Perform with precision
The EC35D features a comfortable cab and easy-to-use controls for high performance and precise operation. With its excellent hydraulic performance and easy serviceability you can do more for less in all applications.

Optimized efficiency
For lower costs, increased productivity and maximum uptime a number of efficient features combine on the EC35D. ECO mode allows you to choose the right machine setting for the job at hand for impressive fuel efficiency. Robust design and quality digging equipment delivers durability and long term machine value. Auto idle and auto engine shut down reduce noise disturbance, fuel consumption, maintenance costs and slow down depreciation of your machine.

Superior serviceability
The EC35D is built to ensure servicing is safe, quick and easy, featuring easy service access with wide-opening hoods, centralized lubrication and ground-level greasing points. The patented multifunction transparent hydraulic filter and extended greasing intervals of 50 hours, enhance machine availability and uptime.

Hydraulics in harmony
The machine’s state-of-the-art hydraulic system is perfectly matched to the premium Volvo engine delivering high performance and smooth operation. Intuitive fingertip controls enhance ease of operation, reduce fatigue and improve fluency. Adjust hydraulic flows in each direction from inside the cab for ultimate precision and versatility.

Performance and precision
Increase your power and precision in all applications with the EC35D. The machine’s outstanding lifting capacity and digging force deliver extra productivity and faster cycle times. Impressive tractive force and superior blade design delivers an increased performance when dozing. The float function, compatible with the angle blade, achieves a precise finish in grading applications.
Operate in a best-in-class cab for superior operator comfort and less fatigue. The EC35D is equipped with a spacious operator environment offering excellent all-around visibility and an adjustable suspended seat and console. Most machine functions and settings can be quickly accessed through keypad and monitor for maximum control of your machine.
Get the most out of your machine. The EC35D is a perfect match with Volvo attachments allowing you to change hydraulic settings directly and easily from the keypad. For increased versatility and uptime, Volvo has a durable range of attachments so you can access more applications and effectively perform a variety of jobs.
More than a machine

Tailored to your business and operations, choose from a wide range of Volvo attachments and Customer Solutions to improve your performance, productivity and versatility. Volvo offers a complete range of robust attachments for all working conditions and can offer a long-term partnership, protect your revenue and provide a full range of services using Genuine Volvo parts, delivered by passionate people.

Quick Couplers
The mechanical and hydraulic universal quick couplers allow attachments to be changed quickly and efficiently. The hydraulic quick coupler’s design allows it to be used for matched Volvo attachments as well as a broad range of offerings from different brands.

Advanced attachment solutions
The machine is compatible with a range of hydraulic attachments, including thumb, breaker and tiltable ditching bucket for more advanced and specialist applications. Available from the factory or aftermarket, do not hesitate to contact your local Volvo dealer and benefit from leading expertise and advanced attachment solutions.

Dealer support
For less downtime and expert care, Volvo proactively respond to your requirements faster and fully support your service and maintenance needs through its local workshops and on-site service vans. Your attentive Volvo dealer offers professional expertise and preventative maintenance solutions to keep you working and ensure more uptime.

Genuine Volvo Parts
Our attention to detail is what makes us stand out and our leading parts availability ensures maximum uptime of your machine. For a long life, parts are extensively tested and approved because every part is vital for machine longevity and uptime.
Perform with precision

**Automatic engine shutdown**
This function automatically turns the engine off to reduce fuel consumption and cut engine operating hours when the machine is inactive for a pre-set amount of time.

**Automatic travel speed**
Automatic two speed travel allows the operator to continually drive the machine at high speed. Speed is automatically reduced when traction is needed.

**Ultimate lifting capacity**
Excellent stability and outstanding hydraulics ensure the machines are capable of lifting heavy loads.

**50 hour greasing interval**
The greasing interval is 50 hours – therefore there is no need to re-grease between jobs.

**In-track boom swing**
The swing post and cylinder stay within the tracks when in an offset position, avoiding the risk of damage to your machine when working alongside obstacles.

Volvo’s durable attachments have been purpose-built to deliver maximum productivity and long service life in combination with Volvo machines.
**Operator Environment**

The industry-leading, spacious Volvo FOPS1 on top, TOPS and ROPS cab boasts all around visibility, ergonomically positioned controls and excellent vibration and noise insulation.

**Suspended seat and console**

The multi-adjustable seat and console are mounted on the same suspension and therefore move together – providing excellent shock and vibration absorption.

**Patented hydraulic filter**

Filtration occurs when the tank is filled or topped up and before the oil returns via the drain lines. The transparent bowl enables easy oil level and contamination checks.

**Service access**

The side position of the engine together with two, wide-opening hoods ensures safe and easy access to all components and service check points from ground level.

**ECO mode**

By simply pressing a button, the unique Volvo ECO mode reduces fuel consumption by up to 10%.

**Anti-theft system**

To reduce the risk of theft, a code can be entered through the keypad to start the machine. It can be changed via the machine management system.

**Customer Solutions**

Volvo provides the right solutions throughout the entire life cycle of your machine to lower total cost of ownership.
Volvo EC35D in detail

**Engine**
- Engine: Volvo D1.7A
- Max. power at r/min: 2 200 kW
- Max. torque at engine speed r/min: 1 800 Nm
- No. of cylinders: 3
- Displacement cm³: 1 647
- Bore mm: 87
- Stroke mm: 92.4
- Compression ratio: 20.5

**Electrical system**
- Voltage V: 12
- Battery V: 1 x 12
- Battery capacity Ah: 74
- Alternator V/Ah: 12/60

**Undercarriage**
- Rubber track width mm: 300
- Steel track width mm: 300
- Bottom/top rollers per side: 4/1
- Track tension: by grease piston
- Blade (width x height) mm: 1 780 x 368

**Hydraulic system**
- Pump type: Variable displacement piston pump
- Maximum system flow l/min: 103
- Maximum flow for accessories l/min: 65
- Maximum pressure for accessories MPa: 22
- Maximum flow for 2nd accessory circuit (option) l/min: 23
- Maximum operating pressure MPa: 4.5
- Sound Level
  - Interior sound level according to ISO 6396 LpA dB: 78

**Electrical system**
- Voltage V: 12
- Battery V: 1 x 12
- Battery capacity Ah: 74
- Alternator V/Ah: 12/60

**Digging Performances**
- Standard bucket width (blade, W/O side cutter) mm: 600
- Standard bucket mass kg: 90
- Standard bucket rated capacity l: 1
- Bucket rotation °: 200
- Bucket breakout force (ISO) daN: 3 289
- Short arm tearout force (ISO) daN: 2 371
- Long arm tearout force (ISO) daN: 2 060

**Travel System**
- Max. drawbar pull daN: 3 300
- Max. travel speed low km/h: 2.7
- Max. travel speed high km/h: 4.5
- Gradeability °: 20
- Travel reduction unit l: 2 x 0.7

**Sound Level**
- Interior sound level according to ISO 6396 LpA dB: 78

**Weight and Ground Pressure**
- Operating weight according to ISO 6016 kg: 3 530
- Ground pressure (cab) kPa: 32.8
- Ground pressure (canopy) kPa: 31.5
- Transport weight kg: 3 455
- With heated cab
- With direct-fit bucket
- With rubber tracks mm: 300
- With short arm mm: 1 400
- With fuel tank capacity %: 100
- With thumb +kg: 64
- With canopy +kg: 135
- With long arm +kg: 15
- With extra counterweight +kg: 170
- With steel tracks +kg: 130
- Steel tracks mm: 300

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- Pump type: Variable displacement piston pump
- Maximum system flow l/min: 103
- Maximum flow for accessories l/min: 65
- Maximum pressure for accessories MPa: 22
- Maximum flow for 2nd accessory circuit (option) l/min: 23
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- Travel reduction unit l: 2 x 0.7

**Sound Level**
- Interior sound level according to ISO 6396 LpA dB: 78

**LIFTING CAPACITY EC35D**

These capacities are given for a machine equipped with a cabin, 300mm rubber tracks and without a bucket or quick-coupler.

The below values are in compliance with ISO standard 10567. They do not exceed 75% of the tipping load or 87% of the hydraulic limit with the machine on firm level ground.

Loads marked with an asterisk (*) are limited by machine's hydraulic lifting capacity rather than tipping load.

Caution: In accordance with standard EN 474-5, the machine must be equipped to carry out handling operations.

It is the operator’s obligation to know and follow the applicable national and local safety regulations.

<table>
<thead>
<tr>
<th>Lifting point height [B]</th>
<th>Lifting point radius (A)</th>
<th>Max. reach</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.0 m</td>
<td>3.0 m</td>
<td>4.0 m</td>
</tr>
<tr>
<td>Arm: 1400mm + Dozer blade up</td>
<td>3 kg</td>
<td>893*</td>
<td>646</td>
</tr>
<tr>
<td></td>
<td>1 kg</td>
<td>1 739</td>
<td>1 611</td>
</tr>
<tr>
<td></td>
<td>2 kg</td>
<td>1 746</td>
<td>1 618</td>
</tr>
<tr>
<td></td>
<td>-2 kg</td>
<td>1 787</td>
<td>1 657</td>
</tr>
<tr>
<td>Arm: 1700mm + Dozer blade up</td>
<td>3 kg</td>
<td>893*</td>
<td>646</td>
</tr>
<tr>
<td></td>
<td>1 kg</td>
<td>1 807</td>
<td>1 675</td>
</tr>
<tr>
<td></td>
<td>0 kg</td>
<td>1 712</td>
<td>1 586</td>
</tr>
<tr>
<td></td>
<td>-1 kg</td>
<td>1 705</td>
<td>1 579</td>
</tr>
<tr>
<td></td>
<td>-2 kg</td>
<td>1 736</td>
<td>1 608</td>
</tr>
</tbody>
</table>

Lift point radius (A)

<table>
<thead>
<tr>
<th>Lifting point radius (A)</th>
<th>Max. reach</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 m</td>
<td>3.0 m</td>
<td>4.0 m</td>
</tr>
<tr>
<td>Arm: 1400mm + Dozer blade down</td>
<td>3 kg</td>
<td>893*</td>
</tr>
<tr>
<td></td>
<td>1 kg</td>
<td>1 752*</td>
</tr>
<tr>
<td></td>
<td>2 kg</td>
<td>2 735*</td>
</tr>
<tr>
<td></td>
<td>-2 kg</td>
<td>2 096*</td>
</tr>
<tr>
<td>Arm: 1700mm + Dozer blade down</td>
<td>3 kg</td>
<td>893*</td>
</tr>
<tr>
<td></td>
<td>1 kg</td>
<td>2 169*</td>
</tr>
<tr>
<td></td>
<td>0 kg</td>
<td>1 639*</td>
</tr>
<tr>
<td></td>
<td>-1 kg</td>
<td>2 813*</td>
</tr>
<tr>
<td></td>
<td>-2 kg</td>
<td>2 359*</td>
</tr>
</tbody>
</table>
# Specifications

## Dimensions

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>EC35D 1400</th>
<th>EC35D 1700</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Maximum cutting height</td>
<td>mm</td>
<td>4 690</td>
<td>4 853</td>
</tr>
<tr>
<td>B Maximum dump height</td>
<td>mm</td>
<td>3 347</td>
<td>3 514</td>
</tr>
<tr>
<td>C Digging depth</td>
<td>mm</td>
<td>3 131</td>
<td>3 431</td>
</tr>
<tr>
<td>C* Maximum digging depth</td>
<td>mm</td>
<td>3 388</td>
<td>3 678</td>
</tr>
<tr>
<td>D Maximum vertical wall digging depth</td>
<td>mm</td>
<td>2 521</td>
<td>2 814</td>
</tr>
<tr>
<td>E Maximum digging depth at ground level</td>
<td>mm</td>
<td>5 031</td>
<td>5 320</td>
</tr>
<tr>
<td>F Maximum digging reach</td>
<td>mm</td>
<td>5 153</td>
<td>5 434</td>
</tr>
<tr>
<td>G Highest position dozer blade</td>
<td>mm</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>H Lowest position dozer blade</td>
<td>mm</td>
<td>525</td>
<td></td>
</tr>
<tr>
<td>I Tumbler length</td>
<td>mm</td>
<td>1 604</td>
<td></td>
</tr>
<tr>
<td>J Track length</td>
<td>mm</td>
<td>2 055</td>
<td></td>
</tr>
<tr>
<td>K Dozer blade, maximum reach at ground level</td>
<td>mm</td>
<td>1 648</td>
<td></td>
</tr>
<tr>
<td>L Overall width with 300mm rubber tracks</td>
<td>mm</td>
<td>1 780</td>
<td></td>
</tr>
<tr>
<td>M Overall length</td>
<td>mm</td>
<td>4 620</td>
<td>4 475</td>
</tr>
<tr>
<td>M* Transport length</td>
<td>mm</td>
<td>5 275</td>
<td>5 190</td>
</tr>
<tr>
<td>N Overall height of engine hood</td>
<td>mm</td>
<td>1 573</td>
<td></td>
</tr>
<tr>
<td>O Minimum ground clearance</td>
<td>mm</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>P Dozer blade height</td>
<td>mm</td>
<td>368</td>
<td></td>
</tr>
<tr>
<td>Q Shoe width (rubber)</td>
<td>mm</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>R Ground clearance to superstructure</td>
<td>mm</td>
<td>557</td>
<td></td>
</tr>
<tr>
<td>S Front slew radius</td>
<td>mm</td>
<td>2 079</td>
<td>2 094</td>
</tr>
<tr>
<td>T Front slew radius with maximum offset</td>
<td>mm</td>
<td>1 660</td>
<td>1 680</td>
</tr>
<tr>
<td>U Overall height</td>
<td>mm</td>
<td>2 481</td>
<td></td>
</tr>
<tr>
<td>W Overall width of superstructure</td>
<td>mm</td>
<td>1 575</td>
<td></td>
</tr>
<tr>
<td>X Tail slew radius</td>
<td>mm</td>
<td>1 265</td>
<td></td>
</tr>
<tr>
<td>X' Additional counterweight overhang</td>
<td>mm</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Y Angle of approach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z Dozer blade width</td>
<td>mm</td>
<td>1 780</td>
<td></td>
</tr>
<tr>
<td>α Maximum boom swing angle to the left</td>
<td>°</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>β Maximum boom offset to the right</td>
<td>mm</td>
<td>627</td>
<td></td>
</tr>
<tr>
<td>γ Maximum boom swing angle to the right</td>
<td>°</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>β' Maximum boom offset to the left</td>
<td>mm</td>
<td>472</td>
<td></td>
</tr>
<tr>
<td>* Option</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- *: Option
**STANDARD EQUIPMENT**

**Engine**
- Low emission, direct injection, water-cooled, Volvo 3-cylinder diesel engine, meeting EU Stage V environmental regulations.
- Engine restart prevention system. Starter motor is protected against ignition when engine is already running.
- Dry-type single element air filter.
- Plastic fuel tank with drain plug.
- Protective strainer on the fuel suction pipe inside the tank.
- Water separator.
- Translucent fuel filter.

**Drivetrain**
- Axial piston hydraulic motors equipped with an epicyclic reduction gears.
- Automatic two speed travel.
- Bottom flanged rollers lubricated for life.
- Grease tensioning wheel lubricated for life.

**Electric / Electronic control system**
- Maintenance free battery.
- IP67 protected electrical system and high quality connectors.
- Removable battery cut-off switch.
- In-cab 12V power socket.

**Swing system**
- Radial piston hydraulic motor with direct engagement on the ball internal crown wheel (no reduction gears).
- Integrated shockless valve.
- Automatic multi-disc slew brake.
- Centralized and remote lubrication of crown wheel & ball bearing.

**Undercarriage**
- "X" shape, box welded fabricated frame with sloping side members.
- 2 Tie-down points on the dozer blade.
- 2 Tie-down points on the frame.
- 2 Integrated lifting points.
- Sturdy removable protecting covers for track motors and slew system.
- 400HB weld-on edge on dozer blade.

**Hydraulic system**
- Large hinged and key-locked access panel.
- Variable displacement, load-sensing piston pump.
- Closed centre flow-sharing main control valve.
- Cushioning on cylinders:
  - Boom up
  - Arm out
- Patented filtering and filtering element.
- Single layer cooling system.
- Double-acting hydraulic circuit for accessories.
- Hammer / shear valve.
- Plastic tank with drain plug.

**Canopy**
- FOPS level 1 on top (Falling Objects Protective Structure)
- TOPS (Tip-Over Protective Structure)
- ROPS (Roll-Over Protective Structure)
- Cushioner operator station.
- Large and roomy uncluttered floor.
- Left hand-rail access.
- Seat-belt with warning indicator.

**Cab**
- FOPS on top level 1 (Falling Object Protective Structure).
- TOPS (Tip-Over Protective Structure).
- ROPS (Roll-Over Protective Structure).
- Cushioned operator station.
- Large door access.
- Large and roomy uncluttered floor.
- Gas-strut assisted front window opening.
- Full opening front bay with in-cab storage for the front lower window.
- Front windscreen wiper and washer nozzle.
- Right hand side sliding window.
- Heating systems.
- Multiple adjustable air vents.
- Filtered air inlet.
- Cab inside light.
- Seat-belt with warning indicator.
- Two working lights on top front of the cab.

**Digging equipment**
- Monobloc box welded boom.
- Boom cylinder rod protection.
- Integrated lifting point on the boom.
- Monobloc box welded arm.
- Long-life steel bushings.
- Hardened, pre-lubricated and corrosion resistant pins.
- 50 hours greasing intervals.

**STANDARD EQUIPMENT**

**Machine controls**
- Finger tip control for boom offset.
- Finger tip control for auxiliary circuit.
- Breaker toggle switch on right joystick.
- Automatic locking device for pilot controls and travel levers when the left console is raised.
- Engine starting safety device: the left console must be raised to operate the starter.
- Pressure accumulator to lower the equipment on the ground when the engine is switched off.
- High torque / automatic two speed change over button on the keypad.
- High speed toggle switch on the dozer blade lever.
- Large travel pedals.

**Instruments and monitoring**
- Water temperature and fuel level gauges.
- Warning lights for hydraulic filter and air filter restriction.
- Self-acting emergency engine shutdown. Prevents failures in case of coolant overheating or too low engine oil pressure.
- Several warning lights, coupled to an audible signal, in the event of malfunction (overheating, drop in oil pressure, low battery voltage...)

**Official approval**
- Machine conforming to European directive 2006/42/EC.
- Hand Arm Vibrations - Whole Body Vibrations compliant with directive 2002/44/EC.
- Electromagnetic compatibility (EMC) conforming to European directive 2004/108/EC and its amendments.
- Object handling device conforming to EN 474-1 and EN 474-5 standards.
- FOPS on top level 1 conforming to ISO 10262 standard.
- TOPS conforming to ISO 12117 and EN 13531 standards.
- ROPS conforming to ISO 3471-1 and / SAE J1040 standards.

**EQUIPMENT**

* = Standard  
○ = Option

<table>
<thead>
<tr>
<th>Operator environment</th>
<th>Basic</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Cab with heater</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Cab with heater and air conditioning</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vinyl or textile seat, with mechanical suspension, low-back seat and 2nd seat</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vinyl or textile seat, height adjustable, with mechanical suspension, high back and 2’ or 3’ retractable seat belt</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Storage box</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Cab roof</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>ISO / SAE control pattern change (in-cab electric switch)</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Travel alarm</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Radio preparation (cab)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Radio, AUX, USB, Bluetooth</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Anti-theft device</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Digital hourmeter</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Extra hour meter (mechanical, )</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Cupholder</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

**Machine exterior**
- Right rearview mirror ● ●
- Left rearview mirror ○ ○
- Protected worklight on the boom ○ ○
- Rear worklight ○ ○
- Rotating beacon ○ ○
- Choice of halogen or LED lights and beacon ○ ○
- Additional counterweight ○ ○
- Front canopy guard (OPG1) ○ ○
- Several levels of paint customisation (RAL specifications) to match with your corporate identity ○ ○

**Digging equipment**
- Short arm ○ ○
- Short arm + thumb bracket ○ ○
- Long arm ○ ○
- Long arm + thumb bracket ○ ○

**Undercarriage equipment**
- 300mm rubber tracks ○ ○
- 300mm steel tracks ○ ○
- Standard dozer blade ● ●
- Hydraulic angle blade ○ ○
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.