



Volvo Construction Equipment

EC220E

VOLVO EXCAVATORS 20.6-25.8t 175hp



A passion for performance.



At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.



Helping you to do more.

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs.

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



You learn a lot in 180 years.

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side.

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.



Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services

Best in Class Efficiency.

The EC220E builds on its efficiency reputation from the D-Series by ensuring all components work together and complement each other. The enhancements deliver the best in class fuel efficiency while not compromising on power – reducing emissions and consumption, while increasing productivity.

Volvo engine

Featuring proven advanced technology, and built on decades of experience, Volvo's robust D6 Stage IV engine boasts more power - while reducing both fuel consumption and emissions to deliver superior quality, reliability and durability.



Boom float function

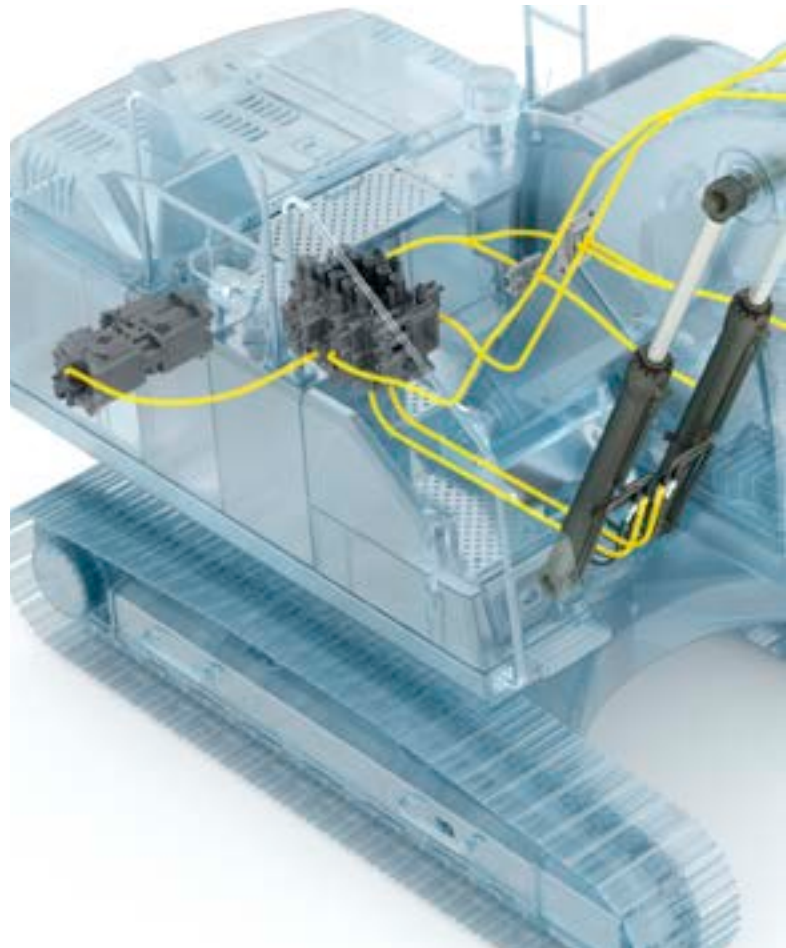
With the boom float function, the pump power for boom lowering can be saved or used for other functions, reducing the cycle time. Also, the grading operation can be made easier.

Auto engine shutdown

To reduce fuel consumption, the engine will automatically switch off when the machine is inactive for a pre-set amount of time (five minutes is the default setting).

Increased power

The increased pump input power creates a highly responsive operation resulting in greater productivity and faster cycle time.



Main Control Valve and Software

The valve is compatible with software in the machine to aid controllability, by providing smooth and easy operation. In addition to increased swing force, the EC220E also comes with a boom swing priority valve; this enhances controllability of the swing and boom operation – making it ideal for loading trucks.



Optimized hydraulics

The hydraulics system, combined with the fully electronic control system and advanced ECO mode, has been optimized to work in harmony with the D6 Stage IV engine, to match the engine power, reduce power loss and improve controllability and response time.



Human Machine Interface (HMI)

All machine interfaces – including joysticks, keypad, panel and larger LCD monitor – are ergonomically designed for optimum control and efficiency, resulting in increased productivity and workplace wellbeing. The number of switches have been simplified and climate control integrated into the keypad for easy adjustments.

First Choice for Comfort.

The cab design puts the operator in the drivers' seat to control personal specifications - from climate control, to short-cut functions on the joystick. The spacious cab allows the operator to move comfortably, to create a working environment that naturally promotes increased productivity.

Side view camera

As well as the rear view camera, there is now a side view camera option to cover the visual blind spot. Both views are displayed on the colour monitor, creating a safer working environment, protecting the operator and personnel on the ground.



Short-cut key

For added convenience, functions such as windshield wipers, cameras, auto-mute or power max function can all be assigned a short-cut button on the joystick. This allows the operator to select a function during the application without disruption.



Bluetooth®

To aid operator convenience and support better productivity, you can now connect a Bluetooth device to the machine enabling the hands-free function.



Seatbelt warning alarm

If the seatbelt is not buckled when the ignition key is turned, an alarm is triggered in intervals along with a continuous visual alert. This emphasises our priority for operator safety.

Building on Foundations of Trust and Quality.

Quality is one of Volvo's core values and it goes hand-in-hand with reliability and durability. The EC220E pays particular attention to having all the components working at a high level of capacity but also being built to stand the test of time – providing the customer and operator with peace of mind.

ROPS

The cab features ROPS – this reinforced steel structure ensures the operator is protected in the unlikely event of the machine rolling over, while it also meets the ISO standards for safety.



Boom and Arm

The robust design includes internal plates positioned to support pressure points during the range of applications. This helps disperse the stress from high-pressure areas of the boom and arm, to ensure maximum productivity time after time, during the most demanding applications.



Lower frame

The intelligently designed X-shape lower frame enables even weight distribution increasing stability and durability - preventing damage from rock and debris.



Narrow and Heavy-duty (NH) Undercarriage

The EC220E NH's oversized and heavy-duty undercarriage creates excellent tractive force for improved durability and reliability in demanding terrain. A robust undercarriage increases the service life of the machine.



Built to last

Working in tough conditions means every component matters - this is why Volvo pays extra attention to each detail during the manufacturing and product design processes. Silicone caulking is used to prevent rust, waterproof harnesses and connections are installed - as well as heavy-duty door hinges and bolted-on protection for the frame-work lights.



Ultimate tool carrier

The machine can be adjusted to take a wide variety of hydraulic lines, which are factory fitted with breaker and shear piping (X1), as well as rotator piping (X3). State-of-the-art auxiliary lines provide the correct flow and pressure for special attachments such as mowers and grinders, shears, crushers and tilt rotators among other attachments. You can choose between the one or two pump flow to maximize profits and productivity.

Customer Choice.

Creating a machine that can adapt to a number of attachments increases productivity and reduces cycle time. The EC220E not only manages to achieve this versatility but it is a machine that incorporates the same high quality performance across its entire menu of applications – meaning the operator is safe in the knowledge that with Volvo there is no better option.

Attachment Management System

The password protected management system allows storage for up to 20 different attachments. It pre-sets and permits hydraulic flow and pressure to be adjusted within the cab, which ensures the use of various attachments for increased versatility.

Extra piping

An additional piping solution is available on the breaker and shear piping (X1), accommodating the use of tilt/rotator attachments.



Electrical pedal

The electric pedal offers precise control to allow the operator to use a wider variety of attachments.

Response mode

The attachment response sensitivity can be adjusted using the keypad. This allows the operator to tailor machine response for maximum impact in different environments.

Proactive Maintenance Solutions.

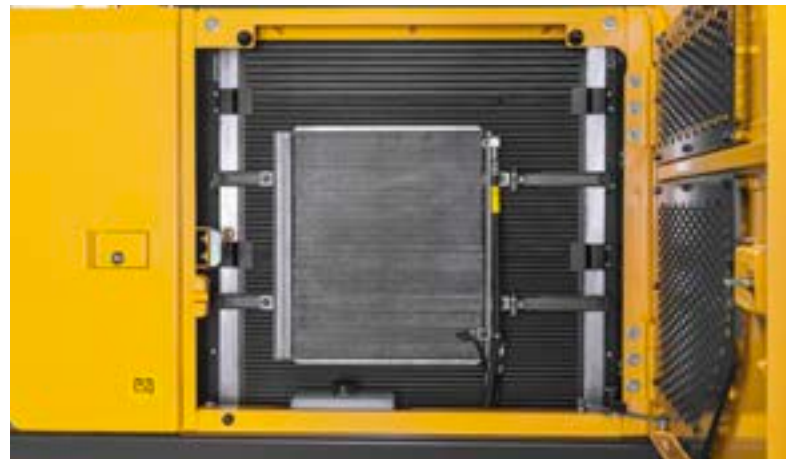
Maintaining your machine will ensure you get the maximum lifetime and productivity. This is why Volvo have made this process easy – developing it to be fast, regular and safe.

Full size guard rails

Multiple sturdy handrails provide safe and easy access to the superstructure for inspection and maintenance.

Single layer cooling system

The radiator, charged air cooler and hydraulic oil cooler are situated side-by-side on a single layer, to maximize efficiency, reduce blockages and aid cleaning. The system is easily accessed from ground level by simply opening the side door.



Service interval alerts

Real-time service alerts are displayed on the colour monitor to enable diagnostic checks. Separate service intervals include – the engine oil/filter, fuel filter/water separator, hydraulic oil and hydraulic oil filter. This ensures peace of mind and maximum uptime.



Anti-slip steel plates

Well-positioned punched anti-slip plates provide superior grip and durability. The design facilitates easy cleaning while promoting safety.



Grouped filters

Maintaining a good level of inspection is important for machine longevity and that is why Volvo has grouped filters together, making them easily accessible for regular checks to maximize machine uptime.



Matched attachments

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

Mix and match for a superior fit.

Maximize your productivity and profitability with Volvo's EC220E crawler excavator and a range of durable attachments. Increase your versatility, access more applications and perform a variety of tasks – all while experiencing faster cycle times and excellent control.

Buckets - GP/HD/XD

Volvo's buckets are the perfect tool for digging and re-handling in all conditions from soft, medium and hard materials. Heavy-duty buckets are intended for productive digging in compact materials. All provide maximum productivity and long life and feature original Volvo wear components.



Quick Coupler

Volvo offers a full range of quick couplers, from its dedicated Volvo S-type coupler to the Steelwrist® ones. Both couplers feature Front Pin Lock technology, which allows supreme safety when changing attachments. Those innovative couplers are not only designed to fit perfectly with Volvo excavators but they also comply with the latest safety regulations of ISO 13031 and EN474-1.

Steelwrist® is a registered trademark of Steelwrist AB

Breakers HB21, HB22

The HB-Series of hydraulic breakers are optimized to the specific weights of Volvo machines and tailored to Volvo quick couplers for swift, safe and simple attachment changes. They are available with a full assortment of tools.



Tilt Rotator

Volvo's tilt rotator can be ordered factory installed with multifunctional joysticks and color display that's fully integrated into the machine's system. The new series of Volvo XD excavator buckets are perfectly matched to the factory installed tilt rotator.

Improved total cost of ownership.

Boom and arm

To achieve the best performance, select the most suitable boom and arm configuration combination for your requirements.



Ultimate tool carrier

Designed to not only be compatible with a range of attachments, but also to enhance their performance by easily and quickly switching to accommodate any needs.



Optimized hydraulics

Designed to perfectly match the engine power, reduce power loss, and improve controllability and response time.

AdBlue®

Volvo offers a total AdBlue solution that is quality assured, cost efficient and easily accessible. Contact your Volvo dealer for more information.

® = registered trademark of the Verband der Automobilindustrie e.V. (VDA)

Boom float

The pump power for boom lowering can be saved or used for other functions, reducing the cycle time. Also, the grading operation can be made easier.

Attachment management system

The password protected management system allows storage for up to 20 different attachments. It pre-sets and permits hydraulic flow and pressure to be adjusted within the cab.



Full size guard rails

Multiple sturdy handrails provide safe and easy access to the super-structure for inspection and maintenance.

Side view camera

Covers the visual blind spot at the side of machine. View is displayed on the colour monitor, creating a safer working environment, protecting the operator and personnel on the ground.



HMI

All machine interfaces are ergonomically positioned and designed for optimum control and efficiency.

Bluetooth®

Bluetooth and hands-free functions have been added, allowing the operator to connect to wireless functions for increased comfort and safety.

Short cut key function

For ease of use, functions such as windshield wipers, cameras, auto-mute or power max function can all be assigned a short-cut button on the joystick

Volvo engine

Volvo's efficient D6 Stage IV engine gives you more power while consuming less fuel for low emission levels.



Grouped filters

Filters are well grouped and easily accessible from the ground level. This facilitates the speed and ease of servicing.



Built to last

All detail – no matter how small - is overlooked. Silicone caulking is used to prevent rust, waterproof harnesses and connections have been installed - as well as heavy-duty door hinges and bolted-on protection for the framework lights.

Adding value to your business.

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to the positive return of your investment.



Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of

your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.



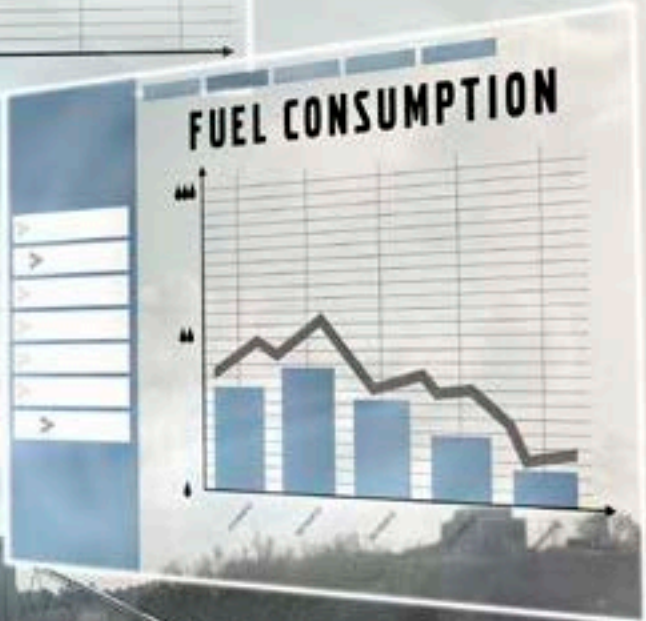
Service Network

In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.



SERVICE PLAN

| | DAY01 | DAY02 | DAY03 | DAY04 | DAY05 | DAY06 | DAY07 |
|---|-------|-------|-------|-------|-------|-------|-------|
| 1 | | | | | | | ✓ |
| 2 | | | | ✓ | ✓ | | |
| 3 | ✓ | | | | | | |
| 4 | | | ✓ | | | ✓ | ✓ |
| 5 | | | | | | | |
| 6 | ✓ | | | | | | |
| 7 | | | ✓ | | | | |



Customer Support Agreements

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

Volvo EC220E in detail.

Engine

The latest generation, Volvo engine Tier 4f / Stage IV emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, high pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

Air Filter: 3-stage with precleaner

Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

| | | |
|----------------------------|-------------|-------------|
| Engine | Volvo | D6J |
| Max power at | r/s / r/min | 30 / 1 800 |
| Net, ISO 9249/SAE J1349 | kW / hp | 128 / 174 |
| Gross, ISO 14396/SAE J1995 | kW / hp | 129 / 175 |
| Max torque at | Nm/ r/min | 849 / 1 350 |
| No. of cylinders | | 6 |
| Displacement | l | 5.7 |
| Bore | mm | 98 |
| Stroke | mm | 126 |

Electrical system

Well protected high-capacity electrical system. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard. Contronics provides advanced monitoring of machine functions and important diagnostic information.

| | | |
|-------------|--------|--------------|
| Voltage | V | 24 |
| Batteries | V / Ah | 2 x 12 / 140 |
| Alternator | V / Ah | 28 / 80 |
| Start motor | V / kW | 24 x 5.5 |

Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and antirebound valve are standard

| | | |
|------------------|-------|------|
| Max. slew speed | r/min | 11.1 |
| Max. slew torque | kNm | 83 |

Drive

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

| | | |
|-------------------|------|-----------|
| Max. drawbar pull | kN | 183 |
| Max. travel speed | km/h | 3.5 / 5.7 |
| Gradeability | ° | 35 |

Undercarriage

Robust X-shaped frame with greased and sealed track chains as standard

EC220EL

| | | |
|---------------------------------|----|-----------------------------|
| Track shoe | | 2 x 49 |
| Link pitch | mm | 190 |
| Shoe width, triple grouser | mm | 500 / 600 / 700 / 800 / 900 |
| Shoe width, triple grouser (HD) | mm | 600 |
| Shoe width, double grouser | mm | 700 |
| Shoe width, single grouser | mm | 600 |
| Bottom rollers | | 2 x 8 |
| Top rollers | | 2 x 2 |

EC220ENL

| | | |
|---------------------------------|----|-------------|
| Track shoe | | 2 x 49 |
| Link pitch | mm | 190 |
| Shoe width, triple grouser | mm | 500/600/700 |
| Shoe width, triple grouser (HD) | mm | 600 |
| Shoe width, double grouser | mm | 700 |
| Bottom rollers | | 2 x 8 |
| Top rollers | | 2 x 2 |

EC220EN

| | | |
|---------------------------------|----|-----------------------|
| Track shoe | | 2 x 46 |
| Link pitch | mm | 190 |
| Shoe width, triple grouser | mm | 600 / 700 / 800 / 900 |
| Shoe width, triple grouser (HD) | mm | 600 |
| Bottom rollers | | 2 x 7 |
| Top rollers | | 2 x 2 |

EC220ENH

| | | |
|----------------------------|----|-------------|
| Track shoe | | 2 x 45 |
| Link pitch | mm | 203 |
| Shoe width, triple grouser | mm | 500/600/700 |
| Bottom rollers | | 2 x 7 |
| Top rollers | | 2 x 2 |

Hydraulic system

The hydraulics system, combined with the fully electronic control system and advanced ECO mode, has been optimized to work in harmony with engine to match the engine power, reduce power loss and improve controllability and response time.

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.

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 | 2x207 |

Pilot pump

| | | |
|--------------|-----------|------|
| Type | Gear pump | |
| Maximum flow | l/min | 1x18 |

Relief valve setting

| | | |
|----------------|-----|-------------|
| Implement | MPa | 34.3 / 36.3 |
| Travel circuit | MPa | 34.3 |
| Slew circuit | MPa | 27.9 |
| Pilot circuit | MPa | 3.9 |

Travel: Variable displacement axial piston motor with mechanical brake

Slew: Fixed displacement axial piston motor with mechanical brake

Hydraulic cylinders

| | | |
|--------------------|--------|-------------|
| Mono boom | | 2 |
| Bore x Stroke | ø x mm | 125 x 1 235 |
| 2 piece boom | | 1 |
| Bore x Stroke | ø x mm | 160 x 1 070 |
| Arm | | 1 |
| Bore x Stroke | ø x mm | 135 x 1 540 |
| Bucket | | 1 |
| Bore x Stroke | ø x mm | 120 x 1 065 |
| Bucket for LR boom | | 1 |
| Bore x Stroke | ø x mm | 100 x 865 |

Service refill capacities

| | | |
|-------------------------|---|---------|
| Fuel tank | l | 320 |
| Hydraulic system, total | l | 290 |
| Hydraulic tank | l | 140 |
| AdBlue tank | l | 27 |
| Engine oil | l | 25 |
| Engine coolant | l | 35 |
| Swing reduction unit | l | 6 |
| Travel reduction unit | l | 2 x 5.8 |

Cab

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

Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.

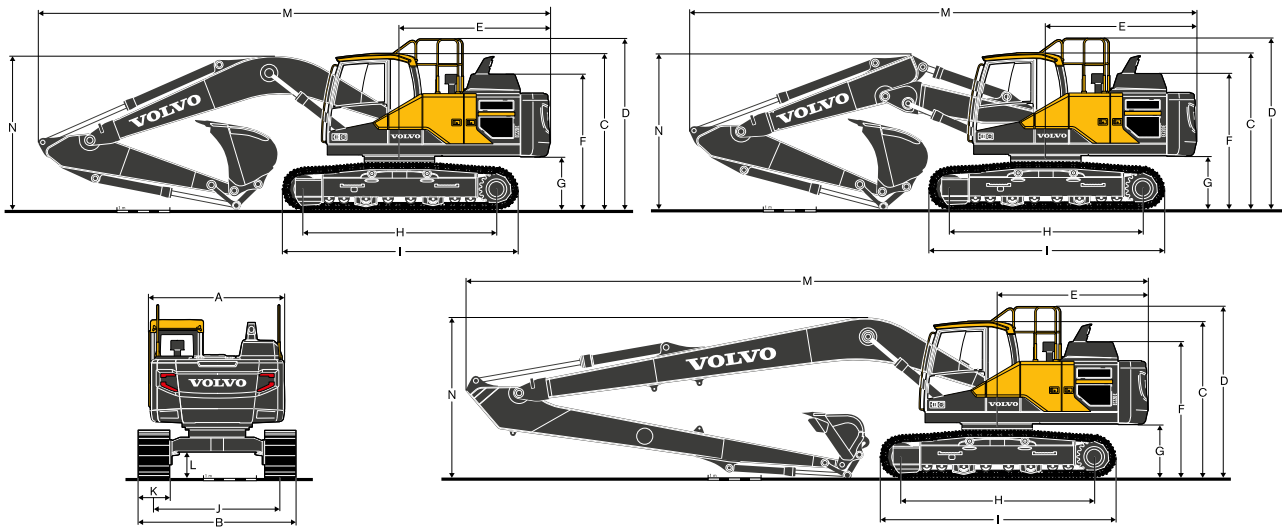
Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

Sound Level

| | | |
|---|-------|-----|
| Sound level in cab according to ISO 6396 | | |
| LpA (standard) | dB(A) | 69 |
| LpA (tropical) | dB(A) | 70 |
| External sound level according to ISO 6395, EU Noise Directive (2000/14/EC) | | |
| LwA (standard) | dB(A) | 102 |
| LwA (tropical) | dB(A) | 103 |

Specifications.

DIMENSIONS



| Description | Unit | EC220EL | | | | EC220ENL | | | |
|-------------------------------------|------|--------------------------|-------|-------|-------|--------------------------|-------|-------|-------|
| | | 5.7 mono or 5.57 2-piece | | | | 5.7 mono or 5.57 2-piece | | | |
| Boom | m | | | | | | | | |
| Arm | m | 2.0 | 2.5 | 2.9 | 3.5 | 2.0 | 2.5 | 2.9 | 3.5 |
| A. Overall width of upper structure | mm | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 |
| B. Overall width | mm | 2 990 | 2 990 | 2 990 | 2 990 | 2 640 | 2 640 | 2 640 | 2 640 |
| C. Overall height of cab | mm | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 |
| D. Overall height of guard rail | mm | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 |
| E. Tail swing radius | mm | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 |
| F. Overall height of engine hood | mm | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 |
| G. Counterweight clearance * | mm | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 |
| H. Tumbler length | mm | 3 660 | 3 660 | 3 660 | 3 660 | 3 660 | 3 660 | 3 660 | 3 660 |
| I. Track length | mm | 4 460 | 4 460 | 4 460 | 4 460 | 4 460 | 4 460 | 4 460 | 4 460 |
| J. Track gauge | mm | 2 390 | 2 390 | 2 390 | 2 390 | 2 040 | 2 040 | 2 040 | 2 040 |
| K. Shoe width | mm | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| L. Min. ground clearance * | mm | 460 | 460 | 460 | 460 | 460 | 460 | 460 | 460 |
| M. Overall length | mm | 9 795 | 9 745 | 9 690 | 9 720 | 9 795 | 9 745 | 9 690 | 9 720 |
| M¹. Overall length | mm | 9 660 | 9 610 | 9 570 | 9 560 | 9 660 | 9 610 | 9 570 | 9 560 |
| N. Overall height of boom | mm | 3 100 | 3 080 | 2 940 | 3 260 | 3 100 | 3 080 | 2 940 | 3 260 |
| N¹. Overall height of boom | mm | 3 065 | 3 065 | 2 960 | 3 310 | 3 065 | 3 065 | 2 960 | 3 310 |

* Without shoe grouser.

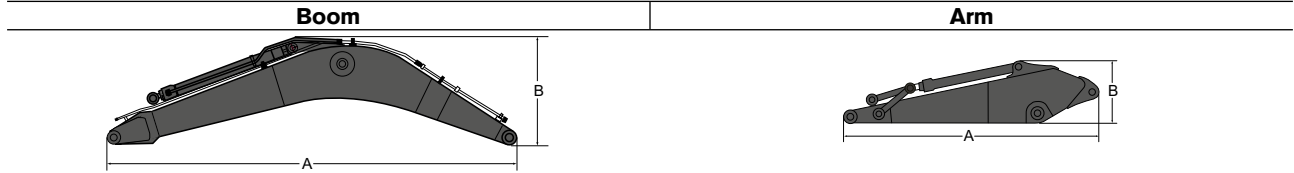
¹ 2-piece boom

| Description | Unit | EC220EN | | | | EC220ENH | | | | EC220ELR |
|-------------------------------------|------|--------------------------|-------|-------|-------|--------------------------|-------|-------|-------|----------|
| | | 5.7 mono or 5.57 2-piece | | | | 5.7 mono or 5.57 2-piece | | | | 8.85 |
| Boom | m | | | | | | | | | 6.25 |
| Arm | m | 2.0 | 2.5 | 2.9 | 3.5 | 2.0 | 2.5 | 2.9 | 3.5 | 6.25 |
| A. Overall width of upper structure | mm | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 | 2 540 |
| B. Overall width | mm | 2 800 | 2 800 | 2 800 | 2 800 | 2 800 | 2 800 | 2 800 | 2 800 | 3 190 |
| C. Overall height of cab | mm | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 | 2 955 |
| D. Overall height of guard rail | mm | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 | 3 270 |
| E. Tail swing radius | mm | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 | 2 850 |
| F. Overall height of engine hood | mm | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 | 2 600 |
| G. Counterweight clearance * | mm | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 |
| H. Tumbler length | mm | 3 370 | 3 370 | 3 370 | 3 370 | 3 510 | 3 510 | 3 510 | 3 510 | 3 660 |
| I. Track length | mm | 4 160 | 4 160 | 4 160 | 4 160 | 4 360 | 4 360 | 4 360 | 4 360 | 4 460 |
| J. Track gauge | mm | 2 200 | 2 200 | 2 200 | 2 200 | 2 040 | 2 040 | 2 040 | 2 040 | 2 390 |
| K. Shoe width | mm | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 800 |
| L. Min. ground clearance * | mm | 460 | 460 | 460 | 460 | 490 | 490 | 490 | 490 | 460 |
| M. Overall length | mm | 9 795 | 9 745 | 9 690 | 9 720 | 9 795 | 9 745 | 9 690 | 9 720 | 12 880 |
| M¹. Overall length | mm | 9 660 | 9 610 | 9 570 | 9 560 | 9 660 | 9 610 | 9 570 | 9 560 | - |
| N. Overall height of boom | mm | 3 100 | 3 080 | 2 940 | 3 260 | 3 100 | 3 080 | 2 940 | 3 260 | 3 055 |
| N¹. Overall height of boom | mm | 3 065 | 3 065 | 2 960 | 3 310 | 3 065 | 3 065 | 2 960 | 3 310 | - |

* Without shoe grouser.

¹ 2-piece boom

DIMENSIONS



| Description | Unit | mono | mono | 2-piece | Long-Reach | Description | Unit | | | | | | Long-Reach |
|-------------|------|-------|--------|---------|------------|-------------|------|-------|-------|-------|--------|-------|------------|
| Boom | m | 5.7 | 5.7 HD | 5.57 | 8.85 | Arm | m | 2.0 | 2.5 | 2.9 | 2.9 HD | 3.5 | 6.25 |
| Length | mm | 5 910 | 5 910 | 5 780 | 9 060 | Length | mm | 3 065 | 3 525 | 3 910 | 3 910 | 4 540 | 7 330 |
| Height | mm | 1 585 | 1 585 | 1 570 | 1 460 | Height | mm | 980 | 860 | 860 | 860 | 855 | 945 |
| Width | mm | 670 | 670 | 670 | 670 | Width | mm | 440 | 440 | 440 | 440 | 440 | 385 |
| Weight | kg | 2 006 | 2 151 | 2 585 | 2 510 | Weight | kg | 1 091 | 1 133 | 1 146 | 1 183 | 1 226 | 1 309 |

* Includes cylinder, piping and pin, excludes boom cylinder pin

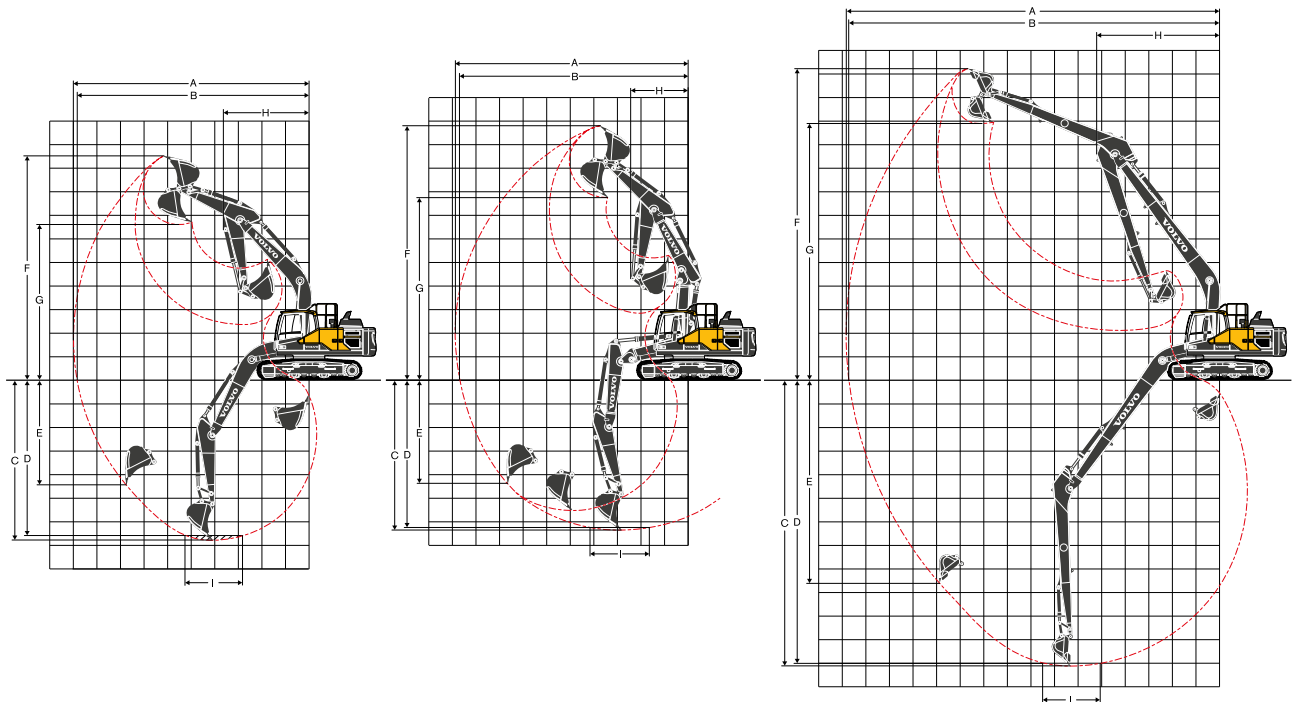
* Includes cylinder, linkage and pin

MACHINE WEIGHTS AND GROUND PRESSURE

| Description | Shoe width | Operating weight | Ground pressure | Overall width | Operating weight | Ground pressure | Overall width |
|--------------------------|---|------------------|-----------------|---|------------------|-----------------|---------------|
| | mm | kg | kPa | mm | kg | kPa | mm |
| | EC220EL | | | | | | |
| | 5.7m boom, 2.9m arm, 820kg / 0.92l bucket, 4 200kg counterweight | | | 5.57m 2-piece, 2.9m arm, 820kg / 0.92l bucket, 4 200kg counterweight | | | |
| Triple grouser | 500 | 21 440 | 53.0 | 2 890 | 22 130 | 54.9 | 2 890 |
| | 600 | 21 700 | 45.1 | 2 990 | 22 385 | 46.1 | 2 990 |
| | 700 | 22 160 | 39.2 | 3 090 | 22 840 | 40.2 | 3 090 |
| | 800 | 22 445 | 35.3 | 3 190 | 23 130 | 36.3 | 3 190 |
| | 900 | 22 740 | 31.4 | 3 290 | 23 420 | 32.4 | 3 290 |
| Triple grouser HD | 600 | 21 870 | 45.1 | 2 990 | 22 550 | 47.1 | 2 990 |
| Double grouser | 700 | 22 425 | 40.2 | 3 090 | 23 110 | 41.2 | 3 090 |
| Single grouser | 600 | 21 910 | 45.1 | 2 990 | 22 590 | 47.1 | 2 990 |
| | EC220ENL | | | | | | |
| | 5.7m boom, 2.9m arm, 820kg / 0.92l bucket, 5 000kg counterweight | | | 5.57m 2-piece, 2.9m arm, 820kg / 0.92l bucket, 5 000kg counterweight | | | |
| Triple grouser | 500 | 22 150 | 54.9 | 2 540 | 22 840 | 56.9 | 2 540 |
| | 600 | 22 410 | 46.1 | 2 640 | 23 100 | 48.0 | 2 640 |
| | 700 | 22 870 | 40.2 | 2 740 | 23 560 | 42.2 | 2 740 |
| Triple grouser HD | 600 | 22 580 | 47.1 | 2 640 | 23 265 | 48.0 | 2 640 |
| Double grouser | 700 | 23 140 | 41.2 | 2 740 | 23 820 | 42.2 | 2 740 |
| | EC220EN | | | | | | |
| | 5.7m boom, 2.9m arm, 820kg / 0.92l bucket, 4 200kg counterweight | | | 5.57m 2-piece, 2.9m arm, 820kg / 0.92l bucket, 4 200kg counterweight | | | |
| Triple grouser | 600 | 21 280 | 48.0 | 2 800 | 21 960 | 49.0 | 2 800 |
| | 700 | 21 710 | 41.2 | 2 900 | 22 395 | 43.1 | 2 900 |
| | 800 | 21 980 | 37.3 | 3 000 | 22 660 | 38.2 | 3 000 |
| | 900 | 22 220 | 33.3 | 3 100 | 22 900 | 34.3 | 3 100 |
| Triple grouser HD | 600 | 21 440 | 48.0 | 2 800 | 22 120 | 50.0 | 2 800 |
| | EC220ENH | | | | | | |
| | 5.7m boom, 2.9 m arm, 820kg / 0.92l bucket, 5 000kg counterweight | | | 5.57m 2-piece, 2.9m arm, 820kg / 0.92l bucket, 5 000kg counterweight | | | |
| Triple grouser | 500 | 23 270 | 62.8 | 2 700 | 23 960 | 64.7 | 2 700 |
| | 600 | 23 590 | 53.0 | 2 800 | 24 270 | 53.9 | 2 800 |
| | 700 | 24 110 | 46.1 | 3 900 | 24 790 | 48.0 | 3 900 |
| | EC220ELR | | | | | | |
| | 8.85m boom, 6.25m arm, 452kg / 0.52l bucket, 5 000kg counterweight | | | | | | |
| Triple grouser | 800 | 23 690 | 37.3 | 3 190 | | | |
| | 900 | 23 990 | 33.3 | 3 290 | | | |

Specifications.

WORKING RANGES



| Description | Unit | EC220EL/EC220ENL/EC220EN/EC220ENH | | | | | | | | EC220ELR |
|--------------------------------------|------|-----------------------------------|-------|-------|--------|--------------|--------|--------|--------|----------|
| Boom | m | 5.7 mono | | | | 5.57 2-piece | | | | 10.2 |
| Arm | m | 2.0 | 2.5 | 2.9 | 3.5 | 2.0 | 2.5 | 2.9 | 3.5 | 6.25 |
| A. Max. digging reach | mm | 9 090 | 9 550 | 9 930 | 10 390 | 8 980 | 9 450 | 9 840 | 10 310 | 15 800 |
| B. Max. digging reach on ground | mm | 8 910 | 9 380 | 9 770 | 10 240 | 8 800 | 9 280 | 9 670 | 10 150 | 15 700 |
| C. Max. digging depth | mm | 5 830 | 6 330 | 6 730 | 7 330 | 5 410 | 5 900 | 6 300 | 6 850 | 12 100 |
| D. Max. digging depth (2.44 m level) | mm | 5 560 | 6 100 | 6 540 | 7 130 | 5 290 | 5 790 | 6 200 | 6 750 | 12 000 |
| E. Max. vertical wall digging depth | mm | 4 880 | 5 620 | 6 090 | 6 470 | 4 390 | 4 990 | 5 410 | 5 930 | 11 290 |
| F. Max. cutting height | mm | 8 940 | 9 220 | 9 460 | 9 460 | 10 010 | 10 380 | 10 710 | 10 920 | 13 300 |
| G. Max. dumping height | mm | 6 190 | 6 430 | 6 650 | 6 700 | 7 100 | 7 460 | 7 780 | 8 010 | 10 950 |
| H. Min. front swing radius | mm | 3 790 | 3 670 | 3 640 | 3 660 | 2 890 | 2 740 | 2 470 | 2 730 | 5 200 |

DIGGING FORCES WITH DIRECT FIT BUCKET

| | | | | | | | | | | | | |
|----------------------------|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|----|
| Bucket radius | mm | 1 528 | 1 528 | 1 528 | 1 528 | 1 528 | 1 528 | 1 528 | 1 528 | 1 250 | | |
| Breakout force - bucket | Normal | SAE J1179 | kN | 146 | 125 | 125 | 125 | 146 | 125 | 125 | 125 | 68 |
| | Power boost | SAE J1179 | kN | 154 | 132 | 132 | 132 | 154 | 132 | 132 | 132 | - |
| | Normal | ISO 6015 | kN | 165 | 141 | 141 | 141 | 165 | 141 | 141 | 141 | 77 |
| | Power boost | ISO 6015 | kN | 174 | 149 | 149 | 149 | 174 | 149 | 149 | 149 | - |
| Tearout force - dipper arm | Normal | SAE J1179 | kN | 144 | 117 | 101 | 92 | 144 | 117 | 101 | 92 | 44 |
| | Power boost | SAE J1179 | kN | 153 | 124 | 107 | 97 | 153 | 124 | 107 | 97 | - |
| | Normal | ISO 6015 | kN | 149 | 121 | 104 | 94 | 149 | 121 | 104 | 94 | 45 |
| | Power boost | ISO 6015 | kN | 158 | 128 | 110 | 99 | 158 | 128 | 110 | 99 | - |
| Rotation angle, bucket | ° | | 166 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 178 | |

BUCKET SELECTION GUIDE

| Bucket type | | Capacity | Cutting width | Weight | Teeth | EC220EL | | | | | | | |
|--------------------|-----------------|----------|---------------|--------|-------|-----------------------------------|----|----|----|-----------------------------------|------|------|------|
| | | | | | | 5.7m Boom | | | | 5.57m 2-piece | | | |
| | | | | | | 600mm shoe, 4 200kg counterweight | | | | 600mm shoe, 4 200kg counterweight | | | |
| | | | | | | L | mm | kg | EA | 2.0m | 2.5m | 2.9m | 3.5m |
| Direct fit Buckets | General purpose | 480 | 600 | 623 | 3 | C | C | C | C | C | C | C | C |
| | | 630 | 800 | 703 | 4 | C | C | C | C | C | C | C | C |
| | | 750 | 900 | 749 | 4 | C | C | C | C | C | C | C | C |
| | | 920 | 1 050 | 819 | 4 | C | C | C | C | C | C | C | C |
| | | 1 090 | 1 200 | 908 | 5 | C | C | C | C | C | C | C | C |
| | | 1 270 | 1 350 | 995 | 5 | C | C | C | B | C | C | C | B |
| | | 1 440 | 1 500 | 1 085 | 6 | C | C | B | A | C | C | B | A |
| Bucket type | | Capacity | Cutting width | Weight | Teeth | EC220ENL | | | | | | | |
| | | | | | | 5.7m Boom | | | | 5.57m 2-piece | | | |
| | | | | | | 600mm shoe, 5 000kg counterweight | | | | 600mm shoe, 5 000kg counterweight | | | |
| | | | | | | L | mm | kg | EA | 2.0m | 2.5m | 2.9m | 3.5m |
| Direct fit Buckets | General purpose | 480 | 600 | 623 | 3 | C | C | C | C | C | C | C | C |
| | | 630 | 800 | 703 | 4 | C | C | C | C | C | C | C | C |
| | | 750 | 900 | 749 | 4 | C | C | C | C | C | C | C | C |
| | | 920 | 1 050 | 819 | 4 | C | C | C | C | C | C | C | C |
| | | 1 090 | 1 200 | 908 | 5 | C | C | C | C | C | C | C | C |
| | | 1 270 | 1 350 | 995 | 5 | C | C | C | C | C | C | C | C |
| | | 1 440 | 1 500 | 1 085 | 6 | C | C | C | B | C | C | C | B |
| Bucket type | | Capacity | Cutting width | Weight | Teeth | EC220EN | | | | | | | |
| | | | | | | 5.7m Boom | | | | 5.57m 2-piece | | | |
| | | | | | | 600mm shoe, 4 200kg counterweight | | | | 600mm shoe, 4 200kg counterweight | | | |
| | | | | | | L | mm | kg | EA | 2.0m | 2.5m | 2.9m | 3.5m |
| Direct fit Buckets | General purpose | 480 | 600 | 623 | 3 | C | C | C | C | C | C | C | C |
| | | 630 | 800 | 703 | 4 | C | C | C | C | C | C | C | C |
| | | 750 | 900 | 749 | 4 | C | C | C | C | C | C | C | C |
| | | 920 | 1 050 | 819 | 4 | C | C | C | C | C | C | C | C |
| | | 1 090 | 1 200 | 908 | 5 | C | C | C | C | C | C | C | C |
| | | 1 270 | 1 350 | 995 | 5 | C | C | C | B | C | C | C | B |
| | | 1 440 | 1 500 | 1 085 | 6 | C | C | B | A | C | C | B | A |
| Bucket type | | Capacity | Cutting width | Weight | Teeth | EC220ENH | | | | | | | |
| | | | | | | 5.7m Boom | | | | 5.57m 2-piece | | | |
| | | | | | | 600mm shoe, 5 000kg counterweight | | | | 600mm shoe, 5 000kg counterweight | | | |
| | | | | | | L | mm | kg | EA | 2.0m | 2.5m | 2.9m | 3.5m |
| Direct fit Buckets | General purpose | 480 | 600 | 623 | 3 | C | C | C | C | C | C | C | C |
| | | 630 | 800 | 703 | 4 | C | C | C | C | C | C | C | C |
| | | 750 | 900 | 749 | 4 | C | C | C | C | C | C | C | C |
| | | 920 | 1 050 | 819 | 4 | C | C | C | C | C | C | C | C |
| | | 1 090 | 1 200 | 908 | 5 | C | C | C | C | C | C | C | C |
| | | 1 270 | 1 350 | 995 | 5 | C | C | C | C | C | C | C | C |
| | | 1 440 | 1 500 | 1 085 | 6 | C | C | C | B | C | C | C | B |

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.
 The recommendations are given as a guide only, based on typical operation conditions.
 Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

Maximum material density

- A 1 200~1 300 kg/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

Specifications.

LIFTING CAPACITY EC220EL

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | Max. reach | | m | | |
|--|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|--------|--------|-----|
| | | 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 | | | |
| Boom: 5.7m Arm: 2.5m Shoe: 600mm CWT: 4 200kg | 7.5 m kg | | | | | | | | | | | | | | | *5 670 | *5 670 | 5.6 |
| | 6.0 m kg | | | | | | | *5 500 | *5 500 | | | | | | | *5 600 | 4 550 | 6.9 |
| | 4.5 m kg | | | | | *7 000 | *7 000 | *6 020 | 5 520 | *5 680 | 3 890 | | | | | *5 690 | 3 800 | 7.6 |
| | 3.0 m kg | | | | | *9 020 | 8 010 | *6 910 | 5 280 | 5 830 | 3 800 | | | | | 5 290 | 3 450 | 8.0 |
| | 1.5 m kg | | | | | *10 780 | 7 530 | *7 800 | 5 050 | 5 720 | 3 690 | | | | | 5 130 | 3 320 | 8.1 |
| | 0.0 m kg | | | | | *11 570 | 7 310 | 7 810 | 4 900 | 5 640 | 3 620 | | | | | 5 260 | 3 390 | 7.9 |
| | -1.5 m kg | | | | *10 840 | *10 840 | *11 480 | 7 280 | 7 760 | 4 850 | | | | | | 5 780 | 3 700 | 7.4 |
| Boom: 5.7m Arm: 2.9m Shoe: 600mm CWT: 4 200kg | -3.0 m kg | | | *14 760 | 14 420 | *10 560 | 7 390 | *7 790 | 4 920 | | | | | | *7 010 | 4 470 | 6.5 | |
| | -4.5 m kg | | | *11 400 | *11 400 | *8 140 | 7 670 | | | | | | | | *7 150 | 6 690 | 5.0 | |
| | 7.5 m kg | | | | | | | *5 180 | *5 180 | | | | | | *4 910 | *4 910 | 6.2 | |
| | 6.0 m kg | | | | | | | *5 080 | *5 080 | | | | | | *4 580 | 4 150 | 7.3 | |
| | 4.5 m kg | | | | | | | *5 660 | 5 600 | *5 350 | 3 940 | | | | *4 520 | 3 530 | 8.0 | |
| | 3.0 m kg | | | | | *8 440 | 8 160 | *6 590 | 5 350 | *5 750 | 3 840 | | | | *4 640 | 3 230 | 8.4 | |
| | 1.5 m kg | | | | | *10 370 | 7 640 | *7 570 | 5 100 | 5 740 | 3 710 | | | | 4 800 | 3 110 | 8.5 | |
| Boom: 5.7m Arm: 3.5m Shoe: 600mm CWT: 4 200kg | 0.0 m kg | | | *5 420 | *5 420 | *11 430 | 7 350 | 7 840 | 4 920 | 5 640 | 3 620 | | | | 4 910 | 3 170 | 8.3 | |
| | -1.5 m kg | *6 270 | *6 270 | *10 320 | *10 320 | *11 590 | 7 280 | 7 750 | 4 840 | 5 610 | 3 590 | | | | 5 330 | 3 430 | 7.8 | |
| | -3.0 m kg | *11 380 | *11 380 | *15 660 | 14 300 | *10 930 | 7 340 | 7 790 | 4 880 | | | | | | 6 320 | 4 040 | 6.9 | |
| | -4.5 m kg | | | *12 740 | *12 740 | *9 050 | 7 560 | | | | | | | | *6 920 | 5 600 | 5.6 | |
| | 7.5 m kg | | | | | | | | | | | | | | *4 900 | 4 370 | 7.1 | |
| | 6.0 m kg | | | | | | | | | *4 610 | 4 050 | | | | *4 850 | 3 500 | 8.1 | |
| | 4.5 m kg | | | | | | | | *4 860 | *4 860 | *4 750 | 3 980 | | | 4 670 | 3 050 | 8.8 | |
| Boom: 5.7m Arm: 3.5m Shoe: 600mm CWT: 4 200kg | 3.0 m kg | | | | | | | *5 740 | 4 400 | *5 170 | 3 840 | 4 410 | 2 860 | | 4 340 | 2 810 | 9.1 | |
| | 1.5 m kg | | | | | | | *6 720 | 5 110 | *5 680 | 3 700 | 4 350 | 2 800 | | 4 220 | 2 720 | 9.2 | |
| | 0.0 m kg | | | | | | | *7 520 | 4 880 | 5 600 | 3 570 | | | | 4 300 | 2 760 | 9.0 | |
| | -1.5 m kg | | | | | *10 750 | 7 160 | 7 670 | 4 760 | 5 530 | 3 510 | | | | 4 610 | 2 950 | 8.6 | |
| | -3.0 m kg | | | *15 300 | 13 960 | *10 470 | 7 170 | 7 660 | 4 750 | 5 550 | 3 530 | | | | 5 280 | 3 370 | 7.8 | |
| | -4.5 m kg | *16 720 | *16 720 | *13 020 | *13 020 | *9 260 | 7 330 | *6 830 | 4 880 | | | | | | *5 830 | 4 320 | 6.6 | |
| | 7.5 m kg | | | | | | | | | | | | | | *8 490 | 8 090 | 4.8 | |
| Boom: 5.57m 2-piece Arm: 2.0m Shoe: 600mm CWT: 4 200kg | 6.0 m kg | | | | | *8 610 | *8 610 | | | | | | | *7 420 | 5 260 | 6.2 | | |
| | 4.5 m kg | | | | | *8 600 | *8 600 | *7 490 | 5 530 | | | | | 6 560 | 4 220 | 7.0 | | |
| | 3.0 m kg | | | | | *9 600 | 8 430 | *7 690 | 5 400 | | | | | 5 870 | 3 760 | 7.4 | | |
| | 1.5 m kg | | | | | *10 920 | 7 780 | *8 160 | 5 150 | | | | | 5 670 | 3 600 | 7.5 | | |
| | 0.0 m kg | | | | | | | 7 910 | 4 920 | 5 680 | 3 610 | | | | 5 860 | 3 700 | 7.3 | |
| | -1.5 m kg | | | | | *10 900 | 7 160 | 7 760 | 4 790 | | | | | | *5 910 | 4 140 | 6.7 | |
| | -3.0 m kg | | | | | *9 390 | 7 190 | *7 140 | 4 800 | | | | | | | | | 5.7 |
| Boom: 5.57m 2-piece Arm: 2.5m Shoe: 600mm CWT: 4 200kg | 7.5 m kg | | | | | *6 710 | *6 710 | | | | | | | | | | | 5.7 |
| | 6.0 m kg | | | | | *7 840 | *7 840 | | | | | | | | *6 800 | 6 530 | 5.5 | |
| | 4.5 m kg | | | | | *8 000 | *8 000 | *7 020 | 5 660 | | | | | | *6 230 | 4 630 | 6.7 | |
| | 3.0 m kg | | | *12 730 | *12 730 | *9 040 | 8 630 | *7 360 | 5 500 | | | | | | 5 920 | 3 830 | 7.5 | |
| | 1.5 m kg | | | | | *10 490 | 7 990 | *7 930 | 5 230 | 5 820 | 3 730 | | | | 5 370 | 3 450 | 7.9 | |
| | 0.0 m kg | | | | | *11 420 | 7 440 | 7 970 | 4 980 | 5 690 | 3 620 | | | | 5 190 | 3 310 | 8.0 | |
| | -1.5 m kg | | | | | *11 250 | 7 190 | 7 780 | 4 810 | 5 610 | 3 550 | | | | 5 340 | 3 380 | 7.8 | |
| Boom: 5.57m 2-piece Arm: 2.9m Shoe: 600mm CWT: 4 200kg | -3.0 m kg | | | *11 490 | *11 490 | *10 080 | 7 160 | *7 590 | 4 770 | | | | | | *5 700 | 3 720 | 7.3 | |
| | -4.5 m kg | | | | | *7 830 | 7 290 | *5 670 | 4 870 | | | | | | *5 010 | 4 540 | 6.3 | |
| | 9.0 m kg | | | | | | | | | | | | | | *6 130 | *6 130 | 4.0 | |
| | 7.5 m kg | | | | | *7 030 | *7 030 | *5 140 | *5 140 | | | | | | *4 940 | *4 940 | 6.0 | |
| | 6.0 m kg | | | | | *7 080 | *7 080 | *6 680 | 5 760 | | | | | | *4 560 | 4 210 | 7.2 | |
| | 4.5 m kg | | | *9 140 | *9 140 | *8 560 | *8 560 | *7 090 | 5 590 | 5 990 | 3 890 | | | | *4 470 | 3 550 | 7.9 | |
| | 3.0 m kg | | | | | *10 090 | 8 160 | *7 720 | 5 310 | 5 870 | 3 780 | | | | *4 570 | 3 220 | 8.3 | |
| Boom: 5.57m 2-piece Arm: 2.9m Shoe: 600mm CWT: 4 200kg | 1.5 m kg | | | | | *11 260 | 7 560 | 8 030 | 5 030 | 5 720 | 3 650 | | | | *4 850 | 3 100 | 8.4 | |
| | 0.0 m kg | | | *5 940 | *5 940 | *11 410 | 7 240 | 7 810 | 4 840 | 5 620 | 3 550 | | | | 4 970 | 3 160 | 8.2 | |
| | -1.5 m kg | | | *10 850 | *10 850 | *10 530 | 7 150 | 7 720 | 4 760 | 5 600 | 3 530 | | | | 5 420 | 3 430 | 7.7 | |
| | -3.0 m kg | | | *10 990 | *10 990 | *8 600 | 7 240 | *6 370 | 4 810 | | | | | | *4 980 | 4 080 | 6.8 | |

LIFTING CAPACITY EC220ENL

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | Max. reach | | m | | |
|--|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|--------|--------|--------|-----|
| | | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | | | | | |
| Boom: 5.7m Arm: 2.5m Shoe: 600mm CWT: 5 000kg | 7.5 m kg | | | | | | | | | | | | | | | *5 670 | *5 670 | 5.6 |
| | 6.0 m kg | | | | | | | *5 500 | 5 310 | | | | | | | *5 600 | 4 270 | 6.9 |
| | 4.5 m kg | | | | | *7 000 | *7 000 | *6 020 | 5 160 | *5 680 | 3 650 | | | | | *5 690 | 3 570 | 7.6 |
| | 3.0 m kg | | | | | *9 020 | 7 350 | *6 910 | 4 920 | *5 990 | 3 560 | | | | | 5 690 | 3 240 | 8.0 |
| | 1.5 m kg | | | | | *10 780 | 6 900 | *7 800 | 4 700 | 6 150 | 3 460 | | | | | 5 520 | 3 120 | 8.1 |
| | 0.0 m kg | | | | | *11 570 | 6 690 | *8 390 | 4 550 | 6 070 | 3 390 | | | | | 5 670 | 3 180 | 7.9 |
| | -1.5 m kg | | | *10 840 | *10 840 | *11 480 | 6 660 | 8 350 | 4 510 | | | | | | | 6 230 | 3 470 | 7.4 |
| Boom: 5.7m Arm: 2.9m Shoe: 600mm CWT: 5 000kg | -3.0 m kg | | | *14 760 | 12 650 | *10 560 | 6 760 | *7 790 | 4 580 | | | | | | *7 010 | 4 170 | 6.5 | |
| | -4.5 m kg | | | *11 400 | *11 400 | *8 140 | 7 030 | | | | | | | | *7 150 | 6 170 | 5.0 | |
| | 7.5 m kg | | | | | | | *5 180 | *5 180 | | | | | | *4 910 | *4 910 | 6.2 | |
| | 6.0 m kg | | | | | | | *5 080 | *5 080 | | | | | | *4 580 | 3 900 | 7.3 | |
| | 4.5 m kg | | | | | | | *5 660 | 5 230 | *5 350 | 3 710 | | | | *4 520 | 3 330 | 8.0 | |
| | 3.0 m kg | | | | | *8 440 | 7 500 | *6 590 | 4 990 | *5 750 | 3 600 | | | | *4 640 | 3 030 | 8.4 | |
| | 1.5 m kg | | | | | *10 370 | 7 000 | *7 570 | 4 740 | 6 180 | 3 480 | | | | *4 950 | 2 930 | 8.5 | |
| Boom: 5.7m Arm: 3.5m Shoe: 600mm CWT: 5 000kg | 0.0 m kg | | | *5 420 | *5 420 | *11 430 | 6 730 | *8 270 | 4 570 | 6 080 | 3 390 | | | | 5 290 | 2 970 | 8.3 | |
| | -1.5 m kg | *6 270 | *6 270 | *10 320 | *10 320 | *11 590 | 6 660 | 8 340 | 4 500 | 6 050 | 3 360 | | | | 5 740 | 3 210 | 7.8 | |
| | -3.0 m kg | *11 380 | *11 380 | *15 660 | 12 540 | *10 930 | 6 720 | *8 080 | 4 540 | | | | | | *6 660 | 3 770 | 6.9 | |
| | -4.5 m kg | | | *12 740 | *12 740 | *9 050 | 6 930 | | | | | | | | *6 920 | 5 200 | 5.6 | |

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

LIFTING CAPACITY EC220ENL

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | Max. reach | | m | |
|--|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|--------|-----|
| | | 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 | | |
| Boom: 5.7m Arm: 3.5m Shoe: 600mm CWT: 5 000kg | 7.5 m kg | | | | | | | | | | | | | | *4 940 | 4 140 | 7.1 |
| | 6.0 m kg | | | | | | | | | | *4 650 | 3 840 | | | *4 900 | 3 330 | 8.1 |
| | 4.5 m kg | | | | | | | | *4 910 | *4 910 | *4 800 | 3 770 | | | *4 950 | 2 910 | 8.8 |
| | 3.0 m kg | | | | | | | | *5 790 | 5 080 | *5 220 | 3 650 | 4 790 | 2 730 | 4 720 | 2 690 | 9.1 |
| | 1.5 m kg | | | | | | | | *6 770 | 4 800 | *5 730 | 3 510 | 4 730 | 2 680 | 4 600 | 2 600 | 9.2 |
| | 0.0 m kg | | | | | | | | *7 580 | 4 590 | 6 080 | 3 390 | | | 4 690 | 2 630 | 9.0 |
| | -1.5 m kg | | | | | | *10 830 | 6 620 | *8 010 | 4 480 | 6 010 | 3 330 | | | 5 020 | 2 810 | 8.6 |
| Boom: 5.57m 2-piece Arm: 2.0m Shoe: 600mm CWT: 5 000kg | -3.0 m kg | | | *15 400 | 12 330 | *10 550 | 6 630 | *7 900 | 4 470 | 6 030 | 3 350 | | | 5 740 | 3 200 | 7.8 | |
| | -4.5 m kg | *16 740 | *16 740 | *13 110 | 12 630 | *9 330 | 6 770 | *6 880 | 4 580 | | | | | *5 890 | 4 080 | 6.6 | |
| | 7.5 m kg | | | | | | | | | | | | | | *8 480 | 7 440 | 4.8 |
| | 6.0 m kg | | | | | | | | | | | | | | *7 400 | 4 880 | 6.2 |
| | 4.5 m kg | | | | | | | | *8 600 | 8 220 | | | | | *6 960 | 3 930 | 7.0 |
| | 3.0 m kg | | | | | | | | *10 890 | 7 090 | *8 130 | 4 760 | | | 6 300 | 3 490 | 7.4 |
| | 1.5 m kg | | | | | | | | | | *8 410 | 4 540 | 6 090 | 3 350 | 6 080 | 3 340 | 7.5 |
| Boom: 5.57m 2-piece Arm: 2.5m Shoe: 600mm CWT: 5 000kg | 0.0 m kg | | | | | *10 870 | 6 490 | *8 170 | 4 420 | | | | | 6 290 | 3 430 | 7.3 | |
| | -1.5 m kg | | | | | *9 360 | 6 530 | *7 120 | 4 420 | | | | | *5 890 | 3 830 | 6.7 | |
| | -3.0 m kg | | | | | *6 690 | *6 690 | | | | | | | | | | 5.7 |
| | 7.5 m kg | | | | | | | | | | | | | | *6 800 | 6 060 | 5.5 |
| | 6.0 m kg | | | | | | | | | | | | | | *6 230 | 4 320 | 6.7 |
| | 4.5 m kg | | | | | | | | | | | | | | *6 120 | 3 580 | 7.5 |
| | 3.0 m kg | | | *12 730 | *12 730 | *9 040 | 7 920 | *7 360 | 5 110 | | | | | | *5 780 | 3 220 | 7.9 |
| Boom: 5.57m 2-piece Arm: 2.9m Shoe: 600mm CWT: 5 000kg | 1.5 m kg | | | | | *10 490 | 7 310 | *7 930 | 4 860 | 6 250 | 3 490 | | | 5 750 | 3 160 | 7.8 | |
| | 0.0 m kg | | | | | *11 420 | 6 790 | *8 360 | 4 610 | 6 130 | 3 380 | | | 5 590 | 3 090 | 8.0 | |
| | -1.5 m kg | | | | | *11 250 | 6 550 | *8 330 | 4 450 | 6 050 | 3 310 | | | 5 750 | 3 160 | 7.8 | |
| | -3.0 m kg | | | *11 490 | *11 490 | *10 080 | 6 520 | *7 590 | 4 410 | | | | | *5 700 | 3 460 | 7.3 | |
| | 9.0 m kg | | | | | | | | | | | | | | *6 130 | *6 130 | 4.0 |
| | 7.5 m kg | | | | | | | | | | | | | | *4 940 | *4 940 | 6.0 |
| | 6.0 m kg | | | | | | | | | | | | | | *4 560 | 3 940 | 7.2 |
| Boom: 5.57m 2-piece Arm: 2.9m Shoe: 600mm CWT: 4 200kg | 4.5 m kg | | | *9 140 | *9 140 | *8 560 | 8 080 | *7 090 | 5 200 | *6 230 | 3 640 | | | *4 470 | 3 320 | 7.9 | |
| | 3.0 m kg | | | | | *10 090 | 7 470 | *7 720 | 4 930 | 6 300 | 3 530 | | | *4 570 | 3 010 | 8.3 | |
| | 1.5 m kg | | | | | *11 260 | 6 900 | *8 260 | 4 670 | 6 160 | 3 410 | | | *4 850 | 2 900 | 8.4 | |
| | 0.0 m kg | | | | | *5 940 | *5 940 | *11 410 | 6 590 | *8 390 | 4 480 | 6 050 | 3 310 | | 5 360 | 2 950 | 8.2 |
| | -1.5 m kg | | | *10 850 | *10 850 | *10 530 | 6 510 | *7 870 | 4 400 | *5 790 | 3 290 | | | | *5 490 | 3 200 | 7.7 |
| | -3.0 m kg | | | *10 990 | *10 990 | *8 600 | 6 590 | *6 370 | 4 450 | | | | | | *4 980 | 3 790 | 6.8 |
| | 7.5 m kg | | | | | | | | | | | | | | | | |

LIFTING CAPACITY EC220EN

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | Max. reach | | m | |
|--|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|--------|-----|
| | | 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 | | |
| Boom: 5.7m Arm: 2.5m Shoe: 600mm CWT: 4 200kg | 7.5 m kg | | | | | | | | | | | | | | *5 670 | *5 670 | 5.6 |
| | 6.0 m kg | | | | | | | | | | | | | | *5 600 | 4 100 | 6.9 |
| | 4.5 m kg | | | | | | | | *5 500 | 5 130 | | | | | 5 130 | 3 420 | 7.6 |
| | 3.0 m kg | | | | | | | | *9 020 | 7 150 | *6 910 | 4 740 | 5 140 | 3 410 | 4 670 | 3 090 | 8.0 |
| | 1.5 m kg | | | | | | | | *10 780 | 6 680 | 6 980 | 4 510 | 5 030 | 3 300 | 4 510 | 2 970 | 8.1 |
| | 0.0 m kg | | | | | | | | 10 590 | 6 470 | 6 810 | 4 360 | 4 950 | 3 230 | 4 630 | 3 030 | 7.9 |
| | -1.5 m kg | | | | | *10 840 | *10 840 | 10 560 | 6 440 | 6 760 | 4 320 | | | | 5 080 | 3 310 | 7.4 |
| Boom: 5.7m Arm: 2.9m Shoe: 600mm CWT: 4 200kg | -3.0 m kg | | | *14 760 | 12 500 | *10 560 | 6 540 | 6 840 | 4 390 | | | | | 6 170 | 4 000 | 6.5 | |
| | -4.5 m kg | | | *11 400 | *11 400 | *8 140 | 6 820 | | | | | | | *7 150 | 5 960 | 5.0 | |
| | 7.5 m kg | | | | | | | | | | | | | | *4 910 | *4 910 | 6.2 |
| | 6.0 m kg | | | | | | | | | | | | | | *4 580 | 3 750 | 7.3 |
| | 4.5 m kg | | | | | | | | | | | | | | *4 520 | 3 180 | 8.0 |
| | 3.0 m kg | | | | | | | | | | | | | | 4 360 | 2 890 | 8.4 |
| | 1.5 m kg | | | | | | | | | | | | | | 4 230 | 2 780 | 8.5 |
| Boom: 5.57m 2-piece Arm: 2.9m Shoe: 600mm CWT: 4 200kg | 0.0 m kg | | | | | *5 420 | *5 420 | 10 640 | 6 510 | 6 840 | 4 390 | 4 960 | 3 230 | 4 320 | 2 830 | 8.3 | |
| | -1.5 m kg | | | *6 270 | *6 270 | *10 320 | *10 320 | 10 560 | 6 430 | 6 760 | 4 310 | 4 920 | 3 210 | | 4 680 | 3 060 | 7.8 |
| | -3.0 m kg | | | *11 380 | *11 380 | *15 660 | 12 390 | 10 630 | 6 500 | 6 800 | 4 350 | | | | 5 540 | 3 600 | 6.9 |
| | -4.5 m kg | | | | | *12 740 | *12 740 | *9 050 | 6 710 | | | | | | *6 920 | 5 000 | 5.6 |
| | 7.5 m kg | | | | | | | | | | | | | | *4 940 | 3 980 | 7.1 |
| | 6.0 m kg | | | | | | | | | | | | | | 4 740 | 3 180 | 8.1 |
| | 4.5 m kg | | | | | | | | | | | | | | 4 160 | 2 770 | 8.8 |
| Boom: 5.7m Arm: 3.5m Shoe: 600mm CWT: 4 200kg | 3.0 m kg | | | | | | | | | | | | | | 3 860 | 2 550 | 9.1 |
| | 1.5 m kg | | | | | | | | | | | | | | 3 760 | 2 470 | 9.2 |
| | 0.0 m kg | | | | | | | | | | | | | | 3 820 | 2 500 | 9.0 |
| | -1.5 m kg | | | | | | | | | | | | | | 4 090 | 2 670 | 8.6 |
| | -3.0 m kg | | | | | *15 400 | 12 180 | 10 530 | 6 410 | 6 720 | 4 280 | 4 910 | 3 190 | | 4 680 | 3 050 | 7.8 |
| | -4.5 m kg | | | *16 740 | *16 740 | *13 110 | 12 480 | *9 330 | 6 550 | 6 860 | 4 400 | | | | *5 890 | 3 900 | 6.6 |
| | 7.5 m kg | | | | | | | | | | | | | | *8 480 | 7 260 | 4.8 |
| Boom: 5.57m 2-piece Arm: 2.9m Shoe: 600mm CWT: 4 200kg | 6.0 m kg | | | | | | | | | | | | | | 7 160 | 4 710 | 6.2 |
| | 4.5 m kg | | | | | | | | | | | | | | 5 750 | 3 770 | 7.0 |
| | 3.0 m kg | | | | | | | | | | | | | | 5 140 | 3 340 | 7.4 |
| | 1.5 m kg | | | | | | | | | | | | | | 4 950 | 3 190 | 7.5 |
| | 0.0 m kg | | | | | | | | | | | | | | 5 110 | 3 280 | 7.3 |
| | -1.5 m kg | | | | | | | | | | | | | | 5 740 | 3 660 | 6.7 |
| | -3.0 m kg | | | | | | | | | | | | | | | | 5.7 |
| 7.5 m kg | | | | | | | | | | | | | | | | | |
| 6.0 m kg | | | | | | | | | | | | | | | | | |
| 4.5 m kg | | | | | | | | | | | | | | | | | |
| 3.0 m kg | | | | | | | | | | | | | | | | | |
| 1.5 m kg | | | | | | | | | | | | | | | | | |
| 0.0 m kg | | | | | | | | | | | | | | | | | |
| -1.5 m kg | | | | | | | | | | | | | | | | | |
| -3.0 m kg | | | | | | | | | | | | | | | | | |
| -4.5 m kg | | | | | | | | | | | | | | | | | |
| 7.5 m kg | | | | | | | | | | | | | | | | | |
| 6.0 m kg | | | | | | | | | | | | | | | | | |
| 4.5 m kg | | | | | | | | | | | | | | | | | |
| 3.0 m kg | | | | | | | | | | | | | | | | | |
| 1.5 m kg | | | | | | | | | | | | | | | | | |
| 0.0 m kg | | | | | | | | | | | | | | | | | |
| -1.5 m kg | | | | | | | | | | | | | | | | | |
| -3.0 m kg | | | | | | | | | | | | | | | | | |
| -4.5 m kg | | | | | | | | | | | | | | | | | |

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.

Specifications.

LIFTING CAPACITY EC220EN

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | Max. reach | | m | | |
|--------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|--------|-------|-----|
| | | 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 | | | |
| Boom: 7.5 m | kg | | | | | *7 840 | *7 840 | | | | | | | | | *6 800 | 5 890 | 5.5 |
| 5.57m2-piece | kg | | | | | | | *8 000 | *8 000 | *7 020 | 5 100 | | | | | *6 230 | 4 160 | 6.7 |
| Arm: 4.5 m | kg | | | *12 730 | *12 730 | *9 040 | 7 740 | *7 360 | 4 940 | | | | | | 5 210 | 3 430 | 7.5 | |
| 2.5m | kg | | | | | *10 490 | 7 110 | 7 230 | 4 680 | 5 110 | 3 340 | | | | 4 720 | 3 080 | 7.9 | |
| Shoe: 1.5 m | kg | | | | | 10 820 | 6 580 | 6 950 | 4 430 | 4 990 | 3 230 | | | | 4 560 | 2 950 | 8.0 | |
| 600mm | kg | | | | | 10 530 | 6 330 | 6 770 | 4 270 | 4 910 | 3 150 | | | | 4 670 | 3 010 | 7.8 | |
| CWT: -1.5 m | kg | | | *11 490 | *11 490 | *10 080 | 6 310 | 6 720 | 4 220 | | | | | | 5 150 | 3 300 | 7.3 | |
| 4 200kg | kg | | | | | *7 830 | 6 430 | *5 670 | 4 330 | | | | | | *5 010 | 4 040 | 6.3 | |
| Boom: 9.0 m | kg | | | | | | | | | | | | | | *6 130 | *6 130 | 4.0 | |
| 5.57m2-piece | kg | | | | | *7 030 | *7 030 | *5 140 | *5 140 | | | | | | *4 940 | *4 940 | 6.0 | |
| Arm: 6.0 m | kg | | | | | *7 080 | *7 080 | *6 680 | 5 200 | | | | | | *4 560 | 3 780 | 7.2 | |
| 2.9m | kg | | | *9 140 | *9 140 | *8 560 | 7 900 | *7 090 | 5 030 | 5 280 | 3 490 | | | | *4 470 | 3 180 | 7.9 | |
| Shoe: 3.0 m | kg | | | | | *10 090 | 7 270 | 7 310 | 4 760 | 5 160 | 3 380 | | | | 4 400 | 2 870 | 8.3 | |
| 500mm | kg | | | | | 10 960 | 6 700 | 7 010 | 4 490 | 5 020 | 3 250 | | | | 4 260 | 2 760 | 8.4 | |
| CWT: 0.0 m | kg | | | *5 940 | *5 940 | 10 580 | 6 380 | 6 800 | 4 290 | 4 920 | 3 160 | | | | 4 360 | 2 810 | 8.2 | |
| 4 200kg | kg | | | *10 850 | *10 850 | 10 490 | 6 300 | 6 710 | 4 220 | 4 900 | 3 140 | | | | 4 740 | 3 050 | 7.7 | |
| Boom: -3.0 m | kg | | | *10 990 | *10 990 | *8 600 | 6 380 | *6 370 | 4 270 | | | | | | *4 980 | 3 630 | 6.8 | |

LIFTING CAPACITY EC220ENH

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | Max. reach | | m | |
|--------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|--------|-----|
| | | 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 | | |
| Boom: 7.5 m | kg | | | | | | | | | | | | | | *5 670 | *5 670 | 5.6 |
| 5.7m | kg | | | | | | | *5 500 | 5 440 | | | | | | *5 600 | 4 380 | 6.9 |
| Arm: 4.5 m | kg | | | | | *7 000 | *7 000 | *6 020 | 5 290 | *5 680 | 3 750 | | | | *5 690 | 3 670 | 7.6 |
| 2.5m | kg | | | | | *9 020 | 7 550 | *6 910 | 5 050 | *5 990 | 3 660 | | | | 5 530 | 3 330 | 8.0 |
| Shoe: 1.5 m | kg | | | | | *10 780 | 7 090 | *7 800 | 4 830 | 5 970 | 3 560 | | | | 5 360 | 3 210 | 8.1 |
| 500mm | kg | | | | | *11 570 | 6 880 | 8 110 | 4 680 | 5 890 | 3 490 | | | | 5 500 | 3 270 | 7.9 |
| CWT: 0.0 m | kg | | | | | *10 840 | *10 840 | *11 480 | 6 860 | 8 060 | 4 640 | | | | 6 040 | 3 570 | 7.4 |
| 5 000kg | kg | | | *14 760 | 13 020 | *10 560 | 6 950 | *7 790 | 4 710 | | | | | | *7 010 | 4 290 | 6.5 |
| Boom: -3.0 m | kg | | | *11 400 | *11 400 | *8 140 | 7 220 | | | | | | | | *7 150 | 6 330 | 5.0 |
| 5.7m | kg | | | | | | | *5 180 | *5 180 | | | | | | *4 910 | *4 910 | 6.2 |
| Arm: 6.0 m | kg | | | | | | | *5 080 | *5 080 | | | | | | *4 580 | 4 000 | 7.3 |
| 2.9m | kg | | | | | | | *5 660 | 5 360 | *5 350 | 3 800 | | | | *4 520 | 3 420 | 8.0 |
| Shoe: 3.0 m | kg | | | | | *8 440 | 7 690 | *6 590 | 5 120 | *5 750 | 3 700 | | | | *4 640 | 3 120 | 8.4 |
| 500mm | kg | | | | | *10 370 | 7 190 | *7 570 | 4 870 | 6 000 | 3 580 | | | | *4 950 | 3 010 | 8.5 |
| CWT: 0.0 m | kg | | | *5 420 | *5 420 | *11 430 | 6 920 | 8 140 | 4 700 | 5 900 | 3 490 | | | | 5 140 | 3 060 | 8.3 |
| 5 000kg | kg | *6 270 | *6 270 | *10 320 | *10 320 | *11 590 | 6 850 | 8 060 | 4 630 | 5 860 | 3 460 | | | | 5 580 | 3 300 | 7.8 |
| Boom: -3.0 m | kg | *11 380 | *11 380 | *15 660 | 12 910 | *10 930 | 6 910 | *8 080 | 4 670 | | | | | | 6 590 | 3 880 | 6.9 |
| 5.7m | kg | | | *12 740 | *12 740 | *9 050 | 7 120 | | | | | | | | *6 920 | 5 340 | 5.6 |
| Arm: 6.0 m | kg | | | | | | | | | *4 650 | 3 940 | | | | *4 940 | 4 250 | 7.1 |
| 2.9m | kg | | | | | | | *4 910 | *4 910 | *4 800 | 3 870 | | | | 4 920 | 2 990 | 8.8 |
| Shoe: 3.0 m | kg | | | | | | | *5 790 | 5 210 | *5 220 | 3 750 | 4 660 | 2 810 | | 4 590 | 2 760 | 9.1 |
| 500mm | kg | | | | | | | *6 770 | 4 930 | *5 730 | 3 610 | 4 600 | 2 750 | | 4 470 | 2 680 | 9.2 |
| CWT: 0.0 m | kg | | | | | | | *7 580 | 4 720 | 5 900 | 3 490 | | | | 4 560 | 2 710 | 9.0 |
| 5 000kg | kg | | | | | *10 830 | 6 820 | *8 010 | 4 610 | 5 830 | 3 430 | | | | 4 870 | 2 890 | 8.6 |
| Boom: -3.0 m | kg | | | *15 400 | 12 700 | *10 550 | 6 820 | *7 900 | 4 600 | 5 850 | 3 450 | | | | 5 570 | 3 300 | 7.8 |
| 5.7m | kg | *16 740 | *16 740 | *13 110 | 13 000 | *9 330 | 6 970 | *6 880 | 4 710 | | | | | | *5 890 | 4 190 | 6.6 |
| Arm: 7.5 m | kg | | | | | *8 600 | 8 410 | | | | | | | | *8 480 | 7 620 | 4.8 |
| 2.0m | kg | | | | | *8 580 | 8 350 | *7 470 | 5 270 | | | | | | *7 400 | 5 010 | 6.2 |
| Shoe: 4.5 m | kg | | | | | *9 580 | 7 900 | *7 670 | 5 140 | | | | | | 6 800 | 4 030 | 7.0 |
| 500mm | kg | | | | | *10 890 | 7 280 | *8 130 | 4 890 | | | | | | 6 100 | 3 590 | 7.4 |
| CWT: 3.0 m | kg | | | | | | | 8 180 | 4 670 | 5 900 | 3 450 | | | | 5 900 | 3 440 | 7.5 |
| 5 000kg | kg | | | | | *10 870 | 6 690 | 8 040 | 4 550 | | | | | | 6 090 | 3 530 | 7.3 |
| Boom: -1.5 m | kg | | | | | *9 360 | 6 720 | *7 120 | 4 550 | | | | | | *5 890 | 3 940 | 6.7 |
| 5.57m2-piece | kg | | | | | *6 690 | *6 690 | | | | | | | | | | 5.7 |
| Arm: 7.5 m | kg | | | | | *7 840 | *7 840 | | | | | | | | *6 800 | 6 210 | 5.5 |
| 2.5m | kg | | | | | *8 000 | *8 000 | *7 020 | 5 400 | | | | | | *6 230 | 4 430 | 6.7 |
| Shoe: 4.5 m | kg | | | *12 730 | *12 730 | *9 040 | 8 110 | *7 360 | 5 250 | | | | | | *6 120 | 3 680 | 7.5 |
| 500mm | kg | | | | | *10 490 | 7 500 | *7 930 | 4 990 | 6 060 | 3 590 | | | | 5 600 | 3 310 | 7.9 |
| CWT: 3.0 m | kg | | | | | *11 420 | 6 980 | 8 260 | 4 740 | 5 940 | 3 480 | | | | 5 430 | 3 180 | 8.0 |
| 5 000kg | kg | | | | | *11 250 | 6 740 | 8 080 | 4 580 | 5 860 | 3 410 | | | | 5 570 | 3 250 | 7.8 |
| Boom: -1.5 m | kg | | | *11 490 | *11 490 | *10 080 | 6 710 | *7 590 | 4 540 | | | | | | *5 700 | 3 560 | 7.3 |
| 5.57m2-piece | kg | | | | | *7 830 | 6 840 | *5 670 | 4 640 | | | | | | *5 010 | 4 340 | 6.3 |
| Arm: 9.0 m | kg | | | | | | | | | | | | | | *6 130 | *6 130 | 4.0 |
| 2.9m | kg | | | | | *7 030 | *7 030 | *5 140 | *5 140 | | | | | | *4 940 | *4 940 | 6.0 |
| Shoe: 6.0 m | kg | | | | | *7 080 | *7 080 | *6 680 | 5 500 | | | | | | *4 560 | 4 040 | 7.2 |
| 500mm | kg | | | *9 140 | *9 140 | *8 560 | 8 280 | *7 090 | 5 330 | *6 230 | 3 740 | | | | *4 470 | 3 410 | 7.9 |
| CWT: 3.0 m | kg | | | | | *10 090 | 7 660 | *7 720 | 5 060 | 6 110 | 3 630 | | | | *4 570 | 3 100 | 8.3 |
| 5 000kg | kg | | | | | *11 260 | 7 090 | *8 260 | 4 800 | 5 970 | 3 500 | | | | *4 850 | 2 990 | 8.4 |
| Boom: 0.0 m | kg | | | *5 940 | *5 940 | *11 410 | 6 790 | 8 110 | 4 610 | 5 860 | 3 410 | | | | 5 200 | 3 040 | 8.2 |
| 5 000kg | kg | | | *10 850 | *10 850 | *10 530 | 6 700 | *7 870 | 4 530 | *5 790 | 3 390 | | | | *5 490 | 3 290 | 7.7 |
| Boom: -3.0 m | kg | | | *10 990 | *10 990 | *8 600 | 6 790 | *6 370 | 4 580 | | | | | | *4 980 | 3 900 | 6.8 |

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

LIFTING CAPACITY EC220ELR

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 0.0 m | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | | |
|--|--------------------------------------|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|----------|-----------|----------|-----------|--------|--------|
| | | 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 | | |
| Boom : 8.85m Arm : 6.25m Shoe : 800mm CWT : 5 000kg | 4.5 m kg | | | | | | | | | | | | | *2 820 | *2 820 | *3 340 | *3 340 |
| | 3.0 m kg | | | | | *6 300 | *6 300 | *4 590 | *4 590 | *3 720 | *3 720 | *3 210 | 3 070 | *3 790 | 3 710 | | |
| | 1.5 m kg | | | | | *7 880 | 7 320 | *5 580 | 5 020 | *4 330 | 3 700 | *3 600 | 2 850 | *4 210 | 3 410 | | |
| | 0.0 m kg | | | *2 480 | *2 480 | *5 610 | *5 610 | *6 360 | 4 570 | *4 860 | 3 410 | *3 970 | 2 650 | *4 550 | 3 160 | | |
| | -1.5 m kg | *2 650 | *2 650 | *3 360 | *3 360 | *5 620 | *5 620 | *6 860 | 4 290 | *5 250 | 3 200 | 4 140 | 2 500 | *4 810 | 2 980 | | |
| | -3.0 m kg | *3 570 | *3 570 | *4 340 | *4 340 | *6 320 | 6 270 | *7 110 | 4 160 | 5 210 | 3 070 | 4 030 | 2 400 | 4 790 | 2 870 | | |
| | -4.5 m kg | *4 530 | *4 530 | *5 410 | *5 410 | *7 370 | 6 290 | *7 120 | 4 120 | 5 150 | 3 020 | 3 980 | 2 350 | 4 740 | 2 830 | | |
| | -6.0 m kg | *5 560 | *5 560 | *6 600 | *6 600 | *8 740 | 6 410 | *6 920 | 4 160 | 5 160 | 3 030 | 3 980 | 2 350 | 4 750 | 2 830 | | |
| | -7.5 m kg | *6 670 | *6 670 | *7 960 | *7 960 | *8 470 | 6 590 | *6 480 | 4 270 | *5 170 | 3 100 | 4 040 | 2 410 | *4 710 | 2 900 | | |
| | -9.0 m kg | | | *9 560 | *9 560 | *7 360 | 6 870 | *5 710 | 4 450 | *4 560 | 3 240 | *3 640 | 2 540 | *4 280 | 3 020 | | |
| | -10.5 m kg | | | | | *5 630 | *5 630 | *4 390 | *4 390 | *3 350 | *3 350 | | | | | | |
| | | Lifting hook related to ground level | 10.5 m | | 12.0 m | | 13.5 m | | Max. reach | | | | | | | | |
| | | | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | | | | | | | |
| | | 12.0 m kg | | | | | | | *870 | *870 | | | | | | 10.3 | |
| | | 10.5 m kg | | | | | | | *800 | *800 | | | | | | 11.6 | |
| | | 9.0 m kg | | | *1 450 | *1 450 | | | *760 | *760 | | | | | | 12.6 | |
| | | 7.5 m kg | *2 230 | *2 230 | *2 060 | *2 060 | | | *740 | *740 | | | | | | 13.4 | |
| | | 6.0 m kg | *2 390 | *2 390 | *2 330 | 2 070 | *1 330 | *1 330 | *740 | *740 | | | | | | 13.9 | |
| | | 4.5 m kg | *2 610 | 2 530 | *2 470 | 1 980 | *1 810 | 1 560 | *750 | *750 | | | | | | 14.3 | |
| | | 3.0 m kg | *2 870 | 2 390 | *2 640 | 1 890 | *2 160 | 1 500 | *780 | *780 | | | | | | 14.5 | |
| | 1.5 m kg | *3 140 | 2 240 | *2 830 | 1 790 | 2 400 | 1 440 | *820 | *820 | | | | | | 14.6 | | |
| | 0.0 m kg | *3 390 | 2 110 | 2 820 | 1 700 | 2 340 | 1 390 | *880 | *880 | | | | | | 14.4 | | |
| | -1.5 m kg | 3 330 | 2 000 | 2 740 | 1 630 | 2 300 | 1 350 | *970 | *970 | | | | | | 14.2 | | |
| | -3.0 m kg | 3 250 | 1 930 | 2 690 | 1 580 | *1 670 | 1 320 | *1 100 | *1 100 | | | | | | 13.7 | | |
| | -4.5 m kg | 3 210 | 1 890 | 2 670 | 1 570 | | | *1 280 | *1 280 | | | | | | 13.1 | | |
| | -6.0 m kg | 3 220 | 1 900 | *2 410 | 1 590 | | | *1 560 | 1 550 | | | | | | 12.3 | | |
| | -7.5 m kg | 3 290 | 1 970 | | | | | *2 030 | 1 830 | | | | | | 11.2 | | |
| | -9.0 m kg | | | | | | | *3 020 | 2 320 | | | | | | 9.7 | | |
| | -10.5 m kg | | | | | | | *3 250 | *3 250 | | | | | | 7.6 | | |

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, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4f EU (Stage IV) requirements

Air filter with indicator

Air intake heater

Cyclone pre-cleaner

Electric engine shut-off

Fuel filter and water separator

Fuel filler pump: 50 l/min, with automatic shut-off

Alternator, 80 A

Standard cooling system by fan clutch(40 deg. C)

Electric/Electronic control system

Contronics

Advanced mode control system

Self-diagnostic system

GSM/GPS Caretrack and 3yr-Caretrack subscription

Machine status indication

Engine speed sensing power control

Automatic idling system

One-touch power boost

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

High-capacity halogen or LED lights:

Frame-mounted 2

Boom-mounted 1

Batteries, 2 x 12 V / 140 Ah

Start motor, 24 V / 5.5 kW

Hydraulic system

Boom hose rupture valve with overload warning device

Automatic sensing hydraulic system

Summation system

Arm priority

Swing priority

ECO mode fuel saving technology

Boom, arm and bucket regeneration valves

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Boom cylinders (x2)

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic two-speed travel motors

Hydraulic oil, longlife oil 46

Frame

Access way with handrail

Tool storage area

Punched metal anti-slip plates

Under cover (heavy duty)

Full height counterweight:

4 200 kg Long Crawler (L), Narrow Crawler (N)

5 000 kg Narrow Long Crawler (NL), Narrow Heavy (NH), Long Reach (LR)

Cab and interior

ROPS (ISO12117-2) certified cab

Silicon oil and rubber mounts with spring

Control lock out lever

Travel pedals and hand levers

Adjustable operator seat with heater and joystick control console

Control joysticks with 4 switches each

Heater & air-conditioner, automatic

Flexible antenna

Radio with MP3 and USB Jack with bluetooth

Cab, all-weather sound suppressed, includes:

Cup holders

Door locks

Tinted glass

Floor mat

Horn

Large storage area

Pull-up type front window

Removable lower windshield

Seat belt

Safety glass

Sun screens, front, roof, rear

Rain shield

Windshield wiper with intermittent feature

Rear view camera

Master key

Undercarriage

Under cover (heavy duty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

600 mm shoe with triple grousers

800 mm shoe with triple grousers (LR)

Digging equipment

Boom: monoblock 5.7 m, Long Reach 8.85 m

Arm: 2.9 m, Long Reach 6.25 m

Manual centralized lubrication

OPTIONAL EQUIPMENT

Engine

Block heater: 120 V, 240 V

Oil bath pre-cleaner

Diesel coolant heater, 5 kW

Water separator with heater

Auto engine shutdown

Fuel filler pump, 35 lpm

Tropical cooling system (50 deg. C)

Electric

Extra work lights (Halogen or LED):

Boom-mounted 1

Cab-mounted 3

Counterweight-mounted 1

Travel alarm

Anti-theft system

Rotating warning beacon

OPTIONAL EQUIPMENT

Hydraulic system

| |
|---|
| Arm hose rupture valve |
| Boom float function with HRV |
| Boom float function without HRV |
| Hydraulic piping: Work tool management system (up to 20 programmable memories) |
| Breaker & shear, 1 and 2 pump flow |
| Slope & rotator (40lpm or 60lpm) |
| Extra for slope & rotator |
| Grapple |
| Oil leak (drain) line |
| Quick coupler |
| Breaker & shear pressure pre-setting |
| Additional return filter |
| Volvo hydraulic quick coupler S1, S1 without hook |
| Volvo hydraulic quick coupler VQC-HD, S70 / VQC-HU,DR22 |
| Hydraulic oil, biodegradable 46 |
| Hydraulic oil, longlife oil 32, 46, 68 |

Cab and interior

| |
|---|
| Fabric seat without heater |
| Fabric seat with heater and air suspension |
| Control joysticks with semi-long |
| Control joysticks with 3 switch & 1 propotional |
| Opening top hatch |
| Falling object guard (FOG) |
| Frame-mounted |
| Cab-mounted |

Cab and interior

| |
|--|
| Cab-mounted falling object protective structure (FOPS) |
| Side view camera |
| Smoker kit (ashtray and lighter) |
| Safety net for front window |
| Sunlight protection, roof (steel) |
| Lower wiper with intermittent control |
| Cleaning air gun |
| Anti-vandalism kit |
| Specific key |

Undercarriage

| |
|---|
| Full track guard |
| 500/600/600 HD/700/800/900 mm shoe with triple grousers |
| 700 mm shoe with double grousers |
| 600 mm shoe with single grouser |

Digging equipment

| |
|-----------------------------------|
| Boom: 5.7 m monoblock, heavy duty |
| Boom: 5.57 m 2 piece boom |
| Arm: 2.0 m, 2.5 m, 2.9 m, 3.5 m |
| Linkage with lifting eye |

Service

| |
|-----------------------------|
| Tool kit, daily maintenance |
| Tool kit, full scale |

Selection of Volvo optional equipment

Auto engine shutdown**Two-piece boom****Diesel coolant heater****LED lights****Fuel fill pump****Cleaning air gun**

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

VOLVO

Volvo Construction Equipment

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