Volvo Construction Equipment
Building Tomorrow

EC160E, EC180E

Volvo Excavators 16.4-20.9 t 150 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 180 years

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

We're on your side

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

We have a passion for performance.

Volvo Trucks

Renault Trucks














Mack Trucks | UD Trucks | Volvo Buses | Volvo Construction Equipment | Volvo Penta | Volvo Financial Services

Effortless Efficiency.

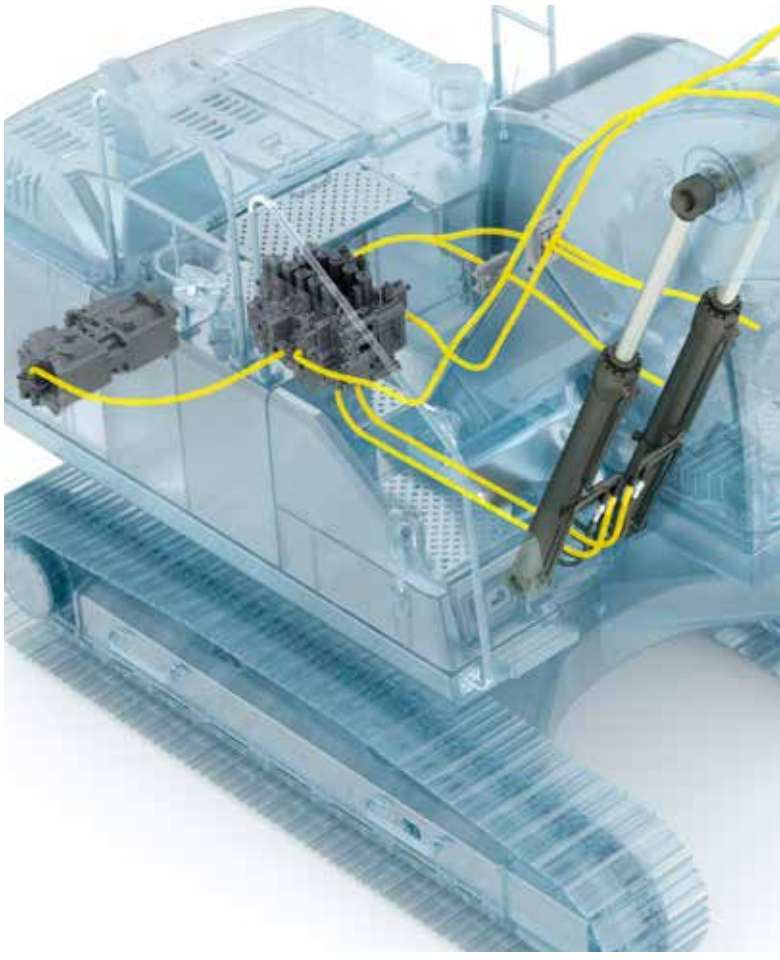
Volvo's new EC160E, and EC180E provide a range of new features to ensure efficiency is a key priority when delivering functions. By carefully considering every duty and component, a machine has been produced that incorporates maximum uptime while also reducing fuel consumption and cycle times – all while delivering elite performance.

Volvo engine

Featuring proven advanced technology, and built on decades of experience, Volvo's robust D4 Stage V engine boasts more power - while reducing both fuel consumption and emissions to deliver superior quality, reliability and durability.

Increased power

The increased engine power combined with the increased pump input power creates a highly responsive combined operation and travel. It also produces faster cycle times and low fuel consumption which leads to higher productivity.



Boom float function

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

Main Control Valve and Software

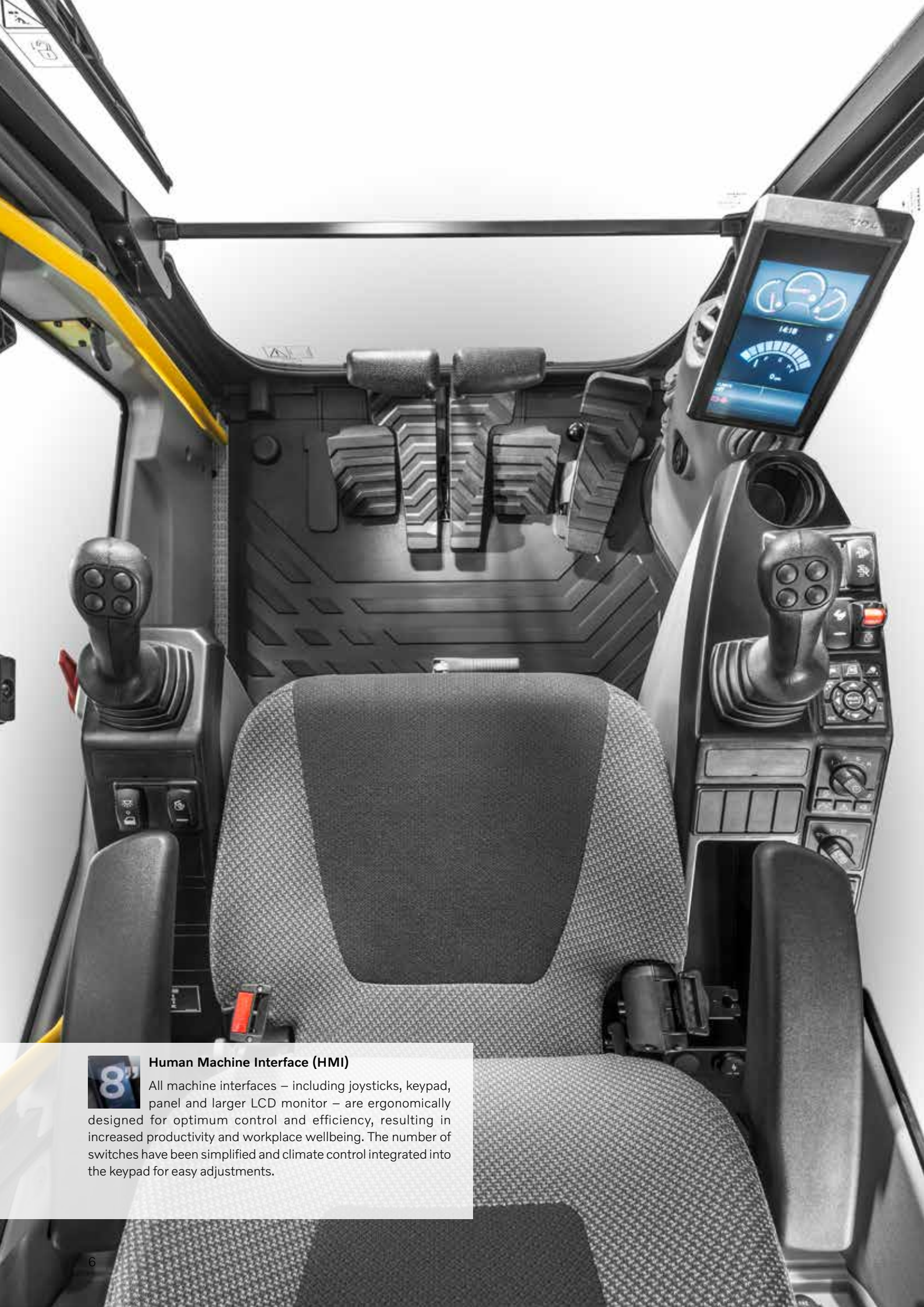
This valve is compatible with software in the machine – building on the already superior controllability by providing a smooth and easy operation. It is also compatible with Volvo's ECO mode – this provides electronic pump control to enhance fuel efficiency.

Auto engine shutdown

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

Optimized hydraulics system

The hydraulics system, combined with the fully electronic control system and advanced ECO mode, has been optimized to work in harmony with D4 Stage V engine to match the engine power, reduce power loss and improve controllability and response time.



Human Machine Interface (HMI)

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

Making hard work easy.

The EC160E and EC180E have been ergonomically designed for convenience and ease of use, allowing the operator to take control in comfort. The spacious cab design, controls and features are the industry first choice, while aimed at increasing productivity by ensuring the machine takes the strain and not the operator.

Side view camera

As well as the rear view camera, side view camera can be optionally available for customers' comfort. Both views are displayed on the colour monitor, creating a safer working environment, protecting the operator and personnel on the ground.

Short-cut key

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

Bluetooth®

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

Seatbelt warning alarm

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

From Strong to Stronger.

The EC160E, EC180E not only encompasses state-of-the-art design but Volvo also recognises that for technology to be truly innovative, top priorities need to be durability, quality and reliability for every function. This is why care has been taken to ensure every aspect of the machine is built to last while operating at the highest level of productivity.

ROPS

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

Boom and Arm

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

Lower frame

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

Undercarriage

The idlers, track links, upper and bottom rollers are built to withstand all elements and terrain, to create improved long-lasting durability and support maximum uptime.

Built to last

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

Ultimate tool carrier

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

Fits with Variety.

To maximize customer productivity and profitability, the EC160E and EC180E have been designed to not only be compatible with a range of attachments, but to enhance their performance by easily and quickly switching to accommodate any needs.

Attachment Management System

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

Extra piping

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

Electrical pedal

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

Response mode

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

Ground Control.

Maintaining a good level of inspection is important for the machine longevity, quicker servicing and maximum uptime – this is the reason Volvo has developed easily accessible maintenance points with added safety precautions.

Grouped filters

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

Single layer cooling system

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

Service interval alerts

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

Anti-slip steel plates

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

Service access

Easy access for maintenance means regular checks are completed faster – increasing uptime and driving down total cost of ownership. The E-series features a new convenient and safe access such as guardrails - to check the hydraulic tank, fuel tank and AdBlue®. This is in addition to the easily accessible side entry, through a wide compartment door.

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

Matched attachments

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

Mix and match for a superior fit.

Maximize your productivity and profitability with Volvo's EC160E and EC180E crawler excavators and a range of durable attachments. Increase your versatility, access more applications and perform a variety of tasks – all while experiencing faster cycle times and excellent control.

Buckets – GP/HD/XD

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

Breakers HB18

The HB-18 hydraulic breaker is optimized to the specific weights of Volvo machines and tailored to Volvo quick couplers for swift, safe and simple attachment changes. They are available with a full assortment of tools.

Quick couplers with front pin lock

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

Tilt Rotator

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

Steelwrist® is a registered trademark of Steelwrist AB

Improved total cost of ownership.

Boom and arm

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

Ultimate tool carrier

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

Optimized hydraulics

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

AdBlue®

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

Boom float

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

Attachment management system

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

Side view camera

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

Short cut key function

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

HMI

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

Bluetooth®

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

Service access

The E-series features a new convenient and safe access - such as guardrails - to check the hydraulic tank, fuel tank and AdBlue®. This is in addition to the easily accessible side entry, through a wide compartment door.

Volvo engine

Volvo's D4 Stage V engine boasts more power while reducing both fuel consumption and emissions; delivering superior quality, reliability and durability.

Grouped filters

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

Built to last

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

Adding value to your business.

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

Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.

Genuine Volvo Parts

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

Service Network

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

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.

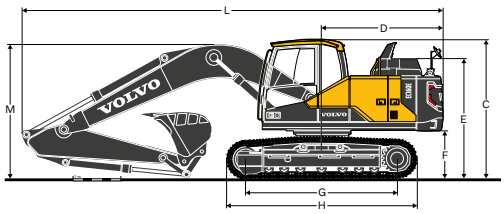
Volvo EC160E, EC180E in detail.

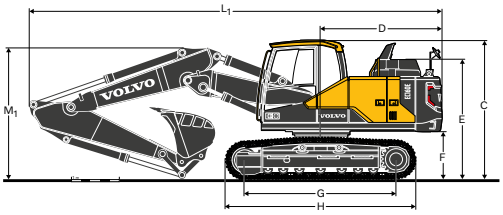
		EC160E	EC180E
Engine			
The latest generation, Volvo engine Stage V emissions compliant diesel engine fully meets the demands of the latest, emsissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, high pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance. Air Filter: 3-stage with precleaner Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.			
Engine	Volvo	D4J	
Max power at	r/s / r/min	33.3 / 2 000	
Net, ISO 9249/SAE J1349	kW / hp	109 / 148	
Gross, ISO 14396/SAE J1995	kW / hp	110 / 150	
Max torque at	Nm / r/ min	609 / 1 600	
No. of cylinders		4	
Displacement	l	4.04	
Bore	mm	101	
Stroke	mm	126	
Electrical system			
Well protected high-capacity electrical system. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard. Contronics provides advanced monitoring of machine functions and important diagnostic information.			
Voltage	V	24	
Batteries	V / Ah	2 x 12 / 110	
Alternator	V / Ah	28 / 80	
Start motor	V / kW	24 / 5.5	
Swing system			
The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and antirebound valve are standard.			
Max. slew speed	r/min	12.5	
Max. slew torque	kNm	51.7	
Drive			
Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.			
Max. drawbar pull	kN	152	167
Max. travel speed	km/h	3.1 / 5.6	2.8 / 5.5
Gradeability	°	35	35
Undercarriage			
Robust X-shaped frame with greased and sealed track chains as standard.			
Track shoe		2 x 44	2 x 46
Link pitch	mm	190	
Shoe width, triple grouser	mm	500 / 600 / 700 / 800 / 900	
Bottom rollers	mm	2 x 7	
Top rollers	mm	2 x 2	
Service refill capacities			
Fuel tank	l	250	
Hydraulic system, total	l	255	
Hydraulic tank	l	110	
AdBlue tank	l	20	
Engine oil	l	16	
Engine coolant	l	27	
Swing reduction unit	l	2.6	
Travel reduction unit	l	2 x 5.8	

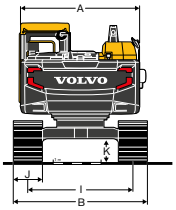
		EC160E	EC180E
Hydraulic system			
The hydraulics system, combined with the fully electronic control system and advanced ECO mode, has been optimized to work in harmony with engine to match the engine power, reduce power loss and improve controllability and response time. **The following important functions are included in the system:** **Summation system:** Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity. **Arm priority:** Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging. **Swing priority:** Gives priority to swing functions for faster simultaneous operations. **Regeneration system:** Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity. **Power boost:** All digging and lifting forces are increased. **Holding valves:** Boom and arm holding valves prevent the digging equipment from creeping.			
Main pump			
Type 2 x variable displacement axial piston pumps			
Maximum flow	l/min	2 x 152	
Pilot pump			
Type Gear pump			
Maximum flow	l/min	1 x 20	
Relief valve setting			
Implement	MPa	34.3 / 36.3	
Travel circuit	MPa	34.3	
Slew circuit	MPa	26.5	
Pilot circuit	MPa	3.9	
Hydraulic motors			
Travel: Variable displacement axial piston motor with mechanical brake **Slew:** Fixed displacement axial piston motor with mechanical brake			
Hydraulic cylinders			
Mono boom		2	
Bore x Stroke	ø x mm	115 x 1 165	
2-piece boom		1	
Bore x Stroke	ø x mm	160 x 950	
Arm		1	
Bore x Stroke	ø x mm	120 x 1 345	
Bucket		1	
Bore x Stroke	ø x mm	105 x 1 000	
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 pressure level in cab according to ISO 6396			
L_{pA} (standard)	dB	69	
L_{pA} (tropical)	dB	70	
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC			
L_{WA} (standard)	dB	101	
L_{WA} (tropical)	dB	102	

Specifications.

DIMENSIONS

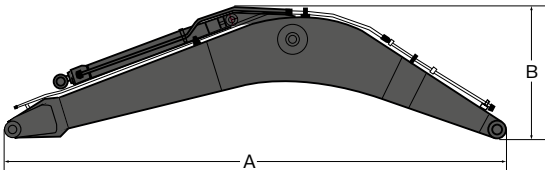


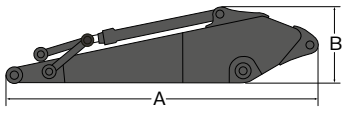




Description		Unit	EC160EL			EC160ENL			EC180EL		
Boom		**m**	**5.2 mono or 5.0 2-piece**								
Arm		**m**	**2.3**	**2.6**	**3.0**	**2.3**	**2.6**	**3.0**	**2.3**	**2.6**	**3.0**
A	Overall width of upper structure	mm	2 490	2 490	2 490	2 490	2 490	2 490	2 490	2 490	2 490
B	Overall width	mm	2 800	2 800	2 800	2 590	2 590	2 590	2 800	2 800	2 800
C	Overall height of cab	mm	2 900	2 900	2 900	2 900	2 900	2 900	2 900	2 900	2 900
D	Tail swing radius	mm	2 550	2 550	2 550	2 550	2 550	2 550	2 550	2 550	2 550
E	Overall height of engine hood	mm	2 510	2 510	2 510	2 510	2 510	2 510	2 510	2 510	2 510
F	Counterweight clearance*	mm	1 010	1 010	1 010	1 010	1 010	1 010	1 010	1 010	1 010
G	Tumbler length	mm	3 180	3 180	3 180	3 180	3 180	3 180	3 370	3 370	3 370
H	Track length	mm	3 980	3 980	3 980	3 980	3 980	3 980	4 160	4 160	4 160
I	Track gauge	mm	2 200	2 200	2 200	1 990	1 990	1 990	2 200	2 200	2 200
J	Shoe width	mm	600	600	600	600	600	600	600	600	600
K	Min. ground clearance*	mm	460	460	460	460	460	460	460	460	460
L	Overall length	mm	8 880	8 770	8 810	8 880	8 770	8 810	8 880	8 770	8 810
L_1	Overall length	mm	8 700	8 620	8 620	8 700	8 620	8 620	8 700	8 620	8 620
M	Overall height of boom	mm	2 980	2 900	3 020	2 980	2 900	3 020	2 980	2 900	3 020
M_1	Overall height of boom	mm	2 770	2 770	2 930	2 770	2 770	2 930	2 770	2 770	2 930

* Without shoe grouser
$_1$ 2-piece boom





EC160E, EC180E

Description	Unit	mono	2-piece
Boom	**m**	**5.2**	**5.0**
Length (A)	mm	5 400	5 200
Height (B)	mm	1 640	1 270
Width	mm	565	565
Weight	kg	1 370	1 610

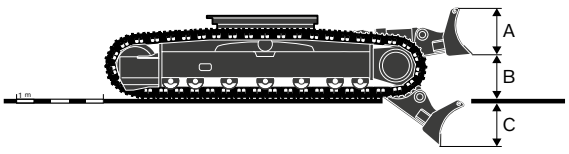
* Includes cylinder, piping and pin, excludes boom cyl. Pin

EC160E, EC180E

Description	Unit			
Arm	**m**	**2.3**	**2.6**	**3.0**
Length (A)	mm	3 240	3 500	3 900
Height (B)	mm	855	855	845
Width	mm	395	395	395
Weight	kg	790	800	860

* Includes cylinder, linkage and pin

Description	Unit	EC160EL	EC160ENL
Front dozer blade			
Height (A)	mm	452	452
Width	mm	2 800	2 590
Weight	kg	572	553
Lift height (B)	mm	571	571
Digging depth (C)	mm	735	735

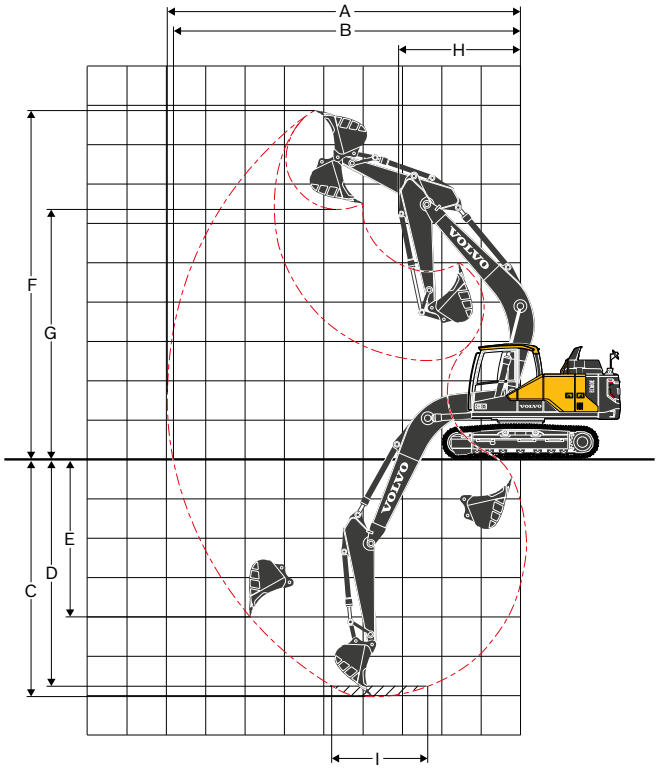


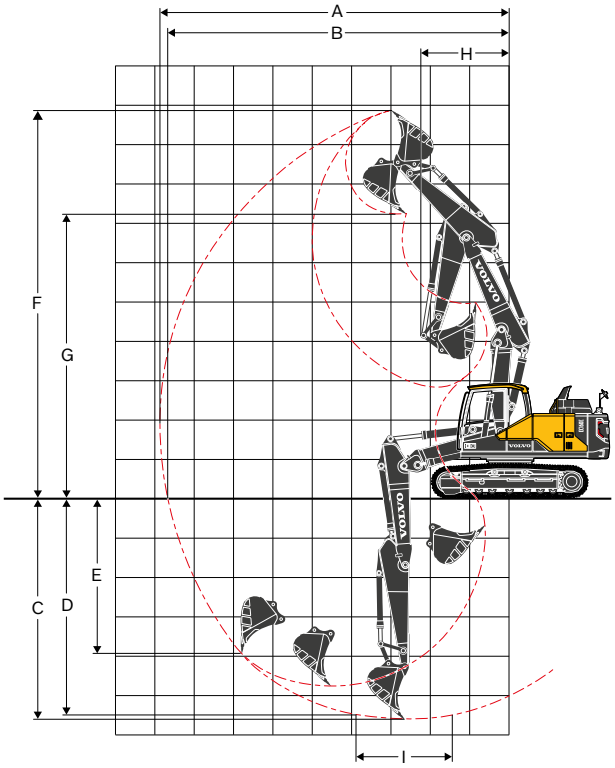
Specifications.

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width
	mm	kg	kPa	mm	kg	kPa	mm
		EC160EL					
		5.2m boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight			**5.0m 2-piece boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight**		
	500	17 490	50.0	2 700	17 860	51.0	2 700
	600	17 720	42.2	2 800	18 090	43.1	2 800
Triple grouser	700	17 955	36.3	2 900	18 330	37.3	2 900
	800	18 350	32.4	3 000	18 720	33.3	3 000
	900	18 620	29.4	3 200	18 990	29.4	3 200
		EC160EL with dozer blade					
		5.2m boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight			**5.0m 2-piece boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight**		
	500	18 670	53.0	2 700	19 040	53.9	2 700
	600	18 900	44.1	2 800	19 270	45.1	2 800
Triple grouser	700	19 130	38.2	2 900	19 500	39.2	2 900
	800	19 530	34.3	3 000	19 900	35.3	3 000
	900	19 790	31.4	3 200	20 165	31.4	3 200
		EC160ENL					
		5.2m boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight			**5.0m 2-piece boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight**		
	500	17 400	49.0	2 490	17 770	50.0	2 490
	600	17 630	41.2	2 590	18 000	42.2	2 590
Triple grouser	700	17 860	36.3	2 690	18 230	37.3	2 690
	800	18 260	32.4	2 790	18 630	33.3	2 790
	900	18 520	29.4	2 890	18 895	29.4	2 890
		EC160ENL with dozer blade					
		5.2m boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight			**5.0m 2-piece boom, 2.6m arm, 514kg / 0.7m³ bucket, 2 750kg counterweight**		
	500	18 570	53.0	2 490	18 940	53.9	2 490
	600	18 800	44.1	2 590	19 170	45.1	2 590
Triple grouser	700	19 030	38.2	2 690	19 400	39.2	2 690
	800	19 430	34.3	2 790	19 800	35.3	2 790
	900	19 700	31.4	2 890	20 070	31.4	2 890
		EC180EL					
		5.2m boom, 2.6m arm, 514kg / 0.7m³ bucket, 3 200kg counterweight			**5.0m 2-piece boom, 2.6m arm, 514kg / 0.7m³ bucket, 3 200kg counterweight**		
	500	18 130	49.0	2 700	18 500	50.0	2 700
	600	18 375	41.2	2 800	18 750	42.2	2 800
Triple grouser	700	18 810	36.3	2 900	19 180	37.3	2 900
	800	19 080	32.4	3 000	19 450	33.3	3 000
	900	19 360	28.4	3 100	19 730	29.4	3 100

WORKING RANGES





Description			Unit	EC160E						EC180E					
Boom			**m**	**5.2 mono**			**5.0 2-piece**			**5.2 mono**			**5.0 2-piece**		
Arm			**m**	**2.3**	**2.6**	**3.0**	**2.3**	**2.6**	**3.0**	**2.3**	**2.6**	**3.0**	**2.3**	**2.6**	**3.0**
A Max. digging reach			mm	8 660	8 980	9 350	8 560	8 870	9 250	8 660	8 980	9 350	8 560	8 870	9 250
B Max. digging reach on ground			mm	8 500	8 820	9 200	8 390	8 710	9 100	8 500	8 820	9 200	8 390	8 710	9 100
C Max. digging depth			mm	5 770	6 070	6 470	5 250	5 560	5 960	5 770	6 070	6 470	5 250	5 560	5 960
D Max. digging depth (I = 2.44m level)			mm	5 470	5 810	6 240	5 120	5 450	5 850	5 470	5 810	6 240	5 120	5 450	5 850
E Max. vertical wall digging depth			mm	4 510	4 990	5 410	4 300	4 660	5 060	4 510	4 990	5 410	4 300	4 660	5 060
F Max. cutting height			mm	8 560	8 820	9 030	9 510	9 810	10 120	8 560	8 820	9 030	9 510	9 810	10 120
G Max. dumping height			mm	6 080	6 310	6 510	6 890	7 180	7 480	6 080	6 310	6 510	6 890	7 180	7 480
H Min. front swing radius			mm	3 070	3 070	3 070	2 040	1 990	2 120	3 070	3 070	3 070	2 040	1 990	2 120
Digging forces with direct fit bucket															
Bucket radius			mm	1 319	1 319	1 319	1 319	1 319	1 319	1 319	1 319	1 319	1 319	1 319	1 319
Breakout force -bucket	Normal	SAE J1179	kN	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5
	Power boost	SAE J1179	kN	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3
	Normal	ISO 6015	kN	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3
	Power boost	ISO 6015	kN	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9
Tearout force -dipper arm	Normal	SAE J1179	kN	90.0	80.0	72.5	90.0	80.0	72.5	90.0	80.0	72.5	90.0	80.0	72.5
	Power boost	SAE J1179	kN	95.1	84.6	76.6	95.1	84.6	76.6	95.1	84.6	76.6	95.1	84.6	76.6
	Normal	ISO 6015	kN	92.2	81.7	73.8	92.2	81.7	73.8	92.2	81.7	73.8	92.2	81.7	73.8
	Power boost	ISO 6015	kN	97.5	86.4	78.1	97.5	86.4	78.1	97.5	86.4	78.1	97.5	86.4	78.1
Rotation angle, bucket			°	183	183	183	183	183	183	183	183	183	183	183	183

Specifications.

BUCKET SELECTION GUIDE

Bucket type			Capacity	Cutting width	Weight	Teeth	EC160EL					
							5.2m boom			5.0m 2-piece boom		
							600mm shoe, 2 750kg counterweight					
			L	mm	kg	EA	2.1m arm	2.5m arm	3.0m arm	2.1m arm	2.5m arm	3.0m arm
Direct fit buckets	Without quick coupler	General purpose	300	450	354	3	C	C	C	C	C	C
			360	600	380	3	C	C	C	C	C	C
			580	900	469	4	C	C	C	C	C	C
			700	1050	514	4	C	C	C	C	C	C
			880	1250	598	5	C	C	C	C	C	C
			960	1350	639	6	C	C	C	C	C	C
	U type quick coupler	General purpose	300	450	354	3	C	C	C	C	C	C
			360	600	380	3	C	C	C	C	C	C
			580	900	469	4	C	C	C	C	C	C
			700	1050	514	4	C	C	C	C	C	C
			880	1250	598	5	C	C	C	C	C	C
			960	1350	639	6	C	C	C	C	C	B

Bucket type			Capacity	Cutting width	Weight	Teeth	EC160ENL					
							5.2m boom			5.0m 2-piece boom		
							500mm shoe, 2 750kg counterweight					
			L	mm	kg	EA	2.1m arm	2.5m arm	3.0m arm	2.1m arm	2.5m arm	3.0m arm
Direct fit buckets	Without quick coupler	General purpose	300	450	354	3	C	C	C	C	C	C
			360	600	380	3	C	C	C	C	C	C
			580	900	469	4	C	C	C	C	C	C
			700	1050	514	4	C	C	C	C	C	C
			880	1250	598	5	C	C	C	C	C	C
			960	1350	639	6	C	C	B	C	C	B
	U type quick coupler	General purpose	300	450	354	3	C	C	C	C	C	C
			360	600	380	3	C	C	C	C	C	C
			580	900	469	4	C	C	C	C	C	C
			700	1050	514	4	C	C	C	C	C	C
			880	1250	598	5	C	B	B	C	B	B
			960	1350	639	6	B	B	A	B	B	A

Bucket type			Capacity	Cutting width	Weight	Teeth	EC180EL					
							5.2m boom			5.0m 2-piece boom		
							600mm shoe, 3 200kg counterweight					
			L	mm	kg	EA	2.1m arm	2.5m arm	3.0m arm	2.1m arm	2.5m arm	3.0m arm
Direct fit buckets	Without quick coupler	General purpose	300	450	354	3	C	C	C	C	C	C
			360	600	380	3	C	C	C	C	C	C
			580	900	469	4	C	C	C	C	C	C
			700	1050	514	4	C	C	C	C	C	C
			880	1250	598	5	C	C	C	C	C	C
			960	1350	639	6	C	C	C	C	C	C
	U type quick coupler	General purpose	300	450	354	3	C	C	C	C	C	C
			360	600	380	3	C	C	C	C	C	C
			580	900	469	4	C	C	C	C	C	C
			700	1050	514	4	C	C	C	C	C	C
			880	1250	598	5	C	C	C	C	C	C
			960	1350	639	6	C	C	C	C	C	C

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

Maximum materal density

A	1 200~1 300 kg/m³	Coal, Caliche, Shale
B	1 400~1 600 kg/m³	Wet earth and clay, Limestone, Sandstone
C	1 700~1 800 kg/m³	Granite, Wet sand, Well blasted rock
D	1 900 kg/m³ ~	Wet mud, Iron ore

LIFTING CAPACITY EC160EL

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 5.2m	6.0 m	kg											*4 480	3 790	5.9
Arm : 2.3m	4.5 m	kg					*4 970	*4 970	*4 660	3 610			4 260	2 980	6.8
Shoe : 600mm	3.0 m	kg					*6 580	5 290	5 020	3 470			3 780	2 620	7.2
CWT : 2 750kg	1.5 m	kg					7 520	4 960	4 860	3 320			3 610	2 490	7.3
	0.0 m	kg					7 310	4 790	4 740	3 220			3 700	2 540	7.1
	-1.5 m	kg			*10 820	8 990	7 270	4 740	4 710	3 180			4 130	2 820	6.6
	-3.0 m	kg			*13 000	9 140	7 340	4 810					5 290	3 570	5.6
Boom : 5.2m	7.5 m	kg											*4 110	*4 110	4.8
Arm : 2.6m	6.0 m	kg							*4 150	3 710			*3 760	3 440	6.3
Shoe : 600mm	4.5 m	kg					*4 570	*4 570	*4 390	3 640			*3 680	2 770	7.1
CWT : 2 750kg	3.0 m	kg			*9 730	*9 730	*6 190	5 360	5 050	3 500	3 570	2 480	3 550	2 470	7.5
	1.5 m	kg					7 570	5 010	4 880	3 340	3 500	2 420	3 400	2 350	7.7
	0.0 m	kg			*5 620	*5 620	7 330	4 800	4 750	3 220			3 470	2 390	7.5
	-1.5 m	kg	*5 790	*5 790	*9 910	8 940	7 250	4 730	4 690	3 170			3 830	2 620	6.9
	-3.0 m	kg	*10 330	*10 330	*13 460	9 070	7 300	4 780					4 750	3 220	6.0
	-4.5 m	kg			*10 810	9 370							*7 450	5 230	4.4
Boom : 5.2m	7.5 m	kg											*3 470	*3 470	5.4
Arm : 3.0m	6.0 m	kg							*3 660	*3 660			*3 170	3 080	6.7
Shoe : 600mm	4.5 m	kg							*3 990	3 660			*3 110	2 530	7.5
CWT : 2 750kg	3.0 m	kg			*8 200	*8 200	*5 610	5 410	*4 720	3 500	3 570	2 480	*3 200	2 270	7.9
	1.5 m	kg			*5 660	*5 660	*7 430	5 030	4 870	3 330	3 480	2 400	3 140	2 160	8.0
	0.0 m	kg			*6 130	*6 130	7 310	4 770	4 720	3 190	3 410	2 330	3 200	2 190	7.8
	-1.5 m	kg	*5 290	*5 290	*9 280	8 810	7 190	4 670	4 640	3 120			3 480	2 370	7.3
	-3.0 m	kg	*8 980	*8 980	*13 880	8 920	7 210	4 690	4 660	3 130			4 200	2 840	6.5
	-4.5 m	kg			*11 770	9 170	7 380	4 840					6 300	4 190	5.0
Boom : 5.0m 2-piece	7.5 m	kg											*5 460	*5 460	4.1
Arm : 2.3m	6.0 m	kg					*6 470	5 840					*4 720	3 880	5.7
Shoe : 600mm	4.5 m	kg			*7 740	*7 740	*7 450	5 650	5 160	3 580			4 360	3 020	6.6
CWT : 2 750kg	3.0 m	kg					7 930	5 290	5 020	3 440			3 850	2 650	7.1
	1.5 m	kg					7 530	4 940	4 850	3 290			3 680	2 510	7.2
	0.0 m	kg					7 320	4 750	4 740	3 190			3 780	2 570	7.0
	-1.5 m	kg			*10 850	8 950	7 280	4 720	4 720	3 170			4 250	2 880	6.5
	-3.0 m	kg					*5 800	4 820							5.4
Boom : 5.0m 2-piece	7.5 m	kg					*4 700	*4 700					*4 260	*4 260	4.7
Arm : 2.6m	6.0 m	kg					*5 460	*5 460	*4 210	3 660			*3 720	3 510	6.1
Shoe : 600mm	4.5 m	kg			*5 780	*5 780	*6 260	5 720	5 210	3 620			*3 580	2 800	7.0
CWT : 2 750kg	3.0 m	kg			*12 620	10 130	8 010	5 360	5 050	3 470			3 600	2 480	7.4
	1.5 m	kg					7 590	4 990	4 870	3 310	3 490	2 390	3 460	2 360	7.5
	0.0 m	kg			*6 200	*6 200	7 340	4 770	4 750	3 190			3 540	2 410	7.4
	-1.5 m	kg			*10 640	8 890	7 260	4 700	4 700	3 150			3 930	2 670	6.8
	-3.0 m	kg					*6 430	4 780					*4 290	3 330	5.9
Boom : 5.0m 2-piece	7.5 m	kg					*4 560	*4 560					*3 520	*3 520	5.3
Arm : 3.0m	6.0 m	kg					*4 590	*4 590	*4 260	3 710			*3 130	3 130	6.6
Shoe : 600mm	4.5 m	kg					*5 050	*5 050	*5 010	3 640			*3 020	2 550	7.4
CWT : 2 750kg	3.0 m	kg			*11 540	10 420	*7 850	5 420	5 070	3 480	3 550	2 440	*3 060	2 280	7.8
	1.5 m	kg			*6 950	*6 950	7 630	5 020	4 870	3 300	3 470	2 370	3 190	2 170	7.9
	0.0 m	kg			*6 660	*6 660	7 320	4 740	4 720	3 160	3 410	2 310	3 250	2 200	7.7
	-1.5 m	kg			*9 910	8 760	7 200	4 640	4 640	3 100			3 560	2 410	7.2
	-3.0 m	kg			*9 600	8 900	*7 080	4 680	4 690	3 140			*4 260	2 920	6.3

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 EC160EL (with dozer blade)

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 5.2m	6.0 m	kg											*4 480	4 220	5.9
Arm : 2.3m	4.5 m	kg					*4 970	*4 970	*4 660	4 030			*4 680	3 330	6.8
Shoe : 600mm	3.0 m	kg					*6 580	5 930	*5 320	3 890			*4 880	2 950	7.2
CWT : 2 750kg	1.5 m	kg					*8 240	5 600	*6 120	3 740			*5 310	2 810	7.3
	0.0 m	kg					*9 250	5 410	*6 740	3 630			*5 720	2 870	7.1
	-1.5 m	kg			*10 820	10 280	*9 490	5 370	*6 950	3 600			*6 250	3 180	6.6
	-3.0 m	kg			*13 000	10 440	*8 900	5 440					*6 950	4 030	5.6
Boom : 5.2m	7.5 m	kg											*4 110	*4 110	4.8
Arm : 2.6m	6.0 m	kg							*4 150	4 130			*3 760	*3 760	6.3
Shoe : 600mm	4.5 m	kg					*4 570	*4 570	*4 390	4 060			*3 680	3 110	7.1
CWT : 2 750kg	3.0 m	kg			*9 730	*9 730	*6 190	6 000	*5 090	3 920	*4 000	2 790	*3 810	2 770	7.5
	1.5 m	kg					*7 930	5 640	*5 930	3 760	*5 050	2 730	*4 140	2 650	7.7
	0.0 m	kg			*5 620	*5 620	*9 090	5 430	*6 620	3 640			*4 740	2 690	7.5
	-1.5 m	kg	*5 790	*5 790	*9 910	*9 910	*9 490	5 360	*6 940	3 590			*5 910	2 960	6.9
	-3.0 m	kg	*10 330	*10 330	*13 460	10 370	*9 100	5 410					*6 550	3 630	6.0
	-4.5 m	kg			*10 810	10 680							*7 450	5 890	4.4
Boom : 5.2m	7.5 m	kg											*3 470	*3 470	5.4
Arm : 3.0m	6.0 m	kg							*3 660	*3 660			*3 170	*3 170	6.7
Shoe : 600mm	4.5 m	kg							*3 990	*3 990			*3 110	2 840	7.5
CWT : 2 750kg	3.0 m	kg			*8 200	*8 200	*5 610	*5 610	*4 720	3 920	*4 400	2 780	*3 200	2 560	7.9
	1.5 m	kg			*5 660	*5 660	*7 430	5 660	*5 620	3 740	*4 830	2 700	*3 440	2 440	8.0
	0.0 m	kg			*6 130	*6 130	*8 770	5 400	*6 390	3 600	*5 230	2 640	*3 900	2 480	7.8
	-1.5 m	kg	*5 290	*5 290	*9 280	*9 280	*9 370	5 300	*6 830	3 530			*4 740	2 690	7.3
	-3.0 m	kg	*8 980	*8 980	*13 880	10 210	*9 220	5 310	*6 710	3 550			*6 100	3 210	6.5
	-4.5 m	kg			*11 770	10 470	*7 900	5 470					*6 940	4 730	5.0
Boom : 5.0m 2-piece	7.5 m	kg											*5 460	*5 460	4.1
Arm : 2.3m	6.0 m	kg					*6 470	*6 470					*4 720	4 330	5.7
Shoe : 600mm	4.5 m	kg			*7 740	*7 740	*7 450	6 290	*6 280	4 000			*4 560	3 390	6.6
CWT : 2 750kg	3.0 m	kg					*8 540	5 930	*6 630	3 860			*4 670	2 980	7.1
	1.5 m	kg					*9 390	5 580	*6 930	3 710			*5 060	2 840	7.2
	0.0 m	kg					*9 330	5 390	*6 820	3 610			*5 490	2 910	7.0
	-1.5 m	kg			*10 850	10 250	*8 230	5 350	*5 940	3 590			*5 170	3 250	6.5
	-3.0 m	kg					*5 800	5 450							5.4
Boom : 5.0m 2-piece	7.5 m	kg					*4 700	*4 700					*4 260	*4 260	4.7
Arm : 2.6m	6.0 m	kg					*5 460	*5 460	*4 210	4 080			*3 720	*3 720	6.1
Shoe : 600mm	4.5 m	kg			*5 780	*5 780	*6 260	*6 260	*5 750	4 040			*3 580	3 150	7.0
CWT : 2 750kg	3.0 m	kg			*12 620	11 470	*8 280	6 000	*6 490	3 890			*3 640	2 800	7.4
	1.5 m	kg					*9 270	5 630	*6 870	3 730	*4 220	2 700	*3 890	2 670	7.5
	0.0 m	kg			*6 200	*6 200	*9 420	5 400	*6 880	3 610			*4 390	2 730	7.4
	-1.5 m	kg			*10 640	10 190	*8 540	5 340	*6 210	3 570			*4 970	3 020	6.8
	-3.0 m	kg					*6 430	5 410					*4 290	3 760	5.9
Boom : 5.0m 2-piece	7.5 m	kg					*4 560	*4 560					*3 520	*3 520	5.3
Arm : 3.0m	6.0 m	kg					*4 590	*4 590	*4 260	4 130			*3 130	*3 130	6.6
Shoe : 600mm	4.5 m	kg					*5 050	*5 050	*5 010	4 060			*3 020	2 870	7.4
CWT : 2 750kg	3.0 m	kg			*11 540	*11 540	*7 850	6 070	*6 240	3 910	*4 180	2 750	*3 060	2 570	7.8
	1.5 m	kg			*6 950	*6 950	*9 000	5 650	*6 710	3 720	*5 020	2 680	*3 240	2 460	7.9
	0.0 m	kg			*6 660	*6 660	*9 400	5 380	*6 860	3 580	*5 060	2 620	*3 620	2 500	7.7
	-1.5 m	kg			*9 910	*9 910	*8 810	5 270	*6 420	3 510			*4 320	2 730	7.2
	-3.0 m	kg			*9 600	*9 600	*7 080	5 310	*4 880	3 550			*4 260	3 310	6.3

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 EC160ENL

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 5.2m	6.0 m	kg											*4 480	3 370	5.9
Arm : 2.3m	4.5 m	kg					*4 970	*4 970	*4 660	3 210			4 190	2 650	6.8
Shoe : 500mm	3.0 m	kg					*6 580	4 670	4 930	3 080			3 700	2 320	7.2
CWT : 2 750kg	1.5 m	kg					7 380	4 350	4 770	2 930			3 540	2 200	7.3
	0.0 m	kg					7 180	4 170	4 650	2 830			3 630	2 230	7.1
	-1.5 m	kg			*10 820	7 670	7 130	4 130	4 620	2 790			4 050	2 470	6.6
	-3.0 m	kg			*13 000	7 810	7 210	4 200					5 190	3 140	5.6
Boom : 5.2m	7.5 m	kg											*4 110	*4 110	4.8
Arm : 2.6m	6.0 m	kg							*4 150	3 310			*3 760	3 070	6.3
Shoe : 500mm	4.5 m	kg					*4 570	*4 570	*4 390	3 240			*3 680	2 460	7.1
CWT : 2 750kg	3.0 m	kg			*9 730	8 640	*6 190	4 730	4 960	3 100	3 510	2 200	3 480	2 180	7.5
	1.5 m	kg					7 430	4 390	4 790	2 950	3 440	2 130	3 330	2 070	7.7
	0.0 m	kg			*5 620	*5 620	7 190	4 190	4 660	2 830			3 410	2 100	7.5
	-1.5 m	kg	*5 790	*5 790	*9 910	7 620	7 120	4 120	4 600	2 780			3 750	2 300	6.9
	-3.0 m	kg	*10 330	*10 330	*13 460	7 750	7 170	4 170					4 660	2 830	6.0
	-4.5 m	kg			*10 810	8 030							*7 450	4 570	4.4
Boom : 5.2m	7.5 m	kg											*3 470	*3 470	5.4
Arm : 3.0m	6.0 m	kg							*3 660	3 340			*3 170	2 740	6.7
Shoe : 500mm	4.5 m	kg							*3 990	3 260			*3 110	2 240	7.5
CWT : 2 750kg	3.0 m	kg			*8 200	*8 200	*5 610	4 780	*4 720	3 110	3 500	2 190	*3 200	2 000	7.9
	1.5 m	kg			*5 660	*5 660	*7 430	4 410	4 780	2 930	3 410	2 110	3 080	1 900	8.0
	0.0 m	kg			*6 130	*6 130	7 170	4 160	4 630	2 800	3 340	2 040	3 140	1 920	7.8
	-1.5 m	kg	*5 290	*5 290	*9 280	7 500	7 050	4 060	4 550	2 730			3 410	2 080	7.3
	-3.0 m	kg	*8 980	*8 980	*13 880	7 600	7 070	4 080	4 560	2 740			4 110	2 490	6.5
	-4.5 m	kg			*11 770	7 840	7 240	4 220					6 180	3 670	5.0
Boom : 5.0m 2-piece	7.5 m	kg											*5 460	*5 460	4.1
Arm : 2.3m	6.0 m	kg					*6 470	5 190					*4 720	3 450	5.7
Shoe : 500mm	4.5 m	kg			*7 740	*7 740	*7 450	5 000	5 070	3 170			4 280	2 670	6.6
CWT : 2 750kg	3.0 m	kg					7 790	4 650	4 930	3 040			3 770	2 330	7.1
	1.5 m	kg					7 400	4 320	4 760	2 890			3 610	2 210	7.2
	0.0 m	kg					7 180	4 130	4 650	2 790			3 710	2 260	7.0
	-1.5 m	kg			*10 850	7 610	7 140	4 100	4 630	2 770			4 170	2 520	6.5
	-3.0 m	kg					*5 800	4 200							5.4
Boom : 5.0m 2-piece	7.5 m	kg					*4 700	*4 700					*4 260	*4 260	4.7
Arm : 2.6m	6.0 m	kg					*5 460	5 260	*4 210	3 250			*3 720	3 120	6.1
Shoe : 500mm	4.5 m	kg			*5 780	*5 780	*6 260	5 070	5 120	3 210			*3 580	2 480	7.0
CWT : 2 750kg	3.0 m	kg			*12 620	8 730	7 870	4 720	4 960	3 070			3 540	2 190	7.4
	1.5 m	kg					7 450	4 360	4 780	2 910	3 420	2 100	3 390	2 080	7.5
	0.0 m	kg			*6 200	*6 200	7 200	4 150	4 650	2 800			3 480	2 110	7.4
	-1.5 m	kg			*10 640	7 560	7 130	4 090	4 610	2 760			3 860	2 340	6.8
	-3.0 m	kg					*6 430	4 160					*4 290	2 920	5.9
Boom : 5.0m 2-piece	7.5 m	kg					*4 560	*4 560					*3 520	*3 520	5.3
Arm : 3.0m	6.0 m	kg					*4 590	*4 590	*4 260	3 300			*3 130	2 770	6.6
Shoe : 500mm	4.5 m	kg					*5 050	*5 050	*5 010	3 230			*3 020	2 250	7.4
CWT : 2 750kg	3.0 m	kg			*11 540	9 000	*7 850	4 780	4 980	3 080	3 480	2 150	*3 060	2 000	7.8
	1.5 m	kg			*6 950	*6 950	7 490	4 390	4 780	2 900	3 400	2 070	3 130	1 900	7.9
	0.0 m	kg			*6 660	*6 660	7 180	4 120	4 620	2 760	3 340	2 010	3 190	1 930	7.7
	-1.5 m	kg			*9 910	7 440	7 060	4 020	4 550	2 700			3 490	2 100	7.2
	-3.0 m	kg			*9 600	7 570	*7 080	4 060	4 600	2 740			4 260	2 550	6.3

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 EC160ENL (with dozer blade)

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 5.2m	6.0 m	kg											*4 480	3 770	5.9
Arm : 2.3m	4.5 m	kg					*4 970	*4 970	*4 660	3 590			*4 680	2 970	6.8
Shoe : 500mm	3.0 m	kg					*6 580	5 240	*5 320	3 460			*4 880	2 620	7.2
CWT : 2 750kg	1.5 m	kg					*8 240	4 920	*6 120	3 310			*5 310	2 490	7.3
	0.0 m	kg					*9 250	4 740	*6 740	3 200			*5 720	2 530	7.1
	-1.5 m	kg			*10 820	8 800	*9 490	4 700	*6 950	3 170			*6 250	2 810	6.6
	-3.0 m	kg			*13 000	8 940	*8 900	4 770					*6 950	3 550	5.6
Boom : 5.2m	7.5 m	kg											*4 110	*4 110	4.8
Arm : 2.6m	6.0 m	kg							*4 150	3 690			*3 760	3 430	6.3
Shoe : 500mm	4.5 m	kg					*4 570	*4 570	*4 390	3 630			*3 680	2 770	7.1
CWT : 2 750kg	3.0 m	kg			*9 730	*9 730	*6 190	5 310	*5 090	3 480	*4 000	2 480	*3 810	2 460	7.5
	1.5 m	kg					*7 930	4 960	*5 930	3 330	*5 050	2 420	*4 140	2 340	7.7
	0.0 m	kg			*5 620	*5 620	*9 090	4 760	*6 620	3 210			*4 740	2 380	7.5
	-1.5 m	kg	*5 790	*5 790	*9 910	8 750	*9 490	4 690	*6 940	3 160			*5 910	2 610	6.9
	-3.0 m	kg	*10 330	*10 330	*13 460	8 880	*9 100	4 730					*6 550	3 210	6.0
	-4.5 m	kg			*10 810	9 170							*7 450	5 170	4.4
Boom : 5.2m	7.5 m	kg											*3 470	*3 470	5.4
Arm : 3.0m	6.0 m	kg							*3 660	*3 660			*3 170	3 070	6.7
Shoe : 500mm	4.5 m	kg							*3 990	3 640			*3 110	2 530	7.5
CWT : 2 750kg	3.0 m	kg			*8 200	*8 200	*5 610	5 360	*4 720	3 490	*44 00	2 470	*3 200	2 260	7.9
	1.5 m	kg			*5 660	*5 660	*7 430	4 980	*5 620	3 310	*4 830	2 390	*3 440	2 160	8.0
	0.0 m	kg			*6 130	*6 130	*8 770	4 730	*6 390	3 180	*5 230	2 330	*3 900	2 180	7.8
	-1.5 m	kg	*5 290	*5 290	*9 280	8 620	*9 370	4 630	*6 830	3 110			*4 740	2 370	7.3
	-3.0 m	kg	*8 980	*8 980	*13 880	8 720	*9 220	4 640	*6 710	3 120			*6 100	2 830	6.5
	-4.5 m	kg			*11 770	8 970	*7 900	4 790					*6 940	4 160	5.0
Boom : 5.0m 2-piece	7.5 m	kg											*5 460	*5 460	4.1
Arm : 2.3m	6.0 m	kg					*6 470	5 770					*4 720	3 860	5.7
Shoe : 500mm	4.5 m	kg			*7 740	*7 740	*7 450	5 580	*6 280	3 560			*4 560	3 010	6.6
CWT : 2 750kg	3.0 m	kg					*8 540	5 230	*6 630	3 420			*4 670	2 640	7.1
	1.5 m	kg					*9 390	4 890	*6 930	3 280			*5 060	2 510	7.2
	0.0 m	kg					*9 330	4 710	*6 820	3 170			*5 490	2 560	7.0
	-1.5 m	kg			*10 850	8 750	*8 230	4 670	*5 940	3 150			*5 170	2 870	6.5
	-3.0 m	kg					*5 800	4 770							5.4
Boom : 5.0m 2-piece	7.5 m	kg					*4 700	*4 700					*4 260	*4 260	4.7
Arm : 2.6m	6.0 m	kg					*5 460	*5 460	*4 210	3 640			*3 720	3 490	6.1
Shoe : 500mm	4.5 m	kg			*5 780	*5 780	*6 260	5 660	*5 750	3 600			*3 580	2 790	7.0
CWT : 2 750kg	3.0 m	kg			*12 620	9 900	*8 280	5 300	*6 490	3 460			*3 640	2 480	7.4
	1.5 m	kg					*9 270	4 940	*6 870	3 300	*4 220	2 380	*3 890	2 360	7.5
	0.0 m	kg			*6 200	*6 200	*9 420	4 720	*6 880	3 180			*4 390	2 410	7.4
	-1.5 m	kg			*10 640	8 700	*8 540	4 660	*6 210	3 140			*4 970	2 660	6.8
	-3.0 m	kg					*6 430	4 730					*4 290	3 320	5.9
Boom : 5.0m 2-piece	7.5 m	kg					*4 560	*4 560					*3 520	*3 520	5.3
Arm : 3.0m	6.0 m	kg					*4 590	*4 590	*4 260	3 690			*3 130	3 110	6.6
Shoe : 500mm	4.5 m	kg					*5 050	*5 050	*5 010	3 620			*3 020	2 540	7.4
CWT : 2 750kg	3.0 m	kg			*11 540	10 180	*7 850	5 360	*6 240	3 460	*4 180	2 440	*3 060	2 270	7.8
	1.5 m	kg			*6 950	*6 950	*9 000	4 960	*6 710	3 290	*5 020	2 360	*3 240	2 170	7.9
	0.0 m	kg			*6 660	*6 660	*9 400	4 690	*6 860	3 150	*5 060	2 300	*3 620	2 200	7.7
	-1.5 m	kg			*9 910	8 570	*8 810	4 590	*6 420	3 080			*4 320	2 400	7.2
	-3.0 m	kg			*9 600	8 700	*7 080	4 630	*4 880	3 120			*4 260	2 910	6.3

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 EC180EL

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 5.2m	6.0 m	kg											*4 480	4 090	5.9
Arm : 2.3m	4.5 m	kg					*4 970	*4 970	*4 660	3 900			*4 680	3 230	6.8
Shoe : 600mm	3.0 m	kg					*6 580	5 720	*5 320	3 760			4 370	2 860	7.2
CWT : 3 200kg	1.5 m	kg					*8 240	5 390	5 640	3 620			4 180	2 720	7.3
	0.0 m	kg					8 590	5 210	5 520	3 510			4 300	2 780	7.1
	-1.5 m	kg			*10 820	9 770	8 540	5 170	5 480	3 480			4 800	3 080	6.6
	-3.0 m	kg			*13 000	9 920	8 620	5 240					6 160	3 890	5.6
Boom : 5.2m	7.5 m	kg											*4 110	*4 110	4.8
Arm : 2.6m	6.0 m	kg							*4 150	4 000			*3 760	3 720	6.3
Shoe : 600mm	4.5 m	kg					*4 570	*4 570	*4 390	3 940			*3 680	3 010	7.1
CWT : 3 200kg	3.0 m	kg			*9 730	*9 730	*6 190	5 780	*5 090	3 790	*4 000	2 710	*3 810	2 690	7.5
	1.5 m	kg					*7 930	5 430	5 660	3 630	4 060	2 640	3 940	2 570	7.7
	0.0 m	kg			*5 620	*5 620	8 610	5 220	5 530	3 510			4 030	2 610	7.5
	-1.5 m	kg	*5 790	*5 790	*9 910	9 720	8 530	5 160	5 470	3 470			4 450	2 860	6.9
	-3.0 m	kg	*10 330	*10 330	*13 460	9 850	8 580	5 200					5 530	3 510	6.0
	-4.5 m	kg			*10 810	10 150							*7 450	5 670	4.4
Boom : 5.2m	7.5 m	kg											*3 470	*3 470	5.4
Arm : 3.0m	6.0 m	kg							*3 660	*3 660			*3 170	*3 170	6.7
Shoe : 600mm	4.5 m	kg							*3 990	3 950			*3 110	2 760	7.5
CWT : 3 200kg	3.0 m	kg			*8 200	*8 200	*5 610	*5 610	*4 720	3 800	4 130	2 700	*3 200	2 480	7.9
	1.5 m	kg			*5 660	*5 660	*7 430	5 450	*5 620	3 620	4 040	2 620	*3 440	2 370	8.0
	0.0 m	kg			*6 130	*6 130	8 590	5 200	5 500	3 480	3 970	2 550	3 720	2 400	7.8
	-1.5 m	kg	*5 290	*5 290	*9 280	*9 280	8 470	5 090	5 420	3 410			4 060	2 600	7.3
	-3.0 m	kg	*8 980	*8 980	*13 880	9 690	8 490	5 110	5 430	3 420			4 890	3 110	6.5
	-4.5 m	kg			*11 770	9 950	*7 900	5 260					*6 940	4 560	5.0
Boom : 5.0m 2-piece	7.5 m	kg											*5 460	*5 460	4.1
Arm : 2.3m	6.0 m	kg					*6 470	6 260					*4 720	4 190	5.7
Shoe : 600mm	4.5 m	kg			*7 740	*7 740	*7 450	6 070	5 950	3 870			*4 560	3 280	6.6
CWT : 3 200kg	3.0 m	kg					*8 540	5 710	5 810	3 740			4 450	2 880	7.1
	1.5 m	kg					8 830	5 370	5 640	3 590			4 270	2 750	7.2
	0.0 m	kg					8 610	5 180	5 520	3 480			4 400	2 810	7.0
	-1.5 m	kg			*10 850	9 730	*8 230	5 140	5 500	3 460			4 950	3 140	6.5
	-3.0 m	kg					*5 800	5 240							5.4
Boom : 5.0m 2-piece	7.5 m	kg					*4 700	*4 700					*4 260	*4 260	4.7
Arm : 2.6m	6.0 m	kg					*5 460	*5 460	*4 210	3 950			*3 720	*3 720	6.1
Shoe : 600mm	4.5 m	kg			*5 780	*5 780	*6 260	6 140	*5 750	3 910			*3 580	3 050	7.0
CWT : 3 200kg	3.0 m	kg			*12 620	10 910	*8 280	5 790	5 840	3 770			*3 640	2 710	7.4
	1.5 m	kg					8 890	5 420	5 660	3 610	4 050	2 610	*3 890	2 590	7.5
	0.0 m	kg			*6 200	*6 200	8 630	5 190	5 530	3 490			4 120	2 640	7.4
	-1.5 m	kg			*10 640	9 670	*8 540	5 130	5 490	3 450			4 580	2 920	6.8
	-3.0 m	kg					*6 430	5 200					*4 290	3 630	5.9
Boom : 5.0m 2-piece	7.5 m	kg					*4 560	*4 560					*3 520	*3 520	5.3
Arm : 3.0m	6.0 m	kg					*4 590	*4 590	*4 260	4 000			*3 130	*3 130	6.6
Shoe : 600mm	4.5 m	kg					*5 050	*5 050	*5 010	3 930			*3 020	2 780	7.4
CWT : 3 200kg	3.0 m	kg			*11 540	11 200	*7 850	5 850	5 860	3 780	4 120	2 670	*3 060	2 490	7.8
	1.5 m	kg			*6 950	*6 950	8 930	5 440	5 660	3 600	4 030	2 590	*3 240	2 380	7.9
	0.0 m	kg			*6 660	*6 660	8 610	5 170	5 500	3 450	3 970	2 530	*3 620	2 420	7.7
	-1.5 m	kg			*9 910	9 540	8 480	5 060	5 430	3 390			4 150	2 640	7.2
	-3.0 m	kg			*9 600	*9 600	*7 080	5 100	*4 880	3 430			*4 260	3 190	6.3

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

	EC160E	EC180E
Engine		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Cyclone pre-cleaner	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Fuel filler pump: 35 l/min	•	•
Alternator, 80 A	•	•
Standard cooling system	•	•
Electric/Electronic control system		
Contronics		
Advanced mode control system	•	•
Self-diagnostic system	•	•
Machine status indication	•	•
GSM/GPS Caretrack and Caretrack subscription	•	•
Engine speed sensing power control	•	•
Automatic idling system	•	•
One-touch power boost	•	•
Safety stop/start function	•	•
Adjustable LCD color monitor	•	•
Master electrical disconnect switch	•	•
Engine restart prevention circuit	•	•
High-capacity halogen lights:		
Frame-mounted: 2, Boom-mounted: 1	•	•
Batteries, 2 x 12 V / 110 Ah	•	•
Start motor, 24 V / 5.5 kW	•	•
Hydraulic system		
Boom hose rupture valve with overload warning device	•	•
Arm hose rupture valve	•	•
Automatic sensing 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	•	•
Boom cylinders (x2)	•	•
Cylinder cushioning	•	•
Cylinder contamination seals	•	•
Auxiliary hydraulic valve	•	•
Automatic two-speed travel motors	•	•
Hydraulic oil, longlife oil 46	•	•
Frame		
Access way with handrail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Under cover (heavy duty)	•	•
2 750kg counterweight	•	
3 200kg counterweight		•

	EC160E	EC180E
Cab and interior		
ROPS (ISO12117-2) certified cab with fixed hatch	•	•
Silicon oil and rubber mounts with spring	•	•
Control lock out lever	•	•
Travel pedals and hand levers	•	•
Adjustable operator seat with heater and joystick control console	•	•
Control joysticks with 4 switches each	•	•
Heater & air-conditioner, automatic	•	•
Flexible antenna	•	•
Radio with AUX, USB Jack and Bluetooth	•	•
Cab, all-weather sound suppressed, includes:		
Cup holders	•	•
Door locks	•	•
Tinted glass	•	•
Floor mat	•	•
Horn	•	•
Large storage area	•	•
Pull-up type front window	•	•
Removable lower windshield	•	•
Seat belt	•	•
Safety glass	•	•
Sun screens, front, roof, rear	•	•
Rain shield	•	•
Windshield wiper with intermittent feature	•	•
Rear view camera	•	•
Master key	•	•
Undercarriage		
Under cover (heavy duty)	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
Digging equipment		
5.2 m mono boom	•	•
2.6 m arm	•	•
Linkage	•	•
Manual centralized lubrication	•	•
Service		
Tool kit, daily maintenance	•	•

OPTIONAL EQUIPMENT

	EC160E	EC180E
Engine		
Block heater: 120 V or 240 V	•	•
Diesel coolant heater, 5 kW	•	•
Water separator with heater	•	•
Auto engine shutdown	•	•
Tropical cooling system	•	•
Electric		
High-capacity LED lights:		
Frame-mounted: 2, Boom-mounted: 1	•	•
Extra work lights (Halogen or LED):		
Boom-mounted 1	•	•
Cab-mounted 3	•	•
Counterweight-mounted 1	•	•
Travel alarm	•	•
Anti-theft system	•	•
Rotating warning beacon	•	•

OPTIONAL EQUIPMENT

	EC160E	EC180E
Hydraulic system		
Boom float function with HRV	•	•
Boom float function without HRV	•	•
Pilot control pattern change	•	•
Hydraulic piping:		
Work tool management system (up to 20 programmable memories)	•	•
Breaker & shear, 1 or 2 pump flow	•	•
Slope & rotator (40lpm or 60lpm)	•	•
Extra for slope & rotator	•	•
Grapple	•	•
Oil leak (drain) line	•	•
Quick coupler	•	•
Additional return filter	•	•
Breaker & shear pressure pre-setting	•	•
Volvo hydraulic quick coupler S1, S6	•	•
Volvo hydraulic quick coupler VQC-HU,DR16	•	•
Volvo hydraulic quick coupler RQC-HD, Steelwrist S60	•	•
Volvo hydraulic quick coupler RQC-HD, Steelwrist S70		•
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 32, 68	•	•

	EC160E	EC180E
Cab and interior		
ROPS (ISO12117-2) certified cab with openable roof hatch	•	•
Fabric seat without heater	•	•
Fabric seat with heater and air suspension	•	•
Control joysticks with semi-long	•	•
Control joysticks with 3 switch & 1 propotional	•	•
Straight travel pedal	•	•
Cab-mounted falling object guard (FOG)	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Anti-vandalism kit	•	•
Safety net for front window	•	•
Side view camera	•	•
Smoker kit (ashtray and lighter)	•	•
Sunlight protection, roof (steel)	•	•
Lower wiper with intermittent control	•	•
Specific key	•	•
Undercarriage		
Dozer blade	•	
500/600/700/800/900 mm shoe with triple grousers	•	•
Digging equipment		
5.0 m 2-piece boom	•	•
2.3 m, 3.0 m arm	•	•
Linkage with lifting eye	•	•
Service		
Tool kit, full scale	•	•

Selection of Volvo optional equipment

Auto engine shutdown

Two-piece boom

Diesel coolant heater

LED lights

Fuel filler pump

Falling Objects Guard (FOG)

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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