------|-----|-----------|
| Implement | MPa | 33.3/36.3 |
| Travel circuit | MPa | 33.3 |
| Slew circuit | MPa | 27.9 |
| Pilot circuit | MPa | 3.9 |

Hydraulic Motors

Travel: Variable displacement axial piston motor with mechanical brake.

Slew: Fixed displacement piston motor with mechanical brake.

Hydraulic Cylinders

| | | |
|---------------|--------|-------------|
| Mono boom | | 2 |
| Bore x Stroke | ø x mm | 150 x 1 530 |
| Arm | | 1 |
| Bore x Stroke | ø x mm | 170 x 1 700 |
| Bucket | | 1 |
| Bore x Stroke | ø x mm | 140 x 1 285 |

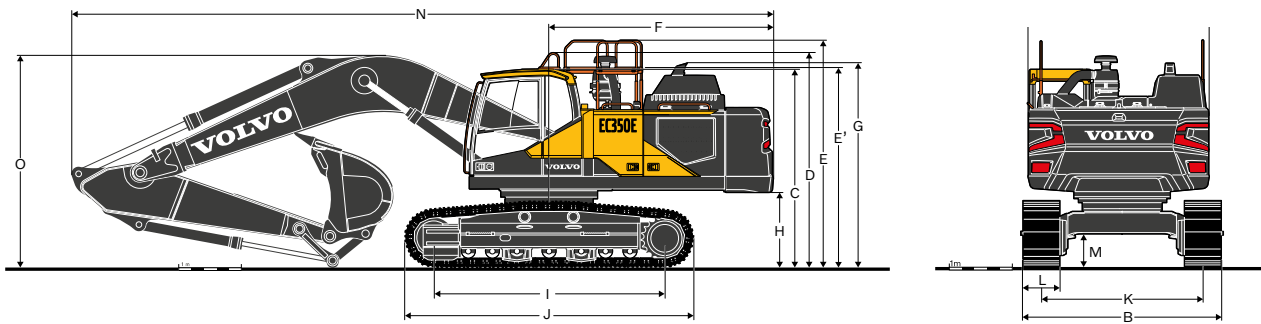
Service Refill

| | | |
|-------------------------|---|---------|
| Fuel tank | l | 580 |
| DEF/AdBlue® tank | l | 50 |
| Hydraulic system, total | l | 465 |
| Hydraulic tank | l | 215 |
| Engine oil | l | 30 |
| Engine coolant | l | 44 |
| Slew reduction unit | l | 6 |
| Travel reduction unit | l | 2 x 6.8 |

Sound Level

| | | |
|--|----|-----|
| Sound pressure level in cab according to ISO 6396 | | |
| L _{pA} | dB | 71 |
| External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC | | |
| L _{WA} | dB | 105 |

Specifications



DIMENSIONS

| Description | Unit | EC350EL | | | EC350ENL | | |
|---|------|---------|--------|--------|----------|--------|--------|
| Boom | m | 6.45 | | | 6.45 | | |
| Arm | m | 2.6 HD | 3.2 HD | 3.9 GP | 2.6 HD | 3.2 GP | 3.9 GP |
| A. Overall width of upper structure | mm | 2 890 | 2 890 | 2 890 | 2 890 | 2 890 | 2 890 |
| B. Overall width | mm | 3 190 | 3 190 | 3 190 | 2 990 | 2 990 | 2 990 |
| C. Overall height of cab | mm | 3 175 | 3 175 | 3 175 | 3 175 | 3 175 | 3 175 |
| D. Overall height of handrail (Unfolded) | mm | 3 440 | 3 440 | 3 440 | 3 440 | 3 440 | 3 440 |
| E. Overall height of guardrail (Unfolded) | mm | 3 650 | 3 650 | 3 650 | 3 650 | 3 650 | 3 650 |
| E'. Overall height of handrail&guardrail (Folded) | mm | 3 165 | 3 165 | 3 165 | 3 165 | 3 165 | 3 165 |
| F. Tail swing radius | mm | 3 600 | 3 600 | 3 600 | 3 600 | 3 600 | 3 600 |
| G. Overall height of diffuser | mm | 3 265 | 3 265 | 3 265 | 3 265 | 3 265 | 3 265 |
| H. Counterweight clearance * | mm | 1 170 | 1 170 | 1 170 | 1 170 | 1 170 | 1 170 |
| I. Tumbler length | mm | 4 020 | 4 020 | 4 020 | 4 020 | 4 020 | 4 020 |
| J. Track length | mm | 4 945 | 4 945 | 4 945 | 4 945 | 4 945 | 4 945 |
| K. Track gauge | mm | 2 590 | 2 590 | 2 590 | 2 390 | 2 390 | 2 390 |
| L. Shoe width | mm | 600 | 600 | 600 | 600 | 600 | 600 |
| M. Min. ground clearance * | mm | 500 | 500 | 500 | 500 | 500 | 500 |
| N. Overall length | mm | 11 295 | 11 200 | 11 245 | 11 295 | 11 210 | 11 245 |
| O. Overall height of boom | mm | 3 565 | 3 380 | 3 575 | 3 565 | 3 380 | 3 575 |

* Without shoe grouser

DIMENSIONS

| Boom | | | |
|-------------|------|---------|---------|
| Description | Unit | EC350E | |
| Boom | m | 6.45 GP | 6.45 HD |
| A. Length | mm | 6 710 | 6 710 |
| B. Height | mm | 1 845 | 1 845 |
| Width | mm | 815 | 815 |
| Weight | kg | 3 205 | 3 490 |

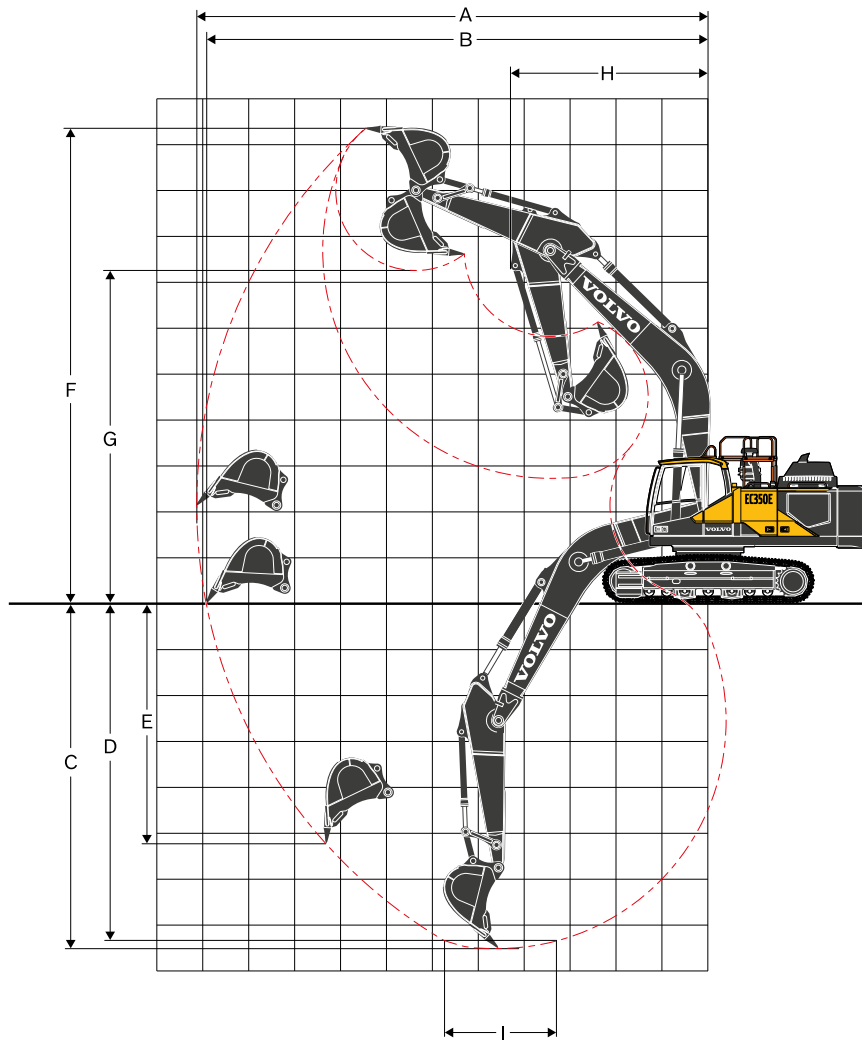
* Includes cylinder, piping and pin, excludes boom cyl. Pin

DIMENSIONS

| Arm | | | | | |
|-------------|------|--------|--------|--------|--------|
| Description | Unit | EC350E | | | |
| Arm | m | 2.6 HD | 3.2 GP | 3.2 HD | 3.9 GP |
| A. Length | mm | 3 670 | 4 350 | 4 345 | 5 045 |
| B. Height | mm | 1 135 | 1 060 | 1 080 | 1 080 |
| Width | mm | 570 | 570 | 570 | 570 |
| Weight | kg | 1 940 | 1 920 | 2 020 | 2 140 |

* Includes cylinder, linkage and pin

Specifications



WORKING RANGES

| Description | Unit | EC350E | | |
|---|----------|-------------|------------|------------|
| Boom | m | 6.45 | | |
| Arm | m | 2.6 | 3.2 | 3.9 |
| A. Max. digging reach | mm | 10 600 | 11 120 | 11 760 |
| B. Max. digging reach on ground | mm | 10 380 | 10 910 | 11 560 |
| C. Max. digging depth | mm | 6 890 | 7 490 | 8 190 |
| D. Max. digging depth (2.44 m/8' level) | mm | 6 690 | 7 310 | 8 040 |
| E. Max. vertical wall digging depth | mm | 10 170 | 10 330 | 10 600 |
| F. Max. cutting height | mm | 7 050 | 7 240 | 7 510 |
| G. Max. dumping height | mm | 4 790 | 5 220 | 5 800 |
| H. Min. front swing radius | mm | 4 320 | 4 290 | 4 240 |

DIGGING FORCES WITH DIRECT FIT BUCKET

| | | | | | | |
|------------------------|--------|-----------|-------------|-------|-------|-----|
| Bucket radius | | mm | 1 746 | 1 746 | 1 746 | |
| Breakout force | Normal | SAE J1179 | kN | 176 | 177 | 176 |
| | | | Power boost | kN | 192 | 192 |
| | Normal | ISO 6015 | kN | 201 | 201 | 201 |
| | | | Power boost | kN | 218 | 219 |
| Tearout force | Normal | SAE J1179 | kN | 187 | 156 | 136 |
| | | | Power boost | kN | 203 | 169 |
| | Normal | ISO 6015 | kN | 192 | 160 | 139 |
| | | | Power boost | kN | 209 | 174 |
| Rotation angle, bucket | | ° | 178 | 178 | 178 | |

BUCKET SELECTION GUIDE

| Bucket type | | | | Capacity | Cutting width | Weight | Teeth | EC350EL | | | EC350ENL | | | | |
|--------------------|-----------------------|-----------------------|----------------------|----------|---------------|--------|-------|-------------------------------------|----|----|-------------------------------------|-----------|-----------|-----------|-----------|
| | | | | | | | | 600 mm shoe, 7 000 kg counterweight | | | 600 mm shoe, 7 000 kg counterweight | | | | |
| | | | | | | | | 6.45 m HD Boom | | | 6.45 m GP Boom | | | | |
| | | | | | | | | L | mm | kg | EA | 2.6 m arm | 3.2 m arm | 3.9 m arm | 2.6 m arm |
| Direct Fit Buckets | Without Quick Coupler | V4 | GP | 870 | 750 | 1 082 | 3 | C | C | C | C | C | C | | |
| | | | | 1 000 | 900 | 1 281 | 4 | C | C | C | C | C | C | | |
| | | | | 1 420 | 1 200 | 1 514 | 5 | C | C | C | C | C | C | | |
| | | | | 1 670 | 1 350 | 1 629 | 5 | C | C | C | C | C | B | | |
| | | | | 1 920 | 1 500 | 1 769 | 5 | C | C | B | C | B | A | | |
| | | | 2 330 | 1 750 | 1 967 | 5 | B | B | A | B | A | X | | | |
| | | | HD | 870 | 750 | 1 352 | 3 | D | D | D | D | D | D | | |
| | | | | 1 000 | 900 | 1 425 | 4 | D | D | D | D | D | D | | |
| | | | | 1 420 | 1 200 | 1 679 | 4 | D | D | D | D | D | D | | |
| | | | | 1 420 | 1 200 | 1 699 | 5 | D | D | D | D | D | D | | |
| | | 1 670 | | 1 380 | 1 821 | 5 | D | D | C | D | C | B | | | |
| | | | | | | | | | | | | | | | |
| | | Quick Coupler Buckets | U type quick coupler | V4 | GP | 870 | 750 | 1 082 | 3 | C | C | C | C | C | C |
| | | | | | | 1 000 | 900 | 1 281 | 4 | C | C | C | C | C | C |
| 1 420 | 1 200 | | | | | 1 514 | 5 | C | C | C | C | C | B | | |
| 1 670 | 1 350 | | | | | 1 629 | 5 | C | C | B | C | B | A | | |
| 1 920 | 1 500 | | | | | 1 769 | 5 | C | B | A | B | A | X | | |
| 2 330 | 1 750 | | | | 1 967 | 5 | A | A | X | A | X | X | | | |
| HD | 870 | | | | 750 | 1 352 | 3 | D | D | D | D | D | D | | |
| | 1 000 | | | | 900 | 1 425 | 4 | D | D | D | D | D | D | | |
| | 1 420 | | | | 1 200 | 1 699 | 5 | D | D | B | D | C | A | | |
| | 1 670 | | | | 1 380 | 1 821 | 5 | D | B | A | B | B | A | | |
| | 1 920 | | | 1 500 | 1 970 | 5 | B | A | X | A | A | X | | | |
| S-quick coupler | V4 | | | GP | 1 000 | 900 | 1 328 | 4 | C | C | C | C | C | C | |
| | | | | | 1 180 | 1 050 | 1 419 | 4 | C | C | C | C | C | C | |
| | | | | | 1 420 | 1 200 | 1 571 | 5 | C | C | C | C | C | B | |
| | | | 1 670 | | 1 350 | 1 686 | 5 | C | C | B | C | B | A | | |
| | | | 1 920 | | 1 500 | 1 809 | 5 | C | B | A | B | A | A | | |
| | | | 2 330 | 1 750 | 1 918 | 5 | B | A | X | A | X | X | | | |
| | | | HD | 1 000 | 900 | 1 400 | 4 | D | D | D | D | D | D | | |
| | | | | 1 420 | 1 200 | 1 655 | 5 | D | D | C | D | D | B | | |
| | | | | 1 670 | 1 350 | 1 782 | 5 | D | C | B | C | B | A | | |
| | | | | 1 920 | 1 500 | 1 928 | 5 | C | B | A | B | A | X | | |
| | 2 330 | | | 1 750 | 2 126 | 5 | A | A | X | A | X | X | | | |

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.
(In case of using bigger bucket than regional standard MRS, consultation with R&D is highly recommended)
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 load : Payload, bucket and additional tools such as quick coupler, rotator,...

Maximum material density

- A: 1 200 - 1 300 kg/m³ Coal, Caliche, Shale
- B: 1 400 - 1 600 kg/m³ Wet earth and clay, Limestone, Sandstone
- C: 1 700 - 1 800 kg/m³ Granite, Wet sand, Well blasted rock
- D: > 1 900 kg/m³ Wet mud, Iron ore
- X : Not recommended

Specifications

GROUND PRESSURE

| Description | 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 |
| | | EC350E with L undercarriage, 6.45 m boom (HD), 2.6 m arm (HD), 1 730 kg bucket, 7 000 kg counterweight | | | EC350E with L undercarriage, 6.45 m boom (HD), 3.2 m arm (HD), 1 730 kg bucket, 7 000 kg counterweight | | | EC350E with L undercarriage, 6.45 m boom (HD), 3.9 m arm (GP), 1 730 kg bucket, 7 000 kg counterweight | | |
| Triple grouser | 600 | 36 240 | 69.5 | 3 190 | 36 320 | 69.7 | 3 190 | 36 390 | 69.8 | 3 190 |
| | 600 (HD) | 36 280 | 69.6 | 3 190 | 36 360 | 69.7 | 3 190 | 36 430 | 69.9 | 3 190 |
| | 700 | 36 860 | 60.6 | 3 290 | 36 950 | 60.7 | 3 290 | 37 010 | 60.8 | 3 290 |
| | 800 | 37 260 | 53.6 | 3 390 | 37 340 | 53.7 | 3 390 | 37 410 | 53.8 | 3 390 |
| | 900 | 37 650 | 48.1 | 3 490 | 37 730 | 48.2 | 3 490 | 37 790 | 48.3 | 3 490 |
| Double grouser | 600 | 36 940 | 70.6 | 3 190 | 37 020 | 70.7 | 3 190 | 37 080 | 70.9 | 3 190 |
| | | EC350E with NL undercarriage, 6.45 m boom (HD), 2.6 m arm (HD), 1 675 kg bucket, 7 000 kg counterweight | | | EC350E with NL undercarriage, 6.45 m boom (HD), 3.2 m arm (HD), 1 675 kg bucket, 7 000 kg counterweight | | | EC350E with NL undercarriage, 6.45 m boom (HD), 3.9 m arm (GP), 1 675 kg bucket, 7 000 kg counterweight | | |
| Triple grouser | 600 | 36 040 | 69.1 | 2 990 | 36 120 | 69.3 | 2 990 | 36 240 | 69.5 | 2 990 |
| | 600 (HD) | 36 080 | 69.2 | 2 990 | 36 170 | 69.4 | 2 990 | 36 290 | 69.6 | 2 990 |
| | 700 | 36 670 | 60.3 | 3 090 | 36 750 | 60.4 | 3 090 | 36 870 | 60.6 | 3 090 |
| | 800 | 37 060 | 53.3 | 3 190 | 37 140 | 53.4 | 3 190 | 37 260 | 53.6 | 3 190 |
| | 900 | 37 450 | 47.9 | 3 290 | 37 530 | 48.0 | 3 290 | 37 650 | 48.1 | 3 290 |
| Double grouser | 600 | 36 740 | 70.2 | 2 990 | 36 820 | 70.4 | 2 990 | 36 940 | 70.6 | 2 990 |
| | | EC350E with NL undercarriage, 6.45 m boom (GP), 2.6 m arm (HD), 1 675 kg bucket, 7 000 kg counterweight | | | EC350E with NL undercarriage, 6.45 m boom (GP), 3.2 m arm (GP), 1 675 kg bucket, 7 000 kg counterweight | | | EC350E with NL undercarriage, 6.45 m boom (GP), 3.9 m arm (GP), 1 675 kg bucket, 7 000 kg counterweight | | |
| Triple grouser | 600 | 35 760 | 68.6 | 2 990 | 35 740 | 68.6 | 2 990 | 35 960 | 69.0 | 2 990 |
| | 600 (HD) | 35 800 | 68.6 | 2 990 | 35 780 | 68.6 | 2 990 | 36 000 | 69.0 | 2 990 |
| | 700 | 36 380 | 59.8 | 3 090 | 36 360 | 59.8 | 3 090 | 36 580 | 60.1 | 3 090 |
| | 800 | 36 780 | 52.9 | 3 190 | 36 760 | 52.9 | 3 190 | 36 980 | 53.2 | 3 190 |
| | 900 | 37 160 | 47.5 | 3 290 | 37 140 | 47.5 | 3 290 | 37 370 | 47.8 | 3 290 |
| Double grouser | 600 | 36 450 | 69.7 | 2 990 | 36 430 | 69.6 | 2 990 | 36 660 | 70.1 | 2 990 |

Specifications

LIFTING CAPACITY EC350ENL

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 point | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 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 | Along UC | Across UC | m | |
| Boom : 6.45 m GP Arm : 2.6 m HD Shoe : 600 mm CWT : 7 000 kg | 7.5 m kg | | | | | | | | | | | | | | *9 220 | 7 500 | 7.02 |
| | 6.0 m kg | | | | | | | *9 760 | 9 560 | *9 150 | 6 660 | | | | *9 150 | 6 000 | 7.96 |
| | 4.5 m kg | | | | | *14 260 | 13 930 | *11 130 | 9 080 | *9 690 | 6 470 | | | | 8 680 | 5 230 | 8.53 |
| | 3.0 m kg | | | | | | | *12 770 | 8 540 | 10 420 | 6 200 | | | | 8 110 | 4 850 | 8.81 |
| | 1.5 m kg | | | | | | | *14 100 | 8 110 | 10 150 | 5 970 | | | | 7 960 | 4 720 | 8.83 |
| | 0 m kg | | | | | | *20 130 | 11 810 | 13 980 | 7 870 | 9 990 | 5 820 | | | 8 220 | 4 850 | 8.59 |
| | -1.5 m kg | | | *14 400 | *14 400 | *19 390 | 11 860 | 13 920 | 7 820 | 9 960 | 5 790 | | | | 9 000 | 5 290 | 8.06 |
| | -3.0 m kg | | | *23 280 | *23 280 | *17 640 | 12 070 | *13 490 | 7 950 | | | | | | *10 720 | 6 280 | 7.19 |
| -4.5 m kg | | | *18 460 | *18 460 | *14 170 | 12 510 | | | | | | | | *10 650 | 8 740 | 5.80 | |
| Boom : 6.45 m GP Arm : 3.2 m GP Shoe : 600 mm CWT : 7 000 kg | 7.5 m kg | | | | | | | | | *8 290 | 6 860 | | | | *7 380 | 6 590 | 7.67 |
| | 6.0 m kg | | | | | | | | | *8 410 | 6 800 | | | | *7 180 | 5 430 | 8.54 |
| | 4.5 m kg | | | | | *12 790 | *12 790 | *10 320 | 9 300 | *9 090 | 6 580 | *7 960 | 4 870 | | *7 250 | 4 800 | 9.07 |
| | 3.0 m kg | | | | | *16 480 | 13 220 | *12 090 | 8 750 | *10 010 | 6 310 | 7 910 | 4 750 | | 7 450 | 4 470 | 9.34 |
| | 1.5 m kg | | | | | *19 190 | 12 350 | *13 660 | 8 280 | 10 240 | 6 050 | 7 770 | 4 620 | | 7 320 | 4 350 | 9.36 |
| | 0 m kg | | | | | *20 220 | 11 990 | 14 100 | 7 980 | 10 030 | 5 860 | 7 670 | 4 530 | | 7 520 | 4 440 | 9.13 |
| | -1.5 m kg | | | *14 520 | *14 520 | *20 000 | 11 920 | 13 960 | 7 860 | 9 940 | 5 780 | | | | 8 120 | 4 780 | 8.63 |
| | -3.0 m kg | *16 920 | *16 920 | *22 970 | *22 970 | *18 720 | 12 040 | 14 010 | 7 910 | 10 000 | 5 840 | | | | 9 430 | 5 530 | 7.82 |
| -4.5 m kg | | | *21 710 | *21 710 | *16 020 | 12 360 | *11 980 | 8 140 | | | | | | *10 480 | 7 220 | 6.58 | |
| Boom : 6.45 m GP Arm : 3.9 m GP Shoe : 600 mm CWT : 7 000 kg | 9.0 m kg | | | | | | | | | | | | | | *6 290 | *6 290 | 7.26 |
| | 7.5 m kg | | | | | | | | | *7 200 | 7 070 | | | | *5 870 | 5 690 | 8.44 |
| | 6.0 m kg | | | | | | | | | *7 510 | 6 950 | *7 020 | 5 040 | | *5 730 | 4 790 | 9.24 |
| | 4.5 m kg | | | | | | | *9 190 | *9 190 | *8 280 | 6 690 | *7 800 | 4 940 | | *5 780 | 4 280 | 9.73 |
| | 3.0 m kg | | | | | *14 560 | 13 590 | *11 020 | 8 890 | *9 280 | 6 360 | 7 950 | 4 770 | | *5 990 | 4 000 | 9.98 |
| | 1.5 m kg | | | | | *17 770 | 12 460 | *12 780 | 8 310 | 10 260 | 6 040 | 7 760 | 4 590 | | *6 390 | 3 890 | 10.00 |
| | 0 m kg | | | *9 000 | *9 000 | *19 530 | 11 850 | 14 040 | 7 910 | 9 970 | 5 790 | 7 610 | 4 460 | | 6 720 | 3 940 | 9.79 |
| | -1.5 m kg | *9 190 | *9 190 | *13 740 | *13 740 | *19 950 | 11 630 | 13 790 | 7 700 | 9 810 | 5 650 | 7 540 | 4 390 | | 7 170 | 4 190 | 9.33 |
| | -3.0 m kg | *14 330 | *14 330 | *19 870 | *19 870 | *19 260 | 11 660 | 13 760 | 7 670 | 9 800 | 5 640 | | | | 8 100 | 4 730 | 8.58 |
| | -4.5 m kg | *20 480 | *20 480 | *24 360 | *23 510 | *17 340 | 11 910 | *13 040 | 7 820 | | | | | | *9 780 | 5 850 | 7.46 |
| -6.0 m kg | | | *18 340 | *18 340 | *13 320 | 12 430 | | | | | | | | *9 920 | 8 740 | 5.76 | |
| Boom : 6.45 m GP Arm : 2.6 m HD Shoe : 700mm CWT : 7 000 kg | 7.5 m kg | | | | | | | | | | | | | | *9 220 | 7 600 | 7.02 |
| | 6.0 m kg | | | | | | | *9 760 | 9 690 | *9 150 | 6 760 | | | | *9 150 | 6 090 | 7.96 |
| | 4.5 m kg | | | | | *14 280 | 14 110 | *11 140 | 9 210 | *9 690 | 6 560 | | | | 8 820 | 5 320 | 8.53 |
| | 3.0 m kg | | | | | | | *12 770 | 8 670 | *10 490 | 6 300 | | | | 8 240 | 4 930 | 8.81 |
| | 1.5 m kg | | | | | | | *14 110 | 8 240 | 10 320 | 6 060 | | | | 8 100 | 4 800 | 8.83 |
| | 0 m kg | | | | | *20 130 | 12 000 | 14 210 | 8 000 | 10 160 | 5 920 | | | | 8 360 | 4 930 | 8.59 |
| | -1.5 m kg | | | *14 440 | *14 440 | *19 380 | 12 050 | 14 150 | 7 950 | 10 130 | 5 890 | | | | 9 160 | 5 380 | 8.06 |
| | -3.0 m kg | | | *23 270 | *23 270 | *17 630 | 12 260 | *13 490 | 8 080 | | | | | | *10 720 | 6 390 | 7.18 |
| -4.5 m kg | | | *18 430 | *18 430 | *14 150 | 12 710 | | | | | | | | *10 650 | 8 890 | 5.79 | |
| Boom : 6.45 m GP Arm : 3.2 m GP Shoe : 700mm CWT : 7 000 kg | 7.5 m kg | | | | | | | | | *8 290 | 6 960 | | | | *7 380 | 6 680 | 7.67 |
| | 6.0 m kg | | | | | | | | | *8 410 | 6 900 | | | | *7 180 | 5 510 | 8.54 |
| | 4.5 m kg | | | | | *12 810 | *12 810 | *10 320 | 9 420 | *9 090 | 6 680 | *7 980 | 4 940 | | *7 250 | 4 870 | 9.07 |
| | 3.0 m kg | | | | | *16 490 | 13 410 | *12 090 | 8 880 | *10 020 | 6 400 | 8 050 | 4 830 | | *7 560 | 4 540 | 9.34 |
| | 1.5 m kg | | | | | *19 200 | 12 540 | *13 660 | 8 410 | 10 410 | 6 140 | 7 900 | 4 700 | | 7 450 | 4 430 | 9.36 |
| | 0 m kg | | | | | *20 220 | 12 180 | 14 340 | 8 110 | 10 200 | 5 960 | 7 810 | 4 610 | | 7 650 | 4 520 | 9.13 |
| | -1.5 m kg | | | *14 550 | *14 550 | *20 000 | 12 110 | 14 200 | 7 990 | 10 110 | 5 880 | | | | 8 270 | 4 870 | 8.63 |
| | -3.0 m kg | *16 950 | *16 950 | *23 000 | *23 000 | *18 710 | 12 230 | *14 130 | 8 040 | 10 180 | 5 930 | | | | 9 600 | 5 630 | 7.82 |
| -4.5 m kg | | | *21 690 | *21 690 | *16 010 | 12 550 | *11 960 | 8 270 | | | | | | *10 480 | 7 340 | 6.57 | |
| Boom : 6.45 m GP Arm : 3.9 m GP Shoe : 700mm CWT : 7 000 kg | 9.0 m kg | | | | | | | | | | | | | | *6 290 | *6 290 | 7.26 |
| | 7.5 m kg | | | | | | | | | *7 200 | 7 170 | | | | *5 870 | 5 770 | 8.45 |
| | 6.0 m kg | | | | | | | | | *7 520 | 7 040 | *7 030 | 5 120 | | *5 730 | 4 870 | 9.24 |
| | 4.5 m kg | | | | | | | *9 190 | *9 190 | *8 280 | 6 780 | *7 800 | 5 010 | | *5 780 | 4 350 | 9.74 |
| | 3.0 m kg | | | | | *14 580 | 13 770 | *11 030 | 9 010 | *9 280 | 6 460 | 8 080 | 4 850 | | *6 000 | 4 070 | 9.98 |
| | 1.5 m kg | | | | | *17 780 | 12 650 | *12 790 | 8 440 | *10 290 | 6 140 | 7 890 | 4 670 | | *6 390 | 3 960 | 10.00 |
| | 0 m kg | | | *9 020 | *9 020 | *19 530 | 12 030 | *14 050 | 8 030 | 10 140 | 5 890 | 7 740 | 4 530 | | 6 850 | 4 010 | 9.79 |
| | -1.5 m kg | *9 210 | *9 210 | *13 760 | *13 760 | *19 950 | 11 820 | 14 030 | 7 820 | 9 990 | 5 750 | 7 670 | 4 470 | | 7 300 | 4 260 | 9.32 |
| | -3.0 m kg | *14 350 | *14 350 | *19 900 | *19 900 | *19 260 | 11 850 | 13 990 | 7 800 | 9 970 | 5 730 | | | | 8 250 | 4 810 | 8.58 |
| | -4.5 m kg | *20 510 | *20 510 | *24 340 | *23 870 | *17 330 | 12 100 | *13 040 | 7 950 | | | | | | *9 780 | 5 950 | 7.46 |
| -6.0 m kg | | | *18 300 | *18 300 | *13 300 | 12 620 | | | | | | | | *9 920 | 8 900 | 5.75 | |

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

Equipment

STANDARD EQUIPMENT

Engine

Turbocharged, four stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements

Air filter with indicator

Air intake heater

Cyclone precleaner

Electric engine shutoff

Fuel filter and water separator

Fuel filler pump: 50 l/min, with automatic shutoff

Alternator, 120 A

Electric / Electronic control system

Advanced mode control system

Selfdiagnostic system

Machine status indication

Engine speed sensing power control

Automatic idling system

Onetouch power boost

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

Highcapacity LED lights:

- Frame-mounted 2

- Boom-mounted 2

Batteries, 2 x 12 V / 200 Ah

Start motor, 24 V / 5.5 kW

Frame

Access way with handrail

Tool storage area

Punched metal antislip plates

counterweight: 7 000kg

Undercarriage

Undercover (heavy duty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

Hydraulic system

Boom up swing priority function

Boom travel priority function (Creep)

Boom down speed control

Hose rupture valve: boom & Arm

Overload warning device

Automatic sensing hydraulic system

Summation system

Boom priority

Arm priority

Swing priority

ECO mode fuel saving technology

Boom, arm and bucket regeneration valves

Swing antirebound valves

Boom and arm holding valves

Multistage filtering system

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic twospeed travel motors

Hydraulic oil, ISO VG 46

STANDARD EQUIPMENT

Cab and interior

ROPS (ISO121172) certified cab

Silicon oil and rubber mounts with spring

Travel pedals and hand levers

Adjustable operator seat and joystick control console

Proportional joysticks with 3 switches each

Heater & airconditioner, automatic

Flexible antenna

Radio with MP3 & USB Jack with bluetooth

Hydraulic safety lock lever

Cab, allweather sound suppressed, includes:

Cup holders

Door locks

Tinted glass

Floor mat

Horn

Large storage area

Pullup type front window

Removable lower windshield

Seat belt

Safety glass

Sun screens, front, roof, rear

Rain shield

Windshield wiper with intermittent feature

Rear view camera

Side view camera

Master key

Track shoes

600 mm with triple grousers

Digging equipment

Boom: 6.45 m

Arm: 3.2 m

Manual centralized lubrication

Equipment

OPTIONAL EQUIPMENT

Engine

Block heater: 240 V
 Oil bath pre-cleaner
 Diesel coolant heater, 10 kW
 Water separator with heater
 Auto engine shutdown
 Reversible fan
 Delayed engine shutdown

Electric

Extra work lights(Halogen or LED):
 - Cab-mounted 3
 - Boom-mounted 2
 - Counterweight-mounted 1
 Green light beacon
 Travel alarm
 Anti-theft system
 Rotating warning beacon

Frame

Foldable Cabin Entrance
 Foldable Walkway

Undercarriage

Full track guard

Hydraulic system

CDC, Comfort Driving Control
 Boom float function
 Attachment management system (up to 32 programmable memories)
 - Variable flow and pressure pre-setting
 Hammer & shear, 1 and 2 pump flow
 Additional return filter
 Hydraulic piping:
 - Slope & rotator
 - Grapple
 - Oil leak (drain) line
 Quick coupler piping
 Volvo hydraulic quick coupler S3
 Volvo hydraulic quick coupler U38
 Hydraulic oil, biodegradable 46
 Hydraulic oil, longlife oil 32
 Hydraulic oil, longlife oil 46
 Hydraulic oil, longlife oil 68
 Fuel tank-fast fuel fill prep
 Straight travel pedal

Machine control system

Dig Assist
 Volvo Active Control (Semi-autonomous)
 Please refer to separate Brochure for more details

OPTIONAL EQUIPMENT

Cab and interior

High visibility cabin
 Fabric seat with heater
 Fabric seat with heater and air suspension
 Deluxe seat
 High-strength one piece front windshield (P5A)
 Opening top hatch
 Falling object guard, FOG (fixed type or hinge type)
 - Frame-mounted
 - Cab-mounted
 Cab-mounted falling object protective structure (FOPS)
 Volvo smart view
 Smoker kit (ashtray and lighter)
 Safety net for front window
 Lower wiper with intermittent control
 Anti-vandalism kit
 Specific key
 Cleaning air gun

Track shoes

700/800/900 mm with triple grousers
 600 mm HD with triple grousers
 600 mm with double grousers

Digging equipment

Boom: 6.45m HD
 Arm: 2.6 m HD, 3.2m HD, 3.9 m
 Linkage with lifting eye

Service

Tool kit, daily maintenance
 Tool kit, full scale

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Foldable walkways and foldable cab entrance



Air gun



Deluxe seat



Comfort Drive Control



High-strength one-piece front windshield



Demolition package



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.

V O L V O