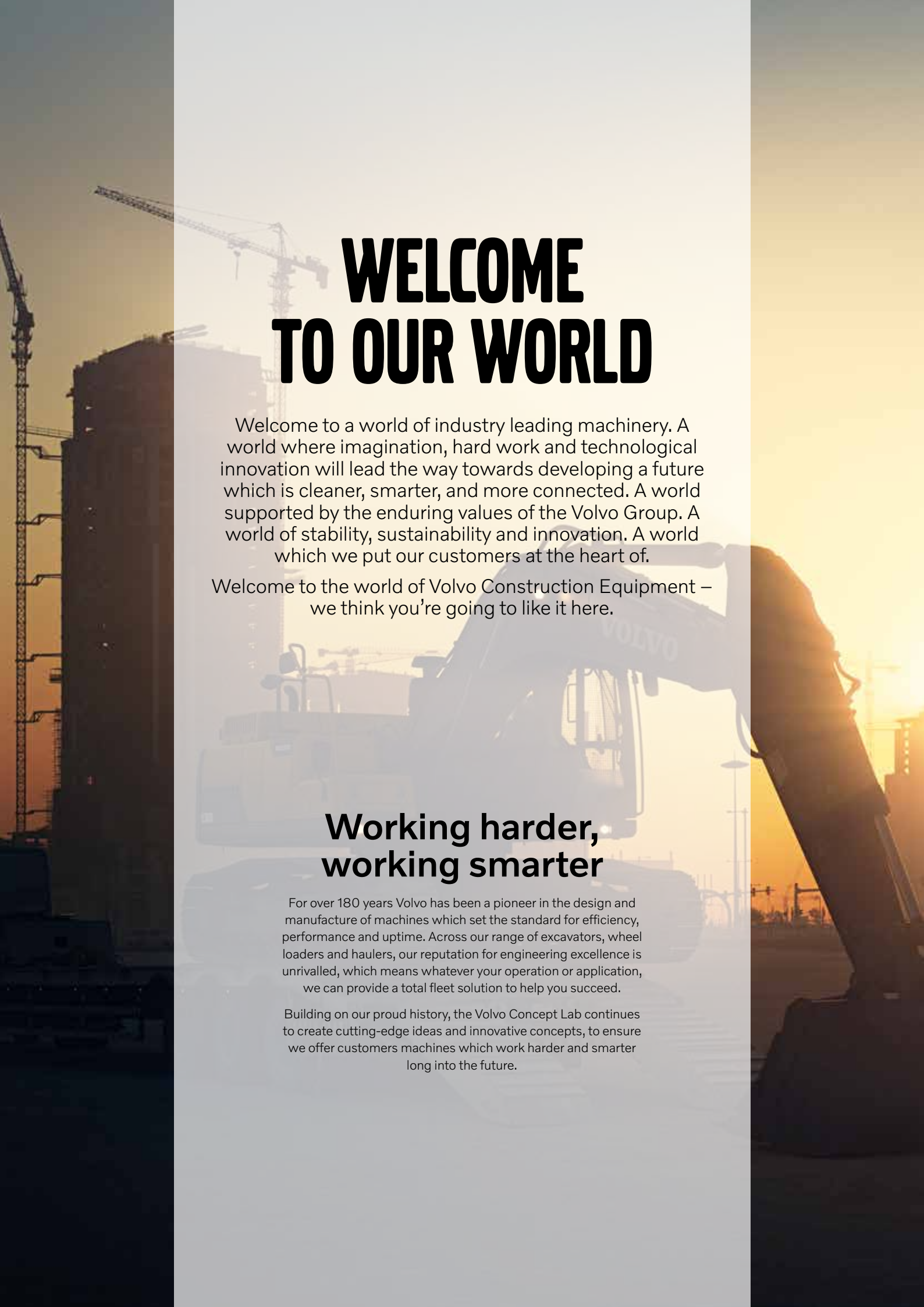
Volvo Construction Equipment
Building Tomorrow

# EC950F

Volvo Excavators 91.3-94.8 t 611 hp





# WELCOME TO OUR WORLD

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

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

## Working harder, working smarter

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

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




# Solutions for you

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

**Designed for your business**

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

**There when you need us**

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

BUILDING TOMORROW

# Big, powerful and productive

Do the big jobs better, stronger and faster with the EC950F. The 90 tonne crawler excavator offers the perfect combination of power and stability to handle a higher capacity in the toughest applications.

**Solid stability**

The outstanding stability of the EC950F means operators can work with confidence in the most challenging environments. The well-balanced and solid machine features a wide track gauge, long track length, retractable undercarriage and an optimized counterweight.



**Powered by Volvo**

Rely on a superior performance from the EC950F, featuring a powerful 450kW Volvo D16 engine, which delivers high torque at low rpm. The machine utilizes advanced technology built on decades of experience to ensure a highly productive operation.



**Comfortably productive**

For operator convenience, all machine interfaces – including the joysticks, keypad and LCD monitor – are ergonomically positioned and designed for optimum control. The low-noise and spacious cab further enhances operator comfort and performance.



**Buckets to match**

Maximize productivity with Volvo buckets, perfectly matched to your machine for ultimate digging results in all working conditions. Our range includes General Purpose, Heavy-Duty and Extreme-Duty buckets, and when your application requires something more unique, we offer Custom-Built Attachments to develop the right solution for you.






# BIGGER MACHINE, BIGGER RESULTS

Gain more profitability in the EC950F, Volvo's largest crawler excavator. The 90 tonne excavator delivers a high bucket capacity for more tons per hour, achieving a fast and efficient on-site production.




# SUPERIOR DIGGING FORCE

Even in the harshest applications, the EC950F is up to the challenge. Experience superior digging force, particularly when working with hard and heavy materials, thanks to constant high hydraulic pressure delivering power to the machine when you need it.

# Peak performance

Job done. With the big and powerful EC950F, no task is too tough. Increase profitability with superior digging force, quick cycle times and outstanding fuel efficiency for a maximum return on investment.

**Fast cycle times**

Cut cycle times to a minimum with the fully electro-hydraulic system. The optimized hydraulics system increases pump power for a fast and smooth operation.



**Complete control**

For a more efficient operation, the electro-hydraulic system puts superior control in the operator's hands. Utilizing intelligent technology, the easy-to-use system controls on-demand flow and reduces internal losses in the hydraulic circuit. What's more, the EC950F comes with a boom-swing priority valve.



**Outstanding fuel efficiency**

Achieve outstanding fuel efficiency with Volvo's unique ECO Mode and electro-hydraulic system. ECO Mode optimizes the hydraulic system to reduce loss of flow and pressure, while the integrated work mode allows operators to choose the best work mode for the task at hand: select from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max).




**Do more**

Take on a range of tasks in the hard-working EC950F. The attachment management system enhances machine versatility by storing settings for up to 20 different attachments, enabling the operator to pre-set hydraulic flow and pressure through the in-cab monitor.



# Always-on

Rely on maximum uptime with the big and durable EC950F – always ready to work. The machine's heavy-duty design, reliable and wear-resistant components, and easy service access ensure you will get the job done safely and without delay.

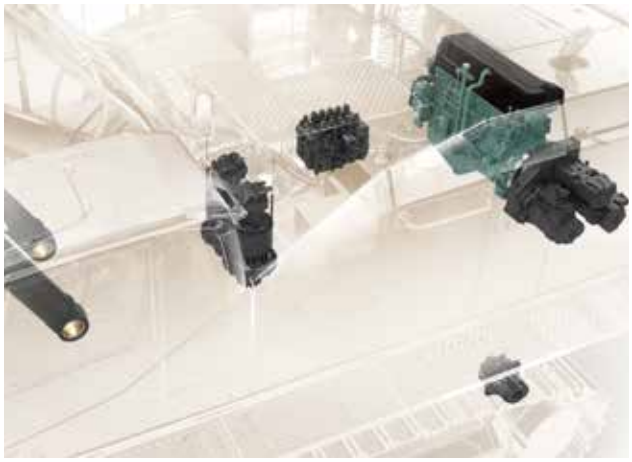
**Durable by design**

Achieve non-stop production with the reliable EC950F, built with protected components to deliver maximum longevity in demanding applications. Outstanding machine protection is provided by features including a heavy-duty boom and arm, strong frame structure, heavy-duty underside plate and optional full-length track guard.




**Proven reliability**

Count on a solid EC950F with Volvo's high-quality components, designed to work in perfect harmony with the machine. Volvo's commitment to rigorous testing in its development process ensures the production of well-engineered components, purpose-built for the job, and proven to be reliable in the toughest applications.



**Wear-resistant digging**

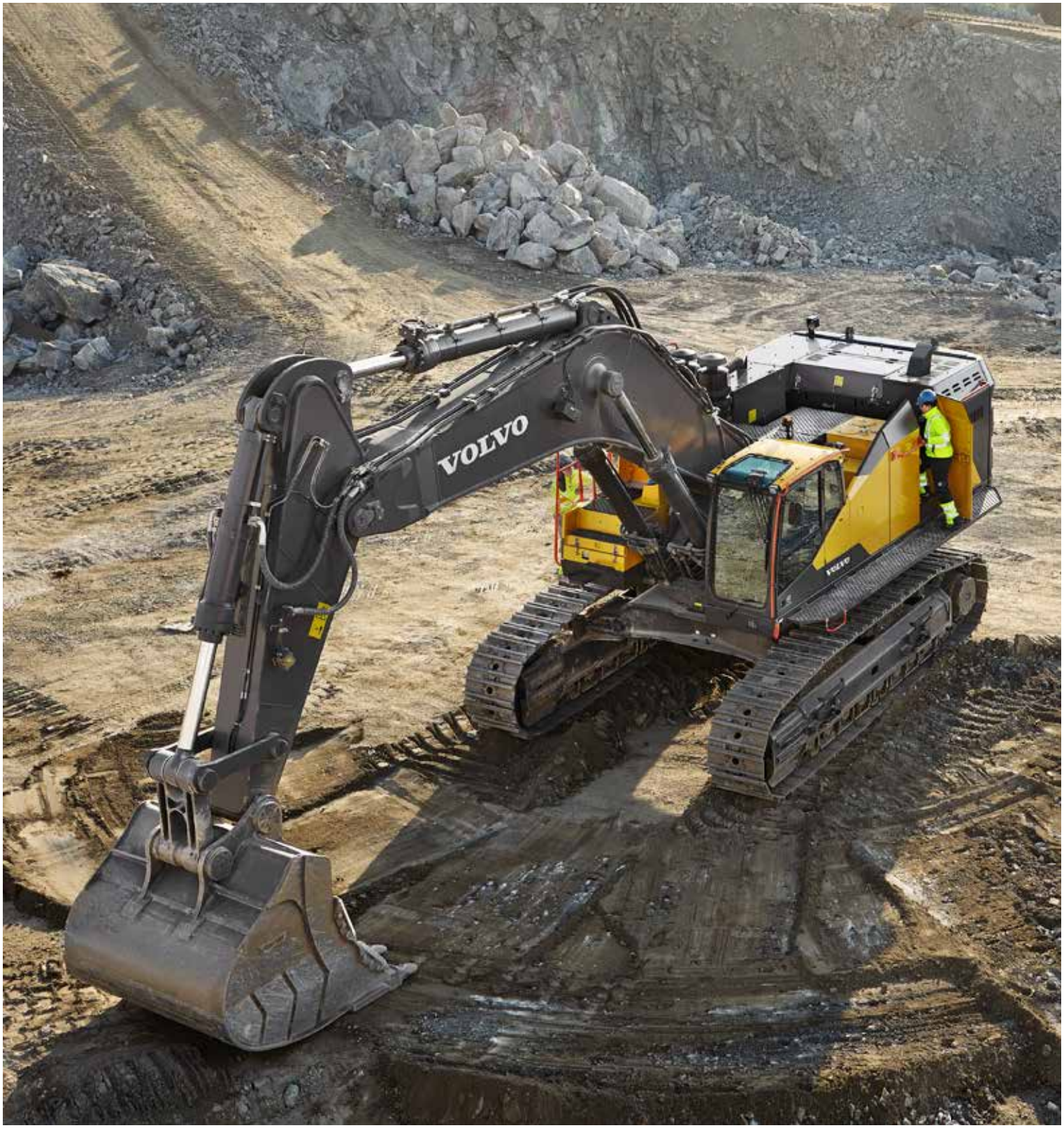
For a prolonged bucket lifespan, Volvo offers a range of wear parts including segments, side cutters, shrouds and teeth. When working with heavily compacted material the Pick Point tooth provides maximum penetration, and the new Volvo Tooth System enables teeth changes in minutes: simply place, push and click – it's that easy to install.



**Safety first**

Safety is built in to the machine thanks to a large entrance, including high visibility handrails and conveniently positioned steps, as well as anti-slip plates. The optional FOG (Falling Object Guard) and FOPS (Falling Object Protective Structure) provide further peace-of-mind when working in tough applications. For added visibility, the EC950F can be equipped with rear view and side cameras, or Volvo Smart View which provides 360° vision.






# EASY SERVICE ACCESS

Maximize uptime with quick and safe servicing. Essential maintenance points are easily accessed via the wide-opening and conveniently located compartment doors using central and surrounding walkways.




# EASY MACHINE MONITORING

Maximize machine uptime and reduce repair costs with Volvo ACTIVE CARE. Utilizing CareTrack data, the intelligent service provides round the clock machine monitoring and tailored customer reports, helping you to keep track of your fleet and take preventive maintenance actions.

# Keeping costs down

Engineering machines which deliver outstanding results is just the start of how we can support your operation. As your partner we are here to help with every aspect of your Volvo machinery. Our portfolio of services is designed to complement your machine's performance and boost your profitability.

**Volvo dealer network**

Volvo has the right solution for you. By listening to your requirements, we can reduce your total cost of ownership and increase your revenue. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.



**Machine diagnosis**

Analyze machine usage, reduce maintenance costs and increase service life with Volvo's diagnostic analysis software. MATRIS analyses the machine's operational data and functions, which can be adjusted accordingly.



**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.




**Genuine Volvo Parts**

Every part is vital for optimized uptime and performance of your machine. Genuine Volvo Parts are extensively tested and approved to ensure the highest quality. Talk to your local Volvo dealer to discover parts availability and quick and easy delivery via our global parts distribution network.



# Go big

## THE OPERATOR'S CHOICE

- Spacious and quiet cab, ergonomic controls
- Boom-swing priority function
- Dig Assist, powered by Volvo Co-Pilot (Option)

## ROBUST PROTECTION

- Heavy-duty boom and arm
- Additional underside plate
- Floating pins on the bucket connection




## VERSATILITY

- General Purpose, Heavy-Duty and Extreme-Duty buckets
- Range of wear parts: teeth, side cutters, segments and wear shrouds
- Custom-Built Attachments for specific applications
- Attachment Management System: pre-set hydraulic flow and pressure

## EFFICIENTLY PRODUCTIVE

- Powerful 450kW Volvo D16 engine: high torque at low RPM
- Fully electro-hydraulic system
- Constant high hydraulic pressure for superior digging force
- ECO mode, Work modes

## KEEP ON DIGGING

- Easy service access, wide-opening compartment doors
- Volvo Tooth System: quick, easy and safe installation
- Volvo ACTIVE CARE: round-the-clock machine monitoring
- Genuine Volvo Parts




## SAFETY FIRST

- High-visibility handrails
- Anti-slip plates
- Central and surrounding walkways
- Rear and side view cameras, Volvo Smart View (Options)

## SOLID STABILITY

- Wide track gauge
- Long track length
- Retractable undercarriage
- Optimized counterweight

# Volvo EC950F in detail

**Engine**

The engine is a low emission, turbocharged air-to-air cooling, 4-stroke diesel engine with water cooling, direct injection controlled electronically, that meets EU Stage V requirements. The engine has been developed especially for excavator use, providing good fuel efficiency, low sound level and a long service life.
**Air Filter** : 3-stage
**Automatic Idling System** : Reduces the engine speed to idle / when levers and pedals are not activated / resulting in less fuel consumption and low cab noise level.

| | | |
|---|---|---|
| Engine | Volvo | D16J |
| Max power at | r/min | 1 650 |
| Net, ISO 9249/SAE J1349 | kW | 449 |
| | hp | 611 |
| Gross, ISO 14396/SAE J1995 | kW | 450 |
| | hp | 612 |
| Max torque | Nm | 2 700 |
| at engine speed | r/min | 1 400 |
| No. of cylinders | | 6 |
| Displacement | l | 16.1 |
| Bore | mm | 144 |
| Stroke | mm | 165 |

**Electrical system**

Contronics, provides advanced monitoring of machine function and important diagnostic information.
High capacity and well protected electrical system.
Centrally located fuse and relay box using clearly arranged printed circuit board mounted, for easy access, behind the cab.
A master switch is standard.

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

**Undercarriage**

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

| | | |
|---|---|---|
| Track shoes | | 51 x 2 |
| Link pitch | mm | 260.4 |
| Shoe width, double grouser | mm | 650/750/900 |
| Bottom rollers | | 9 x 2 |
| Top rollers | | 3 x 2 |

**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 a 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 door.
Integrated air conditioning and heating system: The pressurized and filtered cab air is supplied by automatically controlled fan. The air is distributed via 13 vents.
Ergonomic operator's seat: The adjustable seat and joystick consoles move independently to accommodate the operator. The seat has nine different adjustments and a seat belt to meet any operator's comfort and safety.

**Swing system**

The superstructure is slewed by two units of hydraulic piston motors with 2 stage planetary gear reduction box. Automatic swing holding brake and anti-rebound valve are equipped.

| | | |
|---|---|---|
| Max. slew speed | r/min | 6.9 |
| Max. slew torque | kNm | 343 |

**Travel System**

**Drive device:** 2 step Hydraulic motor with 2 stage planetary reduction gears on each track.
**Framework:** All-welded robust torsion box frame.
**Track Gauge:** Retractable.

| | | |
|---|---|---|
| Max. drawbar pull | kN | 565 |
| Max. travel speed (low) | km/h | 2.8 |
| Max. travel speed (high) | km/h | 4.4 |
| Gradeability | ° | 33 |

**Sound Level**

Sound pressure level in cab according to ISO 6396

| | | |
|---|---|---|
| $L_{pA}$ | dB | 72 |

External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC

| | | |
|---|---|---|
| $L_{WA}$ | dB | 109 |

**Hydraulic system**

The hydraulic system, also known as the "Automatic Sensing Work Mode", is designed for high-productivity, high-digging capacity, high-maneuvering precision and good fuel economy. The summation system, boom priority, arm priority, swing priority along with boom and arm 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 fast raising when loading or performing deep excavation.
**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
**Regeneration system:** Prevents cavitation and provides flow to other movements curing simultaneous operations for maximum productivity
**Holding valves:** Boom and arm holding valves prevent the digging equipment from creeping

| | | |
|---|---|---|
| Main pump. Type: 3 x variable displacement axial piston pumps | | |
| Maximum flow | l/min | 2 x 515; 1 x 147 |
| Pilot pump. Type: Gear pump | | |
| Maximum flow | l/min | 1 x 37.8 |
| Relief value setting pressure | | |
| Implement | MPa | 34.3 |
| Travel circuit | MPa | 34.3 |
| Slew circuit | MPa | 28.4 |
| Pilot circuit | MPa | 3.9 |

**Hydraulic Motors**

**Travel:** Variable displacement axial piston motors
**Slew:** Fixed displacement axial piston motor with mechanical brake

**Hydraulic Cylinders**

| | | |
|---|---|---|
| Mono boom | | 2 |
| Bore x Stroke | ø x mm | 215 x 1 930 |
| Arm | | 1 |
| Bore x Stroke | ø x mm | 240 x 2 180 |
| Bucket | | 1 |
| Bore x Stroke | ø x mm | 200 x 1 500 |
| ME Bucket | | 1 |
| Bore x Stroke | ø x mm | 230 x 1 500 |

**Service Refill**

| | | |
|---|---|---|
| Fuel tank | l | 1 265 |
| Hydraulic system, total | l | 890 |
| Hydraulic tank | l | 460 |
| Engine oil | l | 52 |
| Engine coolant | l | 74 |
| Slew reduction unit | l | 2 x 6.5 |
| Travel reduction unit | l | 2 x 25 |
| PTO gear box | l | 1 x 9.2 |
| Urea | l | 95 |

# Specifications

**GROUND PRESSURE**

| Description | Shoe width | EC950F | | | | | |
|---|---|---|---|---|---|---|---|
| | | Boom 7.25 m, Arm 2.95m, Bucket 4 515kg(4.7m³) | | | Boom 8.4 m, Arm 3.7m, Bucket 4 190kg(3.9m³) | | |
| | | Counterweight 16 200kg | | | Counterweight 16 200kg | | |
| | | Operating weight | Ground pressure | Overall width | Operating weight | Ground pressure | Overall width |
| | mm | kg | kPa | mm | kg | kPa | mm |
| Double grouser | 650 | 91 275 | 123.8 | 4 298 | 92 850 | 125.9 | 4 298 |
| | 750 | 92 115 | 108.3 | 4 300 | 93 690 | 110.1 | 4 300 |
| | 900 | 93 235 | 91.3 | 4 450 | 94 810 | 92.9 | 4 450 |

**BUCKET SELECTION GUIDE**

| Bucket type | | | Capacity | Cutting width | Tip radius | Weight | Teeth | Recommended maximum material density (kg/m³) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | EC950F | | |
| | | | | | | | | 7.25m ME Boom | 8.4m GP Boom | |
| | | | m³ | mm | mm | kg | EA | M2.95m Arm | M2.95m Arm | G3.7m Arm |
| Direct fit Buckets without quick coupler | V4 | GP | 3 900 | 1 970 | 2 221 | 4 321 | 5 | 1 800 | 1 800 | 1 800 |
| | | | 4 700 | 2 000 | 2 348 | 4 648 | 5 | 1 800 | 1 800 | 1 800 |
| | | | 5 400 | 2 280 | 2 348 | 4 992 | 5 | 1 800 | 1 800 | 1 700 |
| | | | 6 000 | 2 350 | 2 446 | 5 233 | 5 | 1 800 | 1 700 | 1 500 |
| | | | 6 500 | 2 300 | 2 566 | 5 277 | 5 | 1 800 | 1 500 | 1 300 |
| | | | 7 000 | 2 450 | 2 566 | 5 583 | 6 | 1 800 | 1 400 | 1 200 |
| | | HD | 3 900 | 1 970 | 2 279 | 5 299 | 5 | 2 100 | 1 800 | 1 800 |
| | | | 4 700 | 2 000 | 2 404 | 5 722 | 5 | 2 100 | 1 800 | 1 800 |
| | | | 5 200 | 2 200 | 2 404 | 5 999 | 5 | 2 100 | 1 800 | 1 500 |
| | | | 5 400 | 2 280 | 2 404 | 6 137 | 5 | 2 100 | 1 700 | 1 500 |
| | | | 5 600 | 2 350 | 2 404 | 6 261 | 5 | 2 100 | 1 600 | 1 400 |
| | | | 6 000 | 2 350 | 2 505 | 6 198 | 5 | 2 100 | 1 500 | 1 300 |
| | | | 6 500 | 2 300 | 2 620 | 6 264 | 5 | 2 000 | 1 400 | 1 200 |
| | V6 | EDX | 6 500 | 2 750 | 2 803 | 6 986 | 5 | 1 800 | 1 300 | - |

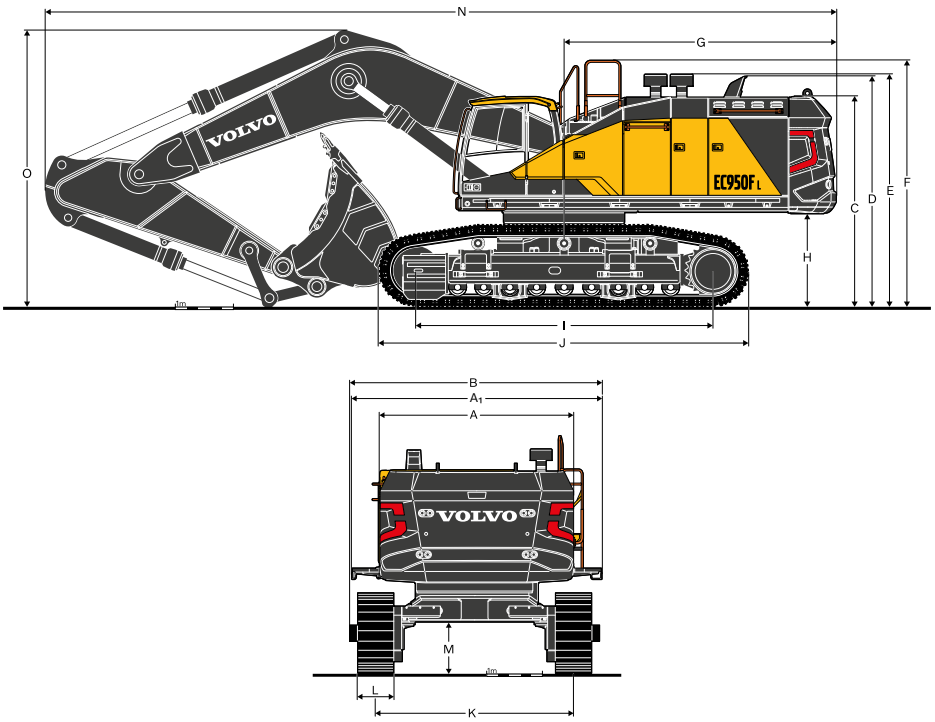
Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.
(In case of using bigger bucket than regional standard MRS, consultation with R&D is highly recommended)
The recommendations are given as a guide only, based on typical operation conditions.
Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

| Maximum materal density | |
|---|---|
| 1 200~1 300 kg/m³ | Coal, Caliche, Shale |
| 1 400~1 600 kg/m³ | Wet earth and clay, Limestone, Sandstone |
| 1 700~1 800 kg/m³ | Granite, Wet sand, Well blasted rock |
| 1 900 kg/m³ ~ | Wet mud, Iron ore |

X : Not recommended

# Specifications

## DIMENSIONS




| Description | | Unit | EC950F | | |
|---|---|---|---|---|---|
| **Boom** | | **m** | **7.25** | **8.4** | |
| **Arm** | | **m** | **2.95** | **2.95** | **3.7** |
| A | Overall width of superstructure | mm | 3 485 | 3 485 | 3 485 |
| $A_1$ | Overall width of superstructure (incl. walkway) | mm | 4 505 | 4 505 | 4 505 |
| B | Overall width (step to walkway) | | | | |
| | 650mm shoe | mm | 4 515 | 4 515 | 4 515 |
| | 750mm shoe | mm | 4 515 | 4 515 | 4 515 |
| | 900mm shoe | mm | 4 520 | 4 520 | 4 520 |
| C | Overall height of cab | mm | 3 655 | 3 655 | 3 655 |
| D | Overall height of tail pipe | mm | 3 990 | 3 990 | 3 990 |
| E | Overall height of precleaner | mm | 4 025 | 4 025 | 4 025 |
| | Overall height of oil bath | mm | 4 180 | 4 180 | 4 180 |
| F | Overall height of guardrail | mm | 4 265 | 4 265 | 4 265 |
| G | Tail swing radius | mm | 4 700 | 4 700 | 4 700 |
| H | Counterweight clearance * | mm | 1 620 | 1 620 | 1 620 |
| I | Tumbler length | mm | 5 120 | 5 120 | 5 120 |
| J | Track length | mm | 6 380 | 6 380 | 6 380 |
| K | Track gauge(extended) | mm | 3 550 | 3 550 | 3 550 |
| | Track gauge (retracted) | mm | 2 980 | 2 980 | 2 980 |
| L | Shoe width | mm | 650 | 650 | 650 |
| M | Min. ground clearance * | mm | 915 | 915 | 915 |
| N | Overall length | mm | 13 615 | 14 765 | 14 600 |
| O | Overall height of boom | mm | 4 950 | 4 875 | 4 905 |
| P | Width of Track (retracted) | | | | |
| | 650mm shoe | mm | 3 630 | 3 630 | 3 630 |
| | 750mm shoe | mm | 3 920 | 3 920 | 3 920 |
| | 900mm shoe | mm | 4 070 | 4 070 | 4 070 |
| | Width of Track (extended) | | | | |
| | 650mm shoe | mm | 4 200 | 4 200 | 4 200 |
| | 750mm shoe | mm | 4 300 | 4 300 | 4 300 |
| | 900mm shoe | mm | 4 450 | 4 450 | 4 450 |

* With shoe grouser

**Boom cylinder**

| Length | Height | Width | Weight |
|---|---|---|---|
| mm | mm | mm | kg |
| 3 000 | 600 | 480 | 1 800 |

**Hose of Boom cylinder**

| Length | Weight | Q'ty |
|---|---|---|
| mm | kg | EA |
| 1 250 | 5 | 2 |
| 1 170 | 4 | 2 |

**Counterweight**

| Length | Height | Width | Weight |
|---|---|---|---|
| mm | mm | mm | kg |
| 3 485 | 2 150 | 830 | 16 100 |

**Shoes**

| Shoe width | Length | Height | Overall width | Weight / unit |
|---|---|---|---|---|
| mm | mm | mm | mm | kg |
| 650 | 6 380 | 1 445 | 1 085 | 12 930 |
| 750 | 6 380 | 1 445 | 1 085 | 13 300 |
| 900 | 6 380 | 1 445 | 1 160 | 13 860 |

**Superstructure**

| Length | Height of tail pipe | Width* | Weight |
|---|---|---|---|
| mm | mm | mm | kg |
| 6 600 | 3 077 | 3 475 | 45 000 |

*Upper structure rotated by 90deg (across)

**Basic machine (without counterweight)**

| Shoe width | Length | Height of tail pipe | Overall width (retracted) | Weight |
|---|---|---|---|---|
| mm | mm | mm | mm | kg |
| 650 | 7 475 | 3 990 | 3 685 | 52 520 |
| 750 | 7 475 | 3 990 | 3 685 | 53 270 |
| 900 | 7 475 | 3 990 | 3 690 | 54 390 |

**Superstructure, including UC and Boom, excluding CWT**

| Boom | Shoe width | Length | Weight |
|---|---|---|---|
| 7.25 | 650 | 11 332 | 65 655 |
| | 750 | 113 32 | 66 490 |
| | 900 | 11 332 | 67 610 |
| 8.4 | 650 | 12 555 | 66 120 |
| | 750 | 12 555 | 66 960 |
| | 900 | 12 555 | 68 080 |

**Walkway**

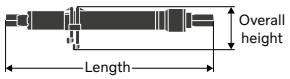
| Location | Length | Width | Height | Weight |
|---|---|---|---|---|
| LH front | 1 310 | 480 | 65 | 21 |
| LH rear | 1 545 | 480 | 65 | 25 |
| RH front | 1 020 | 480 | 65 | 17 |
| RH rear | 1 115 | 480 | 65 | 18 |
| Middle | 1 210 | 480 | 65 | 21 |

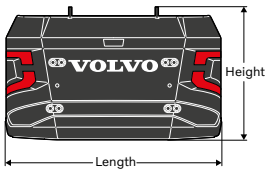
**Lower frame with swing ring**

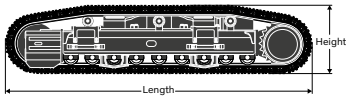
| Length (A) | Width (B) | Height | Weight |
|---|---|---|---|
| mm | mm | mm | kg |
| 3 500 | 2 520 | 1 095 | 7 925 |

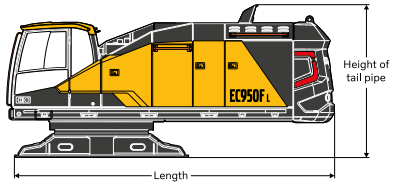
**Superstructure w/o swing ring**

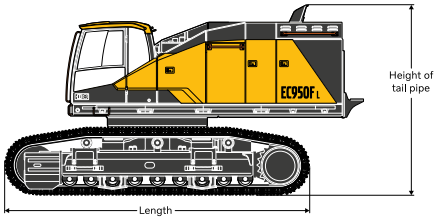
| Length (A) | Height of tail pipe(B) | Width | Weight |
|---|---|---|---|
| mm | mm | mm | kg |
| 6 195 | 2 508 | 3 475 | 20 880 |

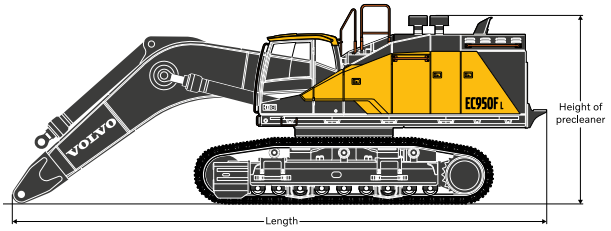


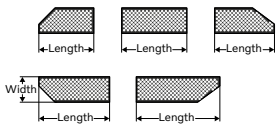



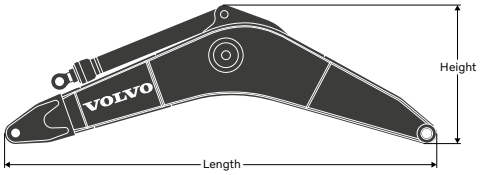



# Specifications

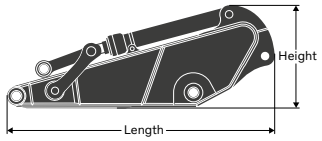
| Description | | Unit | EC950F | |
|---|---|---|---|---|
| **Boom** | | **m** | **7.25** | **8.4** |
| A | Length | mm | 7 620 | 8 770 |
| B | Height | mm | 2 430 | 2 200 |
| Width | | mm | 1 100 | 1 100 |
| Weight | | kg | 9 455 | 9 925 |

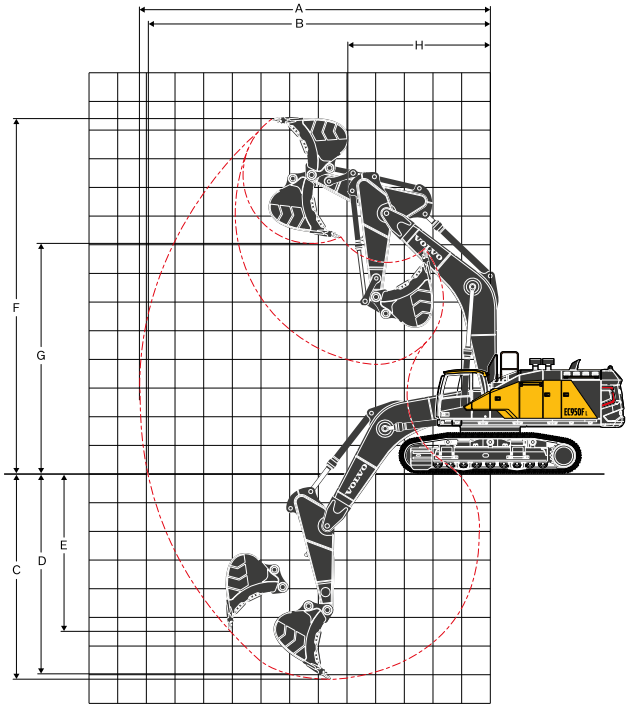
* Includes cylinder, piping and pin




| Description | | Unit | EC950F | |
|---|---|---|---|---|
| **Arm** | | **m** | **2.95** | **3.7** |
| A | Length | mm | 4 470 | 5 210 |
| B | Height | mm | 1 675 | 1 485 |
| Width | | mm | 740 | 740 |
| Weight | | kg | 5 480 | 5 205 |

* Includes bucket cylinder, linkage and pin




| **WORKING RANGES** | | | | | |
|---|---|---|---|---|---|
| **Description** | | **Unit** | **EC950F** | | |
| **Boom** | | **m** | **7.25** | **8.4** | |
| **Arm** | | **m** | **2.95** | **2.95** | **3.7** |
| A | Max. digging reach | mm | 12 270 | 13 480 | 14 020 |
| B | Max. digging reach on ground | mm | 11 950 | 13 190 | 13 750 |
| C | Max. digging depth | mm | 7 120 | 8 330 | 8 950 |
| D | Max. digging depth (I = 2.44 m level) | mm | 6 980 | 8 180 | 8 820 |
| E | Max. vertical wall digging depth | mm | 5 390 | 6 450 | 7 300 |
| F | Max. cutting height | mm | 12 410 | 13 100 | 13 280 |
| G | Max. dumping height | mm | 8 090 | 8 790 | 9 200 |
| H | Min. front swing radius | mm | 4 970 | 6 010 | 5 910 |
| **DIGGING FORCES WITH DIRECT FIT BUCKET** | | | | | |
| Bucket radius | | mm | 2 348 | 2 348 | 2 221 |
| Breakout force - bucket | ISO 6015 | kN | 478 | 478 | 388 |
| | SAE J1179 | kN | 424 | 424 | 341 |
| Tearout force - dipper arm | ISO 6015 | kN | 420 | 420 | 359 |
| | SAE J1179 | kN | 408 | 408 | 350 |
| Rotation angle, bucket | | kN | 170 | 170 | 170 |

**LIFTING CAPACITY EC950F**

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 | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | 10.5 m | | Max. reach | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Max. m |
| Boom: | 7.25 m ME | 9.0 m | kg | | | | | | | *23 410 | *23 410 | | | | | *20 920 | *20 920 | 7.70 |
| Arm: | 2.95 m ME | 7.5 m | kg | | | | | | | *23 470 | *23 470 | | | | | *20 070 | *20 070 | 8.71 |
| Shoe: | 650 mm | 6.0 m | kg | | | *37 080 | *37 080 | *29 020 | *29 020 | *24 780 | *24 780 | *22 380 | 20 830 | | | *19 970 | 19 430 | 9.37 |
| CWT: | 16 100 kg | 4.5 m | kg | | | | | *32 710 | *32 710 | *26 610 | *26 610 | *23 110 | 20 330 | | | *20 420 | 17 840 | 9.77 |
| | | 3.0 m | kg | | | | | *35 880 | *35 880 | *28 340 | 25 870 | *23 900 | 19 770 | | | *21 470 | 17 080 | 9.92 |
| | | 1.5 m | kg | | | | | *37 410 | 34 720 | *29 400 | 25 060 | *24 320 | 19 310 | | | *22 040 | 17 010 | 9.84 |
| | | 0 m | kg | | | *36 060 | *36 060 | *37 060 | 34 160 | *29 360 | 24 600 | *23 890 | 19 050 | | | *22 100 | 17 660 | 9.52 |
| | | -1.5 m | kg | *31 400 | *31 400 | *43 770 | *43 770 | *34 900 | 34 100 | *27 850 | 24 500 | | | | | *21 980 | 19 270 | 8.95 |
| | | -3.0 m | kg | *43 890 | *43 890 | *37 740 | *37 740 | *30 610 | *30 610 | *24 000 | *24 000 | | | | | *21 280 | *21 280 | 8.05 |
| | | -4.5 m | kg | | | *28 200 | *28 200 | *22 570 | *22 570 | | | | | | | *18 960 | *18 960 | 6.71 |
| Boom: | 8.4 m GP | 10.5 m | kg | | | | | | | | | | | | | *20 930 | *20 930 | 7.98 |
| Arm: | 2.95 m ME | 9.0 m | kg | | | | | | | *20 980 | *20 980 | *19 710 | *19 710 | | | *19 670 | *19 670 | 9.21 |
| Shoe: | 650 mm | 7.5 m | kg | | | | | | | *22 100 | *22 100 | *19 870 | *19 870 | | | *19 040 | 17 190 | 10.07 |
| CWT: | 16 100 kg | 6.0 m | kg | | | | | *29 430 | *29 430 | *23 880 | *23 880 | *20 700 | 20 270 | *18 820 | 15 760 | *18 710 | 15 370 | 10.65 |
| | | 4.5 m | kg | | | | | | | *25 850 | 25 550 | *21 740 | 19 530 | *19 180 | 15 420 | *18 560 | 14 300 | 11.00 |
| | | 3.0 m | kg | | | | | | | *27 440 | 24 390 | *22 660 | 18 840 | *19 550 | 15 040 | *18 510 | 13 770 | 11.13 |
| | | 1.5 m | kg | | | | | | | *28 220 | 23 610 | *23 170 | 18 300 | *19 660 | 14 730 | *18 490 | 13 690 | 11.06 |
| | | 0 m | kg | | | | | *34 670 | 32 350 | *28 010 | 23 220 | *23 050 | 17 990 | *19 190 | 14 580 | *18 440 | 14 090 | 10.78 |
| | | -1.5 m | kg | | | | | *32 520 | 32 470 | *26 770 | 23 160 | *22 030 | 17 930 | | | *18 250 | 15 080 | 10.28 |
| | | -3.0 m | kg | | | *33 510 | *33 510 | *29 220 | *29 220 | *24 290 | 23 400 | *19 590 | 18 180 | | | *17 720 | 16 990 | 9.51 |
| | | -4.5 m | kg | | | *27 570 | *27 570 | *24 190 | *24 190 | *19 820 | *19 820 | | | | | *16 380 | *16 380 | 8.41 |
| | | -6.0 m | kg | | | | | *15 720 | *15 720 | | | | | | | | | 6.81 |
| Boom: | 8.4 m GP | 10.5 m | kg | | | | | | | | | | | | | *14 500 | *14 500 | 8.90 |
| Arm: | 3.7 m GP | 9.0 m | kg | | | | | | | | | *18 180 | *18 180 | | | *13 720 | *13 720 | 10.02 |
| Shoe: | 650 mm | 7.5 m | kg | | | | | | | | | *18 690 | *18 690 | *17 500 | 16 360 | *13 390 | *13 390 | 10.81 |
| CWT: | 16 100 kg | 6.0 m | kg | | | | | *27 360 | *27 360 | *22 580 | *22 580 | *19 710 | *19 710 | *17 890 | 16 070 | *13 400 | *13 400 | 11.36 |
| | | 4.5 m | kg | | | | | *31 370 | *31 370 | *24 760 | *24 760 | *20 940 | 19 880 | *18 500 | 15 640 | *13 660 | 13 110 | 11.68 |
| | | 3.0 m | kg | | | | | *34 530 | 34 330 | *26 690 | 24 900 | *22 100 | 19 120 | *19 110 | 15 190 | *14 230 | 12 640 | 11.81 |
| | | 1.5 m | kg | | | | | *35 920 | 33 030 | *27 920 | 23 950 | *22 900 | 18 490 | *19 500 | 14 810 | *15 110 | 12 550 | 11.74 |
| | | 0 m | kg | | | | | *35 660 | 32 480 | *28 230 | 23 380 | *23 140 | 18 070 | *19 460 | 14 550 | *16 480 | 12 850 | 11.48 |
| | | -1.5 m | kg | | | *28 820 | *28 820 | *34 160 | 32 390 | *27 540 | 23 160 | *22 620 | 17 880 | *18 670 | 14 470 | *17 270 | 13 610 | 11.01 |
| | | -3.0 m | kg | *29 970 | *29 970 | *38 250 | *38 250 | *31 480 | *31 480 | *25 720 | 23 230 | *21 020 | 17 940 | | | *17 040 | 15 050 | 10.29 |
| | | -4.5 m | kg | *37 450 | *37 450 | *32 640 | *32 640 | *27 300 | *27 300 | *22 370 | *22 370 | *17 490 | *17 490 | | | *16 330 | *16 330 | 9.29 |
| | | -6.0 m | kg | | | *24 420 | *24 420 | *20 710 | *20 710 | *16 030 | *16 030 | | | | | *14 450 | *14 450 | 7.87 |

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 EC950F**

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 | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | 10.5 m | | Max. reach | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Max. m |
| Boom: | 7.25 m ME | 9.0 m | kg | | | | | | | *23 410 | *23 410 | | | | | *20 920 | *20 920 | 7.70 |
| Arm: | 2.95 m ME | 7.5 m | kg | | | | | | | *23 470 | *23 470 | | | | | *20 070 | *20 070 | 8.71 |
| Shoe: | 750 mm | 6.0 m | kg | | | *37 080 | *37 080 | *29 020 | *29 020 | *24 780 | *24 780 | *22 380 | 21 000 | | | *19 970 | 19 590 | 9.37 |
| CWT: | 16 100 kg | 4.5 m | kg | | | | | *32 710 | *32 710 | *26 610 | *26 610 | *23 110 | 20 500 | | | *20 420 | 17 990 | 9.77 |
| | | 3.0 m | kg | | | | | *35 880 | *35 880 | *28 340 | 26 080 | *23 900 | 19 940 | | | *21 470 | 17 230 | 9.92 |
| | | 1.5 m | kg | | | | | *37 410 | 35 010 | *29 400 | 25 280 | *24 320 | 19 480 | | | *22 040 | 17 160 | 9.84 |
| | | 0 m | kg | | | *36 060 | *36 060 | *37 060 | 34 450 | *29 360 | 24 810 | *23 890 | 19 220 | | | *22 100 | 17 810 | 9.52 |
| | | -1.5 m | kg | *31 400 | *31 400 | *43 770 | *43 770 | *34 900 | 34 400 | *27 850 | 24 720 | | | | | *21 980 | 19 450 | 8.95 |
| | | -3.0 m | kg | *43 890 | *43 890 | *37 740 | *37 740 | *30 610 | *30 610 | *24 000 | *24 000 | | | | | *21 280 | *21 280 | 8.05 |
| | | -4.5 m | kg | | | *28 200 | *28 200 | *22 570 | *22 570 | | | | | | | *18 960 | *18 960 | 6.71 |
| Boom: | 8.4 m GP | 10.5 m | kg | | | | | | | | | | | | | *20 930 | *20 930 | 7.98 |
| Arm: | 2.95 m ME | 9.0 m | kg | | | | | | | *20 980 | *20 980 | *19 710 | *19 710 | | | *19 670 | *19 670 | 9.21 |
| Shoe: | 750 mm | 7.5 m | kg | | | | | | | *22 100 | *22 100 | *19 870 | *19 870 | | | *19 040 | 17 340 | 10.07 |
| CWT: | 16 100 kg | 6.0 m | kg | | | | | *29 430 | *29 430 | *23 880 | *23 880 | *20 700 | 20 440 | *18 820 | 15 900 | *18 710 | 15 510 | 10.65 |
| | | 4.5 m | kg | | | | | | | *25 850 | 25 760 | *21 740 | 19 700 | *19 180 | 15 560 | *18 560 | 14 440 | 11.00 |
| | | 3.0 m | kg | | | | | | | *27 440 | 24 610 | *22 660 | 19 010 | *19 550 | 15 180 | *18 510 | 13 900 | 11.13 |
| | | 1.5 m | kg | | | | | | | *28 220 | 23 830 | *23 170 | 18 470 | *19 660 | 14 880 | *18 490 | 13 830 | 11.06 |
| | | 0 m | kg | | | | | *34 670 | 32 640 | *28 010 | 23 430 | *23 050 | 18 160 | *19 190 | 14 720 | *18 440 | 14 230 | 10.78 |
| | | -1.5 m | kg | | | | | *32 520 | *32 520 | *26 770 | 23 370 | *22 030 | 18 100 | | | *18 250 | 15 230 | 10.28 |
| | | -3.0 m | kg | | | *33 510 | *33 510 | *29 220 | *29 220 | *24 290 | 23 610 | *19 590 | 18 350 | | | *17 720 | 17 140 | 9.51 |
| | | -4.5 m | kg | | | *27 570 | *27 570 | *24 190 | *24 190 | *19 820 | *19 820 | | | | | *16 380 | *16 380 | 8.41 |
| | | -6.0 m | kg | | | | | *15 720 | *15 720 | | | | | | | | | 6.81 |
| Boom: | 8.4 m GP | 10.5 m | kg | | | | | | | | | | | | | *14 500 | *14 500 | 8.90 |
| Arm: | 3.7 m GP | 9.0 m | kg | | | | | | | | | *18 180 | *18 180 | | | *13 720 | *13 720 | 10.02 |
| Shoe: | 750 mm | 7.5 m | kg | | | | | | | | | *18 690 | *18 690 | *17 500 | 16 500 | *13 390 | *13 390 | 10.81 |
| CWT: | 16 100 kg | 6.0 m | kg | | | | | *27 360 | *27 360 | *22 580 | *22 580 | *19 710 | *19 710 | *17 890 | 16 210 | *13 400 | *13 400 | 11.36 |
| | | 4.5 m | kg | | | | | *31 370 | *31 370 | *24 760 | *24 760 | *20 940 | 20 050 | *18 500 | 15 780 | *13 660 | 13 230 | 11.68 |
| | | 3.0 m | kg | | | | | *34 530 | *34 530 | *26 690 | 25 120 | *22 100 | 19 290 | *19 110 | 15 330 | *14 230 | 12 770 | 11.81 |
| | | 1.5 m | kg | | | | | *35 920 | 33 320 | *27 920 | 24 170 | *22 900 | 18 660 | *19 500 | 14 950 | *15 110 | 12 680 | 11.74 |
| | | 0 m | kg | | | | | *35 660 | 32 770 | *28 230 | 23 600 | *23 140 | 18 240 | *19 460 | 14 690 | *16 480 | 12 970 | 11.48 |
| | | -1.5 m | kg | | | *28 820 | *28 820 | *34 160 | 32 680 | *27 540 | 23 370 | *22 620 | 18 050 | *18 670 | 14 610 | *17 270 | 13 740 | 11.01 |
| | | -3.0 m | kg | *29 970 | *29 970 | *38 250 | *38 250 | *31 480 | *31 480 | *25 720 | 23 450 | *21 020 | 18 110 | | | *17 040 | 15 190 | 10.29 |
| | | -4.5 m | kg | *37 450 | *37 450 | *32 640 | *32 640 | *27 300 | *27 300 | *22 370 | *22 370 | *17 490 | *17 490 | | | *16 330 | *16 330 | 9.29 |
| | | -6.0 m | kg | | | *24 420 | *24 420 | *20 710 | *20 710 | *16 030 | *16 030 | | | | | *14 450 | *14 450 | 7.87 |

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 EC950F**

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 | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | 10.5 m | | Max. reach | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Max. m |
| Boom: | 7.25 m ME | 9.0 m | kg | | | | | | | *23 410 | *23 410 | | | | | *20 920 | *20 920 | 7.70 |
| Arm: | 2.95 m ME | 7.5 m | kg | | | | | | | *23 470 | *23 470 | | | | | *20 070 | *20 070 | 8.71 |
| Shoe: | 900 mm | 6.0 m | kg | | | *37 080 | *37 080 | *29 020 | *29 020 | *24 780 | *24 780 | *22 380 | 21 230 | | | *19 970 | 19 810 | 9.37 |
| CWT: | 16 100 kg | 4.5 m | kg | | | | | *32 710 | *32 710 | *26 610 | *26 610 | *23 110 | 20 730 | | | *20 420 | 18 200 | 9.77 |
| | | 3.0 m | kg | | | | | *35 880 | *35 880 | *28 340 | 26 370 | *23 900 | 20 170 | | | *21 470 | 17 430 | 9.92 |
| | | 1.5 m | kg | | | | | *37 410 | 35 410 | *29 400 | 25 570 | *24 320 | 19 710 | | | *22 040 | 17 370 | 9.84 |
| | | 0 m | kg | | | *36 060 | *36 060 | *37 060 | 34 840 | *29 360 | 25 100 | *23 890 | 19 450 | | | *22 100 | 18 030 | 9.52 |
| | | -1.5 m | kg | *31 400 | *31 400 | *43 770 | *43 770 | *34 900 | 34 790 | *27 850 | 25 000 | | | | | *21 980 | 19 670 | 8.95 |
| | | -3.0 m | kg | *43 890 | *43 890 | *37 740 | *37 740 | *30 610 | *30 610 | *24 000 | *24 000 | | | | | *21 280 | *21 280 | 8.05 |
| | | -4.5 m | kg | | | *28 200 | *28 200 | *22 570 | *22 570 | | | | | | | *18 960 | *18 960 | 6.71 |
| Boom: | 8.4 m GP | 10.5 m | kg | | | | | | | | | | | | | *20 930 | *20 930 | 7.98 |
| Arm: | 2.95 m ME | 9.0 m | kg | | | | | | | *20 980 | *20 980 | *19 710 | *19 710 | | | *19 670 | *19 670 | 9.21 |
| Shoe: | 900 mm | 7.5 m | kg | | | | | | | *22 100 | *22 100 | *19 870 | *19 870 | | | *19 040 | 17 540 | 10.07 |
| CWT: | 16 100 kg | 6.0 m | kg | | | | | *29 430 | *29 430 | *23 880 | *23 880 | *20 700 | 20 670 | *18 820 | 16 090 | *18 710 | 15 700 | 10.65 |
| | | 4.5 m | kg | | | | | | | *25 850 | *25 850 | *21 740 | 19 930 | *19 180 | 15 750 | *18 560 | 14 610 | 11.00 |
| | | 3.0 m | kg | | | | | | | *27 440 | 24 890 | *22 660 | 19 230 | *19 550 | 15 370 | *18 510 | 14 080 | 11.13 |
| | | 1.5 m | kg | | | | | | | *28 220 | 24 110 | *23 170 | 18 700 | *19 660 | 15 060 | *18 490 | 14 000 | 11.06 |
| | | 0 m | kg | | | | | *34 670 | 33 040 | *28 010 | 23 720 | *23 050 | 18 390 | *19 190 | 14 910 | *18 440 | 14 410 | 10.78 |
| | | -1.5 m | kg | | | | | *32 520 | *32 520 | *26 770 | 23 660 | *22 030 | 18 330 | | | *18 250 | 15 420 | 10.28 |
| | | -3.0 m | kg | | | *33 510 | *33 510 | *29 220 | *29 220 | *24 290 | 23 900 | *19 590 | 18 580 | | | *17 720 | 17 360 | 9.51 |
| | | -4.5 m | kg | | | *27 570 | *27 570 | *24 190 | *24 190 | *19 820 | *19 820 | | | | | *16 380 | *16 380 | 8.41 |
| | | -6.0 m | kg | | | | | *15 720 | *15 720 | | | | | | | | | 6.81 |
| Boom: | 8.4 m GP | 10.5 m | kg | | | | | | | | | | | | | *14 500 | *14 500 | 8.90 |
| Arm: | 3.7 m GP | 9.0 m | kg | | | | | | | | | *18 180 | *18 180 | | | *13 720 | *13 720 | 10.02 |
| Shoe: | 900 mm | 7.5 m | kg | | | | | | | | | *18 690 | *18 690 | *17 500 | 16 690 | *13 390 | *13 390 | 10.81 |
| CWT: | 16 100 kg | 6.0 m | kg | | | | | *27 360 | *27 360 | *22 580 | *22 580 | *19 710 | *19 710 | *17 890 | 16 400 | *13 400 | *13 400 | 11.36 |
| | | 4.5 m | kg | | | | | *31 370 | *31 370 | *24 760 | *24 760 | *20 940 | 20 280 | *18 500 | 15 970 | *13 660 | 13 400 | 11.68 |
| | | 3.0 m | kg | | | | | *34 530 | *34 530 | *26 690 | 25 410 | *22 100 | 19 520 | *19 110 | 15 520 | *14 230 | 12 930 | 11.81 |
| | | 1.5 m | kg | | | | | *35 920 | 33 720 | *27 920 | 24 460 | *22 900 | 18 890 | *19 500 | 15 130 | *15 110 | 12 840 | 11.74 |
| | | 0 m | kg | | | | | *35 660 | 33 170 | *28 230 | 23 890 | *23 140 | 18 470 | *19 460 | 14 870 | *16 480 | 13 140 | 11.48 |
| | | -1.5 m | kg | | | *28 820 | *28 820 | *34 160 | 33 080 | *27 540 | 23 660 | *22 620 | 18 270 | *18 670 | 14 800 | *17 270 | 13 920 | 11.01 |
| | | -3.0 m | kg | *29 970 | *29 970 | *38 250 | *38 250 | *31 480 | *31 480 | *25 720 | 23 740 | *21 020 | 18 340 | | | *17 040 | 15 380 | 10.29 |
| | | -4.5 m | kg | *37 450 | *37 450 | *32 640 | *32 640 | *27 300 | *27 300 | *22 370 | *22 370 | *17 490 | *17 490 | | | *16 330 | *16 330 | 9.29 |
| | | -6.0 m | kg | | | *24 420 | *24 420 | *20 710 | *20 710 | *16 030 | *16 030 | | | | | *14 450 | *14 450 | 7.87 |

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 |
| Air filter with indicator |
| Air intake heater |
| Cyclone pre-cleaner |
| Electric engine shut-off |
| Fuel filter and water separator |
| Alternator, 80 A |
| **Electric / Electronic control system** |
| Contronics |
| Advanced mode control system |
| Self-diagnostic system |
| Machine status indication |
| Engine speed sensing power control |
| Emergency engine stop switch |
| Automatic idling system |
| Short cut switch |
| Safety stop/start function |
| Adjustable 8inch LCD color monitor |
| Master electrical disconnect switch |
| Engine restart prevention circuit |
| High-capacity LED lights: |
| Cab-mounted 2 |
| Frame-mounted 2 |
| Boom-mounted 4 |
| Batteries, 2 x 12 V / 210 Ah |
| Start motor, 28 V / 6.6 kW |
| **Frame** |
| Access way with handrail |
| Full height counterweight 16 100kg |
| Tool storage area |
| Side walk-way |
| Under cover (heavy duty 4.5mm) |
| Punched metal anti-slip plates |
| **Undercarriage** |
| Mechanically retractable track gauge |
| Hydraulic track adjusters |
| Greased and sealed track link |
| Track Guard |
| Under cover (10mm) |
| **Hydraulic system** |
| Automatic sensing hydraulic system |
| Summation system |
| Boom priority |
| Arm priority |
| Swing priority |
| Boom-swing priority |
| ECO mode fuel saving technology |
| Boom and arm regeneration valves |
| Swing anti-rebound valves |
| Boom and arm holding valves |
| Multi-stage filtering system |
| Cylinder cushioning |
| Cylinder contamination seals |
| Auxiliary hydraulic valve |
| Automatic two-speed travel motors |
| Hydraulic oil, ISO VG 46 |

| STANDARD EQUIPMENT |
|---|
| **Cab and interior** |
| Silicon oil and rubber mounts with spring |
| Adjustable operator seat with heater and joystick control console |
| Control joysticks with semi-long |
| Heater & air-conditioner, automatic |
| Flexible antenna |
| Radio with CD player & MP3 player and USB |
| Hydraulic safety lock lever |
| Cab, all-weather sound suppressed, includes: |
| Cup holders |
| Door locks |
| Tinted glass |
| Floor mat |
| Horn |
| Large storage area |
| Pull-up type front window |
| Removable lower windshield |
| Seat belt |
| Safety glass |
| Sun screens, front, roof, rear |
| Windshield wiper with intermittent feature |
| Master key |
| **Track shoes** |
| Track shoes, 650 mm with double grouser |
| **Digging equipment** |
| Boom: ME 7.25 m |
| Arm: ME 2.95 m |
| Manual centralized lubrication |

| OPTIONAL EQUIPMENT |
|---|
| **Engine** |
| Block heater: 120 V, 240 V |
| Dual stage oil bath pre-cleaner |
| Diesel coolant heater, 10 Kw, 12 Kw |
| Water separator with heater |
| Extra water separator |
| Auto engine shutdown |
| Fuel filler pump, 100 l/min with automatic shut-off |
| Reversible cooling fan |
| **Others** |
| Auto fire suppression system |
| **Electric** |
| Extra lights : |
| Cab-mounted 3 (front 2, rear 1) |
| Boom-mounted 4 |
| Frame-mounted 2 |
| Counterweight-mounted 1 |
| Travel alarm |
| Anti-theft system |
| Rotating warning beacon |
| **Frame** |
| Full height counterweight, removal type 16 100kg |

| OPTIONAL EQUIPMENT |
|---|
| **Undercarriage** |
| Full track guard |
| **Hydraulic system** |
| Hose rupture valve: boom, arm |
| Straight travel pedal |
| Boom float function with HRV |
| Boom float function without HRV |
| Hydraulic piping: |
| Work tool management system (up to 20 programmable memories) |
| Hammer & shear, 1 and 2 pump flow |
| Hammer & shear: variable flow and pressure pre-setting |
| Additional return filter |
| Slope & rotator |
| Grapple |
| Quick coupler piping |
| Hydraulic oil, ISO VG 32, 68 |
| Hydraulic oil, biodegradable 46 |
| Hydraulic oil, longlife oil 32, 46, 68 |
| Hydraulic hose for Artic |

| OPTIONAL EQUIPMENT |
|---|
| **Cab and interior** |
| One-piece fixed front windshield |
| Fabric seat without heater |
| Fabric seat with heater and air suspension |
| Control joysticks with 4 switches each |
| Control joysticks with 3 switch & 1 propotional |
| Pilot control pattern change |
| Opening top hatch |
| Front rain shield |
| Falling object guard (FOG) |
| Frame-mounted |
| Cab-mounted |
| Cab-mounted falling object protective structure (FOPS) |
| Smoker kit (ashtray and lighter) |
| Safety net for front window |
| Sunlight protection, roof (steel) |
| Lower wiper with intermittent control |
| Cleaning air gun |
| Rear view camera |
| Side view camera |
| Volvo smart view |
| Dig assist |
| On board weighting system |
| Specific key |
| **Track shoes** |
| 750/900mm track shoes with double grousers |
| **Digging equipment** |
| Boom: 8.4m |
| Arm: 3.7m |
| Service |
| Tool kit, daily maintenance |
| Tool kit, full scale |
| Special tool for retractable frame |
| Automatic lubrication system |

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

**X1/X3 quick fit auxiliary lines**




**HEPA cab air filter**



**Boom float**



**Volvo Smart View**



**Coolant heater**



**Dig Assist, powered by Volvo Co-Pilot**



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.

Ref. No 20058723_E / English-21 / 2021.07 / EXC / Volvo, Global Marketing

VOLVO

Volvo Construction Equipment

volvoce.com