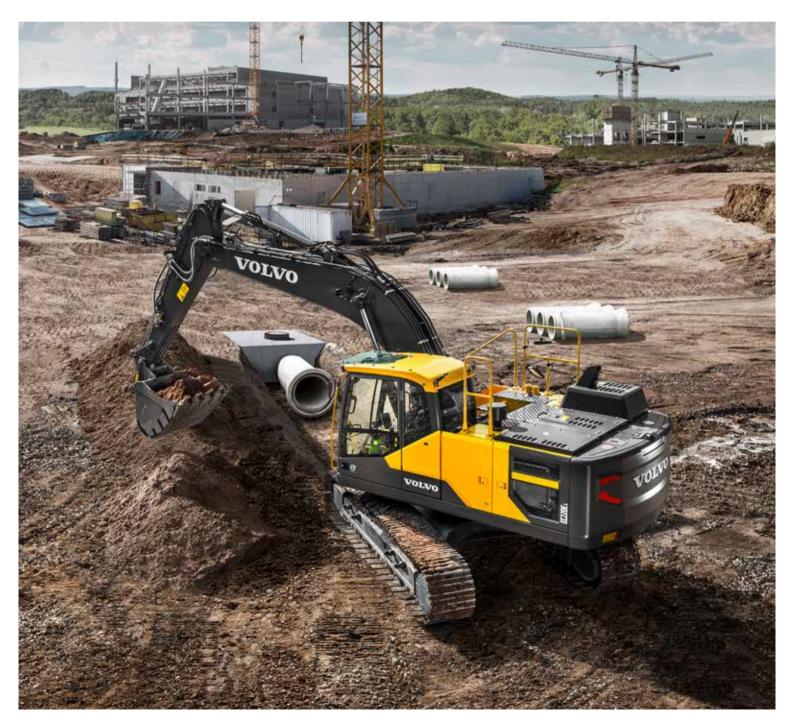
Volvo Construction Equipment



EC220E

Volvo Excavators 20.6-25.1 t / 45,350 - 55,360 lb 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 customers around the globe. 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.

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 support training at our best-in-class Customer Center in Shippensburg and through hands-on training. Using a great Product Demonstration Center featuring a dedicated area for most commons applications, visitors operate equipment from our entire product line under a variety of simulated working conditions. This facility is in year-round use by our dealers and customers. **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.

















Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Financial Services



Volvo Penta



Volvo Construction Equipment



Volvo Buses

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Best in Class Efficiency

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

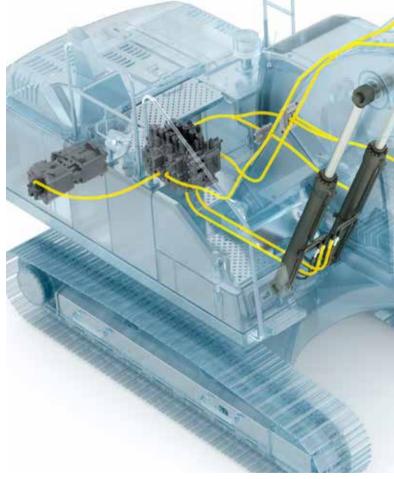
Volvo engine

Featuring proven advanced technology, and built on decades of experience, Volvo's robust D6 Tier 4 Final engine boasts more power - while reducing both fuel consumption and emissions to deliver superior quality, reliability and durability.

Main Control Valve and Software

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





Boom float function

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

Auto engine shutdown

Increased power

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

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).



VOLVO

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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 D6 Tier 4 Final engine to match the engine power, reduce power loss and improve controllability and response time.

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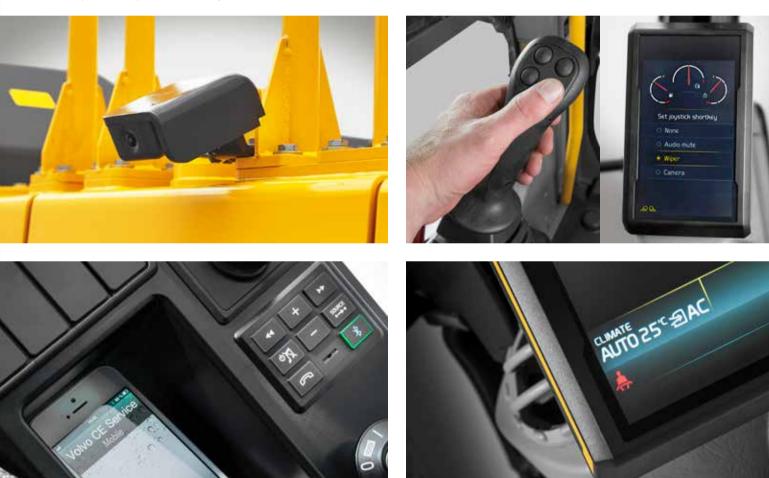
First Choice for Comfort

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

Short-cut key

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.



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.

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.

Building on Foundations of Trust and Quality

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

ROPS

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

Boom and Arm

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

VOLVO





Lower frame

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

Narrow and Heavy-duty (NH) Undercarriage

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





Built to last

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

VOLVO

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-theart 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. AUTOMATING

Customer Choice

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

Attachment Management System

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

NEW XI WORK TOOL

Extra piping

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



Electrical pedal

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



Response mode

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

Proactive Maintenance Solutions

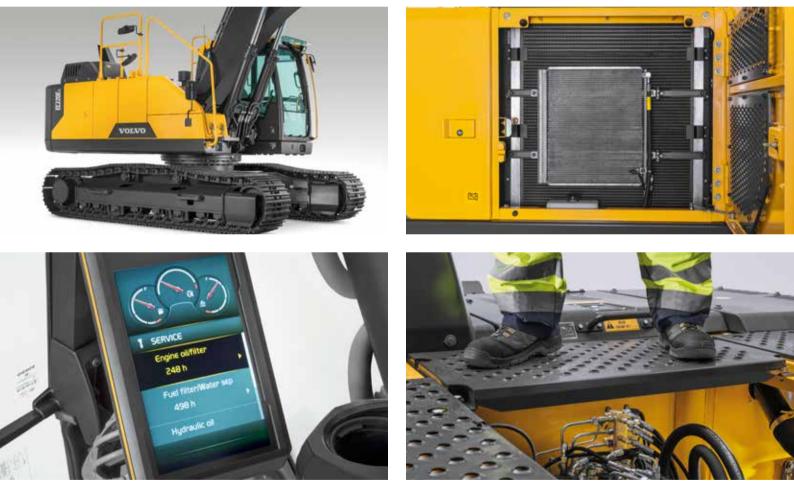
Maintaining your machine will ensure you get the maximum lifetime and productivity. This is why Volvo have made this process easy – developing it to be fast, regular and safe.

Full size fold-able guard rails

Multiple sturdy handrails and fold-able guardrails provide safe and easy access to the superstructure for inspection and maintenance. The fold-able guardrail is to minimize transportation height when it is folded.

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.



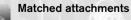
VOLVO

Grouped filters

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

1 20 M

VOLVO



460 m

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. OLVO

VOENO

Mix and match for a superior fit

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

Buckets - GP/HD/XD

Volvo's buckets are the perfect tool for digging and re-handling 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 HB21, HB22

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



Quick Coupler

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

Steelwrist® is a registered trademark of Steelwrist AB

Tilt Rotator

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

Improved total cost of ownership

Boom and arm

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



Ultimate tool carrier

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



Optimized hydraulics

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

Diesel Exhaust Fluid (DEF)

Volvo offers a total DEF 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.



Full size fold-able guard rails

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

Side view camera

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



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

Bluetooth®

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

Short cut key function

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

Volvo engine

Volvo's efficient D6 Tier 4 Final engine gives you more power while consuming less fuel for low emission levels.



Grouped filters

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



Built to last

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

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VOLVO

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





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.

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





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.





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PROFITABILITY

Customer Support Agreements

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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.

FUEL CONSUMPTION

Volvo EC220E in detail

Engine

The latest generation, Volvo engine Tier 4f / Stage IV emissions compliant diesel engine fully meets the demands of the latest, 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		D6J
Max power at	r/s	s / r/min		30 / 1 800
Net, ISO 9249/SAE J1349		kW / hp		128/172
Gross, ISO 14396/SAE J1995		kW / hp		129/173
Max torque at	Nm / r/min	lbf ft / r/min	849 / 1 350	626 / 1,350
No. of cylinders				6
Displacement	I	cu.in	5.7	348
Bore	m	in	98	3.86
Stroke	m	in	126	4.96

Electrical system

Well protected high-capacity electrical system. Waterproof

double-lock harness plugs are used to secure corrosion-free

connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Contronics provides advanced monitoring of machine functions and important diagnostic information.

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

Swing system

The swing system uses an axial pisto		0	, , , ,	
maximum torque. An automatic holdi	ng brake ar	nd antire	bound valve a	re standard
Max. slew speed		r/min		11.1
Max. slew torque	kNm	lbf ft	83	61,220
Drive				
Each track is powered by an automa	atic two-spe	ed shift	travel motor.	The track
brakes are multi-disc, spring-applied	l and hydra	ulic rele	ased. The trav	el motor,
brake and planetary gears are well p	protected w	ithin the	track frame.	
Max. drawbar pull	kN	lbf	183	41,150
Max. travel speed	km/h	mph	3.5 / 5.7	2.2 / 3.5
Gradeability		0		35
Undercarriage				
Robust X-shaped frame with grease	ed and seal	ed track	chains as sta	andard
Track shoe				2 x 49
Link pitch	mm	in	190	7.5
			500 / 600	20/24/
Shoe width, triple grouser	mm	in	/ 700 /	28/32
		• .	800 / 900	/ 36
Shoe width, triple grouser (HD)	mm	in	600	24
Shoe width, double grouser	mm	in	700	28
Bottom rollers				2 x 8
Top rollers				2 x 2
Service refill capacities				
Fuel tank	I	gal	320	85
Hydraulic system, total	I	gal	290	77
Hydraulic tank	1	gal	140	37
DEF tank	I	gal	27	7
Engine oil	I	gal	25	7
Engine coolant	I	gal	35	9
Swing reduction unit	1	gal	6	2
Travel reduction unit	I.	gal	2 x 5.8	2 x 2

Hydraulic system

The hydraulics system, combined with the fully electronic

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

The following important functions are included in the system:

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

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

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

Regeneration system: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity. **Power boost:** All digging and lifting forces are increased.

Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

Main pump

Main punp				
Туре	2 x variable	displace	ement axial p	iston pumps
Maximum flow	l/min	gpm	2 x 207	2 x 55
Pilot pump				
Туре				Gear pump
Maximum flow	l/min	gpm	1 x 18	1 x 5
Relief valve setting				
Implement	Мра	psi	34.3 / 36.3	4,980 / 5,260
Travel circuit	Мра	psi	34.3	4,980
Slew circuit	Mpa	psi	27.9	4,050
Pilot circuit	Мра	psi	3.9	570

Travel: Variable displacement axial piston motor with mechanical brake

Slew: Fixed displacement axi	ial piston motor wi	th mechanical brake	
Hydraulic cylinders			
Mono boom			2
Bore x Stroke	ø x mm	øxin 125 x 1 235	4.9 x 48.6
2 piece boom			1
Bore x Stroke	ø x mm	øx in 160 x 1 070	6.3 x 42.1
Arm			1
Bore x Stroke	ø x mm	øxin 135 x 1 540	5.3 x 60.6
Bucket			1
Bore x Stroke	ø x mm	øx in 120 x 1 065	4.7 x 41.9
Bucket for LR boom			1
Bore x Stroke	ø x mm	øxin 100 x 865	3.9 x 34.1
Cab			

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound

absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.

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

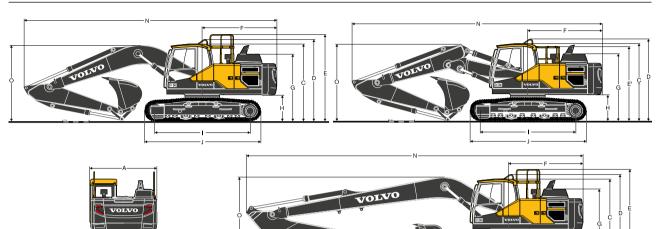
Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

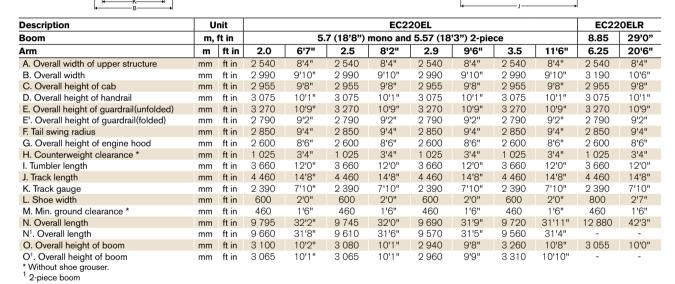
Sound Level

Sound level in cab according to ISO 6	396	
LpA (standard)	dB(A)	69
LpA (tropical)	dB(A)	70
External sound level according to ISO 6	395, EU Noise Directiv	ve (2000/14/EC)
LwA (standard)	dB(A)	102
LwA (tropical)	dB(A)	103

Specifications

DIMENSIONS





DIMENSIONS

Boom m 5.7 18'8" 5.7 HD 18'8" 5.57 18'3" 8.85 29' Length mm 5 910 19'5" 5 910 19'5" 5 780 19'0" 9 060 29' Height mm 1 585 5'2" 1 585 5'2" 1 570 5'2" 1 460 4'5 Width mm 670 2'2" 670 2'2" 670 2'2" 670 2'2"		E	Boom			Arm									
Boom m 5.7 18'8" 5.7 HD 18'8" 5.57 18'3" 8.85 29' Length mm 5 910 19'5" 5 910 19'5" 5 780 19'0" 9 060 29' Height mm 1 585 5'2" 1 585 5'2" 1 570 5'2" 1 460 4'5 Width mm 670 2'2" 670 2'2" 670 2'2" 670 2'2"				B			0	A	В						
Length mm 5 910 19'5" 5 910 19'5" 5 780 19'0" 9 060 29' Height mm 1 585 5'2" 1 585 5'2" 1 570 5'2" 1 460 4'5 Width mm 670 2'2" 670 2'2" 670 2'2"	Description	Unit	mo	no	mo	no	2-pi	ece	Long-Reach						
Height mm 1 585 5'2" 1 585 5'2" 1 570 5'2" 1 460 4'5 Width mm 670 2'2" 670 2'2" 670 2'2" 670 2'2"	Boom	m	5.7	18'8"	5.7 HD	18'8"	5.57	18'3"	8.85	29'0"					
Width mm 670 2'2" 670 2'2" 670 2'2"	Length	mm	5910	19'5"	5910	19'5"	5 780	19'0"	9 060	29'9"					
	Height	mm	1 585	5'2"	1 585	5'2"	1 570	5'2"	1 460	4'9"					
Weight kg 2,006 4,420 2,151 4,740 2,585 5,700 2,510 5,50	Width	mm	670	2'2"	670	2'2"	670	2'2"	670	2'2"					
110 2000 1,120 2101 1,110 2000 0,100 2010 0,00	Weight	kg	2 006	4,420	2 151	4,740	2 585	5,700	2 510	5,530					

Includes cylinder, piping and pin, excludes boom cylinder pin

Description	Unit												
Arm	m	2.0	6'7"	2.5	8'2"	2.9	9'6"	2.9 HD	9'6"	3.5	11'6"	6.25	20'6"
Length	mm	3 065	10'1"	3 525	11'7"	3 910	12'10	3910	12'10	4 540	14'11	7 330	24'1"
Height	mm	980	3'3"	860	2'10"	860	2'10"	860	2'10"	855	2'10"	945	3'1"
Width	mm	440	1'5"	440	1'5"	440	1'5"	440	1'5"	440	1'5"	385	1'3"
Weight	kg	1 091	2,410	1 133	2,500	1 146	2,530	1 183	2,610	1 226	2,700	1 309	2,890

* Includes cylinder, linkage and pin

Specifications

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe	width	Operatin	ng weight	Ground	pressure	Overa	l width	Operatin	g weight	Ground	pressure	Overall width			
	mm	ft in	kg	lb	kPa	psi	mm	ft in	kg	lb	kPa	psi	mm	ft in		
								EC2	220EL							
				860kg	/ 0.92m ³	n, 2.9m (9 (1,810lb) lb) counte	bucket,	,	5.57m (18'3") 2-piece, 2.9m (9'6") arm, 860kg / 0.92m ³ (1,810lb) bucket, 4 200kg (9,260lb) counterweight							
	500	20	21 480	47,370	53.9	7.8	2 890	9'6"	22 170	48,880	54.9	8.0	2 890	9'6"		
	600	24	21 740	47,940	45.1	6.5	2 990	9'10"	22 425	49,450	46.1	6.7	2 990	9'10"		
Triple grouser	700	28	22 200	48,950	39.2	5.7	3 090	10'2"	22 880	50,460	40.2	5.8	3 090	10'2"		
	800	32	22 485	49,580	35.3	5.1	3 190	10'6"	23 170	51,090	36.3	5.3	3 190	10'6"		
	900	36	22 780	50,230	31.4	4.6	3 290	10'10"	23 460	51,740	32.4	4.7	3 290	10'10"		
Triple grouser HD	600	24	21 910	48,310	45.1	6.5	2 990	9'10"	22 590	49,820	47.1	6.8	2 990	9'10"		
Double grouser	700	28	22 465	49,540	40.2	5.8	3 090	10'2"	23 150	51,050	41.2	6.0	3 090	10'2"		
Single grouser	600	24	21 950	48,400	45.1	6.5	2 990	9'10"	22 630	49,910	47.1	6.8	2 990	9'10"		
					EC22	20ELR										
			8.	85m (29'	0") boon	n, 6.25m ((20'6") a	rm,	-							
				452kg / 0.52m³ (1 000lb) bucket, 5 000kg (11 030lb) counterweight												
	800	32	23 690	52,250	37.3	5.4	3 190	10'6"								
Triple grouser	900	36	23 990	52,890	33.3	4.8	3 290	10'10"								

BUCKET SELECTION GUIDE

									EC220EL									
		Cap	acity	Cutting	g width	We	ight	Teeth	5	5.7m (18'	B")Boor	n	5.57m (18'3") 2-piece					
Bucke	et type								800mm (32") shoe, 4 200kg (9 260lb) counterweight									
		L	yard ³	mm	in	kg	lb	EA	2.0m (6'7")	2.5m (8'2")	2.9m (9'6")	3.5m (11'6")	2.0m (6'7")	2.5m (8'2")	2.9m (9'6")	3.5m (11'6")		
		480	0.63	600	23.40	666	1,468	3.00	С	С	С	С	С	С	С	С		
		590	0.77	750	29.25	711	1,568	3.00	С	С	С	С	С	С	С	С		
	General	750	0.98	900	35.10	792	1,746	4.00	С	С	С	С	С	С	С	С		
	purpose	920	1.20	1 050	40.95	862	1,900	4.00	С	С	С	С	С	С	С	С		
		1 090	1.43	1 200	46.80	951	2,096	5.00	С	С	С	С	С	С	С	С		
		1 270	1.66	1 350	52.65	1 038	2,289	5.00	С	С	С	С	С	С	С	С		
Direct fit		480	0.63	600	23.40	738	1,628	3.00	D	D	D	D	D	D	D	D		
Buckets		480	0.63	600	23.40	675	1,488	3.00	D	D	D	D	D	D	D	D		
		750	0.98	900	35.10	872	1,922	4.00	D	D	D	D	D	D	D	D		
	Heavy	750	0.98	900	35.10	808	1,783	4.00	D	D	D	D	D	D	D	D		
	duty	920	1.20	1 050	40.95	951	2,098	4.00	D	D	D	D	D	D	D	D		
		920	1.20	1 050	40.95	888	1,959	4.00	D	D	D	D	D	D	D	D		
		1 090	1.43	1 200	46.80	1 046	2,307	5.00	D	D	D	D	D	D	D	D		
		1 090	1.43	1 200	46.80	983	2,168	5.00	D	D	D	D	D	D	D	D		

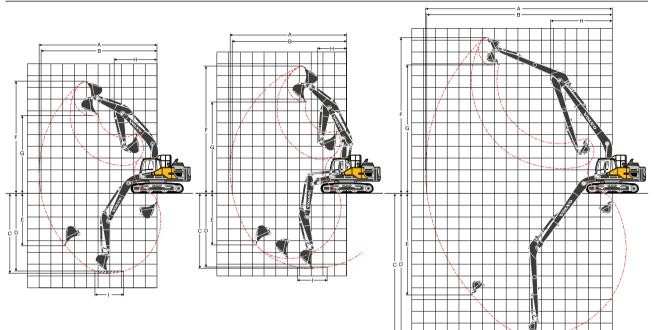
Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.

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

	kg/m ³	lb/yd ³	
Α	1 200 - 1 300	2,000 - 2,200	Coal, Caliche, Shale
в	1 400 - 1 600	2,300 - 2,700	Wet earth and clay, Limestone, Sandstone
С	1 700 - 1 800	2,800 - 3,100	Granite, Wet sand, Well blasted rock
D	> 1 900	> 3,200	Wet mud, Iron ore

WORKING RANGES



k																						
Descriptio	n		U	nit								EC2	20EL								EC22	OELR
Boom			m	ft in			5.	7 (18'8	3") mo	no					5.5	7 (18'3	3") 2- p	iece			8.85	29'0"
Arm			m	ft in	2.0	6'7"	2.5	8'2"	2.9	9'6"	3.5	11'6"	2.0	6'7"	2.5	8'2"	2.9	9'6"	3.5	11'6"	6.25	20'6"
A. Max. dig	ging reac	h	mm	ft in	9 090	29'10"	9 550	31'4"	9 930	32'7"	10 390	34'1"	8 980	29'6"	9 450	31'0"	9 840	32'3"	10 310	33'10"	15 800	51'10"
B. Max. dig ground	gging reac	h on	mm	ft in	8910	29'3"	9 380	30'9"	9 770	32'1"	10 240	33'7"	8 800	28'10"	9 280	30'5"	9 670	31'9"	10 150	33'4"	15 700	51'6"
C. Max. dig	gging dep	th	mm	ft in	5 830	19'2"	6 330	20'9"	6 730	22'1"	7 330	24'1"	5 410	17'9"	5 900	19'4"	6 300	20'8"	6 850	22'6"	12 100	39'8"
D. Max. dig (2.44 m	gging dep n / 8' level)		mm	ft in	5 560	18'3"	6 100	20'0"	6 540	21'5"	7 130	23'5"	5 290	17'4"	5 790	19'0"	6 200	20'4"	6 750	22'2"	12 000	39'4"
E. Max. ver depth	tical wall o	digging	mm	ft in	4 880	16'0"	5 620	18'5"	6 090	20'0"	6 470	21'3"	4 390	14'5"	4 990	16'4"	5 410	17'9"	5 930	19'5"	11 290	37'0"
F. Max. cut	ting heigh	t	mm	ft in	8 940	29'4"	9 220	30'3"	9 460	31'0"	9 460	31'0"	10 010	32'10"	10 380	34'1"	10 7 10	35'2"	10 920	35'10"	13 300	43'8"
G. Max. du	Imping he	ight	mm	ft in	6 190	20'4"	6 430	21'1"	6 650	21'10"	6 700	22'0"	7 100	23'4"	7 460	24'6"	7 780	25'6"	8 010	26'3"	10 950	35'11"
H. Min. front swing radius		adius	mm	ft in	3 790	12'5"	3 670	12'0"	3 640	11'11"	3 660	12'0"	2 890	9'6"	2 740	9'0"	2 470	8'1"	2 730	8'11"	5 200	17'1"
DIGGINO	G FORC	ES W	ITH	DIF	RECT	FIT E	BUCK	ET														
Bucket rad	lius		mm	ft in	1 528	5'0"	1 528	5'0"	1 528	5'0"	1 528	5'0"	1 528	5'0"	1 528	5'0"	1528	5'0"	1528	5'0"	1250	4'1"
	Normal	SAE J1179	kN	lb	146	32,820	125	28,100	125	28,100	125	28,100	146	32,820	125	28,100	125	28,100	125	28,100	68	15,290
Breakout force -	Power boost	SAE J1179	kN	lb	154	34,620	132	29,670	132	29,670	132	29,670	154	34,620	132	29,670	132	29,670	132	29,670	-	-
bucket	Normal	ISO 6015	kN	lb	165	37,090	141	31,700	141	31,700	141	31,700	165	37,090	141	31,700	141	31,700	141	31,700	77	17,310
	Power boost	ISO 6015	kN	lb	174	39,120	149	33,500	149	33,500	149	33,500	174	39,120	149	33,500	149	33,500	149	33,500	-	-
	Normal	SAE J1179	kN	lb	144	32,370	117	26,300	101	22,710	92	20,680	144	32,370	117	26,300	101	22,710	92	20,680	44	9,890
Tearout	Power boost	SAE J1179	kN	lb	153	34,400	124	27,880	107	24,050	97	21,810	153	34,400	124	27,880	107	24,050	97	21,810	-	-
force -	Normal	ISO 6015	kN	lb	149	33,500	121	27,200	104	23,380	94	21,130	149	33,500	121	27,200	104	23,380	94	21,130	45	10,120
	Power boost	ISO 6015	kN	lb	158	35,520	128	28,780	110	24,730	99	22,260	158	35,520	128	28,780	110	24,730	99	22,260	-	-
Rotation ar	Rotation angle, bucket			0	10	66	1	75	1	75	17	75	17	75	1	75	1	75	17	75	17	78

Specifications

LIFTING CAPACITY EC220EL

Lifting capacity at the arm end without bucket.

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

		Lifting hool related to ground			1.5m	n (5')		3.0m (10')				4.5m (15')				6.0m (20')			
		lev m	vel in	Alo t	ng UC	Acro t	lbss UC	Aloı t	ng UC	Acro t	lss UC	Alor t	ng UC	Acro t	lb lb	Alo t	ng UC	Acro t	oss UC
Boom: 5.7m (1	8'8")	7.5	25					-					1 .~ 1			-		-	1
Arm: 2.5m (8	3'2")	6.0	20													*5.5	*12,110	*5.5	*12,110
Shoe: 800mm	n (32")	4.5	15									*7.0	*15,100	*7.0	*15,100	*6.0	*13,120	5.6	12,150
CWT: 4,200k	g	3.0	10									*9.0	*19,400	8.2	17,660	*6.9	*14,990	5.4	11,640
(9,260)	lb)	1.5	5									*10.8	*23,250	7.7	16,610	*7.8	*16,910	5.2	11,140
		0.0	0									*11.6	*25,050	7.5	16,120	8.0	17,210	5.0	10,810
		-1.5	-5					*10.8	*24,770	*10.8	*24,770	*11.5	*24,900	7.5	16,050	7.9	17,100	5.0	10,710
		-3.0	-10					*14.8	*32,010	14.7	31,560	*10.6	*22,840	7.6	16,280	*7.8	*16,730	5.0	10,890
			-15					*11.4	*24,370	*11.4	*24,370	*8.2	*17,180	7.8	16,940				
Boom: 5.7m (1		7.5	25													*5.2		*5.2	
Arm: 2.9m (9		6.0	20													*5.1	*11,170	*5.1	*11,170
Shoe: 800mm		4.5	15									10.4		0.0	17000	*5.7	*12,330	*5.7	12,310
CWT: 4,200k	-	3.0	10									*8.4	*18,180	8.3	17,980	*6.6	*14,300	5.5	11,780
(9,260)	(D)	1.5	5					*5.4	*10560	*5.4	*10560	*10.4	*22,370	7.8	16,830	*7.6	*16,400	5.2	11,240
		0.0	0 -5	*6.3	*14,060	*6.3	*14,060	*5.4 *10.3	*12,560 *23,490	*10.3	*12,560 *23,490	*11.4	*24,740 *25,120	7.5 7.4	16,210 16,030	8.0 7.9	17,270 17,090	5.0 5.0	10,860
		-3.0	-10	*11.4	*25,580		*25,580	*15.7	*33,940	14.6	31,310	*10.9	*23,640	7.5	16,180	8.0	17,090	5.0	
		-4.5	-15	11.4	20,000	11.4	20,000				*27,330	*9.1	*19,310	7.7	16,680	0.0	17,190	5.0	10,790
Boom: 5.7m (1	8'8")	7.5	25					12.1	27,000	12.1	27,000	3.1	13,510	1.1	10,000				
Arm: 3.5m (1		6.0	20																
Shoe: 800mm		4.5	15													*4.9	*10,720	*4.9	*10,720
CWT: 4,200k	· · ·	3.0	10													*5.8	*12,590	5.6	11,980
(9,260)	۰ I	1.5	5													*6.8	*14,710	5.3	11,380
.,		0.0	0													*7.6	*16,460	5.1	10,900
		-1.5	-5									*10.8	*23,490	7.4	15,960	7.9	17,040	4.9	10,650
		-3.0	-10					*15.4	*33,360	14.4	30,840	*10.6	*22,860	7.4	15,980	*7.9	17,020	4.9	10,630
		-4.5	-15	*16.7	*38,240	*16.7	*38,240	*13.1	*28,240	*13.1	*28,240	*9.3	*20,080	7.6	16,320	*6.9	*14,650	5.0	10,920
		Lifting	hook			(25')		9.0m (30')			Max. reach								
		relate			7.5m	(25')			9.0m	(30')				Max	. reach				
		relate grou	ed to und																
		relate grou lev	ed to und /el		ng UC	Acro	oss UC		ng UC	Acro	oss UC		ng UC	Acro	oss UC	m	ft		
	8.8.1	relate grou lev m	ed to und vel in	Alo t			lb	Aloı t			ss UC	t	lb	Acro t	lb				
Boom: 5.7m (1		relate grou lev m 7.5	ed to und /el in 25		ng UC	Acro	1		ng UC	Acro	1	t *5.7	lb *12,540	Acro t *5.7	lb 12,540	5.6	18.0		
Arm: 2.5m (8	3'2")	relate grou lev m 7.5 6.0	ed to und vel in 25 20	t	ng UC	Acro t	1		ng UC	Acro	1	t *5.7 *5.6	lb *12,540 *12,350	Acro t *5.7 4.7	bss UC lb *12,540 10,400	5.6 6.9	18.0 22.3		
Arm: 2.5m (8 Shoe: 800mm	3'2") n (32")	relate grou lev m 7.5 6.0 4.5	ed to und vel in 25 20 15	t *5.7	ng UC Ib	Acro t 4.0	lb		ng UC	Acro	1	t *5.7 *5.6 *5.7	lb *12,540 *12,350 *12,530	Acro t *5.7 4.7 3.9	bss UC lb *12,540 10,400 8,630	5.6 6.9 7.6	18.0 22.3 24.8		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200k	3'2") n (32") g	relate grou lev m 7.5 6.0 4.5 3.0	ed to und /el 25 20 15 10	t *5.7 6.0	ng UC Ib 12,850	Acro t 4.0 3.9	lb 8,370		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4	lb *12,540 *12,350 *12,530 11,970	Acro t *5.7 4.7	bss UC b *12,540 10,400 8,630 7,790	5.6 6.9 7.6 8.0	18.0 22.3 24.8 26.2		
Arm: 2.5m (8 Shoe: 800mm	3'2") n (32") g	relate grou lev m 7.5 6.0 4.5	ed to und vel in 25 20 15	t *5.7	ng UC Ib 12,850 12,610	Acro t 4.0	lb 8,370 8,140		ng UC	Acro	1	t *5.7 *5.6 *5.7	lb *12,540 *12,350 *12,530 11,970 11,580	Acro t *5.7 4.7 3.9 3.5 3.4	ss UC lb *12,540 10,400 8,630 7,790 7,490	5.6 6.9 7.6 8.0 8.1	18.0 22.3 24.8 26.2 26.5		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200k	3'2") n (32") g	relate grou lev 7.5 6.0 4.5 3.0 1.5	ed to und rel 25 20 15 10 5	t *5.7 6.0 5.9	ng UC Ib 12,850	Acro t 4.0 3.9 3.8	lb 8,370		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3	lb *12,540 *12,350 *12,530 11,970	Acro t *5.7 4.7 3.9 3.5	bss UC b *12,540 10,400 8,630 7,790	5.6 6.9 7.6 8.0	18.0 22.3 24.8 26.2		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200k	3'2") n (32") g	relate grou lev m 7.5 6.0 4.5 3.0 1.5 0.0	ed to und /el 25 20 15 10 5 0	t *5.7 6.0 5.9	ng UC Ib 12,850 12,610	Acro t 4.0 3.9 3.8	lb 8,370 8,140		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4	lb *12,540 *12,350 *12,530 11,970 11,580 11,890	Acro t *5.7 4.7 3.9 3.5 3.4 3.5	*12,540 10,400 8,630 7,790 7,490 7,650	5.6 6.9 7.6 8.0 8.1 7.9	18.0 22.3 24.8 26.2 26.5 25.8		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200k	3'2") n (32") g	relate grou lev m 7.5 6.0 4.5 3.0 1.5 0.0 -1.5	ed to und rel 25 20 15 10 5 0 -5	t *5.7 6.0 5.9	ng UC Ib 12,850 12,610	Acro t 4.0 3.9 3.8	lb 8,370 8,140		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9	Ib *12,540 *12,350 *12,530 11,970 11,580 11,890 13,090	Acro t *5.7 4.7 3.9 3.5 3.4 3.5 3.8	Ib 12,540 10,400 8,630 7,790 7,490 7,650 8,380	5.6 6.9 7.6 8.0 8.1 7.9 7.4	18.0 22.3 24.8 26.2 26.5 25.8 24.1		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200k	3'2") n (32") g lb)	relate grou lev 7.5 6.0 4.5 3.0 1.5 0.0 -1.5 -3.0	ed to und rel 25 20 15 10 5 0 -5 -10	t *5.7 6.0 5.9	ng UC Ib 12,850 12,610	Acro t 4.0 3.9 3.8	lb 8,370 8,140		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9 *7.0	Ib *12,540 *12,350 *12,530 11,970 11,580 11,890 13,090 *15,470	Acro t *5.7 4.7 3.9 3.5 3.4 3.5 3.8 4.6	Ib 12,540 10,400 8,630 7,790 7,490 7,650 8,380 10,180	5.6 6.9 7.6 8.0 8.1 7.9 7.4 6.5	18.0 22.3 24.8 26.2 26.5 25.8 24.1 21.1		
Arm: 2.5m (E Shoe: 800mm CWT: 4,200k (9,260	3'2") n (32") g lb)	relate grou lev 7.5 6.0 4.5 3.0 1.5 0.0 -1.5 -3.0 -4.5	ed to und rel 25 20 15 10 5 0 -5 -10 -15	t *5.7 6.0 5.9	ng UC Ib 12,850 12,610	Acro t 4.0 3.9 3.8	lb 8,370 8,140		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9 *7.0 *7.2	Ib *12,540 *12,530 *12,530 11,970 11,580 11,890 13,090 *15,470 *15,750	Acro t *5.7 4.7 3.9 3.5 3.4 3.5 3.8 4.6 6.8	ss UC lb 12,540 10,400 8,630 7,790 7,490 7,650 8,380 10,180 15,530	5.6 6.9 7.6 8.0 8.1 7.9 7.4 6.5 5.0	18.0 22.3 24.8 26.2 26.5 25.8 24.1 21.1 16.0		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200kg (9,260l) 9 Boom: 5.7m (1 Arm: 2.9m (9 Shoe: 800mm	3'2") 1 (32") g (b) 18'8") 9'6") 1 (32")	relate grou lev m 7.5 6.0 4.5 3.0 1.5 0.0 -1.5 -3.0 -4.5 7.5 6.0 4.5	ed to and rel 25 20 15 10 5 0 -5 -10 -15 25 20 15	t *5.7 6.0 5.9 5.8 *5.4	ng UC Ib 12,850 12,610 12,450 *11,760	Acro t 4.0 3.9 3.8 3.7 4.0	lb 8,370 8,140 7,990 8,670		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9 *7.0 *7.0 *7.2 *4.9 *4.6 *4.5	Ib *12,540 *12,350 *12,530 11,970 11,580 11,890 *13,090 *15,470 *15,550 *10,930 *10,120 *9,950	Acro t *5.7 3.9 3.5 3.4 3.5 3.8 4.6 6.8 *4.9 4.2 3.6	Ib 12,540 10,400 8,630 7,790 7,490 8,830 10,180 15,530 *10,930 9,480 8,020	5.6 6.9 7.6 8.0 8.1 7.9 7.4 6.5 5.0 6.2 7.3 8.0	18.0 22.3 24.8 26.2 26.5 25.8 24.1 21.1 16.0 19.9 23.8 26.2		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200kg (9,260) 9 Boom: 5.7m (1 Arm: 2.9m (5 Shoe: 800mm CWT: 4,200kg	8'2") n (32") g lb) l8'8") 9'6") n (32") g	relate grou lev m 7.5 6.0 4.5 3.0 1.5 0.0 -1.5 -3.0 -4.5 7.5 6.0 4.5 3.0	ed to and rel 25 20 15 10 5 0 -15 25 25 20 15 25 20 15 10	t *5.7 6.0 5.9 5.8 *5.8	ng UC Ib 12,850 12,610 12,450 *11,760 *12,560	Acro t 4.0 3.9 3.8 3.7 4.0 3.9	lb 8,370 8,140 7,990 8,670 8,670 8,450		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9 *7.0 *7.0 *7.2 *4.9 *4.6 *4.5 *4.6	Ib *12,540 *12,350 *12,530 *11,970 11,580 13,090 *15,470 *15,750 *10,930 *10,120 *9,950 *10,220	Acro t *5.7 3.9 3.5 3.4 3.5 3.8 4.6 6.8 *4.9 4.2 3.6 3.3	Ib 12,540 10,400 7,790 7,490 7,650 8,380 10,180 15,530 9,480 8,020 7,300	5.6 6.9 7.6 8.0 8.1 7.9 7.4 6.5 5.0 6.2 7.3 8.0 8.4	18.0 22.3 24.8 26.5 25.8 24.1 21.1 16.0 19.9 23.8 26.2 27.5		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200kg (9,260l) 9 Boom: 5.7m (1 Arm: 2.9m (9 Shoe: 800mm	8'2") n (32") g lb) l8'8") 9'6") n (32") g	relate grou lev m 7.5 6.0 4.5 3.0 1.5 -1.5 -3.0 -1.5 -3.0 -4.5 6.0 4.5 3.0 4.5 3.0 1.5	ed to rel in 25 20 15 10 5 0 -10 -10 25 20 -10 20 15 10 15 10 5 20 15 20 5 20 5 20 5	t *5.7 6.0 5.9 5.8 *5.8 *5.4 *5.8 5.9	ng UC Ib 12,850 12,610 12,450 *11,760 *12,560 12,670	Acro t 4.0 3.9 3.8 3.7 4.0 3.9 3.8	Ib 8,370 8,140 7,990 8,670 8,450 8,200		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9 *7.0 *7.0 *7.2 *4.9 *4.6 *4.5 *4.6 4.9	Ib *12,540 *12,350 *12,530 *11,970 11,580 11,890 13,090 *15,470 *15,750 *10,930 *10,120 *9,950 *10,220 10,840	Acro t *5.7 3.9 3.5 3.4 3.5 3.8 4.6 6.8 *4.9 4.2 3.6 3.3 3.2	Ib *12,540 10,400 8,630 7,790 7,650 8,380 10,180 15,530 *10,930 9,480 7,300 7,300	5.6 6.9 7.6 8.0 8.1 7.9 7.4 6.5 5.0 6.2 7.3 8.0 8.4 8.5	18.0 22.3 24.8 26.5 25.8 24.1 21.1 16.0 19.9 23.8 26.2 27.5 27.8		
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Arm: 2.5m (8 Shoe: 800mm CWT: 4,200kg (9,2601) 9 Boom: 5.7m (1 Arm: 2.9m (9 Shoe: 800mm CWT: 4,200kg (9,2601) 9 Boom: 5.7m (1 Arm: 3.0mm Boom: 5.7m (1 Arm: 3.5m (1 Shoe: 800mm	3'2") n (32") g (b) (8'8") 9'6") n (32") g (b) (8'8") (1'6") n (32") n (32")	relate grou lev m 7.5 6.0 4.5 3.0 1.5 0.0 -1.5 -3.0 4.5 7.5 6.0 4.5 3.0 1.5 5.3 0.0 1.5 5.3 0.0 4.5 3.0 1.5 5.3 0.0 4.5 5.3 0.0 4.5 5.5 6.0 4.5 5.5 6.0 4.5 5.5 6.0 4.5 7.5 6.0 4.5 7.5 6.0 7.5 6.0 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	ed to und in 25 20 15 10 5 0 -10 15 20 10 5 20 15 20 15 20 15 20 15 20 15 20 15 20 15 20 15 20 10 5 20 10 5 20 10 5 20 10 5 20 10 5 20 10 5 20 10 5 20 10 5 20 10 5 20 10 5 20 10 5 20 10 10 5 20 10 10 10 10 10 10 10 10 10 1	t *5.7 6.0 5.9 5.8 *5.4 *5.8 5.9 5.8 5.8 5.8 5.8 *4.7 *4.8	ng UC Ib 12,850 12,610 12,450 '11,760 '12,560 12,670 12,460 12,400 '10,550	Acro t 4.0 3.9 3.8 3.7 4.0 3.9 3.8 3.7 3.7 3.7 4.2 4.1	Ib 8,370 8,140 7,990 8,670 8,450 8,200 8,000 7,950 8,940 8,820		ng UC	Acro	1	t *5.7 *5.6 *5.7 5.4 5.3 5.4 *5.9 *7.0 *7.0 *4.6 *4.5 *4.6 *4.5 *4.6 *5.5 *6.5 *5.5 *6.9 *4.9 *4.9 *4.9 *4.6 *5.5 *6.6 *5.5 *6.6 *5.7 *4.9 *4.6 *4.5 *4.6 *5.5 *4.6 *4.5 *4.6 *4.5 *4.6 *4.5 *4.6 *4.8 *4.9 *4.8	Ib *12,540 *12,530 *12,530 *12,530 *11,970 *11,580 *13,090 *15,470 *15,470 *15,470 *10,930 *10,120 *9,950 *10,220 10,840 *12,060 *14,380 *15,270 *10,920 *10,800 *10,670	Acro t 5.7 4.7 3.9 3.5 3.4 3.5 3.8 4.6 6.8 4.2 3.6 3.3 3.2 3.2 3.2 3.2 3.2 3.5 4.1 5.7 4.5 3.6 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	Ib 12,540 10,400 7,790 7,490 7,650 8,380 10,180 15,530 10,800 9,480 8,020 7,300 7,300 7,150 9,180 12,930 10,160 8,060 7,000	5.6 6.9 7.6 8.0 7.4 6.5 5.0 6.2 7.3 8.0 8.4 8.5 8.3 7.8 6.9 5.6 7.1 8.1 8.8	18.0 22.3 24.8 26.2 25.8 24.1 21.1 16.0 19.9 23.8 26.2 27.5 27.8 27.1 25.5 22.7 18.0 23.0 26.5 28.6		
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Arm: 2.5m (8 Shoe: 800mm CWT: 4,200kg (9,2601 Boom: 5.7m (1 Arm: 2.9m (5 Shoe: 800mm CWT: 4,200kg (9,2601 Boom: 5.7m (1 Arm: 2.9m (5 Boom: 5.7m (1 Arm: 3.5m (1 Shoe: 800mm CWT: 4,200kg 9,2601 9,2601	3'2") n (32") g (b) 18'8") p'6") n (32") g (b) 11'6") n (32") g 13'2") g	relate grou lev m 7.5 6.0 4.5 3.0 4.5 0.0 -1.5 -3.0 4.5 3.0 4.5 3.0 4.5 3.0 1.5 0.0 -1.5 -3.0 4.5 3.0 1.5 0.0 4.5 3.0 1.5 0.0 4.5 5.5 0 4.5 5.5 0 4.5 5.5 1.5 5.5 1.5 5.5 1.5 5.5 1.5 5.5 1.5 5.5 1.5 5.5 1.5 5.5 1.5 5.5 5	ed to und in 25 20 15 10 5 0 -10 -15 25 20 15 10 5 0 -15 25 20 15 10 -15 25 20 15 10 -15 25 20 15 10 -15 25 20 15 10 -15 25 20 15 25 20 15 25 20 20 25 20 25 20 20 25 20 20 20 20 20 20 20 20 20 20	t *5.7 6.0 5.9 5.8 *5.4 *5.8 5.9 5.8 5.8 5.8 *5.8 *4.7 *4.8 *5.2 *5.7	ng UC Ib 12,850 12,610 12,450 '11,760 '12,560 12,670 12,460 12,400 '10,560 '10,550 '11,410 '12,500	Acro t 4.0 3.9 3.8 3.7 4.0 3.8 3.7 3.7 4.2 4.1 4.0 3.8	Ib 8,370 8,140 7,990 8,670 8,450 8,200 8,000 7,950 8,820 8,820 8,560 8,250	4.6	ng UC Ib	Acro t 3.0		t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9 *7.0 *4.9 *4.5 *4.6 *4.5 *4.6 *5.5 6.5 *6.9 *4.9 *4.9 *4.9 *4.9 *4.9 *4.9 *4.9 *4	Ib *12,540 *12,350 *12,350 *12,350 *12,350 *11,970 *11,890 *13,090 *15,470 *15,750 *10,930 *10,120 *9,950 10,840 *11,090 12,060 *14,380 *15,270 *10,8200 *10,670 9,900 9,640	Acro t *5.7 4.7 3.9 3.5 3.4 3.5 3.8 4.6 6.8 4.2 3.6 3.2 3.2 3.2 3.2 3.5 4.1 5.7 4.2 3.6 3.2 3.2 3.5 4.2 3.5 3.2 3.5 4.2 3.5 3.2 3.5 3.2 3.5 3.2 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	UC Ib *12,540 10,400 8,630 7,790 7,650 8,380 10,180 15,530 *10,930 9,480 8,020 7,300 7,150 9,180 12,930 10,160 8,060 7,000 6,450 6,250	5.6 6.9 7.6 8.0 8.1 7.9 7.4 6.5 5.0 6.2 7.3 8.0 8.4 8.5 8.3 7.8 6.9 5.6 7.1 8.1 8.8 9.1 9.2	18.0 22.3 24.8 26.2 25.8 24.1 21.1 16.0 19.9 23.8 26.2 27.5 27.8 27.1 25.5 22.7 18.0 23.0 26.5 28.6 29.8 30.1		
Arm: 2.5m (8 Shoe: 800mm CWT: 4,200kg (9,260) 9 Boom: 5.7m (1 Arm: 2.9m (5 Shoe: 800mm CWT: 4,200kg (9,260) 9 Boom: 5.7m (1 Arm: 2.9m (5 Boom: 5.7m (1 Arm: 3.5m (1 Shoe: 800mm CWT: 4,200kg Yam: 3.5m (1 Shoe: 800mm CWT: 4,200kg	3'2") n (32") g (b) 18'8") p'6") n (32") g (b) 11'6") n (32") g 13'2") g	relate grou lev m 7.5 6.0 4.5 3.0 4.5 3.0 -1.5 -3.0 -1.5 -3.0 4.5 3.0 4.5 3.0 1.5 -3.0 -1.5 -3.0 -1.5 -3.0 4.5 3.0 1.5 -3.0 4.5 3.0 4.5 3.0 4.5 5 3.0 4.5 5 0.0 4.5 5 5 0.0 4.5 5 0 0 1.5 5 0 1.5 5 0 1.5 5 1.5 1.5 5 1.5 1.5 1.5 1.5 1.5 1.5	ed to und in 25 20 15 10 5 0 -10 -15 20 15 10 5 0 -10 5 0 -115 20 -10 -15 20 -10 -15 20 -10 -15 20 -10 -15 20 -10 -15 -15 -10 -15 -15 -10 -15 -15 -15 -15 -15 -15 -15 -15	t *5.7 6.0 5.9 5.8 *5.4 *5.8 5.8 5.8 5.8 5.8 *5.8 *4.7 *4.8 *5.2 *5.7 5.8	ng UC Ib 12,850 12,610 12,450 '11,760 '12,560 12,670 12,460 12,400 '10,550 '11,410 '12,500 12,460	Acro t 4.0 3.9 3.8 3.7 3.7 4.0 3.8 3.7 3.7 4.2 4.1 4.0 3.8 3.7	Ib 8,370 8,140 7,990 8,670 8,450 8,200 8,940 8,820 8,560 8,250 8,000	4.6	ng UC Ib	Acro t 3.0		t *5.7 *5.6 *5.7 5.4 5.3 5.4 5.9 *7.0 *7.2 *4.9 *4.6 *4.5 *4.6 *5.5 *5.5 *6.5 *6.9 *4.9 *4.9 *4.9 *4.9 *4.9 *4.9 *4.6 *5.7 *4.9 *4.6 *5.7 *4.9 *4.6 *5.5 *4.6 *5.5 *4.6 *5.5 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.6 *4.9 *4.9 *4.9 *4.6 *4.5 *4.9 *4.9 *4.6 *4.5 *4.9 *4.9 *4.6 *4.5 *4.9 *4.9 *4.6 *4.5 *4.9 *4.8 *4.9 *5.9 *5.9 *5.9 *5.9 *5.9 *5.9 *5.9 *5.9 *5.9 *5.9 *5.9 *	Ib *12,540 *12,350 *12,350 *12,350 *12,350 *11,970 *11,890 *13,090 *15,470 *15,470 *15,750 *10,930 *10,120 *9,950 *10,220 10,840 *11,090 12,060 *14,380 *10,920 *10,800 9,900 9,9640 9,820	Acro t *5.7 4.7 3.9 3.5 3.4 3.5 3.4 4.6 6.8 4.2 3.6 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	Ib Ib *12,540 10,400 8,630 7,790 7,650 8,380 10,180 15,530 *10,930 9,480 8,020 7,300 7,150 9,180 12,930 10,160 8,0600 6,450 6,450 6,250 6,340	5.6 6.9 7.6 8.0 8.1 7.9 7.4 6.5 5.0 6.2 7.3 8.0 8.4 8.5 8.3 7.8 6.9 5.6 7.1 8.1 8.3 7.8 9.1 9.2 9.0	18.0 22.3 24.8 26.2 26.5 25.8 24.1 21.1 16.0 19.9 23.8 26.2 27.5 27.8 27.1 25.5 22.7 18.0 26.2 27.5 27.8 27.1 25.5 22.7 18.0 26.5 28.6 29.8 30.1 29.5		

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

LIFTING CAPACITY EC220ELR

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

		Lifting relate grou	ed to		6.0m ((20')			7.5m	(25')			9.0m	(30')			10.5m	n (35')	
		lev		Alo	ng UC	Acro	ss UC	Aloi	ng UC	Acro	ss UC	Alor	ng UC	Acro	oss UC	Alor	ng UC	Acro	oss UC
		m	in	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb
	8.85m (29'0")		40																
Arm:	6.25m (20'6")		35														*3,530		*3,530
Shoe:	800mm (32")		30														*4,750		*4,750
CWT:	5 000kg	7.5	25													*2.2	*4,910	*2.2	*4,91
	(11 030lb)	6.0	20											10.0		*2.4	*5,240	*2.4	*5,24
		4.5	15									*2.8	*6,140	*2.8	*6,140	*2.6	*5,700	2.5	5,450
		3.0	10	*4.6	*9,900	*4.6	*9,900	*3.7	*8,060	*3.7	*8,060	*3.2	*6,960	3.1	6,620	*2.9	*6,250	2.4	5,140
		1.5	5	*5.6	*12,040	5.0	10,860	*4.3	*9,370	3.7	8,000	*3.6	*7,820	2.9	6,140	*3.1	*6,830	2.2	4,830
		0	0	*6.4	*13,750	4.6	9,870	*4.9	*10,520	3.4	7,360	*4.0	*8,600	2.7	5,710	*3.4	*7,370	2.1	4,540
		-1.5	-5	*6.9	*14,860	4.3	9,270	*5.3	*11,380	3.2	6,910	4.1	8,920	2.5	5,390	3.3	7,170	2.0	4,31
		-3.0	-10	*7.1	*15,400	4.2	8,970	5.2	11,220	3.1	6,630	4.0	8,690	2.4	5,170	3.3	7,010	1.9	4,160
		-4.5	-15	*7.1	15,410	4.1	8,890	5.2	11,100	3.0	6,520	4.0	8,580	2.4	5,070	3.2	6,930	1.9	4,090
		-6.0	-20	*6.9	*14,980	4.2	8,980	5.2	11,130	3.0	6,550	4.0	8,600	2.4	5,080	3.2	6,960	1.9	4,110
		-7.5	-25	*6.5	*13,970	4.3	9,230	*5.2	*11130	3.1	6,710	4.0	8,750	2.4	5,220	3.3	7,130	2.0	4,27
		-9.0	-30	*5.7	*12,200	4.5	9,650	*4.6	*9,710	3.2	7,040	*3.6	*7,640	2.5	5,540				
		-10.5	-35	*4.4	*9,090	*4.4	*9,090	*3.4		*3.4									
		Lifting																	
		relate		12.0m (40')					13.5m	(45')		Max. reach							
		ground level		Along UC		Across UC		Along UC											
				Alo	ng LIC	Acro	OII 22	Alo		Acro	SSLIC	Alor		Acro	OII 22		1		
		lev	/el				-		-č		ss UC		ng UC		oss UC	m	ft		
		lev m	/el in	Alo t	ng UC Ib	Acro t	lb	Aloi t	ng UC Ib	Acro t	ss UC Ib	t	lb	t	lb				
		m 12.0	in 40				-		-č		1	t *0.8	lb *1,950	t *0.9	lb *1,950	10.3	33.1		
		m 12.0 10.5	in 40 35	t	lb	t	lb		-č		1	t *0.8 *0.8	lb *1,950 *1,780	t *0.9 *0.8	lb *1,950 *1,780	10.3 11.6	33.1 37.7		
		m 12.0 10.5 9.0	rel in 40 35 30	t *1.5	lb *2,610	t *1.5	lb *2,610		-č		1	t *0.8 *0.8 *0.8	lb *1,950 *1,780 *1,680	t *0.9 *0.8 *0.8	lb *1,950 *1,780 *1,680	10.3 11.6 12.6	33.1 37.7 41.1		
		m 12.0 10.5 9.0 7.5	vel in 40 35 30 25	t *1.5 *2.1	lb *2,610 *4,190	t *1.5 *2.1	lb *2,610 *4,190	t	lb	t	lb	t *0.8 *0.8 *0.8 *0.7	lb *1,950 *1,780 *1,680 *1,630	t *0.9 *0.8 *0.8 *0.7	lb *1,950 *1,780 *1,680 *1,630	10.3 11.6 12.6 13.4	33.1 37.7 41.1 43.7		
		lev m 12.0 10.5 9.0 7.5 6.0	vel in 40 35 30 25 20	t *1.5 *2.1 *2.3	lb *2,610 *4,190 *5,120	t *1.5 *2.1 2.1	lb *2,610 *4,190 4,420	t *1.3	lb *2,230	t *1.3	lb *2230	t *0.8 *0.8 *0.8 *0.7 *0.7	lb *1,950 *1,780 *1,680 *1,630 *1,620	t *0.9 *0.8 *0.8 *0.7 *0.7	lb *1,950 *1,780 *1,680 *1,630 *1,620	10.3 11.6 12.6 13.4 13.9	33.1 37.7 41.1 43.7 45.6		
		m 12.0 10.5 9.0 7.5 6.0 4.5	rel in 40 35 30 25 20 15	t *1.5 *2.1 *2.3 *2.5	lb *2,610 *4,190 *5,120 *5,410	t *1.5 *2.1 2.1 2.0	lb *2,610 *4,190 4,420 4,260	t *1.3 *1.8	b *2,230 *3,440	t *1.3 1.6	lb *2230 3,330	t *0.8 *0.8 *0.8 *0.7 *0.7 *0.7	Ib *1,950 *1,780 *1,680 *1,630 *1,620 *1,650	t *0.9 *0.8 *0.8 *0.7 *0.7 *0.7	Ib *1,950 *1,780 *1,680 *1,630 *1,620 *1,650	10.3 11.6 12.6 13.4 13.9 14.3	33.1 37.7 41.1 43.7 45.6 46.9		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0	rel in 40 35 30 25 20 15 10	t *1.5 *2.1 *2.3 *2.5 *2.6	lb *2,610 *4,190 *5,120 *5,410 *5,770	t *1.5 *2.1 2.1 2.0 1.9	lb *2,610 *4,190 4,420 4,260 4,060	t *1.3 *1.8 *2.2	*2,230 *3,440 *4,230	t *1.3 1.6 1.5	lb *2230 3,330 3,220	t *0.8 *0.8 *0.8 *0.7 *0.7 *0.7 *0.8	Ib *1,950 *1,780 *1,680 *1,630 *1,630 *1,650 *1,650	t *0.9 *0.8 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8	Ib *1,950 *1,780 *1,680 *1,630 *1,630 *1,620 *1,650 *1,710	10.3 11.6 12.6 13.4 13.9 14.3 14.5	33.1 37.7 41.1 43.7 45.6 46.9 47.6		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5	rel in 40 35 30 25 20 15 10 5	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8	lb *2,610 *4,190 *5,120 *5,410 *5,770 *6,160	t *1.5 *2.1 2.1 2.0 1.9 1.8	lb *2,610 *4,190 4,420 4,260 4,060 3,850	t *1.3 *1.8 *2.2 2.4	*2,230 *3,440 *4,230 *4,720	t *1.3 1.6 1.5 1.4	lb *2230 3,330 3,220 3,090	t *0.8 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810	t *0.9 *0.8 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5 0	rel in 40 35 30 25 20 15 10 5 0	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8 2.82	lb *2,610 *4,190 *5,120 *5,410 *5,770 *6,160 6,070	t *1.5 *2.1 2.1 2.0 1.9 1.8 1.7	lb *2,610 *4,190 4,420 4,260 4,060 3,850 3,660	t *1.3 *1.8 *2.2 2.4 2.3	*2,230 *3,440 *4,230 *4,720 *4,830	t *1.3 1.6 1.5 1.4 1.4	lb *2230 3,330 3,220 3,090 2,980	t *0.8 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950	t *0.9 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6 14.4	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8 47.8		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5 0 -1.5	rel in 40 35 30 25 20 15 10 5 0 -5	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8 2.82 2.74	lb *2,610 *4,190 *5,120 *5,410 *5,770 *6,160 6,070 5,910	t *1.5 *2.1 2.0 1.9 1.8 1.7 1.6	Ib *2,610 *4,190 4,420 4,260 4,060 3,850 3,660 3,510	t *1.3 *1.8 *2.2 2.4 2.3 2.3	*2,230 *3,440 *4,230 *4,720 *4,830 *4,250	t *1.3 1.6 1.5 1.4 1.4 1.4	lb *2230 3,330 3,220 3,090 2,980 2,890	t *0.8 *0.8 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8 *0.9 *1.0	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150	t *0.9 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8 *0.9 *1.0	Ib *1,950 *1,780 *1,680 *1,630 *1,620 *1,650 *1,710 *1,810 *1,950 *2,150	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6 14.4 14.2	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8 47.8 47.4 46.5		
		lev m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5 0 -1.5 -3.0	rel in 40 35 30 25 20 15 10 5 0 -5 -5	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8 2.82 2.74 2.69	lb *2,610 *4,190 *5,120 *5,410 *5,770 *6,160 6,070 5,910 5,800	t *1.5 *2.1 2.1 2.0 1.9 1.8 1.7 1.6 1.6	Ib *2,610 *4,190 4,420 4,260 4,060 3,850 3,660 3,510 3,410	t *1.3 *1.8 *2.2 2.4 2.3	*2,230 *3,440 *4,230 *4,720 *4,830	t *1.3 1.6 1.5 1.4 1.4	lb *2230 3,330 3,220 3,090 2,980	t *0.8 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1	Ib *1,950 *1,780 *1,680 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150 *2,430	t *0.9 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,610 *1,810 *1,950 *2,150 *2,430	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6 14.4 14.2 13.7	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8 47.4 46.5 45.0		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5 0 -1.5 -3.0 -4.5	rel in 40 35 20 25 20 15 10 5 0 -5 -10 -15	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8 2.82 2.74 2.69 2.67	Ib *2,610 *4,190 *5,120 *5,120 *5,410 *5,770 *6,160 6,070 5,910 5,800 5,780	t *1.5 *2.1 2.0 1.9 1.8 1.7 1.6 1.6 1.6	Ib *2,610 *4,190 4,420 4,260 4,060 3,850 3,660 3,510 3,410 3,380	t *1.3 *1.8 *2.2 2.4 2.3 2.3	*2,230 *3,440 *4,230 *4,720 *4,830 *4,250	t *1.3 1.6 1.5 1.4 1.4 1.4	lb *2230 3,330 3,220 3,090 2,980 2,890	t *0.8 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150 *2,430 *2,850	t *0.9 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150 *2,430 *2,850	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6 14.4 14.2 13.7 13.1	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8 47.4 46.5 45.0 42.9		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5 0 -1.5 -3.0 -4.5 -6.0	rel in 40 35 30 25 20 15 10 5 0 -5 -10 -15 -20	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8 2.82 2.74 2.69	lb *2,610 *4,190 *5,120 *5,410 *5,770 *6,160 6,070 5,910 5,800	t *1.5 *2.1 2.1 2.0 1.9 1.8 1.7 1.6 1.6	Ib *2,610 *4,190 4,420 4,260 4,060 3,850 3,660 3,510 3,410	t *1.3 *1.8 *2.2 2.4 2.3 2.3	*2,230 *3,440 *4,230 *4,720 *4,830 *4,250	t *1.3 1.6 1.5 1.4 1.4 1.4	lb *2230 3,330 3,220 3,090 2,980 2,890	t *0.8 *0.8 *0.7 *0.7 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3 *1.6	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150 *2,430 *2,850 *3,490	t *0.9 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3 1.6	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150 *2,430 *2,850 3,460	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6 14.4 14.2 13.7 13.1 12.3	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8 47.8 47.4 46.5 47.4 46.5 45.0 42.9 40.0		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5 0 -1.5 -3.0 -4.5 -6.0 -7.5	rel in 40 35 30 25 20 15 10 5 0 -15 -10 -15 -20 -25	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8 2.82 2.74 2.69 2.67	Ib *2,610 *4,190 *5,120 *5,120 *5,410 *5,770 *6,160 6,070 5,910 5,800 5,780	t *1.5 *2.1 2.0 1.9 1.8 1.7 1.6 1.6 1.6	Ib *2,610 *4,190 4,420 4,260 4,060 3,850 3,660 3,510 3,410 3,380	t *1.3 *1.8 *2.2 2.4 2.3 2.3	*2,230 *3,440 *4,230 *4,720 *4,830 *4,250	t *1.3 1.6 1.5 1.4 1.4 1.4	lb *2230 3,330 3,220 3,090 2,980 2,890	t *0.8 *0.8 *0.7 *0.7 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3 *1.6 *2.0	Ib *1,950 *1,780 *1,680 *1,650 *1,650 *1,710 *1,810 *2,150 *2,430 *2,850 *3,490 *4,590	t *0.9 *0.8 *0.8 *0.7 *0.7 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3 1.6 1.8	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,710 *1,810 *1,950 *2,150 *2,850 3,460 4,100	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6 14.4 14.2 13.7 13.1 12.3 11.2	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8 47.4 46.5 45.0 42.9 40.0 36.3		
		m 12.0 10.5 9.0 7.5 6.0 4.5 3.0 1.5 0 -1.5 -3.0 -4.5 -6.0	rel in 40 35 20 20 15 10 5 0 -5 -10 -5 -10 -15 -20 -25 -30	t *1.5 *2.1 *2.3 *2.5 *2.6 *2.8 2.82 2.74 2.69 2.67	Ib *2,610 *4,190 *5,120 *5,120 *5,410 *5,770 *6,160 6,070 5,910 5,800 5,780	t *1.5 *2.1 2.0 1.9 1.8 1.7 1.6 1.6 1.6	Ib *2,610 *4,190 4,420 4,260 4,060 3,850 3,660 3,510 3,410 3,380	t *1.3 *1.8 *2.2 2.4 2.3 2.3	*2,230 *3,440 *4,230 *4,720 *4,830 *4,250	t *1.3 1.6 1.5 1.4 1.4 1.4	lb *2230 3,330 3,220 3,090 2,980 2,890	t *0.8 *0.8 *0.7 *0.7 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3 *1.6	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150 *2,430 *2,850 *3,490	t *0.9 *0.8 *0.7 *0.7 *0.7 *0.8 *0.8 *0.8 *0.8 *0.9 *1.0 *1.1 *1.3 1.6	Ib *1,950 *1,780 *1,680 *1,630 *1,650 *1,650 *1,710 *1,810 *1,950 *2,150 *2,430 *2,850 3,460	10.3 11.6 12.6 13.4 13.9 14.3 14.5 14.6 14.4 14.2 13.7 13.1 12.3	33.1 37.7 41.1 43.7 45.6 46.9 47.6 47.8 47.8 47.4 46.5 47.4 46.5 45.0 42.9 40.0		

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

Equipment

STANDARD EQUIPMENT

Engine
Turbocharged, 4 stroke diesel engine with water cooling, direct
injection and charged air cooler that meets Tier 4f EU (Stage IV)
requirements
Air filter with indicator
Air intake heater
Cyclone pre-cleaner
Electric engine shut-off
Fuel filter and water separator
Alternator, 80 A
Tropical cooling system (50 deg. C)
Electric/Electronic control system
Contronics
Advanced mode control system
Self-diagnostic system
Satellite Caretrack and 3yr-Caretrack subscription
Machine status indication
Engine speed sensing power control
Automatic idling system
One-touch power boost
Safety stop/start function
Adjustable LCD color monitor
Master electrical disconnect switch
Engine restart prevention circuit
High-capacity halogen or LED lights:
Frame-mounted 2
Boom-mounted 1
Travel alarm
Batteries, 2 x 12 V / 140 Ah
Start motor, 24 V / 5.5 kW
Hydraulic system
Boom float function without HRV
Automatic sensing hydraulic system
Summation system
Arm priority
Swing priority
Pilot control pattern change
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
Undercover (heavy-duty)
Full height counterweight:
4 200 kg (9,260 lb) - Long Crawler (L)
5 000 kg (11,030 lb) - Long Reach (LR)

Cab and interior ROPS (ISO12117-2) certified cab Silicon oil and rubber mounts with spring Opening top hatch Control lock out lever Travel pedals and hand levers Adjustable operator seat with heater and joystick control console Control joysticks with 4 switches each Straight travel pedal Heater & air-conditioner, automatic Flexible antenna Radio with MP3 and USB Jack with bluetooth Cab, all-weather sound suppressed, includes: Cup holders Door locks Tinted glass Floor mat Horn Large storage area Pull-up type front window Removable lower windshield Seat belt Safety glass Sun screens, front, roof, rear Windshield wiper with intermittent feature Rear view camera Master key Undercarriage Undercover Hydraulic track adjusters Greased and sealed track link Track Guard 800 mm (32") shoe with triple grousers Digging equipment Boom: monoblock 5.7 m (18'8"), Long Reach 8.85 m (29'0") Arm: 2.9 m (9'6"), Long Reach 6.25 m (20'6") Manual centralized lubrication Linkage without lifting eye

OPTIONAL EQUIPMENT
Engine
Block heater: 120 V
Oil bath pre-cleaner
Diesel coolant heater, 5 kW
Water separator with heater
Auto engine shutdown
Fuel filler pump: 50 l/min (13.2 gpm), with automatic shut-off
Standard cooling system by fan clutch (40 deg. C)
Electric
Extra work lights (Halogen or LED):
Boom-mounted 1
Cab-mounted 3
Counterweight-mounted 1
Anti-theft system
Rotating warning beacon
Flashing beacon, LED
Side view camera
Dig assist 2D/In-field/Steelwrist
Volvo smart View (VSV)

lydraulic system	Cab and interior
Boom hose rupture valve (HRV) with overload warning device	Cab-mounted falling object protective structure (FOPS)
Arm hose rupture valve (HRV)	Side view camera
Boom float function with HRV	Rain shield
Hydraulic piping:	Smoker kit (ashtray and lighter)
Work tool management system (up to 20 programmable	Safety net for front window
memories)	Lower wiper with intermittent control
Hammer & shear, 1 and 2 pump flow	Cleaning air gun
Slope & rotator (40lpm/11gpm or 60lpm/16gpm)	Anti-vandalism kit
Extra for slope & rotator	Undercarriage
Grapple	Full track guard
Oil leak (drain) line	500mm (20") / 600mm (24") / 600mm HD (24") /
Quick coupler piping	700mm (28") / 900mm (36") shoe with triple grousers
Breaker & shear pressure pre-setting	700 mm (28") shoe with double grousers
Additional return filter	600 mm (24") shoe with single grouser
Volvo hydraulic quick coupler S1, S1 without hook	Digging equipment
Hydraulic oil, biodegradable 46	Boom: 5.7 m (18'8") monoblock, heavy duty
Hydraulic oil, longlife oil 32, 68	Boom: 5.57 m (18'3") 2-piece boom
Cab and interior	Arm: 2.0 m (6'7"), 2.5 m (8'2"), 2.9 m (9'6"), 3.5 m (11'6")
Fabric seat without heater	Linkage with lifting eye
Fabric seat with heater and air suspension	Service
Control joysticks with semi-long	Tool kit, daily maintenance
Control joysticks with 3 switch & 1 propotional	Tool kit, full scale
Falling object guard (FOG)	
Frame-mounted	
Cab-mounted	
Cab-mounted	

Selection of Volvo optional equipment

Auto engine shutdown



LED lights



Two-piece boom



Fuel fill pump



Diesel coolant heater



Cleaning air gun



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



Volvo Construction Equipment