

VOLVO WHEELED EXCAVATORS

EW160D, EW180D, EW210D

16.2-22.8 t / 35,658 lb-50,300 lb 115 kW-129 kW / 154 hp-173 hp



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 175 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.

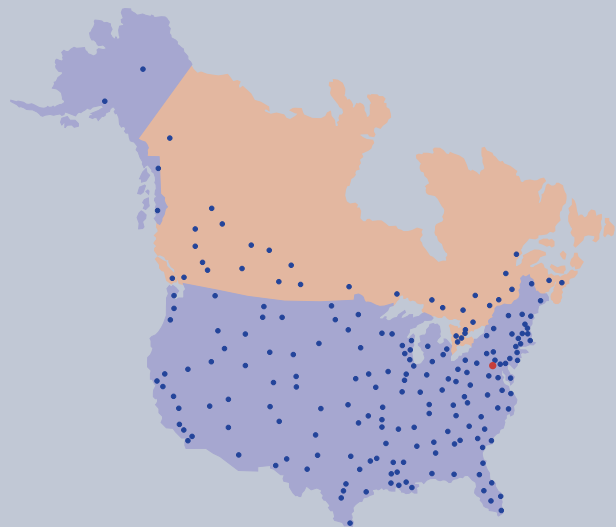
A strong, dedicated, capable dealer network.

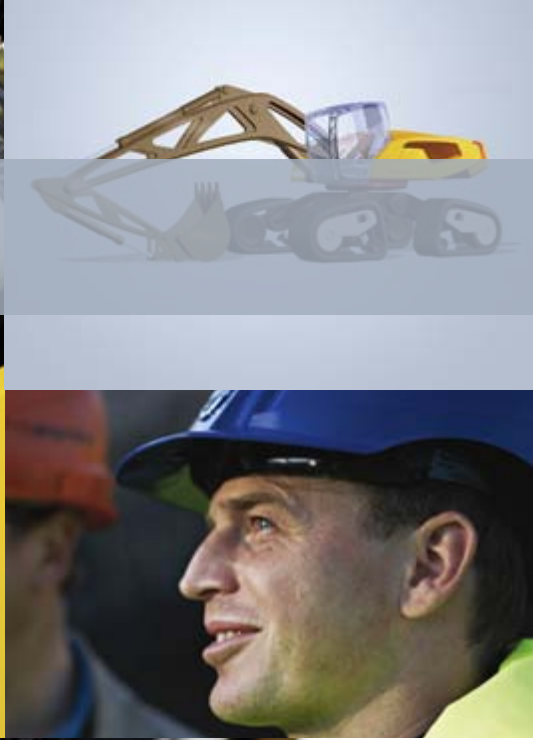
Our dealers are strategically located throughout North America to provide the equipment you need and the parts and service support you demand for a productive and profitable operation.

The strength of our dealer network is enhanced with extensive individualized product and product support training at our state-of-the-art Technical Training Center in Asheville and through hands-on training. At our nearby 80-acre Product Demonstration Center, visitors operate equipment from our entire product line under a variety of simulated working conditions. Both facilities are in year-round use by our dealers and customers – more than 2,000 visit each year. **Building the best starts right here.**

The products designed and manufactured by Volvo Construction Equipment have their beginnings at the most advanced Research & Design centers in the industry. Volvo CE machines are designed in 11 R&D centers and produced in 15 manufacturing facilities across the world.

The major R&D center and manufacturing plant in the Americas is located in Shippensburg, Pennsylvania. This facility has been in operation for over 30 years and – with its recently added 200,000 sq. ft. expansion – now covers 570,000 sq. ft. on an 80 acre campus. Dedicated work teams and highly advanced technologies and techniques using the Volvo Production System ensure continuous quality improvements, labor savings and cost control to reach the high quality that our customers have come to expect from Volvo.





Mack Trucks



Volvo Construction Equipment



Volvo Penta



Volvo Trucks



Renault Trucks



UD Trucks



Volvo Buses



Volvo Aero



Volvo Financial Services

BUILT FOR EFFICIENCY.

At Volvo we are proud of our fuel efficient and environmentally responsible machines, we deliver more power for less fuel. The EW160D, EW180D and EW210D are no exception; our newly developed engine meets all legislative requirements, improves performance and lowers fuel consumption to save you time and money.



Volvo D4 and D6 Tier 4 Interim engine

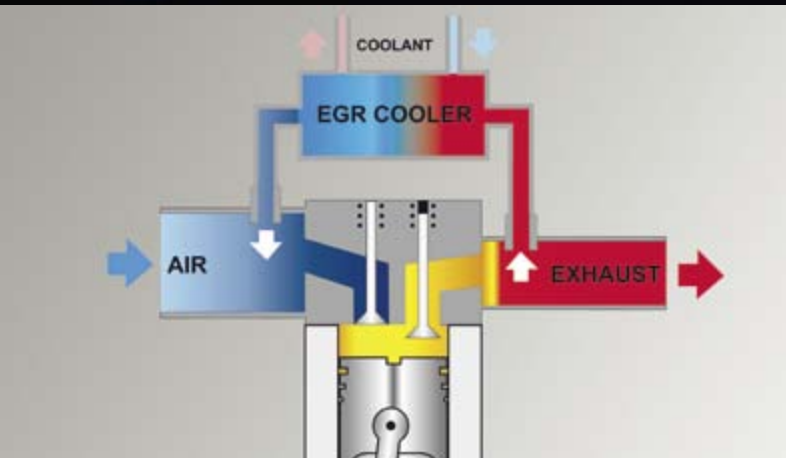
Volvo's efficient diesel engine with V-ACT technology gives you more power, while consuming less fuel, for high torque at low engine speeds. Low emission levels for ultimate efficiency and environmental care.

Fuel efficiency

Increased fuel efficiency from Volvo's D6 Tier 4 Interim engine, enhanced hydraulic system and well matched Volvo components. More power with ultimate efficiency.

Diesel Particulate Filter (DPF)

The active-type DPF includes a Diesel Oxidation Catalyst function and regeneration burner. The system temporarily holds the exhaust fumes and incinerates them, lowering emissions without reducing performance.



Exhaust Gas Recirculation (EGR) and Electronic Control Unit (ECU)

Efficient cooled external EGR reduces oxygen concentration and decreases the combustion temperature for lower emissions. The ECU controls the mix of recirculated exhaust gas and fresh air – crucial for reducing emissions, performance and fuel economy.

Regeneration

Particles collected during filter cleaning are oxidized and transformed into non-toxic CO₂ every 6-10 hours. Volvo's regeneration system does not interrupt operation, performance or productivity. Regeneration can be postponed if the timing is inconvenient.

WE SET THE STANDARD.

Quality is at the forefront of the wheeled excavator design. These tough machines are highly mobile, productive and flexible – both on and off-road. Trust Volvo for quality you can rely on.



Quality

Volvo matched components and an excellent combination of features come together to produce a quality machine. Our rear view camera is fitted as standard and provides superb clarity via the color I-ECU monitor. An optional side view camera further increases safety.

Anti-slip plate

Added operator and service mechanic safety from punched anti-slip plate which provides superb grip, especially in wet or icy conditions.

Foot steps and hand rail

Safe and easy access to the machine is ensured by two convenient foot steps and a hand rail.

LED rear lights

LED lights on the rear counterweight provide longer life time and improved appearance.



Stays and locking devices

Volvo's automatic stays prevent doors being blown closed for added safety, they can easily be manually released. Automatic locks ensure the doors close properly and enhance appearance.

Hammer/shear (X1) and attachment rotation (X3) management

Increase your wheeled excavator versatility with optional hydraulics functions X1 hammer/shear and X3 rotation. X1 function utilizes the main system hydraulic flow to operate attachments requiring one or two way flow whereas X3 function provides an appropriate 2 way flow for tilting or rotating attachments.

Tightening eyes

A new type of over dimensioned tightening eyes secure the machine to the trailer and enable it to be lifted. The four eyes are on top of the undercarriage sides to ensure easy operator access.

DEMAND CONTROL.



Industry-leading cab

All-round visibility and an excellent operator environment are at the heart of Volvo's cab design. The spacious cab, with ample storage and leg room and easy to access controls, increases operator productivity and reduces fatigue.

Volvo puts you in control with its industry leading cab; achieve more while working comfortably. Get productive with our excellent all-round visibility, increased safety and ample space. See more and do more with Volvo.

Adjustable steering column

Slim design of the easily adjustable steering column ensures visibility is not impaired for increased operator comfort.



ROPS

The cab features Roll Over Protective Structure (ROPS) which meets the ISO 12117-2 safety standard for increased peace of mind in the unlikely event of machine roll over.



Smart controls

Navigate through the colour I-ECU monitor via the conveniently located control panel. The monitor can be clearly read in all light conditions for easy visual and diagnostic checks, increasing uptime and productivity.



Automatic climate control system

Operators can set their ideal temperature with Volvo's powerful climate control system which is fitted as standard. Industry leading air circulation and defrosting capability is delivered with 14 well-spaced vents for increased comfort and productivity.

PERFORMANCE YOU CAN MEASURE.

The Volvo wheeled excavators are designed to help you do more. An enhanced hydraulic system and well matched Volvo components guarantee you increased digging performance. It all adds up to more with Volvo.



Increased digging power

Perform at a higher level with increased digging power for greater productivity. Optimized breakout and digging forces provided by perfectly dimensioned hydraulic cylinders and optimized equipment geometry.

Attachment management system

Allows storage of up to 18 different attachment presets and enables hydraulic flow (standard) and pressure (optional) to be adjusted according to requirements. Operators can change attachments quickly without manual setup.

Eco mode

For increased fuel efficiency eco mode has been added to the choice of work modes available. Choose the correct mode according to your working conditions for added versatility and increased performance.

Travel motor

New electrical, proportional control travel motor provides increased controllability for smoother downhill rides and when increasing speed while carrying a heavy load.



Tilt rotator

The optional tilt rotator acts as a wrist between the arm and bucket of the machine. It combines 360° rotary motion with 40° tilt action for flexibility and profitability.

Axle oscillation and lock

For increased off-road performance the front axle oscillation is 9° or 6° if mudguards are specified. Oscillation lock can be activated by the operator or automatically when 'Parking Mode' is selected.

Automatic idling system and automatic engine shut down

The idling system reduces rpm when the controls are inactive for a specified time (between 3-20 seconds). When the machine is stationary for the selected time the engine will automatically shut down – this is easily disabled and adjusted. Reduce fuel consumption and save money.

EASY TO MAINTAIN.

Serviceability is built in to the new EW160D, EW180D and EW210D. Easy access to grouped service points allows for fast and effortless maintenance and service checks. Increase your uptime with Volvo.



Serviceability

Grouped filters and accessible radiators are quick to access from ground level via large compartment doors – increasing safety. Fast and easy access for maintenance means regular checks are more likely to be done leading to longer machine operating life.

Grouped filters

Grouped filters in the pump compartment are accessible via one door at ground level for faster servicing and more machine uptime.

Fuel filler pump

Get more versatility from the fuel filler pump which allows for the machine to be re-filled from an external fuel tank. This provides 50l/min and an auto-stop function.

Service intervals on I-ECU

A service mode is incorporated into the I-ECU color monitor to enable diagnostic checks. Four separate service intervals – the engine oil/filter, fuel filter/water separator, hydraulic oil and hydraulic oil filter – are displayed on the monitor.



CareTrack

Volvo's telematics system guides machine owners towards optimized productivity and their next service – remotely. Get fuel consumption and location reports to save fuel and reduce costs.

Grouped greasing points

Conveniently located boom and arm greasing points are grouped for simplicity and ease of access. Greasing is needed at 50 hour intervals and at 250 hours for the slew ring. Quicker maintenance leads to increased productivity.

Cooling system

Cooling fan speed is controlled to its need which reduces fuel consumption and noise. The three coolers - change air cooler, water cooler and hydraulic cooler - form a single layer layout and are cooled by one fan for a more compact design, which is easy to service and clean – guaranteeing you more uptime.

THE COMPLETE PACKAGE.

Boom configurations

The EW160D, EW180D and EW210D are available with either a monoboom or a two piece boom, with or without offset, providing increased flexibility and versatility.



Performance

Perform at a higher level with increased digging force for greater productivity.

Auto greasing system

This optional feature supplies the correct amount of lubrication to all greasing points on a timed basis for reduced costs.

Higher working pressure

Reinforced digging equipment due to increased hydraulic pressure.

Eco mode

Work in Volvo's new eco mode for increased fuel efficiency.





Cab

Spacious cab with excellent all-round visibility and easy to access controls. Approved to ROPS safety standards.

Diesel Particulate Filter (DPF)

The active-type DPF incinerates exhaust fumes to lower emissions.



Tier 4 Interim engine

Volvo's efficient diesel engine with V-ACT technology gives you more power, while consuming less fuel for low emission levels.

Heavy counterweight

A heavier counterweight for increased stability when using bulky attachments is available as an option for more versatility.



Serviceability

Grouped filters are quick and easy to access from ground level via large compartment doors for increased safety.



Quality

Volvo matched components and excellent features combine to produce a quality machine you can trust.

Travel motor

New electrical, proportional control travel motor provides increased controllability for a smoother downhill ride.

VOLVO EW160D, EW180D, EW210D IN DETAIL.

Engine

Volvo Construction Equipment is ready to comply with the tough new US (EPA) Tier 4 interim legislation for off-road vehicles with the introduction of a cascade of innovations in its new generation engines with Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions and maintain superior performance and fuel efficiency.

Volvo machines are equipped with Volvo designed and manufactured in-line turbo charged diesel engines with a precise high-pressure fuel injector system, air to air intercooler and electronic engine controls to optimize machine performance. The engine features an externally cooled exhaust gas re-circulation (E-EGR) and a Diesel Particulate Filter.

EW160D		
Engine	Volvo	D6H
Max power at	r/s / r/min	31,7 / 1,900
Gross, ISO 14396/SAE J1995	kW / hp	115 / 154
Net, ISO 9249/DIN 6271	kW / hp	112 / 150
Max torque at 1,350 rpm	Nm / lbf. ft	716 / 528
No. of cylinders		6
Displacement	l / cu. in	5.7 / 348
Bore	mm / in	98 / 3.86
Stroke	mm / in	126 / 4.96

EW180D		
Engine	Volvo	D6H
Max power at	r/s / r/min	33,3 / 2,000
Gross, ISO 14396/SAE J1995	kW / hp	129 / 173
Net, ISO 9249/DIN 6271	kW / hp	126 / 169
Max torque at 1,500 rpm	Nm / lbf. ft	758 / 559
No. of cylinders		6
Displacement	l / cu. in	5.7 / 348
Bore	mm / in	98 / 3.86
Stroke	mm / in	126 / 4.96

EW210D		
Engine	Volvo	D6H
Max power at	r/s / r/min	33,3 / 2,000
Gross, ISO 14396/SAE J1995	kW / hp	129 / 173
Net, ISO 9249/DIN 6271	kW / hp	126 / 169
Max torque at 1,500 rpm	Nm / lbf. ft	758 / 559
No. of cylinders		6
Displacement	l / cu. in	5.7 / 348
Bore	mm / in	98 / 3.86
Stroke	mm / in	126 / 4.96

Electrical system

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

Contronics provides advanced monitoring of machine functions and important diagnostic information on the I-ECU.

	EW160D	EW180D	EW210D
Voltage	V	24	
Batteries	V	2 x 12	
Battery capacity	Ah	100	
Alternator	V / Ah	28 / 110	
Alternator rating	W	3,360	

Slew system

The superstructure is slewed by the means of a radial piston motor without reduction gear.

Automatic slew holding brake and anti-rebound valve are standard.

		EW160D	EW180D	EW210D
Max. slew speed	r/min	10.0	9.1	9.7
Max. slew torque	kNm	50,4	65,6	77,5
	lbf. ft	37,200	48,400	57,200

Undercarriage

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

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.

		EW160D	EW180D	EW210D
Oscillating	°	± 9	± 9	± 9
with mudguards	°	± 6	± 7	± 7
Twin wheels		10.00-20		
Max. tractive force (net)	kN	104	104	121
	lbf. ft.	23,380	23,380	27,200

Travel speed

		EW160D	EW180D	EW210D
on road	km/h	20,0/30,0 /35,0	20,0/30,0 /35,0	20,0/25,5 /30,0
	mph	12.5/18.5 /22.0	12.5/18.5 /22.0	12.5/15.5 18.5
off road	km/h	5,0/7,4 /8,7	5,0/7,4 /8,9	5,0/6,4 /7,4
	mph	3.1/4.4 /5.0	3.1/4.6 /5.5	3.1/4.0 /4.6
creep	km/h	4,0	3,7	3,2
	mph	2.5	2.3	2.0
Min. turning radius	m	7.3	7.6	8.1
	ft	23.0	25.0	26.7

Cab

New-design Volvo Care Cab with operator protective structure, large and roomy interior, more leg room and foot space. One way travel pedal with rocker switch control (F-N-R) on the right joystick. One-touch release for digging brake pedal.

Audio system with remote control. 3 cup holders, 3 outlets, independently adjustable joystick consoles.

Excellent all-round visibility provided by maximized cab class, transparent roof hatch, 2-piece sliding door window and long-stroke, easy to adjust and narrow steering column. The liftable front windshield can easily be stored in the inside roof space and clipped in position. The removable lower front glass can be stored in the side door pocket. Interior lighting consists of one reading light and one light with timer.

The pressurized and filtered cab air is supplied by a 14-vent climate-control providing fast defrosting and high cooling and heating performance.

Viscous/spring mounted suspension cushions protect the operator from vibrations. Deluxe air-suspension seat with adjustable seat suspension, height, tilt, recline and forward-backward settings (option).

Adjustable, easy to read 6.4" LCD color monitor provides real time information of machine functions and important diagnostic information and is switch-able to rear view camera monitor.

Sound level

	EW160D	EW180D	EW210D
Sound level in cab according to ISO 6396			
External sound level according to ISO 6395			
LpA dB(A)	70	70	70
(Directive 2000/14/EC)			
LwA dB(A)	101	102	103

Brakes

Service brakes: servo-hydraulically manoeuvred self-adjusting wet multi-discs 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.

Hydraulic system

Closed-center load sensing hydraulic system with pressure compensated valves. Load independence of movements. Flow sharing feature, combined with a high flow electronically controlled pump (power regulation). The system gives superior manoeuvrability and fast movements, for optimal working result and economy.

The following working modes are included in the system:

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

Travel mode (T): Engine speed is controlled by travel pedal stroke for low fuel consumption and noise.

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

Customer mode (C): Operator can set proper oil flow in accordance with job conditions.

Power Boost: All digging and lifting forces are increased.

	EW160D	EW180D	EW210D
Main pump, low noise axial piston pump			
Maximum flow	l/min	256	420
	gpm	67.6	111
Brake + steering pump, low noise gear pump			
Maximum flow	l/min	36.0	36.1
	gpm	9.5	10.0
Servo pump, low noise gear pump			
Maximum flow	l/min	15.0	15.2
	gpm	4.0	4.2
Maximum pressure:			
Implements	MPa	34,0 / 37,5	34,0 / 37,5
	Psi	4,930 / 5,440	4,930 / 5,440
Travel system	MPa	37,5	37,5
	Psi	5,440	5,440
Pilot system	MPa	4,0	3,5
	Psi	490	490

Total machine weight

EW160D		
Machine with 5,0 m (16' 5") monoboom, 2,45 m (8' 0") dipper arm, quickfit S6, 530 kg (1,168 lb) / 780 l (0.98 yd ³) bucket. Standard counterweight.		
Dozer blade front and outriggers rear	kg / lb	17 250 / 38,000
Dozer blade rear only	kg / lb	16 200 / 35,700
Front and rear outriggers	kg / lb	17 500 / 38,600
Machine with 5,1 m (16' 9") 2-piece boom, 2,45 m (8' 0") dipper arm, quickfit S6, 530 kg (1,168 lb) / 780 l (0.98 yd ³) bucket. Standard counterweight.		
Dozer blade front and outriggers rear	kg / lb	17 600 / 38,800
Dozer blade rear only	kg / lb	16 550 / 36,500
Front and rear outriggers	kg / lb	17 850 / 39,400

EW180D		
Machine with 5,2 m (17' 1") monoboom, 2,45 m (8' 0") dipper arm, quickfit S1, 590 kg (1,300 lb) / 890 l (1.16 yd ³) bucket.		
Dozer blade front and outriggers rear	kg / lb	19 400 / 42,800
Dozer blade rear excl. outriggers	kg / lb	18 200 / 40,000
Front and rear outriggers	kg / lb	19 700 / 43,400
Machine with 5,3 m (17' 4") 2-piece boom, 2,45 m (8' 0") dipper arm, quickfit S1, 590 kg (1,300 lb) / 890 l (1.16 yd ³) bucket.		
Dozer blade front and outriggers rear	kg / lb	20 000 / 44,000
Dozer blade rear excl. outriggers	kg / lb	18 800 / 41,400
Front and rear outriggers	kg / lb	20 300 / 44,700

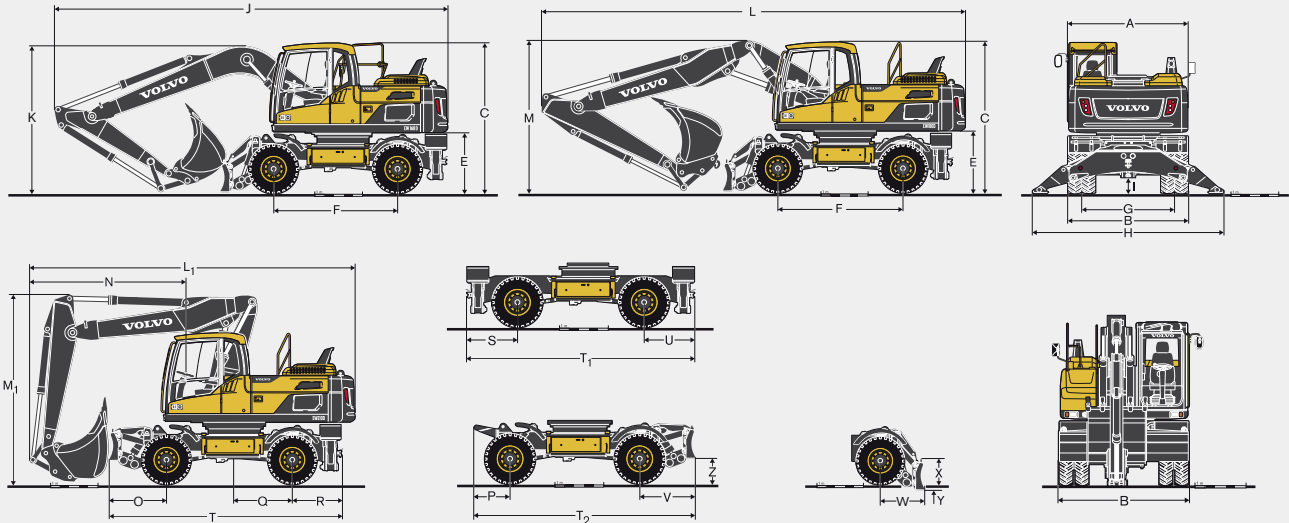
EW210D (*heavy counterweight / **standard counterweight)		
Machine with 5,6 m (18' 4") monoboom, 2,45 m (8' 0") dipper arm, quickfit S1, 810 kg (1,785 lb) / 1 350 l (1.76 yd ³) bucket.		
Dozer blade front and outriggers rear	kg / lb	*21 700/**20 900 / *47,800/**46,100
Dozer blade rear excl. outriggers	kg / lb	*20 400/**19 700 / *45,000/**43,400
Front and rear outriggers	kg / lb	*22 100/**21 300 / *48,700/**46,900
Machine with 5,5 m (18' 0") 2-piece boom, 2,45 m (8' 0") dipper arm, quickfit S1, 810 kg (1,785 lb) / 1 350 l (1.76 yd ³) bucket.		
Dozer blade front and outriggers rear	kg / lb	*22 400/**21 600 / *49,300/**47,600
Dozer blade rear excl. outriggers	kg / lb	*21 100/**20 400 / *46,500/**45,000
Front and rear outriggers	kg / lb	*22 800/**22 000 / *50,400/**48,500

Service refill capacities

	EW160D	EW180D	EW210D
Fuel tank	l / gal	250 / 66.1	335 / 78
Hydraulic system, total	l / gal	260 / 68.7	300 / 78
Hydraulic tank	l / gal	123 / 32	165 / 43
Engine oil	l / gal	25 / 6.6	25 / 6.6
Engine coolant	l / gal	33 / 8.7	33 / 8.7
Transmission	l / gal	2,5 / 0.7	2,5 / 0.7
Axle differential:			
Front axle	l / gal	9,5 / 2.5	9,5 / 2.5
Rear axle	l / gal	12,5 / 3.3	14,5 / 3.8
Final drive, wet disc type	l / gal	4 x 2,5 / 4 x 0.7	4 x 2,5 / 4 x 0.7

SPECIFICATIONS.

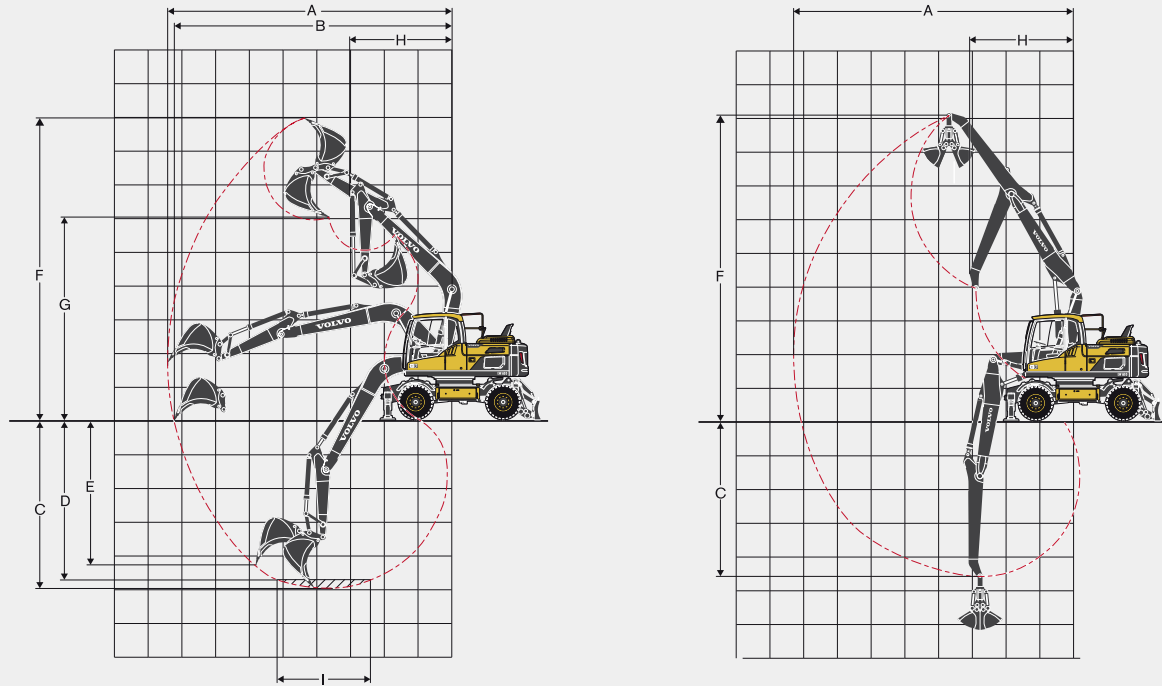
DIMENSIONS - EW160D, EW180D and EW210D



Description	Unit	EW160D				EW180D				EW210D				
Boom	m, (ft-in)	5,0 (16' 5") mono or 5,1 (16' 9") 2-piece				5,2 (17' 1") mono or 5,3 (17' 5") 2-piece				5,6 (18' 4") mono or 5,5 (18' 0") 2-piece				
*Arm, **Grab Arm	m, (ft-in)	*2,0 (6' 7")	*2,45 (8' 0")	*2,6 (8' 6")	*3,1 (10' 2")	**2,95 (9' 8")†	*2,45 (8' 0")	*2,6 (8' 6")	*3,0 (9' 10")	**3,2 (10' 6")†	*2,45 (8' 0")	*2,6 (8' 6")	*2,9 (9' 6")	**3,2 (10' 6")†
A. Overall width of superstructure	mm, (ft-in)	2 520 (8' 2")	2 520 (8' 2")	2 520 (8' 2")	2 520 (8' 2")	2 520 (8' 2")	2 520 (8' 3")	2 520 (8' 3")	2 520 (8' 3")	2 520 (8' 3")	2 520 (8' 3")	2 520 (8' 3")	2 520 (8' 3")	2 520 (8' 3")
B. Overall width	mm, (ft-in)	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")	2 540/2 750 (8' 4")/(9' 0")
C. Overall height of cab	mm, (ft-in)	3 140 (10' 4")	3 140 (10' 4")	3 140 (10' 4")	3 140 (10' 4")	3 140 (10' 4")	3 190 (10' 6")	3 190 (10' 6")	3 190 (10' 6")	3 190 (10' 6")	3 190 (10' 6")	3 190 (10' 6")	3 190 (10' 6")	3 190 (10' 6")
D. Tail slew radius	mm, (ft-in)	2 150 (7' 3")	2 150 (7' 3")	2 150 (7' 3")	2 150 (7' 3")	2 150 (7' 3")	2 550 (8' 4")	2 550 (8' 4")	2 550 (8' 4")	2 550 (8' 4")	2 650 (8' 8")	2 650 (8' 8")	2 650 (8' 8")	2 650 (8' 8")
E. Counterweight clearance	mm, (ft-in)	1 260 (4' 1")	1 260 (4' 1")	1 260 (4' 1")	1 260 (4' 1")	1 260 (4' 1")	1 280 (4' 2")	1 280 (4' 2")	1 280 (4' 2")	1 280 (4' 2")	1 280 (4' 2")	1 280 (4' 2")	1 280 (4' 2")	1 280 (4' 2")
F. Wheel base	mm, (ft-in)	2 600 (8' 6")	2 600 (8' 6")	2 600 (8' 6")	2 600 (8' 6")	2 600 (8' 6")	2 650 (8' 8")	2 650 (8' 8")	2 650 (8' 8")	2 650 (8' 8")	2 750 (9' 0")	2 750 (9' 0")	2 750 (9' 0")	2 750 (9' 0")
G. Tread	mm, (ft-in)	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")	1 940 (6' 4")
H. Outrigger width (front or rear)	mm, (ft-in)	3 980 (13' 1")	3 980 (13' 1")	3 980 (13' 1")	3 980 (13' 1")	3 980 (13' 1")	4 000 (13' 2")	4 000 (13' 2")	4 000 (13' 2")	4 000 (13' 2")	4 000 (13' 1")	4 000 (13' 1")	4 000 (13' 1")	4 000 (13' 1")
I. Minimum ground clearance	mm, (ft-in)	360 (1' 2")	360 (1' 2")	360 (1' 2")	360 (1' 2")	360 (1' 2")	333 (1' 1")	333 (1' 1")	333 (1' 1")	333 (1' 1")	350 (1' 2")	350 (1' 2")	350 (1' 2")	350 (1' 2")
J. Overall length (mono)	mm, (ft-in)	8 240 (27' 0")	8 250 (27' 1")	8 240 (27' 0")	7 940 (26' 1")	8 255 (27' 1")†	8 880 (29' 1")	8 870 (29' 1")	8 900 (29' 2")	8 830 (29' 0")	9 380 (30' 9")	9 380 (30' 9")	9 380 (30' 9")	9 340 (30' 8")
K. Overall height of boom (mono)	mm, (ft-in)	3 070 (10' 1")	3 040 (10' 0")	3 200 (10' 6")	3 700 (12' 2")	3 155 (10' 4")†	3 220 (10' 7")	3 180 (10' 5")	3 480 (11' 5")	3 580 (11' 9")	3 220 (10' 7")	3 220 (10' 7")	3 170 (10' 5")	3 680 (12' 1")
L. Overall length (2-piece)	mm, (ft-in)	8 330 (27' 4")	8 360 (27' 5")	8 360 (27' 10")	8 150 (26' 9")	8 350 (27' 5")	8 990 (29' 6")	8 990 (29' 6")	9 020 (29' 7")	8 860 (29' 1")	9 300 (30' 6")	9 320 (30' 7")	9 330 (30' 7")	9 150 (30' 0")
L'. Overall length (2-piece)	mm, (ft-in)	6 440 (21' 1")	6 440 (21' 2")	5 960 (19' 7")	5 950 (19' 6")	6 900 (22' 8")	6 870 (22' 6")	6 630 (21' 9")	6 670 (21' 11")	6 720 (22' 0")	3 080 (10' 1")	3 080 (10' 1")	3 080 (10' 1")	3 490 (11' 5")
M. Overall height of boom (2-piece)	mm, (ft-in)	2 865 (9' 5")	2 860 (9' 5")	2 900 (9' 6")	3 390 (11' 1")	2 950 (9' 8")	3 220 (10' 7")	3 200 (10' 6")	3 340 (11' 0")	3 530 (11' 7")	6 940 (22' 9")	6 720 (22' 0")	6 740 (22' 1")	6 900 (22' 8")
M'. Overall height of boom (2-piece)	mm, (ft-in)	3 920 (12' 10")	3 920 (12' 10")	3 920 (12' 10")	3 940 (12' 11")	3 990 (13' 1")	3 970 (13' 0")	3 940 (12' 11")	3 940 (12' 11")	3 950 (13' 0")	3 940 (12' 11")	3 940 (12' 11")	3 940 (12' 11")	3 970 (13' 0")
N. Front overhang	mm, (ft-in)	3 200 (10' 6")	3 215 (10' 7")	2 715 (8' 11")	2 710 (8' 10")	3 660 (12' 0")	3 280 (10' 9")	3 040 (10' 0")	3 080 (10' 1")	3 130 (10' 3")	3 250 (10' 8")	3 030 (9' 11")	3 050 (10' 0")	3 210 (10' 6")
O. Undercarriage dimensions	mm, (ft-in)	1 180 (3' 10")	1 180 (3' 10")	1 180 (3' 10")	1 180 (3' 10")	1 180 (3' 10")	1 210 (3' 12")	1 210 (3' 12")	1 210 (3' 12")	1 210 (3' 12")	1 290 (4' 3")	1 290 (4' 3")	1 290 (4' 3")	1 290 (4' 3")
P. Undercarriage dimensions	mm, (ft-in)	750 (2' 5")	750 (2' 5")	750 (2' 5")	750 (2' 5")	750 (2' 5")	780 (2' 7")	780 (2' 7")	780 (2' 7")	780 (2' 7")	830 (2' 9")	830 (2' 9")	830 (2' 9")	830 (2' 9")
Q. Undercarriage dimensions	mm, (ft-in)	1 500 (3' 9")	1 500 (3' 9")	1 500 (3' 9")	1 500 (3' 9")	1 500 (3' 9")	1 220 (4' 0")	1 220 (4' 0")	1 220 (4' 0")	1 220 (4' 0")	1 375 (4' 6")	1 375 (4' 6")	1 375 (4' 6")	1 375 (4' 6")
R/U. Undercarriage dimensions	mm, (ft-in)	1 030 (3' 4")	1 030 (3' 4")	1 030 (3' 4")	1 030 (3' 4")	1 030 (3' 4")	1 040 (3' 5")	1 040 (3' 5")	1 040 (3' 5")	1 040 (3' 5")	1 070 (3' 6")	1 070 (3' 6")	1 070 (3' 6")	1 070 (3' 6")
S. Undercarriage dimensions	mm, (ft-in)	1 080 (3' 6")	1 080 (3' 6")	1 080 (3' 6")	1 080 (3' 6")	1 080 (3' 6")	1 130 (3' 8")	1 130 (3' 8")	1 130 (3' 8")	1 130 (3' 8")	1 160 (3' 10")	1 160 (3' 10")	1 160 (3' 10")	1 160 (3' 10")
T. Undercarriage dimensions	mm, (ft-in)	4 800 (15' 9")	4 800 (15' 9")	4 800 (15' 9")	4 800 (15' 9")	4 800 (15' 9")	4 900 (16' 1")	4 900 (16' 1")	4 900 (16' 1")	4 900 (16' 1")	5 110 (16' 9")	5 110 (16' 9")	5 110 (16' 9")	5 110 (16' 9")
T'. Undercarriage dimensions	mm, (ft-in)	4 700 (15' 5")	4 700 (15' 5")	4 700 (15' 5")	4 700 (15' 5")	4 700 (15' 5")	4 820 (15' 10")	4 820 (15' 10")	4 820 (15' 10")	4 820 (15' 10")	4 980 (16' 4")	4 980 (16' 4")	4 980 (16' 4")	4 980 (16' 4")
T''. Undercarriage dimensions	mm, (ft-in)	4 470 (14' 8")	4 470 (14' 8")	4 470 (14' 8")	4 470 (14' 8")	4 470 (14' 8")	4 560 (15' 0")	4 560 (15' 0")	4 560 (15' 0")	4 560 (15' 0")	4 780 (15' 8")	4 780 (15' 8")	4 780 (15' 8")	4 780 (15' 8")
V. Undercarriage dimensions	mm, (ft-in)	1 120 (3' 8")	1 120 (3' 8")	1 120 (3' 8")	1 120 (3' 8")	1 120 (3' 8")	1 130 (3' 8")	1 130 (3' 8")	1 130 (3' 8")	1 130 (3' 8")	1 200 (3' 11")	1 200 (3' 11")	1 200 (3' 11")	1 200 (3' 11")
W. Undercarriage dimensions	mm, (ft-in)	920 (3' 0")	920 (3' 0")	920 (3' 0")	920 (3' 0")	920 (3' 0")	960 (3' 2")	960 (3' 2")	960 (3' 2")	960 (3' 2")	980 (3' 3")	980 (3' 3")	980 (3' 3")	980 (3' 3")
X. Undercarriage dimensions	mm, (ft-in)	630 (3' 0")	630 (3' 0")	630 (3' 0")	630 (3' 0")	630 (3' 0")	630 (2' 1")	630 (2' 1")	630 (2' 1")	630 (2' 1")	630 (2' 1")	630 (2' 1")	630 (2' 1")	630 (2' 1")
Y. Undercarriage dimensions	mm, (ft-in)	153 (6' 0")	153 (6' 0")	153 (6' 0")	153 (6' 0")	153 (6' 0")	155 (6' 0")	155 (6' 0")	155 (6' 0")	155 (6' 0")	132 (5' 0")	132 (5' 0")	132 (5' 0")	132 (5' 0")
Z. Undercarriage dimensions	mm, (ft-in)	520 (1' 8")	520 (1' 8")	520 (1' 8")	520 (1' 8")	520 (1' 8")	470 (1' 7")	470 (1' 7")	470 (1' 7")	470 (1' 7")	450 (1' 6")	450 (1' 6")	450 (1' 6")	450 (1' 6")

†grab arm, without clamshell bucket ‡without bucket

WORKING RANGES - EW160D

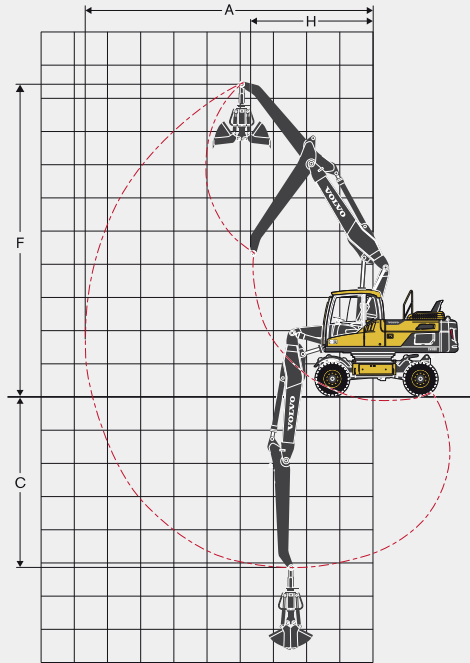
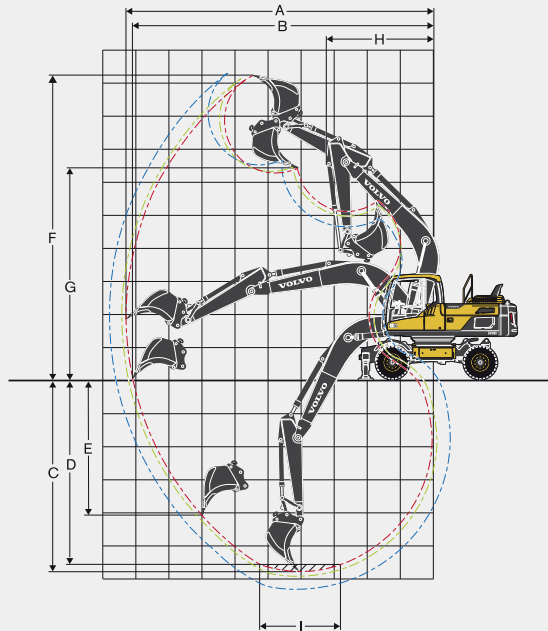


Description	Unit	5,0 (16' 5") monoboomb				EW160D				5,1 (16' 9") 2-piece boom			
Boom	m, (ft-in)	5,0 (16' 5") monoboomb				EW160D				5,1 (16' 9") 2-piece boom			
Arm, 'Grab Arm	m, (ft-in)	2,0 (6' 7")	2,45 (8' 0")	2,6 (8' 6")	3,1 (10' 2")	2,95 (9' 8")	2,0 (6' 7")	2,45 (8' 0")	2,6 (8' 6")	3,1 (10' 2")	2,95 (9' 8")		
A. Max. digging reach	mm, (ft-in)	8 600 (28' 3")	9 030 (29' 8")	9 170 (30' 1")	9 650 (31' 8")	8 050 (26' 5")	8 750 (28' 9")	9 180 (30' 1")	9 320 (30' 7")	9 810 (32' 2")	8 190 (26' 11")		
B. Max. digging reach on ground	mm, (ft-in)	8 400 (27' 7")	8 840 (29' 0")	8 990 (29' 6")	9 470 (31' 1")	-	8 550 (28' 1")	8 990 (29' 1")	9 140 (30' 0")	9 630 (31' 7")	-		
C. Max. digging depth	mm, (ft-in)	5 160 (16' 11")	5 610 (18' 5")	5 760 (18' 11")	6 260 (20' 7")	4 590 (15' 1")	5 150 (16' 11")	5 600 (18' 4")	5 750 (18' 10")	6 250 (20' 6")	4 590 (15' 1")		
D. Max. digging depth (l = 2,440 m, (8') level)	mm, (ft-in)	4 940 (16' 3")	5 420 (17' 9")	5 570 (18' 3")	6 100 (20' 0")	-	5 040 (16' 7")	5 500 (18' 1")	5 650 (18' 6")	6 150 (20' 2")	-		
E. Max. vertical wall digging depth	mm, (ft-in)	4 200 (13' 9")	4 710 (15' 5")	4 850 (15' 11")	5 320 (17' 6")	-	3 890 (12' 9")	4 360 (14' 3")	4 500 (14' 9")	4 970 (16' 4")	-		
F. Max. cutting height	mm, (ft-in)	8 840 (29' 0")	9 100 (29' 10")	9 190 (30' 2")	9 470 (31' 1")	8 090 (26' 6")	9 660 (31' 8")	10 000 (32' 10")	10 110 (33' 3")	10 480 (34' 5")	9 000 (29' 6")		
G. Max. dumping height	mm, (ft-in)	5 950 (19' 6")	6 190 (20' 4")	6 270 (20' 7")	6 560 (21' 6")	-	6 650 (21' 10")	6 980 (22' 11")	7 090 (23' 3")	7 460 (24' 6")	-		
H. Min. front slew radius	mm, (ft-in)	3 140 (10' 4")	3 150 (10' 4")	3 160 (10' 4")	3 190 (10' 6")	3 270 (10' 9")	2 690 (8' 10")	2 820 (9' 3")	2 860 (9' 5")	3 000 (9' 11")	3 010 (9' 10")		
Digging forces with direct fit bucket													
Breakout force - bucket													
Normal	SAE/ISO	kN, (lb)	127,7 (28,270)	127,7 (28,270)	127,7 (28,270)	127,7 (28,270)	-	127,7 (28,270)	127,7 (28,270)	127,7 (28,270)	127,7 (28,270)	-	
Power boost	SAE/ISO	kN, (lb)	127,7 (28,700)	127,7 (28,700)	127,7 (28,700)	127,7 (28,700)	-	127,7 (28,700)	127,7 (28,700)	127,7 (28,700)	127,7 (28,700)	-	
Tearout force - dipper arm													
Normal	SAE/ISO	kN, (lb)	97,0 (21,800)	85,0 (18,500)	82,0 (17,700)	72,0 (15,700)	-	97,0 (21,800)	85,0 (18,500)	82,0 (17,700)	72,0 (15,700)	-	
Power boost	SAE/ISO	kN, (lb)	97,0 (21,800)	85,0 (19,100)	82,0 (18,300)	72,0 (16,200)	-	97,0 (21,800)	85,0 (19,100)	82,0 (18,300)	72,0 (16,200)	-	
Max. recommended for direct fit bucket													
Arm													
		2,0 m (6' 7")		2,45 m (8' 0")		2,6 m (8' 6")		3,1 m (10' 2")					
Max. bucket		m ³	yd ³	m ³	yd ³	m ³	yd ³	m ³	yd ³				
GP bucket 1,8 t/m ³ (3,030 lb/yd ³)		1,0	1.30	0,87	1.14	0,87	1.14	0,87	1.14	0,78	1.02		
HD bucket 2,1 t/m ³ (3,540 lb/yd ³)		0,70	0.92	0,70	0.92	0,70	0.92	0,62	0.81				
Max. recommended for quick fit bucket													
5,0 m (16' 5") Monoboomb													
		2,0 m (6' 7")		2,45 m (8' 0")		2,6 m (8' 6")		3,1 m (10' 2")					
Max. bucket		m ³	yd ³	m ³	yd ³	m ³	yd ³	m ³	yd ³				
S6/S60 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)		0,87	1.05	0,73	0.95	0,60	0.78	0,63	0.92				
S6 Qf HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)		0,70	0.92	0,63	0.82	0,55	0.72	0,55	0.78				
S1 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)		0,87	1.05	0,60	0.78	0,50	0.65	0,53	0.75				
S1 QF HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)		0,70	0.82	0,55	0.72	0,48	0.62	0,48	0.72				
Max. recommended for direct fit bucket													
5,1 m (16' 9") 2-piece boom													
		2,0 m (6' 7")		2,45 m (8' 0")		2,6 m (8' 6")		3,1 m (10' 2")					
Max. bucket		m ³	yd ³	m ³	yd ³	m ³	yd ³	m ³	yd ³				
GP bucket 1,8 t/m ³ (3,030 lb/yd ³)		0,87	1.14	0,87	1.14	0,78	1.02	0,70	0.92				
HD bucket 2,1 t/m ³ (3,540 lb/yd ³)		0,70	0.92	0,70	0.92	0,70	0.92	0,63	0.81				
Max. recommended for quick fit bucket													
5,1 m (16' 9") 2-piece boom													
		2,0 m (6' 7")		2,45 m (8' 0")		2,6 m (8' 6")		3,1 m (10' 2")					
Max. bucket		m ³	yd ³	m ³	yd ³	m ³	yd ³	m ³	yd ³				
S6/S60 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)		0,87	1.14	0,78	1.02	0,78	1.02	0,70	0.92				
S6 Qf HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)		0,70	0.92	0,62	0.81	0,62	0.81	0,50	0.65				
S1 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)		0,87	1.14	0,70	0.92	0,70	0.92	0,62	0.81				
S1 QF HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)		0,70	0.92	0,62	0.81	0,62	0.81	0,36	0.47				

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose. 2. "Max permitted sizes" are for reference only and are not necessarily available from the factory. 3. "Max. permitted sizes" are for heavy counterweight.

SPECIFICATIONS.

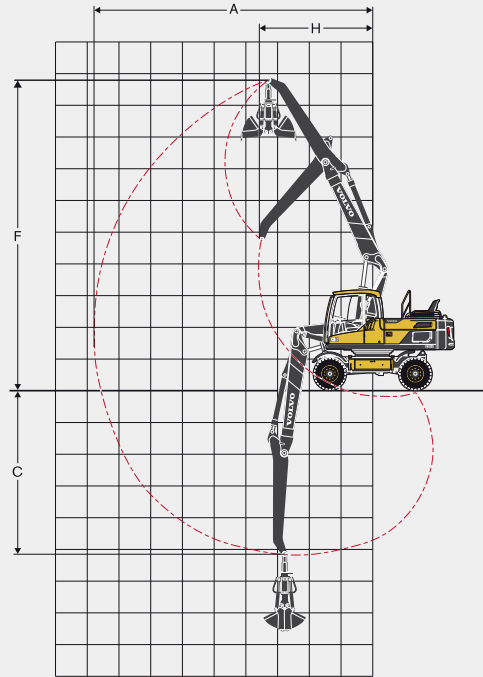
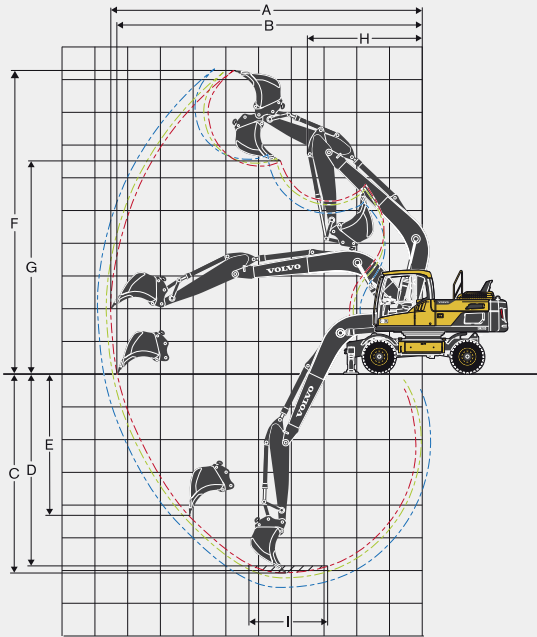
WORKING RANGES - EW180D



Description	Unit	EW180D								
Boom	m, (ft-in)	5,2 (17' 1") monoboomb				5,3 (17' 5") 2-piece boom				
Arm, 'Grab Arm	m, (ft-in)	2,45 (8' 0")	2,6 (8' 6")	3,0 (9' 10")	3,1 (10' 6")	2,45 (8' 0")	2,6 (8' 6")	3,0 (9' 10")	3,1 (10' 6")	
A. Max. digging reach	mm, (ft-in)	9 440 (30' 0")	9 570 (31' 5")	9 950 (32' 8")	8 670 (28' 5")	9 260 (30' 5")	9 390 (30' 10")	9 760 (32' 0")	8 490 (27' 10")	
B. Max. digging reach on ground	mm, (ft-in)	9 250 (19' 4")	9 380 (30' 9")	9 770 (32' 0")	-	9 070 (29' 9")	9 190 (30' 2")	9 570 (31' 5")	-	
C. Max. digging depth	mm, (ft-in)	5 980 (19' 8")	6 130 (20' 1")	6 530 (21' 1")	5 190 (17' 0")	5 790 (19' 0")	5 940 (19' 6")	6 340 (20' 10")	4 980 (16' 5")	
D. Max. digging depth (l = 2,440 m, (8') level)	mm, (ft-in)	5 890 (19' 4")	6 030 (19' 10")	6 440 (21' 1")	-	5 580 (18' 4")	5 740 (18' 10")	6 160 (20' 3")	-	
E. Max. vertical wall digging depth	mm, (ft-in)	4 940 (14' 9")	4 630 (15' 2")	4 990 (16' 4")	-	4 100 (13' 5")	4 220 (13' 10")	4 580 (15' 0")	-	
F. Max. cutting height	mm, (ft-in)	10 160 (33' 4")	10 240 (33' 7")	10 510 (34' 6")	9 360 (30' 8")	9 150 (30' 0")	9 190 (30' 2")	9 380 (30' 9")	9 370 (27' 5")	
G. Max. dumping height	mm, (ft-in)	7 110 (23' 4")	7 190 (23' 7")	7 470 (24' 6")	-	6 350 (20' 10")	6 390 (21' 0")	6 590 (21' 8")	-	
H. Min. front slew radius	mm, (ft-in)	2 750 (9' 0")	2 750 (9' 0")	2 830 (9' 3")	3 700 (12' 2")	3 220 (10' 7")	3 200 (10' 6")	3 190 (10' 6")	3 870 (12' 8")	
Digging forces with direct fit bucket										
Breakout force - bucket										
Breakout force SAE	kN, (lb)	120,0 (27,100)	120,0 (25,270)	120,0 (25,270)	-	120,0 (25,270)	120,0 (25,270)	120,0 (25,270)	-	
Breakout force ISO	kN, (lb)	136,0 (30,575)	136,0 (30,575)	136,0 (30,575)	-	136,0 (30,575)	136,0 (30,575)	136,0 (30,575)	-	
Tearout force - dipper arm										
Tearout force SAE	kN, (lb)	103,0 (23,200)	99,0 (22,300)	90,0 (20,200)	-	103,0 (23,200)	99,0 (22,300)	90,0 (20,200)	-	
Tearout force ISO	kN, (lb)	106,0 (24,000)	102,0 (23,000)	92,0 (20,800)	-	106,0 (24,000)	102,0 (23,000)	92,0 (20,800)	-	
Max. recommended for direct fit bucket										
Arm		2,45 m (8' 0")			5,2 m (17' 1") Monoboomb		2,6 m (8' 6")		3,0 m (9' 10")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
GP bucket 1,8 t/m ³ (3,030 lb/yd ³)	1,0		1.30		0,87	1.14		0,87	1.14	
HD bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,70	0.92	
Max. recommended for quick fit bucket										
Arm		2,45 m (8' 0")			5,2 m (17' 1") Monoboomb		2,6 m (8' 6")		3,0 m (9' 10")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
S1/S70 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,78	1.02		0,70	0.92	
S1/S70 Qf HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,62	0.81	
UQF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,78	1.02		0,70	0.92	
UQF HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,62	0.81	
Max. recommended for direct fit bucket										
Arm		2,45 m (8' 0")			5,3 m (17' 5") 2-piece boom		2,6 m (8' 6")		3,0 m (9' 10")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
GP bucket 1,8 t/m ³ (3,030 lb/yd ³)	1,0		1.30		1,0	1.30		0,87	1.14	
HD bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,70	0.92	
Max. recommended for quick fit bucket										
Arm		2,45 m (8' 0")			5,3 m (17' 5") 2-piece boom		2,6 m (8' 6")		3,0 m (9' 10")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
S1/S70 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,87	1.14		0,78	1.02	
S1/S70 Qf HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,70	0.92	
UQF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,87	1.14		0,78	1.02	
UQF HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,62	0.81	

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose. 2. "Max permitted sizes" are for reference only and are not necessarily available from the factory. 3. "Max. permitted sizes" are for heavy counterweight.

WORKING RANGES - EW210D



Description	Unit	EW210D								
		5,9 (18' 4") monoboomb			3,2 (10' 6")		5,5 (18' 0") 2-piece boom			
Boom	m, (ft-in)	5,9 (18' 4") monoboomb			3,2 (10' 6")		5,5 (18' 0") 2-piece boom			
Arm, 'Grab Arm	m, (ft-in)	2,45 (8' 0")	2,6 (8' 6")	2,9 (9' 6")	3,2 (10' 6")		2,45 (8' 0")	2,6 (8' 6")	2,9 (9' 6")	3,2 (10' 6")
A. Max. digging reach	mm, (ft-in)	9 640 (31' 7")	9 770 (32' 1")	10 050 (33' 0")	8 890 (29' 2")	9 640 (31' 7")	9 780 (32' 1")	10 060 (33' 0")	8 890 (29' 2")	-
B. Max. digging reach on ground	mm, (ft-in)	9 450 (31' 0")	9 590 (31' 6")	9 870 (32' 5")	-	9 450 (31' 0")	9 590 (31' 6")	9 880 (32' 5")	-	-
C. Max. digging depth	mm, (ft-in)	6 180 (20' 3")	6 330 (20' 9")	6 300 (21' 0")	5 360 (17' 7")	6 050 (19' 10")	6 200 (20' 4")	6 500 (21' 4")	5 240 (17' 2")	-
D. Max. digging depth (l = 2,440 m, (8') level)	mm, (ft-in)	5 970 (19' 7")	6 130 (20' 1")	6 440 (21' 2")	-	5 920 (19' 5")	6 100 (20' 0")	6 400 (21' 0")	-	-
E. Max. vertical wall digging depth	mm, (ft-in)	4 390 (14' 5")	4 530 (14' 10")	4 810 (15' 9")	-	4 580 (15' 0")	4 720 (15' 6")	5 000 (16' 5")	-	-
F. Max. cutting height	mm, (ft-in)	9 370 (30' 9")	9 440 (31' 0")	9 590 (31' 5")	8 620 (28' 3")	10 670 (35' 0")	10 790 (35' 5")	11 020 (36' 2")	9 860 (32' 4")	-
G. Max. dumping height	mm, (ft-in)	6 570 (21' 7")	6 640 (21' 9")	6 780 (22' 3")	-	7 530 (24' 9")	7 640 (25' 1")	7 870 (25' 10")	-	-
H. Min. front slew radius	mm, (ft-in)	3 590 (11' 9")	3 580 (11' 9")	3 560 (11' 8")	4 130 (13' 6")	2 630 (8' 7")	2 680 (8' 9")	1 770 (9' 1")	3 630 (11' 10")	-
Digging forces with direct fit bucket										
Breakout force - bucket										
Breakout force SAE	kN, (lb)	129,0 (29,000)	129,0 (29,000)	129,0 (29,000)	-	120,0 (25,270)	120,0 (25,270)	120,0 (25,270)	-	-
Breakout force ISO	kN, (lb)	149,0 (33,400)	149,0 (33,400)	149,0 (33,400)	-	136,0 (30,575)	136,0 (30,575)	136,0 (30,575)	-	-
Tearout force - dipper arm										
Tearout force SAE	kN, (lb)	119,0 (26,700)	114,0 (25,700)	106,0 (23,900)	-	103,0 (23,200)	99,0 (22,300)	90,0 (20,200)	-	-
Tearout force ISO	kN, (lb)	123,0 (27,600)	118,0 (26,500)	109,0 (24,600)	-	106,0 (24,000)	102,0 (23,000)	92,0 (20,800)	-	-
Max. recommended for direct fit bucket										
Arm		2,45 m (8' 0")			5,2 m (17' 1") Monoboomb		2,6 m (8' 6")		2,9 m (9' 6")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
GP bucket 1,8 t/m ³ (3,030 lb/yd ³)	1,0		1.30		1,0	1.30		0,77	1.14	
HD bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,70	0.92	
Max. recommended for quick fit bucket										
Arm		2,45 m (8' 0")			5,2 m (17' 1") Monoboomb		2,6 m (8' 6")		2,9 m (9' 6")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
S1/S70 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,87	1.14		0,78	1.02	
S1/S70 Qf HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,70	0.92	
UQF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,87	1.14		0,78	1.02	
UQF HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,70		0.92		0,70	0.92		0,62	0.81	
Max. recommended for direct fit bucket										
Arm		2,45 m (8' 0")			5,3 m (17' 5") 2-piece boom		2,6 m (8' 6")		2,9 m (9' 6")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
GP bucket 1,8 t/m ³ (3,030 lb/yd ³)	1,0		1.30		1,0	1.30		0,87	1.14	
HD bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,78		1.02		0,78	1.02		0,78	1.02	
Max. recommended for quick fit bucket										
Arm		2,45 m (8' 0")			5,3 m (17' 5") 2-piece boom		2,6 m (8' 6")		2,9 m (9' 6")	
Max. bucket	m ³		yd ³		m ³	yd ³		m ³	yd ³	
S1/S70 QF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,87	1.14		0,78	1.02	
S1/S70 Qf HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,78		1.02		0,78	1.02		0,70	0.92	
UQF GP-bucket 1,8 t/m ³ (3,030 lb/yd ³)	0,87		1.14		0,87	1.14		0,78	1.02	
UQF HD-bucket 2,1 t/m ³ (3,540 lb/yd ³)	0,78		1.02		0,78	1.02		0,70	0.92	

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose. 2. "Max permitted sizes" are for reference only and are not necessarily available from the factory. 3. "Max. permitted sizes" are for heavy counterweight.

EQUIPMENT.

STANDARD EQUIPMENT

	EW160D	EW180D	EW210D
Engine			
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4i emission requirements	•	•	•
Air intake heater	•	•	•
ECO-Mode	•	•	•
Fuel filter and water separator	•	•	•
Fuel filler pump: 50 l/min (13.2 gpm), with automatic shut-off	•	•	•
Aluminium core radiator	•	•	•
Electric/Electronic control system			
Contronics - computerized monitoring and diagnostic system	•	•	•
Master electrical disconnect switch	•	•	•
Adjustable automatic idling system	•	•	•
One-touch power boost	•	•	•
Adjustable monitor	•	•	•
Safety stop/start function	•	•	•
2 Frame mounted halogen lamps	•	•	•
Alternator, 120 A	•	•	•
Batteries, 2 x 12 V / 140 Ah	•	•	•
Start motor, 24 V / 5.5 kW	•	•	•
CareTrack via GSM	•	•	•
Rear view camera	•	•	•
Travel alarm	•	•	•
Hydraulic system			
Boom float function	•	•	•
Load sensing hydraulic system	•	•	•
Cylinder cushioning	•	•	•
Cylinder contamination seals	•	•	•
Return filter of full flow type 2,000 h exchange interval	•	•	•
Pressure relief system (servo accumulator)	•	•	•
Proportional controlled visco-clutch cooling fan	•	•	•
Hose rupture valve for boom	•	•	•
Hose rupture valve for dipper arm	•	•	•
Hydraulic long life oil ISO VG 46	•	•	•
Cab and interior			
Volvo Care Cab with fixed roof hatch /ROPS	•	•	•
Heater & air-conditioner, automatic	•	•	•
Hydraulic dampening cab mounts	•	•	•
Heated, adjustable operator seat and joystick control console	•	•	•
Adjustable steering column	•	•	•
Hydraulic safety lock lever	•	•	•
Control joysticks with 5 switches each	•	•	•
Cab, all-weather sound suppressed, includes:	•	•	•
- Cup holder	•	•	•
- Door locks	•	•	•
- Safety glass, light tinted	•	•	•
- Floor mat	•	•	•
- Horn	•	•	•
- Large storage area	•	•	•
- Pull-up type front window	•	•	•
- Removable lower windshield	•	•	•
- Retractable seat belt	•	•	•
- Windshield wiper with washer and intermittent feature	•	•	•
- Sun screens, front, roof, rear	•	•	•
Master ignition key	•	•	•
Radio with CD player and MP3 input	•	•	•

	EW160D	EW180D	EW210D
Ashtray	•	•	•
Lighter	•	•	•
Undercarriage			
2-speed power transmission plus creep speed	•	•	•
Oscillating front axle ± 9° with out mudguards 6° with mudguards	•	•	•
2-circuit travel brakes	•	•	•
EAL extended axle lock			•
Maintenance-free propeller shafts	•	•	•
Stone protection rings	•	•	•
Front dozer blade and rear outriggers	•	•	•
Twin tires 10.00PR		•	•
Travel speed:			
- 35 km/h (22.0 mph)	•		
- 30, 35 km/h (18.5, 22.0 mph)		•	
- 25, 30 km/h (15.5, 18.5 mph)			•
Superstructure			
LED Rear lights	•	•	•
Service walkway with anti-slip grating	•	•	•
Centralised lubricating point for slew bearing	•	•	•
Standard counterweight	•		
Digging equipment			
Boom: 5,0 m (16' 5") monoboom	•		
Boom: 5,2 m (17' 1") monoboom		•	
Boom: 5,6 m (18' 4") monoboom			•
Arm: 2,45 m (8' 0")	•		
Arm: 2,6 m (8' 6")		•	•
Attachment points for extra hydraulics	•		
Centralized lubrication point	•	•	•

OPTIONAL EQUIPMENT

	EW160D	EW180D	EW210D
Engine			
Diesel coolant heater with digital timer	•	•	•
Block heater, 240 V	•	•	•
Water separator with heater	•	•	•
Dust net	•	•	•
Reversible fan	•	•	•
Tropical cooling		•	•
CareTrack via satellite	•	•	•
Electric			
Rotating beacon	•	•	•
Extra work lights:			
- Service walkway 1 and counterweight 1	•	•	•
- Boom-mounted 2	•	•	•
- Cab front 2	•	•	•
Multi-channel electric center passage	•	•	•
Anti-theft system	•	•	•
Tilting and rotating attachment preparation		•	•
Hydraulic system			
Hydraulic oil, biodegradable ISO VG 32	•	•	•
Hydraulic oil, biodegradable ISO VG 46	•	•	•
Hydraulic long life oil ISO VG 32	•	•	•
Hydraulic long life oil ISO VG 68	•	•	•
Hydraulic equipment for:			
- Hammer & shears	•	•	•
- Slope bucket/rotator	•	•	•

OPTIONAL EQUIPMENT

	EW160D	EW180D	EW210D
- Grab/clam shell	•	•	•
- Quick fit	•	•	•
- Flow and pressure control	•	•	•
Cab and interior			
Volvo Care Cab with openable PC roof hatch / ROPS	•	•	•
Proportional control joystick	•	•	•
Falling object guard (FOG)	•	•	•
Cab mounted falling object protective structures (FOPS)	•	•	•
Rain shield, front	•	•	•
Side camera	•	•	•
Sunlight shield, roof hatch (steel)	•	•	•
Safety net for front window	•	•	•
Lower wiper	•	•	•
Anti-vandalism kit	•	•	•
Seat:	•	•	•
- Fabric seat, with heater	•	•	•
- Fabric seat, with heater and air suspension	•	•	•
Undercarriage			
Twin tires 10.00 - 20 - 16PR / 11.00 - 20	•	•	•
Single tires 18-R - 19.5		•	
Single tires 620/40-22.5			•
Rear dozer blade	•	•	•
4 outriggers	•	•	•
Grab holder	•	•	•
Mudguards, front and rear	•	•	•
Tool box, left hand side/right hand side	•	•	•
Cruise control	•	•	•
Travel speed: 30 km/h (18.5 mph)	•		
Wide axle 2.75 m (9' 0")	•	•	•
Superstructure			
Light counter weight			•
Heavy counter weight	•	•	•
License plate preparation	•		
Digging equipment			
Boom: 5,1 m (16' 9") 2 piece boom	•		
Boom: 5,3 m (17' 5") 2 piece boom		•	
Boom: 5,5 m (18' 0") 2 piece boom			•
Arm: 2,0 m (6' 7"), 2,6 m (8' 6"), 3,1 m (10' 2")	•		
Arm: 2,45 m (8' 0"), 3,0 m (9' 10")		•	
Arm: 2,45 m (8' 0"), 2,9 m (9' 6")			•
Grab arm: 2,95 m (9' 8")	•		
Grab arm: 3,2 m (10' 6")		•	•
Hydraulic quick fit			
S1 system	•	•	•
S6 system	•		
Universal system	•	•	•
Attachments			
Buckets, direct fit and quick fit:	•	•	•
- General Purpose bucket (GP)	•	•	•
- Heavy Duty bucket	•	•	•
- Slope bucket	•	•	•
Lifting eye	•	•	•
Service			
Tool kit, daily maintenance	•	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT



VOLVO CONSTRUCTION EQUIPMENT



Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different.

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.

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