ALL WORK. ALL THE TIME.

[MORE PROFIT.]

• **Powerful Volvo V-ACT engine:** efficiently moves more tons per hour.

• **Industry-leading fuel efficiency.**

• **The digging reach, depth and capacity** to stretch your productivity further.

• **Advanced hydraulic system** is well matched for efficient, smooth control.

• **Excellent lifting capacity** – to pull out of the pile with no hesitation.

• **Volvo quick fit:** easy attachment change out for greater versatility.

[MORE SAFETY.]

• **The new-design Volvo Care Cab,** with operator protective structure provides security.

• **Anti-slip steps and platforms** with punched steel plates for superior grip even when wet or icy.

• **Low engine emission levels and low noise.**

• **Superior balance and stability** for peace of mind in any terrain.

• **Lead-free exterior paint** is in harmony with the environment.
[MORE COMFORT.]

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

[MORE UPTIME.]

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

[MORE QUALITY.]

- Strong undercarriage frame: endures daily abuse.
- Heavy-duty boom and arm: reliability and strength for difficult jobs.
- Reinforced boom/arm and proven components deliver every time.
- Reinforced superstructure: double welded stress points.
- Lifetime greased, sealed track chain prevents leaks and guarantees long life.
Big. Size alone won’t get the job done. You have to back it up with production – every day. When the job is big, look to the excavator that does it all bigger, faster and stronger. The 70-ton Volvo EC700C will make you think it’s in the 80-ton class. That’s because it’s built like it. Get to work in the machine that will be your money-making partner for a long time.

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

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

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

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

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

*Volvo: the name you can trust for quality.*
VOLVO'S ENGINE LEADERSHIP SPANS LAND, SEA, SKY AND SPACE

As the world’s largest manufacturer of 9-to-18-liter diesel engines, Volvo has unmatched expertise designing power systems that move the world. Volvo engines for Volvo Construction Equipment, Volvo Aero, Volvo Buses, Volvo Penta and Volvo Trucks define productivity and fuel economy. Our performance has been honed on land, over the sea, across the sky and into space. Leading research and development keeps all Volvo Group products at the forefront of productivity. So when we say Volvo engines are tested — and proven — you can believe it. Trust in it. It’s the real advantage of Volvo Power.
You might not have to move mountains – but it’s nice to know you can. The Volvo EC700C has all the power you need, plus perfectly harmonized hydraulics to make the most difficult material quickly go wherever you want. Mass excavation. Production trenching. Rock-face stripping. Mine loading. The list goes on and on. Just like the Volvo EC700C.

**BUILT TO LEAVE NO WORK BEHIND.**

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

**Power to tear through the work**
- Powerful Volvo engine delivers high torque even at low RPMs.
- Powerful Volvo engine: 336.5kw (458hp).
- Harmonized engine and hydraulics for smooth, responsive digging and lifting.
- High breakout forces, crowding forces and slew speed.
- Quicker cycle times. More tons loaded. Faster job completion.

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

• More care built in through quality.

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

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

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

**Environmental care**
- Volvo Advanced Combustion Technology (V-ACT) engine provides low emissions.
- Robust cab suspension mounts suppress noise and dampen vibration.
• Industry’s highest heating/cooling capacity with 14 vents.

• Greater floor space with ergonomic pedals.

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

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

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

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

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

PROSIS makes parts ordering faster
- CD-ROM application makes it quick and easy for your dealer to order all your parts.
- Your dealer helps you find the right part and place your order to get you up and running fast.
• Simplified, easy service access.
• Easy access to hydraulic pumps and filters.
• Volvo is the partner you can grow with.
Make your Volvo Excavator just right for you and your work. To customize your excavator with other optional equipment features to suit your application, contact your local Volvo dealer.

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

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

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

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

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

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

**Rear view camera**
The rear view camera provides excellent clarity via the monitor. As a result, the need for the operator to look through the rear screen and via mirrors is reduced. This enables the operator to observe what is behind him before operating the machine for increased safety.

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

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

**Hydraulic quick fit**
A Volvo hydraulic quick fit makes changing attachments quick and easy – all from the comfort and safety of the cab. Different Volvo quick fit types are available to fit new and existing customers’ buckets/attachments.
Hydraulic kits
Diesel-driven engine coolant heater
FOG and FOPS cab protection

Operator seats
Straight travel pedal
Full-length derailing shield

Rear view camera
Wrist control joysticks - proportional control
CareTrack

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

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

- **Engine**
  - Type: Volvo D16E EAEE
  - Max. power, at 30 r/s (1,900 r/min): 336.5 kW (458 hp)
  - Net (ISO 9249, SAE J1349): 346 kW (470 hp)
  - Gross (SAE J1995): 346 kW (470 hp)
  - Max. torque at 1,350 r/min: 2,250 Nm
  - No. of cylinders: 6
  - Displacement: 16.1 l
  - Bore: 144 mm
  - Stroke: 165 mm

**Electrical system**
High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Contronics provides advanced monitoring of machine functions and important diagnostic information.

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

**Service refill capacities**

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

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

- **Max. slew speed**: 6.7 m/min
- **Max. slew torque**: 226.7 kNm

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

- **Max. drawbar pull**: 453 kN
- **Max. travel speed**: 4.6/3.0 km/h
- **Gradeability**: 35°

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

- **Track pads**: 2 x 48
- **Link pitch**: 260.4 mm
- **Shoe width, double grousers**: 650/750/900 mm
- **Bottom rollers**: 2 x 8
- **Top rollers**: 2 x 3

**Hydraulic system**
The hydraulic system, also known as the "Integrated work mode control" is designed for high-productivity, high-digging capacity, high-manoeuvring precision and excellent fuel economy. The summation system, boom, arm and slew priority along with boom, arm and bucket regeneration provides optimum performance.

The following important functions are included in the system:

- **Summation system**: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.
- **Boom priority**: Gives priority to the boom operation for faster raising when loading or performing deep excavations.
- **Arm priority**: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.
- **Slew priority**: Gives priority to slew functions for faster simultaneous operations.

**Regeneration system**: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.

- **Power boost**: All digging and lifting forces are increased.
- **Holding valves**: Boom and arm holding valves prevent the digging equipment from creeping.

**Main pump**
Type: 2 x variable displacement axial piston pumps
Maximum flow: 2 x 436 l/min

**Pilot pump**
Type: Gear pump
Maximum flow: 27.4 l/min

**Hydraulic motors**
- **Slew**: Variable displacement axial piston motor with mechanical brake
- **Boom** and **Arm**: Fixed displacement piston motor with mechanical brake

**Relief valve setting**
- **Implement**: 31.4/34.3 MPa
- **Travel circuit**: 34.3 MPa
- **Slew circuit**: 25.5 MPa
- **Pilot circuit**: 3.9 MPa

**Hydraulic cylinders**
- **Boom**: 2
- **Bore x Stroke**: ø90 x 1,790 mm
- **Arm**: 1
- **Bore x Stroke**: ø215 x 2,070 mm
- **Bucket**: 1
- **Bore x Stroke**: ø190 x 1,450 mm
- **ME Bucket**: 1
- **Bore x Stroke**: ø200 x 1,450 mm

**Cab**
The operator’s cab has easy access via a wide door opening. The cab is supported on hydraulic damper mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.

Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically controlled fan. The air is distributed throughout the cab from 14 vents. Ergonomic operator’s seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator’s comfort and safety.

**Sound Level**
- **Sound level in cab according to ISO 6396**: LpA 72 dB(A)
- **External sound level according to ISO 6395 and EU Directive 2000/14/EC**: LwA 107 dB(A)
Ground pressure

**EC700CL with 6.6 m boom, 2.9 m arm, 3 730 kg bucket, 11 300 kg counterweight**

<table>
<thead>
<tr>
<th>Description</th>
<th>Shoe width</th>
<th>Operating weight</th>
<th>Ground pressure</th>
<th>Overall width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double grousers</td>
<td>650 mm</td>
<td>69 800 kg</td>
<td>101.5 kPa</td>
<td>4 095 mm</td>
</tr>
<tr>
<td></td>
<td>750 mm</td>
<td>70 500 kg</td>
<td>88.9 kPa</td>
<td>4 100 mm</td>
</tr>
<tr>
<td></td>
<td>900 mm</td>
<td>71 700 kg</td>
<td>75.3 kPa</td>
<td>4 250 mm</td>
</tr>
</tbody>
</table>

**EC700CL with 7.7 m boom, 3.55 m arm, 2 800 kg bucket, 11 300 kg counterweight**

<table>
<thead>
<tr>
<th>Description</th>
<th>Shoe width</th>
<th>Operating weight</th>
<th>Ground pressure</th>
<th>Overall width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double grousers</td>
<td>650 mm</td>
<td>69 300 kg</td>
<td>100.8 kPa</td>
<td>4 095 mm</td>
</tr>
<tr>
<td></td>
<td>750 mm</td>
<td>70 000 kg</td>
<td>88.2 kPa</td>
<td>4 100 mm</td>
</tr>
<tr>
<td></td>
<td>900 mm</td>
<td>71 000 kg</td>
<td>74.6 kPa</td>
<td>4 250 mm</td>
</tr>
</tbody>
</table>

Max. permitted buckets

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.
2. “Max. permitted sizes” are for reference only and are not necessarily available from the factory.
3. Bucket widths are less than bucket’s tip radius.
4. LL: Light Utility
5. GP: General Purpose, Excavation, Trenching
6. HD: Heavy Duty, Heavy Excavation, Heavy Trenching
7. RL: Rock Loading

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Max. bucket volume / weight</th>
<th>6.6 m boom</th>
<th>7.7 m boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.9 m arm</td>
<td>2.9 m arm</td>
</tr>
<tr>
<td>LU bucket 1.2 t/m³</td>
<td>1 / kg</td>
<td>6 600 / 4 250</td>
<td>5 300 / 3 400</td>
</tr>
<tr>
<td>LU bucket 1.5 t/m³</td>
<td>1 / kg</td>
<td>5 675 / 3 650</td>
<td>4 550 / 2 950</td>
</tr>
<tr>
<td>GP bucket 1.3 t/m³</td>
<td>1 / kg</td>
<td>5 675 / 5 150</td>
<td>4 550 / 3 850</td>
</tr>
<tr>
<td>GP bucket 1.5 t/m³</td>
<td>1 / kg</td>
<td>5 200 / 4 400</td>
<td>4 175 / 3 500</td>
</tr>
<tr>
<td>GP bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>4 600 / 3 900</td>
<td>3 700 / 3 100</td>
</tr>
<tr>
<td>HD bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>4 350 / 4 350</td>
<td>3 500 / 3 500</td>
</tr>
<tr>
<td>HD bucket 2.0 t/m³</td>
<td>1 / kg</td>
<td>4 075 / 4 050</td>
<td>3 275 / 3 250</td>
</tr>
<tr>
<td>RL bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>3 925 / 5 100</td>
<td>3 150 / 4 050</td>
</tr>
<tr>
<td>RL bucket 2.0 t/m³</td>
<td>1 / kg</td>
<td>3 700 / 4 800</td>
<td>2 975 / 3 850</td>
</tr>
<tr>
<td>Max. permitted bucket width</td>
<td></td>
<td>2 100</td>
<td>2 000</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Max. bucket volume / weight</th>
<th>2.9 m arm</th>
<th>7.7 m boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.55 m arm</td>
<td>4.2 m arm</td>
</tr>
<tr>
<td>LU bucket 1.2 t/m³</td>
<td>1 / kg</td>
<td>5 875 / 3 050</td>
<td>5 450 / 2 950</td>
</tr>
<tr>
<td>LU bucket 1.5 t/m³</td>
<td>1 / kg</td>
<td>5 050 / 2 550</td>
<td>4 675 / 2 450</td>
</tr>
<tr>
<td>GP bucket 1.3 t/m³</td>
<td>1 / kg</td>
<td>5 050 / 3 550</td>
<td>4 675 / 3 400</td>
</tr>
<tr>
<td>GP bucket 1.5 t/m³</td>
<td>1 / kg</td>
<td>4 625 / 3 200</td>
<td>4 275 / 3 050</td>
</tr>
<tr>
<td>GP bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>4 100 / 2 750</td>
<td>3 800 / 2 650</td>
</tr>
<tr>
<td>HD bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>3 875 / 3 150</td>
<td>3 600 / 3 000</td>
</tr>
<tr>
<td>HD bucket 2.0 t/m³</td>
<td>1 / kg</td>
<td>3 625 / 2 850</td>
<td>3 350 / 2 750</td>
</tr>
<tr>
<td>RL bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>3 500 / 3 800</td>
<td>3 250 / 3 600</td>
</tr>
<tr>
<td>RL bucket 2.0 t/m³</td>
<td>1 / kg</td>
<td>3 275 / 3 550</td>
<td>3 050 / 3 350</td>
</tr>
<tr>
<td>Max. permitted bucket width</td>
<td></td>
<td>2 000</td>
<td>2 000</td>
</tr>
</tbody>
</table>
Dimensions

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

<table>
<thead>
<tr>
<th>Description</th>
<th>6.6 m boom</th>
<th>7.7 m boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.9 m arm</td>
<td>2.9 m arm</td>
</tr>
<tr>
<td>A. Overall width of upper structure</td>
<td>mm</td>
<td>3 420</td>
</tr>
<tr>
<td>B. Overall width</td>
<td>mm</td>
<td>4 286</td>
</tr>
<tr>
<td>C. Overall height of cab</td>
<td>mm</td>
<td>3 520</td>
</tr>
<tr>
<td>D. Tail slew radius</td>
<td>mm</td>
<td>4 140</td>
</tr>
<tr>
<td>E. Overall height of air cleaner cap</td>
<td>mm</td>
<td>3 590</td>
</tr>
<tr>
<td>F. Counterweight clearance *</td>
<td>mm</td>
<td>1 507</td>
</tr>
<tr>
<td>G. Tumbler length</td>
<td>mm</td>
<td>4 750</td>
</tr>
<tr>
<td>H. Track length</td>
<td>mm</td>
<td>5 990</td>
</tr>
<tr>
<td>I. Track gauge (extended)</td>
<td>mm</td>
<td>3 350</td>
</tr>
<tr>
<td>Track gauge (retracted)</td>
<td>mm</td>
<td>2 750</td>
</tr>
<tr>
<td>J. Shoe width</td>
<td>mm</td>
<td>650</td>
</tr>
<tr>
<td>K. Min. ground clearance *</td>
<td>mm</td>
<td>858</td>
</tr>
<tr>
<td>L. Overall length</td>
<td>mm</td>
<td>12 200</td>
</tr>
<tr>
<td>M. Overall height of boom</td>
<td>mm</td>
<td>4 855</td>
</tr>
</tbody>
</table>

*With shoe grouser

**Boom**

<table>
<thead>
<tr>
<th>Description</th>
<th>6.6 m</th>
<th>7.7 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>mm</td>
<td>6 890</td>
</tr>
<tr>
<td>Height</td>
<td>mm</td>
<td>2 530</td>
</tr>
<tr>
<td>Width</td>
<td>mm</td>
<td>1 110</td>
</tr>
<tr>
<td>Weight</td>
<td>kg</td>
<td>6 550</td>
</tr>
</tbody>
</table>

*Includes arm cylinder, piping and pin
## Dimensions

### Arm

<table>
<thead>
<tr>
<th>Description</th>
<th>2.9 m</th>
<th>3.55 m</th>
<th>4.2 m</th>
<th>5.2 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight / unit</td>
<td>kg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Cylinder

### Counterweight

### Shoes

### Cab

### Cab with shoes

### Cab with shoes and boom

### Description

<table>
<thead>
<tr>
<th>Description</th>
<th>Length</th>
<th>Height</th>
<th>Width</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm</td>
<td>6.6 m</td>
<td>3.55 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cylinder</td>
<td>3.55 m</td>
<td>2.765 mm</td>
<td>560 mm</td>
<td>3430 mm</td>
</tr>
<tr>
<td>Counterweight</td>
<td>3.55 m</td>
<td>3.420 mm</td>
<td>1280 mm</td>
<td>800 mm</td>
</tr>
<tr>
<td>Shoes</td>
<td>3.55 m</td>
<td>2.765 mm</td>
<td>560 mm</td>
<td>3430 mm</td>
</tr>
<tr>
<td>Cab</td>
<td>3.55 m</td>
<td>5500 mm</td>
<td>2655 mm</td>
<td>2735 mm</td>
</tr>
<tr>
<td>Cab with shoes</td>
<td>3.55 m</td>
<td>6730 mm</td>
<td>3590 mm</td>
<td>3495 mm</td>
</tr>
<tr>
<td>Cab with shoes and boom</td>
<td>3.55 m</td>
<td>6730 mm</td>
<td>3590 mm</td>
<td>3495 mm</td>
</tr>
<tr>
<td>Boom</td>
<td>6.6 m</td>
<td>5500 mm</td>
<td>10140 mm</td>
<td>3590 mm</td>
</tr>
</tbody>
</table>

* Includes bucket cylinder, linkage and pin

---

17
Working ranges & digging force

<table>
<thead>
<tr>
<th>Machine with direct fit bucket</th>
<th>6.6 m boom</th>
<th>7.7 m boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.9 m arm</td>
<td>2.9 m arm</td>
</tr>
<tr>
<td>A. Max. digging reach</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>B. Max. digging reach on ground</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>C. Max. digging depth</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>D. Max. digging depth (2.44 m level)</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>E. Max. vertical wall digging depth</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>F. Max. cutting height</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>G. Max. dumping height</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>H. Min. front slew radius</td>
<td>mm</td>
<td>mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Digging forces with direct fit bucket</th>
<th>6.6 m boom</th>
<th>7.7 m boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.9 m arm</td>
<td>2.9 m arm</td>
</tr>
<tr>
<td>Bucket radius</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>Breakout force - bucket (Normal/Power boost)</td>
<td>SAE J1179</td>
<td>kN</td>
</tr>
<tr>
<td></td>
<td>ISO 6015</td>
<td>kN</td>
</tr>
<tr>
<td>Tearout force - arm (Normal/Power boost)</td>
<td>SAE J1179</td>
<td>kN</td>
</tr>
<tr>
<td></td>
<td>ISO 6015</td>
<td>kN</td>
</tr>
<tr>
<td>Rotation angle, bucket</td>
<td>deg.</td>
<td>deg.</td>
</tr>
</tbody>
</table>
### Lifted capacity

At the arm end without bucket.

- For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

#### EC700CL

<table>
<thead>
<tr>
<th>Across undercarriage</th>
<th>Lifting hook related to ground level</th>
<th>4.5 m</th>
<th>6.0 m</th>
<th>7.5 m</th>
<th>9.0 m</th>
<th>10.5 m</th>
<th>Max. reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>10m</td>
<td>kg</td>
<td>118</td>
<td>145</td>
<td>165</td>
<td>190</td>
<td>215</td>
<td>114</td>
</tr>
<tr>
<td>9m</td>
<td>kg</td>
<td>114</td>
<td>136</td>
<td>155</td>
<td>180</td>
<td>203</td>
<td>112</td>
</tr>
<tr>
<td>8m</td>
<td>kg</td>
<td>110</td>
<td>130</td>
<td>149</td>
<td>175</td>
<td>198</td>
<td>110</td>
</tr>
<tr>
<td>7.5m</td>
<td>kg</td>
<td>106</td>
<td>126</td>
<td>146</td>
<td>171</td>
<td>194</td>
<td>108</td>
</tr>
<tr>
<td>7m</td>
<td>kg</td>
<td>102</td>
<td>122</td>
<td>142</td>
<td>167</td>
<td>190</td>
<td>106</td>
</tr>
<tr>
<td>6m</td>
<td>kg</td>
<td>98</td>
<td>118</td>
<td>138</td>
<td>163</td>
<td>186</td>
<td>104</td>
</tr>
<tr>
<td>5m</td>
<td>kg</td>
<td>94</td>
<td>112</td>
<td>132</td>
<td>157</td>
<td>180</td>
<td>102</td>
</tr>
<tr>
<td>4.5m</td>
<td>kg</td>
<td>90</td>
<td>107</td>
<td>128</td>
<td>153</td>
<td>176</td>
<td>100</td>
</tr>
<tr>
<td>4m</td>
<td>kg</td>
<td>86</td>
<td>104</td>
<td>124</td>
<td>149</td>
<td>172</td>
<td>98</td>
</tr>
<tr>
<td>3.5m</td>
<td>kg</td>
<td>82</td>
<td>99</td>
<td>120</td>
<td>144</td>
<td>167</td>
<td>96</td>
</tr>
<tr>
<td>3m</td>
<td>kg</td>
<td>78</td>
<td>95</td>
<td>116</td>
<td>140</td>
<td>163</td>
<td>94</td>
</tr>
<tr>
<td>2.5m</td>
<td>kg</td>
<td>74</td>
<td>92</td>
<td>112</td>
<td>136</td>
<td>159</td>
<td>92</td>
</tr>
<tr>
<td>2m</td>
<td>kg</td>
<td>70</td>
<td>89</td>
<td>109</td>
<td>133</td>
<td>156</td>
<td>90</td>
</tr>
<tr>
<td>1.5m</td>
<td>kg</td>
<td>66</td>
<td>86</td>
<td>108</td>
<td>132</td>
<td>155</td>
<td>88</td>
</tr>
<tr>
<td>1m</td>
<td>kg</td>
<td>62</td>
<td>83</td>
<td>104</td>
<td>128</td>
<td>152</td>
<td>86</td>
</tr>
<tr>
<td>0.5m</td>
<td>kg</td>
<td>58</td>
<td>79</td>
<td>99</td>
<td>121</td>
<td>145</td>
<td>84</td>
</tr>
</tbody>
</table>

#### Notes:
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.
### EC700CL

Lifting capacity

At the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

#### Across undercarriage

<table>
<thead>
<tr>
<th>Lifting hook related to ground level</th>
<th>Along undercarriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 m</td>
<td>6 m</td>
</tr>
<tr>
<td>Boom 6.6 m</td>
<td>Arm 2.9 m</td>
</tr>
<tr>
<td>10m</td>
<td>kg</td>
</tr>
<tr>
<td>750</td>
<td></td>
</tr>
<tr>
<td>7m</td>
<td></td>
</tr>
<tr>
<td>6m</td>
<td></td>
</tr>
<tr>
<td>5m</td>
<td></td>
</tr>
<tr>
<td>3m</td>
<td></td>
</tr>
<tr>
<td>2m</td>
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</tr>
<tr>
<td>1m</td>
<td></td>
</tr>
<tr>
<td>0m</td>
<td></td>
</tr>
<tr>
<td>-1.5 m</td>
<td></td>
</tr>
<tr>
<td>-3 m</td>
<td></td>
</tr>
<tr>
<td>-4.5 m</td>
<td></td>
</tr>
<tr>
<td>-6 m</td>
<td></td>
</tr>
<tr>
<td>-7.5 m</td>
<td></td>
</tr>
<tr>
<td>-9 m</td>
<td></td>
</tr>
<tr>
<td>-10.5 m</td>
<td></td>
</tr>
</tbody>
</table>

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### Lifting Capacity

At the arm end without bucket.

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**EC700CL**

<table>
<thead>
<tr>
<th>Lifting hook related to ground level</th>
<th>4.5 m</th>
<th>6.0 m</th>
<th>7.5 m</th>
<th>9.0 m</th>
<th>10.5 m</th>
<th>Max. reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Across undercarriage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boom 6.6 m ME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10 m</td>
<td>28 900</td>
<td>28 900</td>
<td>21 940</td>
<td>18 480</td>
<td>15 090</td>
<td>6.7</td>
</tr>
<tr>
<td>5 m</td>
<td>19 480</td>
<td>19 480</td>
<td>17 360</td>
<td>17 360</td>
<td>13 680</td>
<td>8.6</td>
</tr>
<tr>
<td>0 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14 020</td>
<td>14 020</td>
</tr>
<tr>
<td>Arm 2.9 m ME</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>10 m</td>
<td>24 440</td>
<td>24 440</td>
<td>19 740</td>
<td>17 710</td>
<td>13 800</td>
<td>9.3</td>
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<tr>
<td>5 m</td>
<td>19 480</td>
<td>19 480</td>
<td>17 360</td>
<td>17 360</td>
<td>13 680</td>
<td>8.6</td>
</tr>
<tr>
<td>0 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14 020</td>
<td>14 020</td>
</tr>
<tr>
<td>Shoe 900 mm</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 m</td>
<td>25 300</td>
<td>25 200</td>
<td>20 840</td>
<td>16 800</td>
<td>13 680</td>
<td>8.6</td>
</tr>
<tr>
<td>5 m</td>
<td>19 480</td>
<td>19 480</td>
<td>17 360</td>
<td>17 360</td>
<td>13 680</td>
<td>8.6</td>
</tr>
<tr>
<td>0 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14 020</td>
<td>14 020</td>
</tr>
<tr>
<td>Counterweight 11 300 kg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 m</td>
<td>23 610</td>
<td>21 970</td>
<td>18 470</td>
<td>15 380</td>
<td>12 350</td>
<td>8.6</td>
</tr>
<tr>
<td>5 m</td>
<td>19 480</td>
<td>19 480</td>
<td>17 360</td>
<td>17 360</td>
<td>13 680</td>
<td>8.6</td>
</tr>
<tr>
<td>0 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14 020</td>
<td>14 020</td>
</tr>
</tbody>
</table>

| Along undercarriage                 |       |       |       |       |        |           |
| Boom 6.6 m ME                       |       |       |       |       |        |           |
| 10 m                                | 27 070 | 27 070 | 24 090 | 20 970 | 16 410 | 11.2      |
| 5 m                                 | 22 440 | 22 440 | 18 470 | 15 830 | 11 670 | 8.3       |
| 0 m                                 |        |       |       |       | 14 760 | 14 760    |
| Arm 2.9 m ME                        |       |       |       |       |        |           |
| 10 m                                | 25 550 | 22 270 | 20 080 | 16 900 | 12 490 | 8.6       |
| 5 m                                 | 22 670 | 22 670 | 18 190 | 15 610 | 11 180 | 7.5       |
| 0 m                                 |        |       |       |       | 14 200 | 14 000    |
| Shoe 900 mm                         |       |       |       |       |        |           |
| 10 m                                | 25 520 | 22 270 | 20 080 | 16 900 | 12 490 | 8.6       |
| 5 m                                 | 22 670 | 22 670 | 18 190 | 15 610 | 11 180 | 7.5       |
| 0 m                                 |        |       |       |       | 14 200 | 14 000    |
| Counterweight 11 300 kg             |       |       |       |       |        |           |
| 10 m                                | 27 120 | 24 870 | 21 970 | 18 470 | 15 940 | 11.6      |
| 5 m                                 | 23 610 | 21 970 | 18 470 | 15 380 | 12 350 | 8.6       |
| 0 m                                 |        |       |       |       | 14 760 | 14 760    |

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STANDARD EQUIPMENT

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

Electric/Electronic control system
Contronics:
- Advanced mode control system
- Self-diagnostic system
Machine status indication
Engine speed sensing power control
One-touch power boost
Safety stop/start function
Adjustable LCD color monitor
Master electrical disconnect switch
Engine restart prevention circuit
High-capacity halogen lights:
- Frame-mounted 1
- Boom-mounted 1
Batteries, 2 x 12 V / 225 Ah
Start motor, 28 V / 6.6 kW

Hydraulic system
Hose rupture valve: boom
Overload warning device
Automatic sensing hydraulic system:
- Summation system
- Boom priority
- Arm priority
- Slew priority
Boom and arm regeneration valves
Slew anti-rebound valves
Boom and arm holding valves
Multi-stage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Automatic two-speed travel motors
Hydraulic oil, ISO VG 46

Superstructure
Access way with handrail
Full height counterweight 11 300 kg
Tool storage area
Service walkway with anti-slip grating
Undercover (heavy-duty 4.5 mm)
Side walk-way

Cab and interior
Fabric seat with heater and air suspension
Pilot-operated wrist control joystick with 4 switches each
Heater & air-conditioner, automatic
Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Flexible antenna
Hydraulic safety lock lever
Cab, all-weather sound suppressed, includes:
- Ashtray
- Cup holder
- Lighter
- Door locks
- Tinted glass
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Safety glass
- Rain shield, front
- Windshield wiper with intermittent feature
- Radio with CD player
Anti-vandalism kit assembly preparation
Master key

Undercarriage
Hydraulic track adjusters
Greased and sealed track chain
Track guard
Undercover (10 mm)
Mechanically retractable track gauge

Track shoes
Track shoes, 650 mm with double grousers

Digging equipment
Boom: ME 6.6 m
Arm: 2.9 m
Centralized lubrication

Service
Special tool for retractable frame

OPTIONAL EQUIPMENT

Engine
Block heater: 240V
Dual stage precleaner
Diesel coolant heater
Water separator with heater
Low noise kit

Electric
Extra lamps:
- Cab-mounted 4
- Counterweight-mounted 1
- Boom-mounted 2
Travel alarm
Anti-theft system
Rotating warning beacon

Hydraulic system
Hose rupture valve: arm
Boom float function
Hydraulic piping
- Hammer & shear, 1 and 2 pump flow
- Slope & rotator
- Grapple
- Oil leak (drain) line
- Quick fit piping
Volvo hydraulic quick fit, UOF
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 46

Cab and interior
Fabric seat
Fabric seat with heater
Control joysticks with proportional control
Falling object guard (FOG)
- Frame-mounted (356 kg)
- Cab-mounted (153 kg)
Cab-mounted falling object protective structure (FOPS: 80 kg)
Safety screen for front window
Lower wiper
Anti-vandalism kit
Rear view camera

Undercarriage
Full track guard (190 kg / unit)

Track shoes
750 mm, 900 mm track shoes with double grousers

Digging equipment
Boom: 7.7 m
Arm: 3.55 m / 4.2 m / 5.2 m

Service
Electric grease gun
Hand lamp
Spare parts
Tool kit, full scale

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.
Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 180 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo.

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