



Volvo Construction Equipment

EW205D

VOLVO EXCAVATORS 19.8-21.8t 176hp



A passion for performance.



Volvo Trucks



Renault Trucks

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.





Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction
Equipment



Volvo Penta



Volvo Financial Services



ECO mode

Volvo's unique ECO mode optimizes the hydraulic system to reduce flow and pressure losses – resulting in improved fuel efficiency without any loss of performance in most operating conditions. ECO mode is automatically selected but can be switched off via the keypad.

Unrivalled fuel efficiency.

Introducing the EW205D from Volvo – a new 20 ton wheeled excavator designed to drive your efficiency up. With advanced technology including Volvo's unique ECO mode and a powerful Volvo engine, this superior digging and mobile tool carrying machine works with ultimate efficiency both off and on-road.

Volvo engine

Featuring proven, advanced technology and built on decades of experience, the Volvo D6 engine delivers the ultimate combination of low fuel consumption and high productivity. Benefit from superior performance, reliability and durability.

Work modes

Volvo's unique, integrated work mode system optimizes fuel efficiency and machine performance. The operator can choose the best work mode for the task at hand – select from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max).



Automatic idling system

Engine speed is reduced to idle when the controls are inactive for a pre-set amount of time (between 3 and 20 seconds). This reduces fuel consumption and noise.

Auto engine shut down

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).

Optimized piping

The large diameter of the hydraulic piping on the boom and arm reduces pressure losses and improves fuel efficiency.

Command and control.

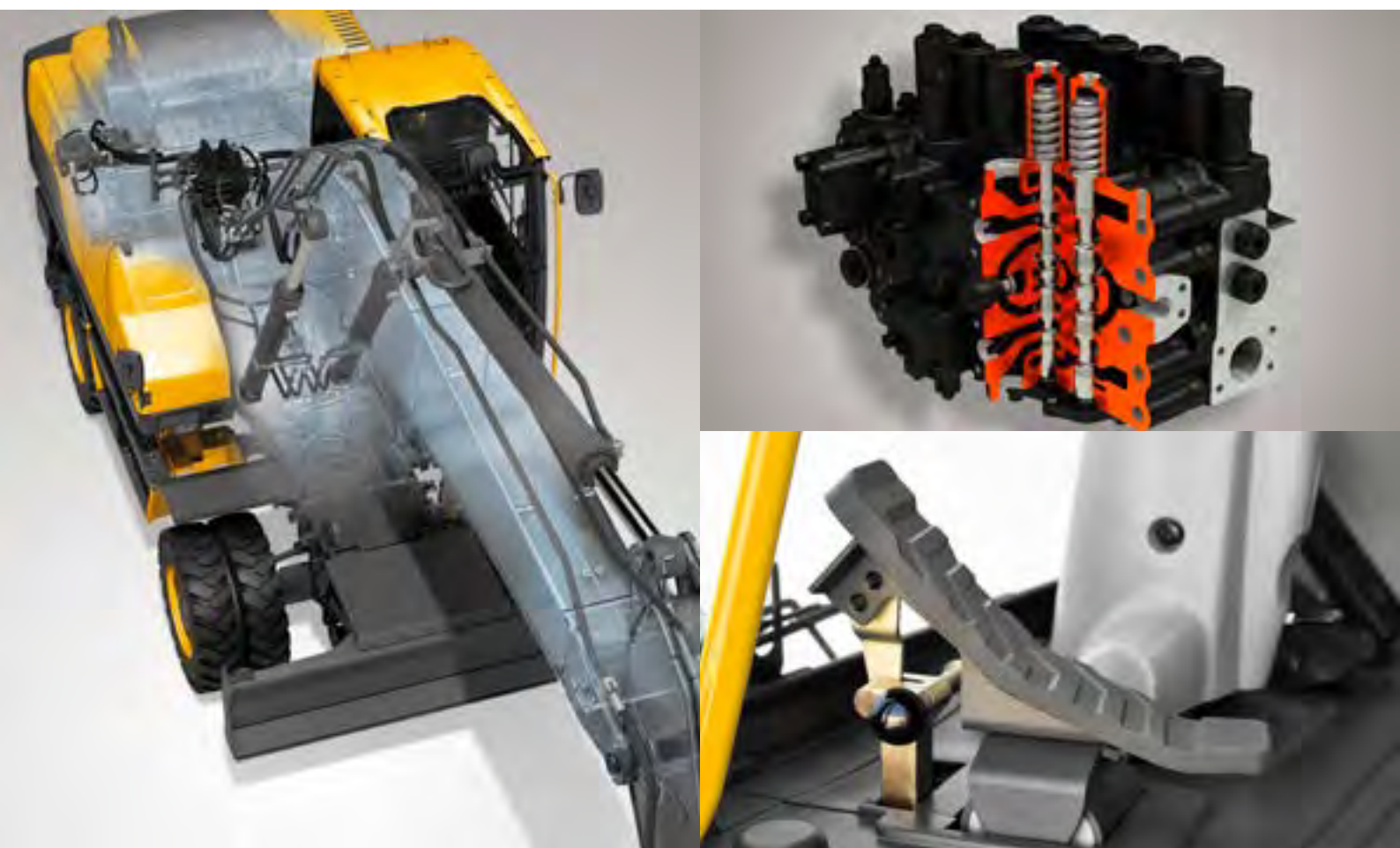
If you're looking for superior controllability and smooth and responsive movements then look no further than the EW205D. Featuring advanced hydraulics and an electronic flow-dividing control system, this excavator delivers an outstanding performance in both single and combined operations.

Electronic flow-dividing control system

The Proportional Pressure Reducing Valve (PPRV) ensures the right amount of flow is delivered to each operation. This results in optimized control – delivering smooth and responsive movements during combined operations.

Main control valve

The newly developed main control valve is designed to reduce internal pressure losses and enhance the efficiency of the hydraulic system.



Breaker and shear pedal

The electronically-controlled breaker and shear foot pedal delivers superior control and ease of operation.



Advanced hydraulics

The full electro-hydraulic system and main control valve use intelligent technology to control on-demand flow and reduce internal losses in the hydraulic circuit. This provides increased control, shorter cycle times and improved fuel efficiency.



Stable undercarriage

The well-balanced undercarriage is made from strong steel for maximum durability when operating in rough terrain as well as ultimate stability when lifting heavy loads.

Stability you can rely on.

Whether you're working in the road construction, utilities, landscaping or any other application, the EW205D has been built to handle tough terrain and work on a variety of jobsites. With a strong undercarriage and a rigid main frame, this well-balanced and durable excavator boasts superior stability.

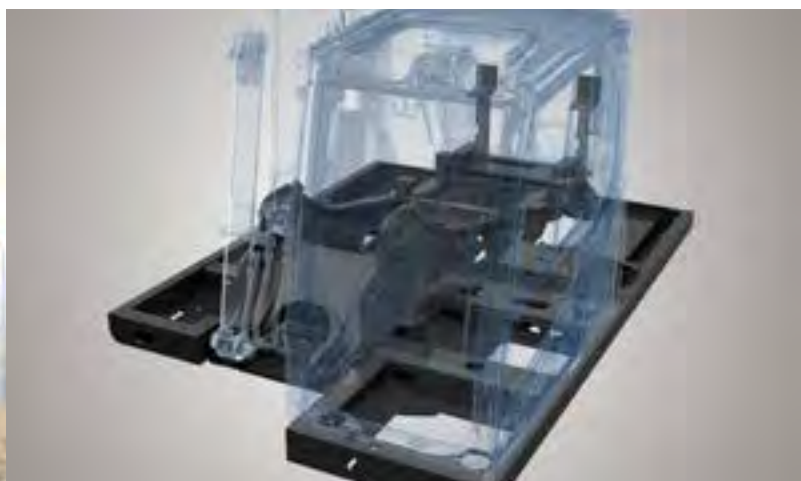
Axle lock

For superior ground contact when traveling and operating on a slope or uneven terrain, the front axle oscillates. To keep the machine level and secure stability, the axle lock function can be both manually and automatically activated.



Rigid main frame

The strong structure easily absorbs impacts transferred through the digging equipment. Reinforced welding between the center and side frames, and the boom and boom cylinder mounts, increases durability.



Well-balanced driveline

The ideally-matched, Volvo driveline has been built to work in perfect harmony. The durable Volvo design delivers excellent control for smooth travel, superior performance and high productivity.



Dozer blade and outriggers

A robust dozer blade and outriggers optimize machine stability and increase versatility – enabling the excavator to carry out a variety of tasks including lifting, loading and grading.

Comfort counts.

When you have a long day ahead of you it's important to know you'll be working in comfort. That's why Volvo has developed a spacious and comfortable operating environment with ergonomic controls, all-around visibility and vibration protection. Experience new levels of comfort and get the job done with Volvo.

I-ECU monitor

The color, seven inch LCD monitor displays machine status information including fuel consumption data and service interval alerts – enabling increased uptime and high productivity. The user-friendly design is easy to read in all light conditions.

Volvo seat

The fully adjustable seat has been designed to enhance operator comfort during long work shifts. An optional air suspension and heated seat are available for ultimate comfort.

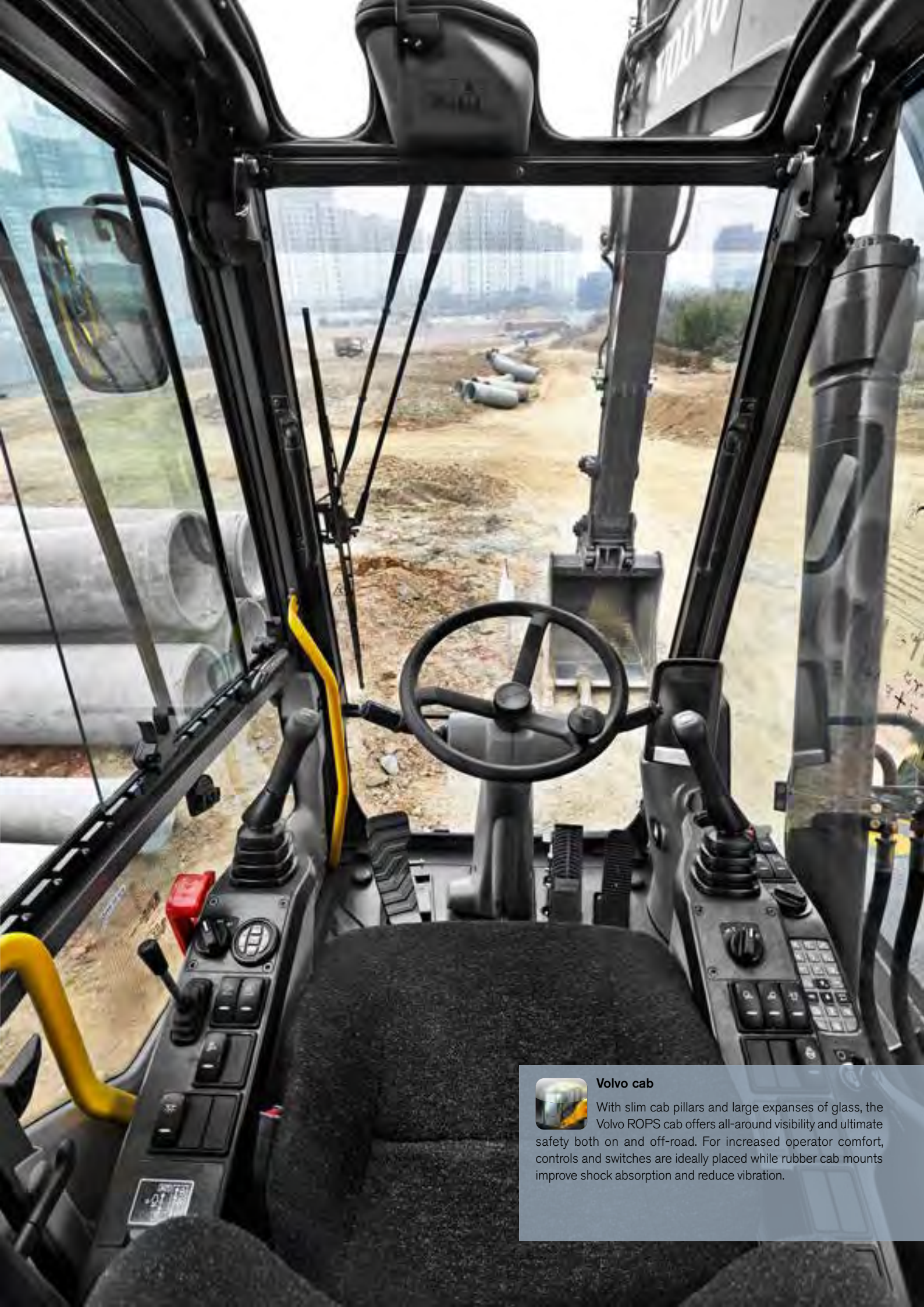


Adjustable steering column

The slim design of the easily adjustable steering column enables easy entry to the cab while also ensuring visibility is not impaired. The angle of the steering column is changed by simply pushing a pedal.

Climate control

Volvo's powerful, industry-leading climate control system provides superior operator comfort. The air circulation and defrosting system features 14 well-spaced vents which quickly heat or cool the cab.



Volvo cab

With slim cab pillars and large expanses of glass, the Volvo ROPS cab offers all-around visibility and ultimate safety both on and off-road. For increased operator comfort, controls and switches are ideally placed while rubber cab mounts improve shock absorption and reduce vibration.



Easy service access

Rear access behind the cab, along with sturdy steps and handrails, provides safe and easy maintenance access to the superstructure. Centralized greasing points permit regular checks to be done faster for maximum machine uptime.

Access more uptime.

Even a Volvo machine requires service and maintenance in order to work as efficiently and productively as possible. But the difference is that Volvo makes maintenance easy – giving you more uptime. With grouped service points and safe and easy access to components, you'll get the most out of each working day.

Large toolbox

For easy daily maintenance and increased uptime, a spacious toolbox is located between the steps on the left side of the machine.



Single layer cooling system

The radiator, charged air cooler and hydraulic oil cooler are integrated in a single layer to maximize efficiency, reduce blockages and aid cleaning. The system is easily accessed by opening the side door.



Service interval display

For easy maintenance and increased machine uptime, four service interval alerts on the monitor inform the operator when maintenance is required.



Grouped filters

Grouped filters are quick and easy to access from ground level for fast servicing.

The machine that does more.

Intelligent flow-dividing control system

The Proportional Pressure Reducing Valve (PPRV) ensures the right amount of flow is delivered to each operation.

Serviceability

Grouped filters and centralized greasing points permit regular checks to be done faster for maximum machine uptime.

Advanced hydraulics



The full electro-hydraulic system and main control valve use intelligent technology to control on-demand flow for high performance and efficiency.

Quick couplers

Volvo quick couplers are designed to work with Volvo attachments, delivering ultimate compatibility and unrivalled performance.

Attachment range



Volvo's comprehensive range of attachments have been purpose-built to work in perfect harmony with Volvo machines.



I-ECU monitor

The LCD monitor clearly displays machine status information for easy operation and increased productivity.



Volvo cab

All-around visibility and an ergonomic design are at the center of Volvo's operator environment – increasing comfort and ease of operation.



Easy service access

Rear access behind the cab along with sturdy steps and handrails provide safe and easy maintenance access to the superstructure.

Volvo engine

The Volvo D6 engine delivers the ultimate combination of low fuel consumption and high productivity.

Rigid main frame

The strong structure easily absorbs impacts transferred through the digging equipment.

Blade and outriggers

A robust dozer blade and outriggers optimize machine stability and increase versatility.



Stable undercarriage

The well-balanced undercarriage is made from strong steel for maximum durability and stability.



ECO mode

Volvo's unique ECO mode improves fuel efficiency without any loss of performance in most operating conditions.



Attachment range

Volvo's durable attachments have been purpose-built to work in perfect harmony with Volvo machines, forming one solid, reliable unit. The comprehensive range includes ditching buckets, hydraulic breakers and general purpose buckets. Experience maximum productivity with the right attachment for your specific requirements.

Infinite opportunities.

Maximize your productivity and profitability with the versatile EW205D and Volvo's comprehensive, durable range of attachments. Increase your versatility, access more applications and effectively perform a variety of tasks – all while experiencing faster cycle times and excellent control. Get the most out of your excavator with Volvo.

Quick couplers

Volvo quick couplers are designed to work with Volvo attachments, delivering ultimate compatibility and unrivalled performance.

Optional auxiliary hydraulics

Factory fitted breaker and shear piping as well as tilt and rotator piping increase versatility by enabling a wide range of additional attachments to be used.



Hydraulic breakers

Volvo's durable hydraulic breakers have been designed for ultimate compatibility with Volvo excavators. The range has been built to break the most demanding materials and combines excellent performance with low noise and vibration levels.

Attachment management system (AMS)

The AMS stores the settings for up to 20 hydraulic attachments. The system allows hydraulic flow adjustments to be accurately and easily set according to the needs of the tool being used.

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 increasing the positive return on your investment and maximising uptime.



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 | DAY3 | DAY5 | DAY8 | DAY10 | DAY12 | DAY15 |
|-------|------|------|------|-------|-------|-------|
| | | | | | | ✓ |
| | | | ✓ | ✓ | | |
| | ✓ | | | | | ✓ |
| | | ✓ | | | ✓ | ✓ |
| ✓ | | | | | | |
| | | ✓ | ✓ | | | |



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 EW205D in detail.

Engine

The engine, which provide excellent performance, is equipped with six cylinder, vertical, electronic-controlled high pressure fuel injectors, internal EGR, 6 liter in-line waste gate turbo charger, air-to-air intercooler and water cooled diesel engine type.

| | | |
|-----------------------------|-------------|-------------|
| Engine | | VOLVO D6E |
| Max power at | r/s / r/min | 33 / 2 000 |
| Net (ISO9249/SAEJ1349) | kW / hp | 121.3 / 165 |
| Gross (ISO 14396/SAE J1995) | kW / hp | 129.5 / 176 |
| Max. torque | Nm / r/min | 730 / 1 500 |
| No. of cylinders | | 6 |
| Displacement | l | 5.7 |
| Bore | mm | 98 |
| Stroke | mm | 126 |

Electrical system

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

| | | |
|------------------|--------|----------|
| Voltage | V | 24 |
| Batteries | V | 2 x 12 |
| Battery capacity | Ah | 120 |
| Alternator | V / A | 28 / 80 |
| Start motor | V / kW | 24 / 5.5 |

Undercarriage

Drive train: One big variable axial-piston motor on the two-step Power Shift gearbox gives power to front and rear axles.

Framework: All-welded robust torsion box frame.

Wheels: Alternative single and twin wheels available.

Front axle: Robust excavator axle with automatic or operator controlled front axle oscillation lock.

| | | |
|----------------------------|------|---------------|
| Oscillating | ° | ± 7 |
| Oscillating with mudguards | ° | ± 7 |
| Twin wheels | type | 10.00-20 14PR |
| Max. tractive force (net) | kN | 110 |
| Travel speed, on road | km/h | 36 |
| Travel speed, off road | km/h | 9 |
| Travel speed, creep | km/h | 3.5 |
| Min. turning radius | m | 7.136 |

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 dB(A) 74

| | | |
|--|-----------|---------|
| External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC (standard/tropical) | LwA dB(A) | 103/104 |
|--|-----------|---------|

Hydraulic system

The electro-hydraulic system and MCV (main control valve) use intelligent technology to control on-demand flow for high productivity, high-digging capacity and excellent fuel economy. The following important functions and working modes are included in the system:

Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.

Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations.

Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.

Swing priority: Gives priority to swing functions for faster simultaneous operations.

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

Parking mode (P): Parking position for optimal safety.

Travel mode (T): Engine speed is controlled by travel pedal stroke and mode selection switch for low fuel consumption and noise. Work equipment are not able to move at this mode for optimal safety.

Working mode (W): Full working flow with adjustable engine rpm for normal working and best speed utilisation.

Creeping mode (C): Additional working mode for fixed lower travel speed.

Hydraulic pumps

Main pump

| | | |
|-----------|--|---------|
| Type | 2 x Variable displacement axial piston pumps | |
| Max. flow | l/min | 2 x 230 |

Pilot pump

| | | |
|-----------|-----------|--------|
| Type | Gear pump | |
| Max. flow | l/min | 1 x 20 |

Brake + steering pump

| | | |
|-----------|---------------------|----------|
| Type | Low noise gear pump | |
| Max. flow | l/min | 1 x 41.5 |

Relief valve setting

| | | |
|---------------|-----|-----------|
| Implement | MPa | 32.4/34.3 |
| Travel system | MPa | 34.3 |
| Swing system | MPa | 27.9 |
| Pilot System | MPa | 3.9 |

Hydraulic cylinders

| | | |
|---------------|--------|-------------|
| Boom | | 2 |
| Bore x Stroke | ø x mm | 120 x 1 235 |
| Arm | | 1 |
| Bore x Stroke | ø x mm | 135 x 1 540 |
| Bucket | | 1 |
| Bore x Stroke | ø x mm | 120 x 1 065 |
| Dozer blade | | 1 |
| Bore x Stroke | ø x mm | 115 x 273 |
| Outrigger | | 2 |
| Bore x Stroke | ø x mm | 150 x 444 |

Swing system

| | | |
|------------------|-----|------|
| Max. swing speed | rpm | 11.5 |
|------------------|-----|------|

Brakes

Service brakes: servo-hydraulically manoeuvred self-adjusting wet multidiscs with two separate brake circuits.

Parking brake: negative wet disc in gear housing, spring applied and pressure released

Digging brake: service brake with mechanical lock system

Security system: The 2-circuit travel brakes are supplied with two accumulators in the event of failure in the service brake system

Total machine weights

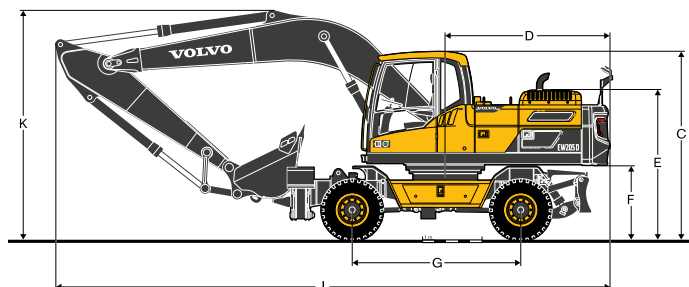
| | | |
|---|----|--------|
| Machine with 5.65m boom, 2.7m arm, 748 kg / 860 l bucket, Standard counterweight, Dozer blade and Outrigger | kg | 20 730 |
|---|----|--------|

Service refill capacities

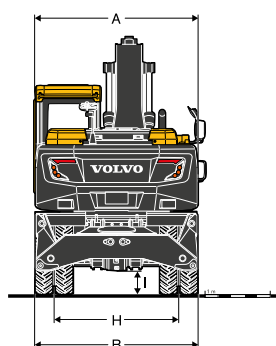
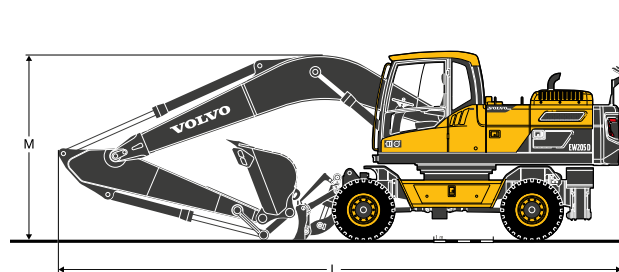
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|-----------------------------------|---|---------|
| Fuel tank | l | 323 |
| Hydraulic system, total | l | 335 |
| Hydraulic tank | l | 148 |
| Engine oil | l | 32 |
| Engine coolant | l | 41 |
| Swing reduction unit | l | 7 |
| Transmission | l | 2.5 |
| Axel differential: (Axel housing) | | |
| Front axle | l | 11 |
| Rear axle | l | 15 |
| Final drive | l | 4 x 2.5 |

Dimensions.

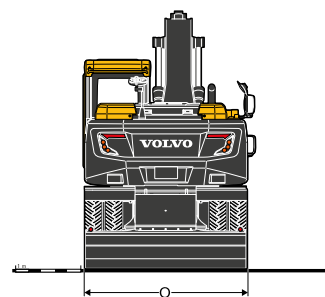
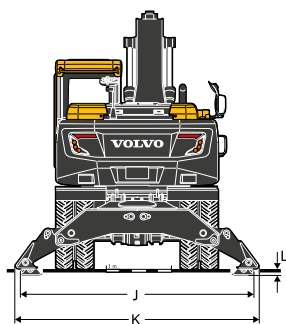
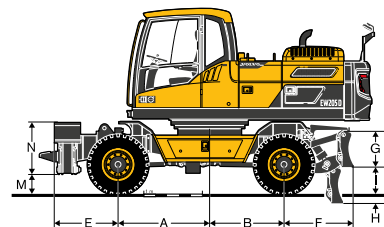
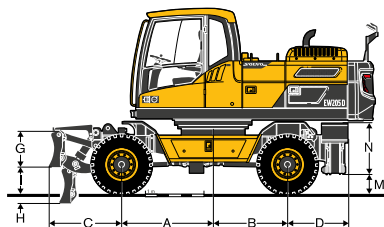
TRAVEL POSITION



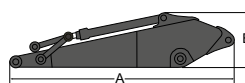
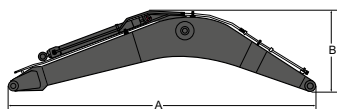
TRANSPORTATION POSITION



| Description | | Unit | Front outrigger and rear dozer blade | | Front dozer blade and rear outrigger | |
|-------------|----------------------------------|----------|---|-------------|---|-------------|
| Boom | | m | 5.65 | 5.65 | 5.65 | 5.65 |
| Arm | | m | 2.7 | 2.9 | 2.7 | 2.9 |
| A | Overall width of upper structure | mm | 2 500 | 2 500 | 2 500 | 2 500 |
| B | Overall width | mm | 2 500 | 2 500 | 2 500 | 2 500 |
| C | Overall height of cab | mm | 3 180 | 3 180 | 3 180 | 3 180 |
| D | Tail swing radius | mm | 2 800 | 2 800 | 2 800 | 2 800 |
| E | Overall height of engine hood | mm | 2 520 | 2 520 | 2 520 | 2 520 |
| F | Counterweight clearance | mm | 1 244 | 1 244 | 1 244 | 1 244 |
| G | Wheel base | mm | 2 850 | 2 850 | 2 850 | 2 850 |
| H | Tread width | mm | 1 914 | 1 914 | 1 914 | 1 914 |
| I | Min. ground clearance | mm | 329 | 329 | 329 | 329 |
| J | Overall length | mm | 9 355 | 9 340 | 9 310 | 9 315 |
| K | Overall height of boom | mm | 3 990 | 3 990 | 3 985 | 3 990 |
| L | Overall length | mm | 9 510 | 9 520 | 9 510 | 9 520 |
| M | Overall height of boom | mm | 3 280 | 3 490 | 3 280 | 3 490 |



| Description | | Unit | |
|------------------------------|-----------------------|------|----|
| Front Outrigger & Rear Dozer | Center to front wheel | A | mm |
| | Center to rear wheel | B | mm |
| | Outrigger to wheel | E | mm |
| | Dozer to wheel | F | mm |
| Front Dozer & Rear Outrigger | Center to front wheel | A | mm |
| | Center to rear wheel | B | mm |
| | Dozer to wheel | C | mm |
| | Outrigger to wheel | D | mm |
| Outrigger | Width_digging | J | mm |
| | Width | K | mm |
| | Digging depth | L | mm |
| | Clearance | M | mm |
| | Height | N | mm |
| | Weight | | kg |
| Dozer Blade | Height | G | mm |
| | Digging depth | H | mm |
| | Lifting height | I | mm |
| | Width | O | mm |
| | Weight | | kg |



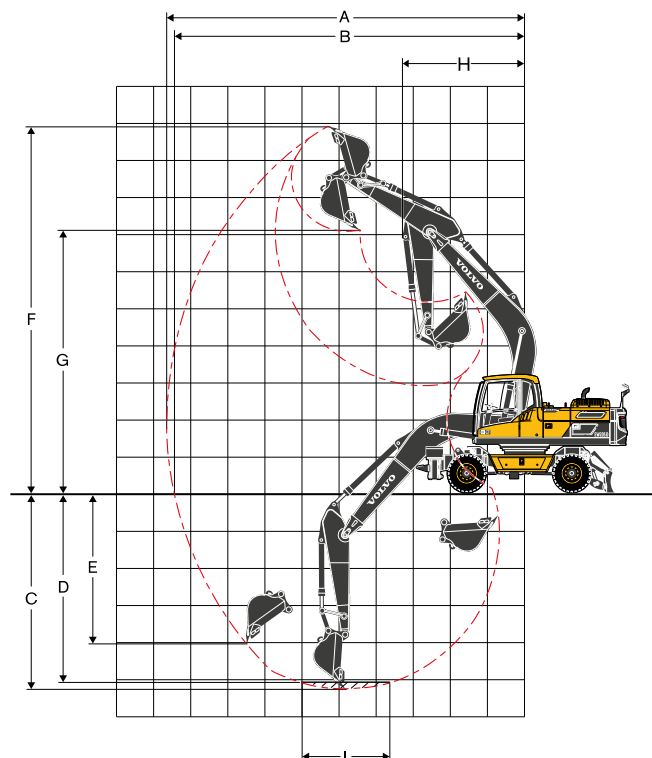
| Description | | Unit | Boom | | Arm | |
|-------------|--------|------|-------|--|-------|-------|
| | | m | 5.65 | | 2.7 | 2.9 |
| A | Length | mm | 5 870 | | 3 710 | 3 910 |
| B | Height | mm | 1 650 | | 870 | 860 |
| | Width | mm | 670 | | 440 | 440 |
| | Weight | kg | 1 995 | | 1 080 | 1 121 |

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

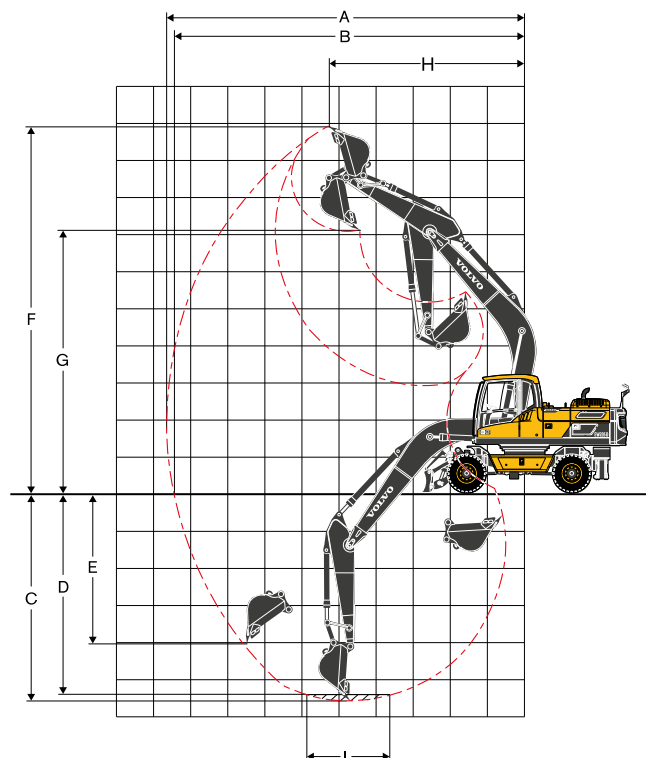
Arm * Includes cylinder, linkage and pin

Specifications.

FRONT OUTRIGGER AND REAR DOZER BLADE



FRONT DOZER BLADE AND REAR OUTRIGGER



WORKING RANGES WITH DIRECT FIT BUCKET

| Description | | | Unit | Front outrigger and rear dozer blade | | Front dozer blade and rear outrigger | |
|-------------|---------------------------------------|--|------|--------------------------------------|--------|--------------------------------------|--------|
| Boom | | | m | 5.65 | 5.65 | 5.65 | 5.65 |
| Arm | | | m | 2.7 | 2.9 | 2.7 | 2.9 |
| A | Max. digging reach | | mm | 9 685 | 9 890 | 9 685 | 9 890 |
| B | Max. digging reach on ground | | mm | 9 490 | 9 695 | 9 490 | 9 695 |
| C | Max. digging depth | | mm | 5 345 | 5 545 | 5 565 | 5 765 |
| D | Max. digging depth (l=2 440 mm level) | | mm | 5 165 | 5 370 | 5 385 | 5 590 |
| E | Max. vertical wall digging depth | | mm | 4 125 | 4 295 | 4 125 | 4 295 |
| F | Max. cutting height | | mm | 9 895 | 10 045 | 9 895 | 10 045 |
| G | Max. dumping height | | mm | 7 085 | 7 225 | 7 085 | 7 225 |
| H | Min. front swing radius | | mm | 3 310 | 3 330 | 3 310 | 3 330 |

DIGGING FORCES WITH DIRECT FIT BUCKET

| | | | | | | | |
|-------------------------|-------------|-----------|-----|-------|-------|-------|-------|
| Bucket radius | | | mm | 1 470 | 1 470 | 1 470 | 1 470 |
| Breakout force (bucket) | Normal | SAE J1179 | kN | 122 | 122 | 122 | 122 |
| | Power boost | SAE J1179 | kN | 130 | 130 | 130 | 130 |
| | Normal | ISO 6015 | kN | 136 | 136 | 136 | 136 |
| | Power boost | ISO 6015 | kN | 144 | 144 | 144 | 144 |
| Tearout force (arm) | Normal | SAE J1179 | kN | 100 | 96 | 100 | 96 |
| | Power boost | SAE J1179 | kN | 106 | 102 | 106 | 102 |
| | Normal | ISO 6015 | kN | 102 | 99 | 102 | 99 |
| | Power boost | ISO 6015 | kN | 109 | 105 | 109 | 105 |
| Rotation angle, bucket | | | deg | 175 | 175 | 175 | 175 |

BUCKET SELECTION GUIDE

| Bucket type | | Capacity | Cutting width | Weight | Teeth | Front outrigger and rear dozer blade | | | | Front dozer blade and rear outrigger | | | |
|--------------------|-----------------|----------|---------------|--------|-------|--------------------------------------|------|-----------------------|------|--------------------------------------|------|-----------------------|------|
| | | | | | | 5.65m Boom 3 400kg | | 5.65m Boom 3 800kg | | 5.65m Boom 3 400kg | | 5.65m Boom 3 800kg | |
| | | | | | | Counterweight | | Counterweight | | Counterweight | | Counterweight | |
| Direct fit Buckets | General purpose | L | mm | kg | EA | 2.7m | 2.9m | 2.7m | 2.9m | 2.7m | 2.9m | 2.7m | 2.9m |
| | | 860 | 1 100 | 748 | 4 | C | C | C | C | C | C | C | C |
| | | 950 | 1 200 | 781 | 5 | C | C | C | C | C | C | C | C |
| | | 950 | 1 200 | 783 | 5 | C | C | C | C | C | C | C | C |
| | | 1 100 | 1 350 | 843 | 5 | B | B | C | B | B | B | 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.

X : Not recommended

Maximum material density





















| | | |
|---|-------------------------------|--|
| A | 1 200~1 300 kg/m ³ | Coal, Caliche, Shale |
| B | 1 400~1 600 kg/m ³ | Wet earth and clay, Limestone, Sandstone |
| C | 1 700~1 800 kg/m ³ | Granite, Wet sand, Well blasted rock |
| D | 1 900 kg/m ³ ~ | Wet mud, Iron ore |

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.

Reach from machine center (u = support up/d = support down).

| L | A B | 1.5 m | | | | 3 m | | | | 4.5 m | | | | 6 m | | | | 7.5 m | | | | Max. | | | | Max. | | |
|---|--------|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|------|------|------|------|------|------|-----|
| | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | | | | |
| | m | u | d | u | d | u | d | u | d | u | d | u | d | u | d | u | d | u | d | u | d | m | | | | | | |
| Boom 5.65m Arm 2.7m CWT 3 400kg Front Dozer blade Rear Outrigger | 7.5 | | | | | | | | | | | | | *4.3 | *4.3 | 4.2 | *4.3 | | | | | | | *4.2 | *4.2 | *4.2 | *4.2 | 6.0 |
| | 6.0 | | | | | | | | | | | | | *4.9 | *4.9 | 4.3 | *4.9 | | | | | | | *3.9 | *3.9 | 3.1 | *3.9 | 7.1 |
| | 4.5 | | | | | | | | | *6.3 | *6.3 | *6.3 | *6.3 | *5.4 | *5.4 | 4.1 | *5.4 | 4.1 | *5.0 | 2.9 | 3.8 | 3.8 | *3.8 | 2.6 | 3.5 | 7.8 | | |
| | 3.0 | | | | | | | | | *7.9 | *7.9 | 5.9 | *7.9 | 5.6 | *6.1 | 3.9 | 5.2 | 4.0 | *5.2 | 2.8 | 3.7 | 3.5 | *3.9 | 2.4 | 3.2 | 8.2 | | |
| | 1.5 | | | | | | | | | 8.3 | *9.3 | 5.4 | 7.6 | 5.4 | *6.8 | 3.6 | 5.0 | 3.9 | *5.6 | 2.7 | 3.6 | 3.4 | *4.2 | 2.3 | 3.1 | 8.2 | | |
| | 0 | | | | | | *6.2 | *6.2 | *6.2 | *6.2 | 8.0 | *9.9 | 5.2 | 7.3 | 5.2 | *7.2 | 3.5 | 4.8 | 3.8 | *5.7 | 2.6 | 3.5 | 3.5 | *4.7 | 2.4 | 3.2 | 8.0 | |
| | -1.5 | | | | | | *11.6 | *11.6 | 9.6 | *11.6 | 7.9 | *9.7 | 5.1 | 7.2 | 5.1 | *7.2 | 3.4 | 4.7 | | | | | | 3.8 | *5.5 | 2.6 | 3.5 | 7.5 |
| | -3.0 | | | | | | *12.1 | *12.1 | 9.8 | *12.1 | 8.0 | *8.7 | 5.2 | 7.3 | 5.2 | *6.4 | 3.5 | 4.8 | | | | | | 4.6 | *5.6 | 3.1 | 4.3 | 6.5 |
| -4.5 | | | | | | | | | | *6.3 | *6.3 | 5.4 | *6.3 | | | | | | | | | | | | | | 5.0 | |
| Boom 5.65m Arm 2.9m CWT 3 400kg Front Dozer blade Rear Outrigger | 7.5 | | | | | | | | | | | | | | | | | | | | | | | *5.2 | *5.2 | *5.2 | *5.2 | 4.3 |
| | 6.0 | | | | | | | | | | | | | *5.0 | *5.0 | 4.3 | *5.0 | | | | | | | *4.4 | *4.4 | 4.1 | *4.4 | 6.2 |
| | 4.5 | | | | | | | | | | | | | *5.1 | *5.1 | 4.3 | *5.1 | | | | | | | *4.1 | *4.1 | 3.1 | *4.1 | 7.3 |
| | 3.0 | | | | | | *8.6 | *8.6 | *8.6 | *8.6 | *6.6 | *6.6 | 6.4 | *6.6 | *5.7 | *5.7 | 4.1 | 5.5 | 4.1 | *5.2 | 2.9 | 3.8 | 3.7 | *4.1 | 2.6 | 3.5 | 7.9 | |
| | 1.5 | | | | | | | | | | *8.4 | *8.4 | 5.9 | 8.1 | 5.6 | *6.5 | 3.9 | 5.2 | 4.0 | *5.6 | 2.8 | 3.7 | 3.4 | *4.2 | 2.3 | 3.2 | 8.3 | |
| | 0 | | | | | | | | | | 8.3 | *9.9 | 5.4 | 7.6 | 5.4 | *7.3 | 3.6 | 5.0 | 3.9 | *6.0 | 2.6 | 3.6 | 3.3 | *4.5 | 2.2 | 3.1 | 8.3 | |
| | -1.5 | | | | | | *6.0 | *6.0 | *6.0 | *6.0 | 8.0 | *10.7 | 5.2 | 7.3 | 5.2 | *7.8 | 3.5 | 4.8 | 3.8 | *6.2 | 2.6 | 3.5 | 3.4 | *5.1 | 2.3 | 3.1 | 8.1 | |
| | -3.0 | | | | | | *10.6 | *10.6 | 9.6 | *10.6 | 7.9 | *10.6 | 5.1 | 7.2 | 5.1 | *7.9 | 3.4 | 4.7 | 3.7 | *6.0 | 2.5 | 3.5 | 3.7 | *5.9 | 2.5 | 3.4 | 7.6 | |
| -4.5 | | | | | | *13.7 | *13.7 | 9.8 | *13.7 | 8.0 | *9.7 | 5.2 | 7.3 | 5.2 | *7.2 | 3.5 | 4.8 | | | | | | 4.4 | *6.1 | 3.0 | 4.1 | 6.7 | |
| Boom 5.65m Arm 2.7m CWT 3 800kg Front Dozer blade Rear Outrigger | 7.5 | | | | | | | | | | | | | *4.3 | *4.3 | *4.3 | *4.3 | | | | | | | *4.2 | *4.2 | *4.2 | *4.2 | 6.0 |
| | 6.0 | | | | | | | | | | | | | *4.9 | *4.9 | 4.5 | *4.9 | | | | | | | *3.9 | *3.9 | 3.3 | *3.9 | 7.1 |
| | 4.5 | | | | | | | | | *6.3 | *6.3 | *6.3 | *6.3 | *5.4 | *5.4 | 4.3 | *5.4 | 4.3 | *5.0 | 3.0 | 4.0 | *3.8 | *3.8 | 2.8 | 3.7 | 7.8 | | |
| | 3.0 | | | | | | | | | *7.9 | *7.9 | 6.2 | *7.9 | 5.9 | *6.1 | 4.1 | 5.5 | 4.2 | *5.2 | 2.9 | 3.9 | 3.7 | *3.9 | 2.6 | 3.4 | 8.2 | | |
| | 1.5 | | | | | | | | | 8.7 | *9.3 | 5.7 | 7.9 | 5.6 | *6.8 | 3.9 | 5.2 | 4.1 | *5.6 | 2.8 | 3.8 | 3.5 | *4.2 | 2.5 | 3.3 | 8.2 | | |
| | 0 | | | | | | *6.2 | *6.2 | *6.2 | *6.2 | 8.4 | *9.9 | 5.5 | 7.7 | 5.5 | *7.2 | 3.7 | 5.1 | 4.0 | *5.7 | 2.7 | 3.7 | 3.6 | *4.7 | 2.5 | 3.4 | 8.0 | |
| | -1.5 | | | | | | *11.6 | *11.6 | 10.2 | *11.6 | 8.4 | *9.7 | 5.4 | 7.6 | 5.4 | *7.2 | 3.7 | 5.0 | | | | | | 4.0 | *5.5 | 2.8 | 3.7 | 7.5 |
| | -3.0 | | | | | | *12.1 | *12.1 | 10.4 | *12.1 | 8.4 | *8.7 | 5.5 | 7.7 | 5.5 | *6.4 | 3.7 | 5.1 | | | | | | 4.9 | *5.6 | 3.3 | 4.5 | 6.5 |
| -4.5 | | | | | | | | | | *6.3 | *6.3 | 5.8 | *6.3 | | | | | | | | | | | | | | 5.0 | |
| Boom 5.65m Arm 2.9m CWT 3 800kg Front Dozer blade Rear Outrigger | 7.5 | | | | | | | | | | | | | *4.7 | *4.7 | 4.5 | *4.7 | | | | | | | *4.0 | *4.0 | *4.0 | *4.0 | 6.3 |
| | 6.0 | | | | | | | | | | | | | *4.7 | *4.7 | 4.5 | *4.7 | | | | | | | *3.7 | *3.7 | 3.1 | *3.7 | 7.4 |
| | 4.5 | | | | | | | | | *6.0 | *6.0 | *6.0 | *6.0 | *5.2 | *5.2 | 4.3 | *5.2 | 4.3 | *4.8 | 3.0 | 4.0 | *3.7 | *3.7 | 2.7 | 3.5 | 8.0 | | |
| | 3.0 | | | | | | | | | *7.7 | *7.7 | 6.2 | *7.7 | 5.9 | *5.9 | 4.1 | 5.4 | 4.2 | *5.1 | 2.9 | 3.9 | 3.5 | *3.7 | 2.4 | 3.3 | 8.4 | | |
| | 1.5 | | | | | | | | | 8.7 | *9.1 | 5.7 | 7.9 | 5.6 | *6.6 | 3.8 | 5.2 | 4.0 | *5.4 | 2.8 | 3.7 | 3.4 | *4.0 | 2.3 | 3.2 | 8.4 | | |
| | 0 | | | | | | *6.3 | *6.3 | *6.3 | *6.3 | 8.4 | *9.7 | 5.4 | 7.6 | 5.4 | *7.1 | 3.7 | 5.0 | 3.9 | *5.6 | 2.7 | 3.7 | 3.5 | *4.4 | 2.4 | 3.2 | 8.2 | |
| | -1.5 | *6.8 | *6.8 | *6.8 | *6.8 | *11.1 | *11.1 | 10.0 | *11.1 | 8.3 | *9.7 | 5.4 | 7.5 | 5.3 | *7.1 | 3.6 | 4.9 | 3.9 | *5.5 | 2.7 | 3.6 | 3.8 | *5.2 | 2.6 | 3.5 | 7.7 | | |
| | -3.0 | | | | | | *12.4 | *12.4 | 10.2 | *12.4 | 8.3 | *8.8 | 5.4 | 7.6 | 5.4 | *6.5 | 3.6 | 5.0 | | | | | | 4.6 | *5.4 | 3.1 | 4.2 | 6.8 |
| -4.5 | | | | | | | | | | *6.7 | *6.7 | 5.6 | *6.7 | | | | | | | | | | *5.2 | *5.2 | 4.5 | *5.2 | 5.4 | |

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above values are in compliance with ISO standard 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load, with the machine on firm, level ground. 3. Load capacities marked with an asterisk (*) are limited by machine's hydraulic lifting 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

Fuel filter and water separator

Alternator, 80 A

Electric/Electronic control system

Contronics - computerized monitoring and diagnostic system

GSM/GPS Caretrack and 3yr-Caretrack subscription

Machine status indication

Automatic idling system

One-touch power boost

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

Travel alarm

High-capacity halogen lights:

Frame-mounted 2

Boom-mounted 1

Batteries, 2 x 12 V / 120 Ah

Start motor, 24 V / 5.5 kW

Hydraulic system

Automatic hydraulic system

Summation system

Boom priority

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

Cylinder cushioning

Cylinder contamination seals

Superstructure

Service walkway with anti-slip grating

Centralized lubricating point for swing bearing

Tool storage area

Counterweight: 3 400kg

Undercover

Cab and interior

ROPS (ISO12117-2) certified cab with fixed roof hatch

Rubber mounts with spring

Fabric seat without heater

Heater and air-conditioner, automatic

Adjustable operator seat and joystick control console

Adjustable steering wheel

Control joysticks

Flexible antenna

Control lock out lever

Cab, all-weather sound suppressed, includes:

Cup holders

Door locks

Tinted and safety glass

Floor mat

Horn

Pull-up type front window

Removable lower windshield

Seat belt

Windshield wiper with intermittent feature

Sun Screen, front/roof/rear

Master key

Undercarriage

Lower frame with Front dozer blade and rear outrigger

2-speed power transmission plus creep

Oscillating front axle $\pm 7^\circ$ with mudguards

2-circuit travel brakes

Maintenance-free propeller shafts

Tire 10.00-20-14PR

Digging equipment

Boom: 5.65m

Arm: 2.7m with strip

Linkage

Service

Tool kit, daily maintenance

OPTIONAL EQUIPMENT

Engine

Tropical cooling
Block heater: 240 V
Oil bath pre-cleaner
Diesel coolant heater, 5 kW
Water separator with heater
Extra water separator
Auto engine shutdown
Fuel filler pump: 35 lpm with auto stop

Electric

Extra work lights:
Boom-mounted 1
Cab-mounted 3 (front 2, rear 1)
Counterweight-mounted 1
Anti-theft system
Rearview camera
Rotating warning beacon
Air compressor
Microphone

Hydraulic system

Boom hose rupture valve with overload warning device
Arm hose rupture valve
Hydraulic piping:
Hammer & shear, 1 and 2 pump flow
Slope/Rotator
Quick coupler
Volvo hydraulic quick coupler S1
Hydraulic oil, ISO VG 32, 46, 68
Hydraulic oil, longlife oil 32, 46, 68

Cab and interior

ROPS (ISO12117-2) certified cab with openable roof hatch
Fabric seat with heater
Fabric seat with heater and air suspension
AM/FM stereo with CD player, MP3 and USB input
Cab-mounted falling object guard (FOG)
Cab-mounted falling object guard (FOG)_Hinge type
Cab-mounted falling object protective structure (FOPS)
Smoker kit (ashtray and lighter)
Safety net for front window
Front rain shield
Sun shield, roof hatch (steel)
Emergency steering
Specific key

Superstructure

Rear view mirror on counterweight
Counterweight: 3 800kg

Undercarriage

Lower frame with Front outrigger and rear dozer blade
Mudguard

Digging equipment

Arm: 2.9m with strip

Service

Tool kit, full scale
Spare parts kit
Wheel Chock
Mechanical Stopper

Standard and optional equipment may vary by market.
Please consult your local Volvo dealer for details.

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.

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Breaker/Shear piping (X1)



Emergency steering



Rear-view camera



Quick-coupler piping



Extra work light



Air compressor





VOLVO

Volvo Construction Equipment

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