



Volvo Construction Equipment

# EC480E

VOLVO EXCAVATORS 45.6-53.9t 373hp



# E is for efficiency.

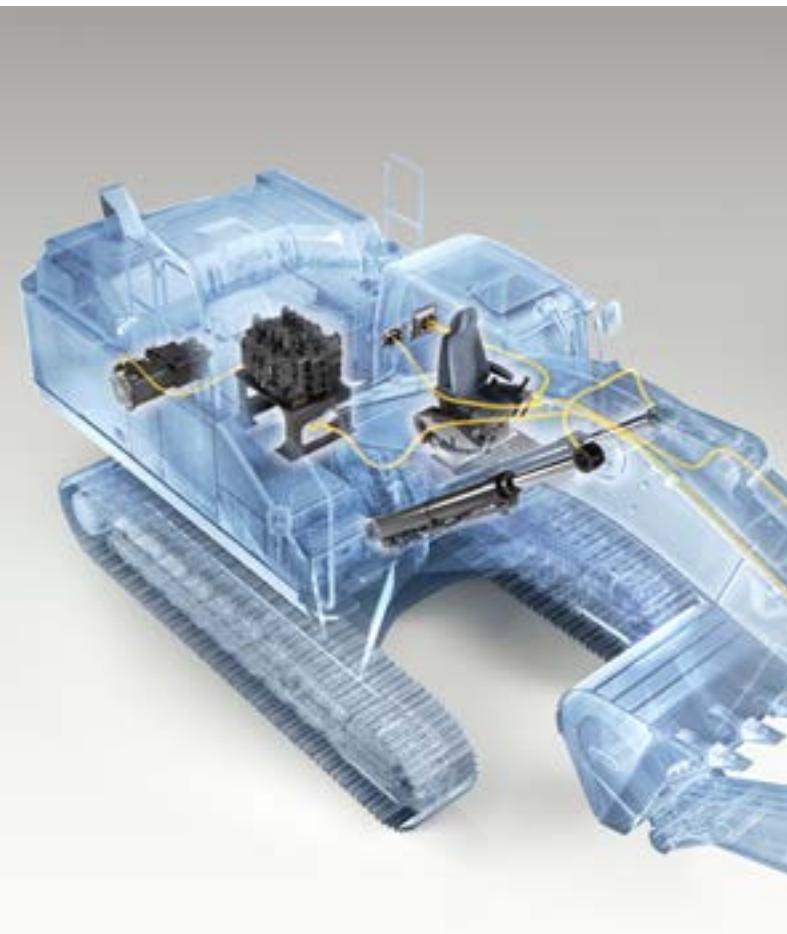
Introducing the EC480E crawler excavator from Volvo – a powerful and efficient production machine designed to reduce fuel consumption and increase productivity. With advanced technology including Volvo's unique ECO mode and a new electro-hydraulic control system, the EC480E delivers fuel efficiency improvement.

## Advanced hydraulics

The new electro-hydraulic system uses intelligent technology to control on-demand flow and reduce internal losses in the hydraulic circuit. This increases controllability, shortens cycle times and improves fuel efficiency – resulting in higher productivity and performance.

## Work modes

Volvo's unique, integrated work mode system now includes the G4 mode for optimum fuel efficiency and machine performance. Operators can choose the best work mode for the task at hand – select from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max).



## Automatic idling system

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

## Auto engine shut down

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

## Fuel consumption display

A gauge bar on the monitor measures both instantaneous fuel consumption and average fuel consumption. This allows machine owners and operators to monitor fuel usage on different job sites.



#### ECO mode

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



#### Human Machine Interface (HMI)

All machine interfaces – including the joysticks, keypad and LCD monitor – are ergonomically positioned and designed for optimum control and efficiency. For operator convenience and ease of use, the number of switches has been significantly reduced.

# Productivity at your fingertips.

The EC480E has been expertly designed with both the machine owner and operator in mind. With ideally placed controls and switches and a user-friendly LCD monitor and keypad, the task at hand becomes easier and operators will work with increased efficiency – resulting in more productivity.

## Keypad

The optimally positioned keypad allows the operator to easily navigate through the LCD monitor and activate machine functions in a safe and comfortable way. The functionality of the camera, air conditioning and lights can be customized via the hot key – enabling the operator to select and save desired configurations.

## LCD monitor

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



## Shortcut switch

The windshield wipers, camera, audio mute or power max function can be assigned to a shortcut switch located on the joystick. This allows the operator to easily control the selected function by simply pressing a switch.

## Seatbelt warning alarm

If the seatbelt is not fastened when the ignition key is turned, a sensor triggers an alarm which sounds for three seconds.

## Bluetooth®

For added convenience, operators can now connect a Bluetooth device to the machine.

# The source of productivity.

Volvo puts customer needs at the heart of its design process. That's why the EC480E not only increases productivity with 5% faster cycle times, but also improves fuel efficiency and meets the latest Stage IV/Tier 4 Final engine emission legislation. Capitalize on high torque at low rpm and experience superior performance and reduced fuel consumption.

## Diesel-driven heater

The optional diesel-driven coolant heater helps to start the engine in low temperatures while simultaneously heating the cab. The heater can be set in advance to engage at a specific date and time.



## Volvo After Treatment System

During the fully automatic regeneration process, particulate matter in the Diesel Particulate Filter is oxidized at low exhaust temperatures via passive regeneration. Volvo uses Selective Catalytic Reduction technology where AdBlue®/Diesel Exhaust Fluid is heated to produce ammonia. This causes a chemical reaction which converts NOx to nitrogen and CO<sub>2</sub> – both of which are naturally found in the air. Neither process interrupts machine operation, performance or productivity.

## Cooling fan

The hydraulically-driven, electronically controlled cooling fan regulates the temperature of the vital components. It automatically activates only when needed – reducing fuel consumption and noise. The optional reversible functionality – which blows air in the opposite direction – enables self-cleaning of the cooling units.



#### Volvo engine

Featuring proven, advanced technology and built on decades of experience, Volvo's robust D13 Stage IV/Tier 4 Final engine boasts more power while reducing both fuel consumption and emissions and delivering superior quality, reliability and durability.



#### **Reinforced undercarriage**

 With a strong three-piece undercarriage and a high strength tensile steel X-shaped frame, Volvo excavators are built to withstand tough conditions. For superior durability, the undercarriage components are reinforced – ensuring long life and high uptime.

# Reinforced quality.

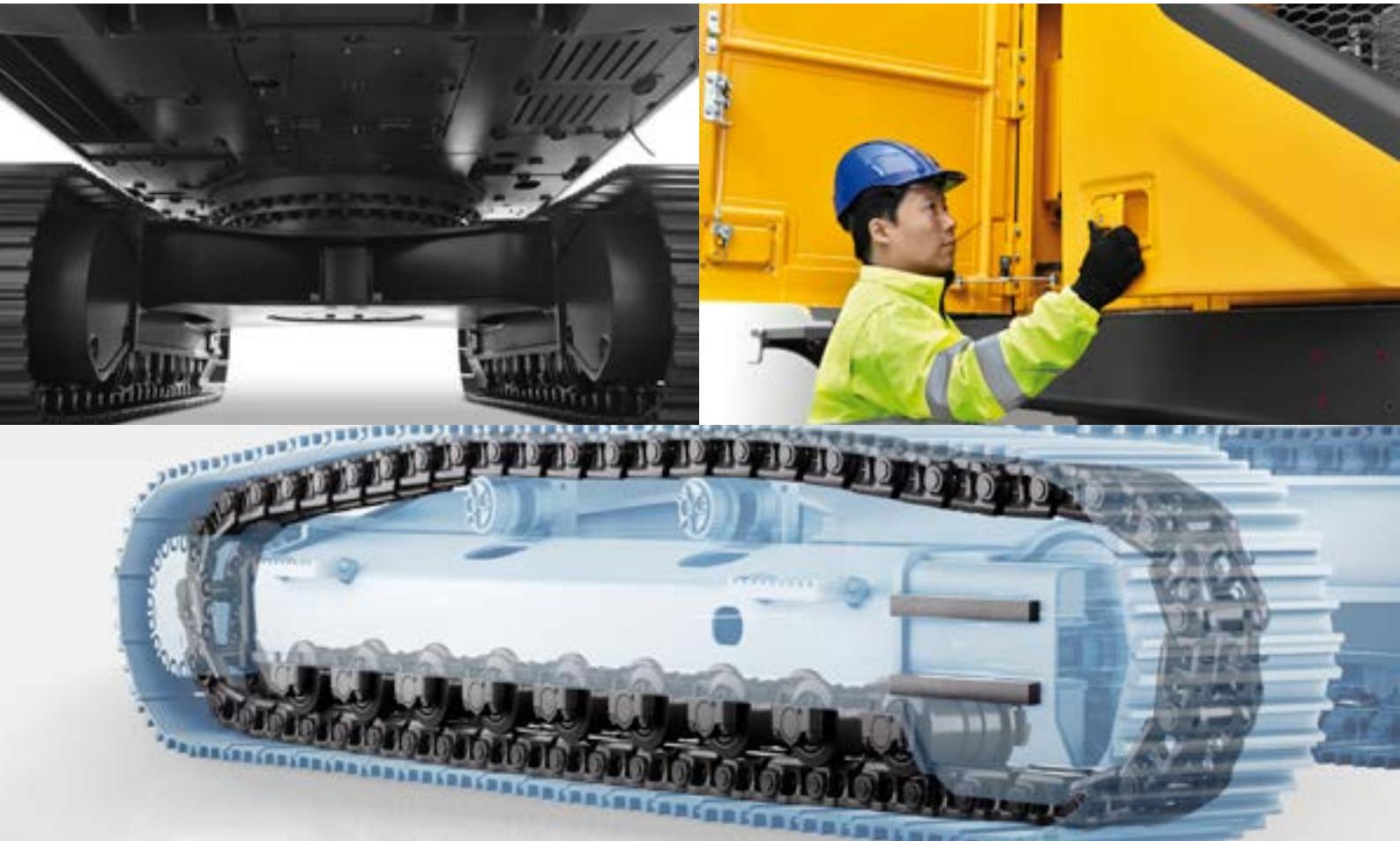
If you're looking for a strong and reliable excavator to handle tough conditions then look no further than the EC480E. Whether you're working on a quarry, in mass excavation or any other application, this robust, heavy-duty production machine has the quality and durability you need to work on demanding job sites.

## Superstructure undercover

The heavy-duty superstructure undercover plates increase durability by providing additional protection to the underside of the machine in tough applications – preventing damage from rock and debris.

## Doors and hinges

Volvo's durable design features a rigid side door with a robust handle and hinges for superior durability.



## Robust design

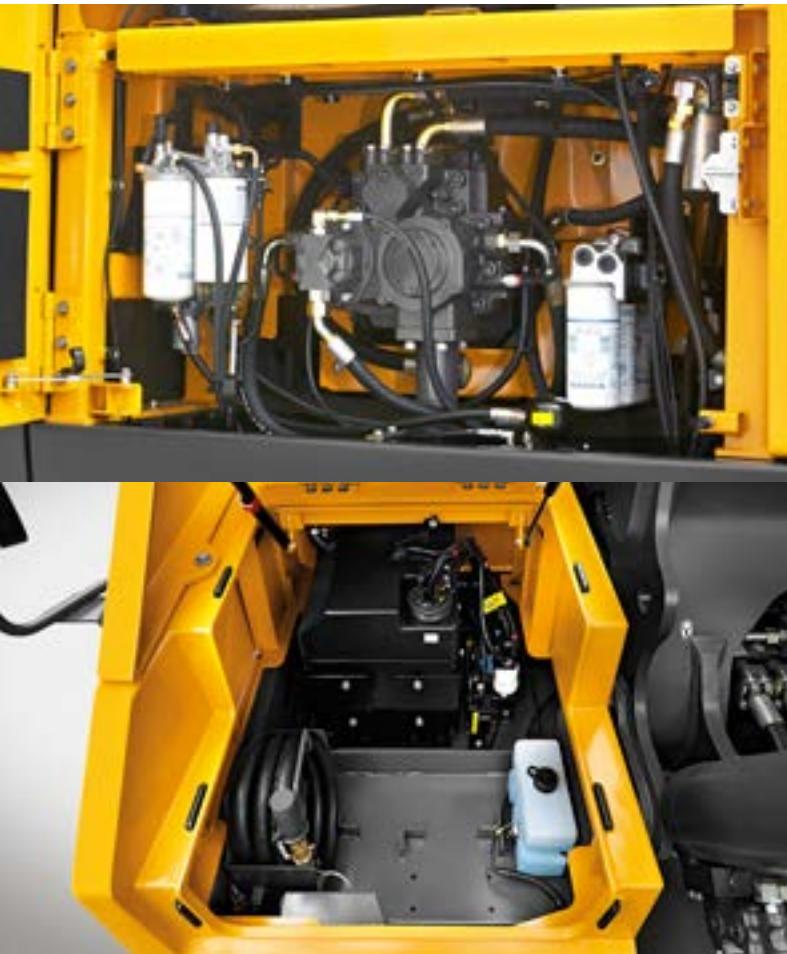
The reinforced idler frame, track links and bottom rollers are built to withstand tough conditions for improved durability and reliability in demanding applications.

# Upping your uptime.

Maintaining and servicing construction equipment is essential in order to sustain maximum performance and productivity – but this shouldn't be a complicated or time consuming task. With large, wide opening compartment doors and grouped service points, Volvo makes maintenance easy. Increase your uptime with Volvo.

## Service access

Grouped filters are quick and easy to access from ground level. To facilitate fast servicing, grouped greasing points are easily accessed with the machine in one position.



## Storage space

A large storage compartment provides a safe and convenient location for items including a toolbox and grease can.

## Anti-slip plates

Punched anti-slip plates provide superior grip and increased safety. The design facilitates easy cleaning.



## Handrails

Handrails and full size guardrails provide safe and easy access to the cab and superstructure.



#### Single module cooler

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.



## 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 – delivering maximum productivity.

# The perfect match.

Maximize your productivity and profitability with the EC480E and Volvo's durable range of attachments. Increase your versatility, access more applications and effectively perform a variety of tasks – all while experiencing faster cycle times and excellent control. Get the most out of your excavator with Volvo.

## Bucket range

Volvo's general purpose buckets are the perfect tool for digging and re-handling in soft to medium conditions. Heavy-duty buckets are intended for productive digging in compact materials. Both provide maximum productivity and long life.



## Optional auxiliary hydraulics

Factory fitted breaker and shear piping (X1) as well as tilt and rotator piping (X3) increase versatility by enabling a wide range of additional attachments to be used.



## S-type quick coupler

The Volvo S-type quick coupler is designed to work with Volvo attachments – delivering ultimate compatibility and unrivalled performance.

## Universal quick coupler

The Volvo universal quick coupler offers maximum versatility. It picks up a variety of attachments from various manufacturers and meets new safety regulations.

## Genuine Volvo wear parts

Volvo offers a selection of economic, replaceable wear parts including high quality teeth, segments, side cutters, adapters and shrouds to protect the bucket and ensure long life.

# Do more.



## Safe access

Punched anti-slip plates, handrails and full size guardrails provide safe and easy access to the machine.



## HMI

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

## Advanced hydraulics

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

## Quick coupler

The Volvo quick coupler offers maximum versatility, picking up a wide variety of attachments.



## Attachments

Volvo's durable attachments have been purpose-built to deliver maximum productivity and long service life in combination with Volvo machines.



## Reinforced undercarriage

The undercarriage components are reinforced to ensure long life, high uptime and ultimate durability in tough conditions.

## Volvo After Treatment System

The automatic regeneration process takes place without interrupting machine operation, performance or productivity.

## **AdBlue®**

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

## **LCD monitor**

The new, eight inch LCD monitor clearly displays machine status information for easy operation and increased productivity.

## **ECO mode**



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

## **Service access**

Grouped filters are quick and easy to access from ground level via large, wide compartment doors.

## **Volvo engine**



Volvo's D13 Stage IV/Tier 4 Final engine boasts more power while reducing both fuel consumption and emissions and delivering superior quality, reliability and durability.

## **Single module cooler**

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.

# 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 EC480E in detail.

## Engine

The latest generation, Volvo engine Tier 4f (Stage IV) emissions compliant diesel engine fully meets the demands of the latest, emissions 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 pre-cleaner.

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 Tier 4f (Stage IV)	Volvo	D13J
Max power at	r/s / r/min	30 / 1800
Net, ISO 9249/SAE J1349	kW / hp	277 / 371
Gross, ISO 14396/SAE J1995	kW / hp	278 / 373
Max torque at	Nm / r/min	1 890 / 1 350
No. of cylinders		6
Displacement	l	12.8
Bore	mm	131
Stroke	mm	158

## Electrical system

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

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

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	200
Alternator	V / Ah	28 / 80

## Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

Max. slew speed	r/min	9.3
Max. slew torque	kNm	166.3

## 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	333.4
Max. travel speed	km/h	3.2 / 5.2
Gradeability	°	35

## Undercarriage

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

Track pads		2 x 52
Link pitch	mm	215.9
Shoe width, triple grouser	mm	600/600HD*/700/ 800/900
Shoe width, double grouser	mm	600
Bottom rollers		2 x 9
Top rollers		2 x 2
Top rollers (retractable)		2 x 3

\* Not HD shoe but HD track link

## Sound Level

Sound level in cab according to ISO 6396

LpA	dB(A)	71
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External sound level according to ISO 6395 and EU Noise

Directive (2000/14/EC) and 474-1:2006 +A1:2009

LwA	dB(A)	106
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## Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom and arm regeneration provides optimum performance. The following important functions are included in the system:

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

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

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

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

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

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 376
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Pilot pump, Type Gear pump

Maximum flow	l/min	32
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## Hydraulic motors

Travel: Variable displacement axial piston motor with mechanical brake

Slew: Fixed displacement axial piston motor with mechanical brake

## Relief valve setting

Implement	MPa	32.4/35.3
Travel circuit	MPa	32.4
Slew circuit	MPa	25.8
Pilot circuit	MPa	3.9

## Hydraulic cylinders

Mono boom		2
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Bore x Stroke	ø x mm	165 x 1 590
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Arm		1
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Bore x Stroke	ø x mm	190 x 1 850
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Bucket		1
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Bore x Stroke	ø x mm	165 x 1 335
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ME Bucket		1
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Bore x Stroke	ø x mm	175 x 1 335
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## Service refill capacities

Fuel tank		680
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AdBlue® tank		62.5
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Hydraulic system, total		525
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Hydraulic tank		270
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Engine oil		42
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Engine coolant		60
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Slew reduction unit		2 x 6
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Travel reduction unit		2 x 7.5
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## Cab

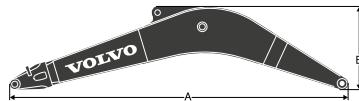
The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into 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.

# Dimensions.

**Boom**



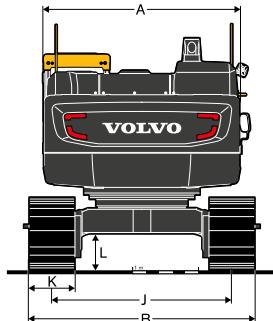
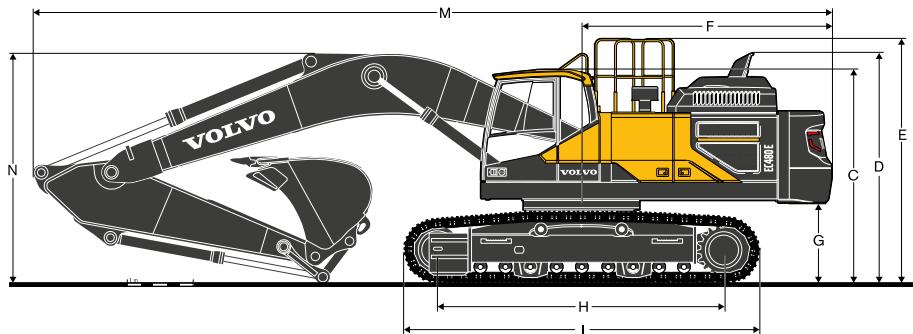
**Arm**



	Unit	mono	mono	Description	Unit				
Boom	m	6.5 ME	7.0 HD	Arm	m	2.55 ME	3.35 HD	3.9	4.8
A	mm	6 750	7 250	A	mm	3 770	4 590	5 140	6 100
B	mm	2 000	1 840	B	mm	1 235	1 235	1 240	1 250
Width	mm	960	960	Width	mm	600	600	600	600
Weight	kg	4 368	4 403	Weight	kg	2 416	2 639	2 664	2 938

\* Includes arm cylinder, piping and pin

\* Includes bucket cylinder, linkage and pin

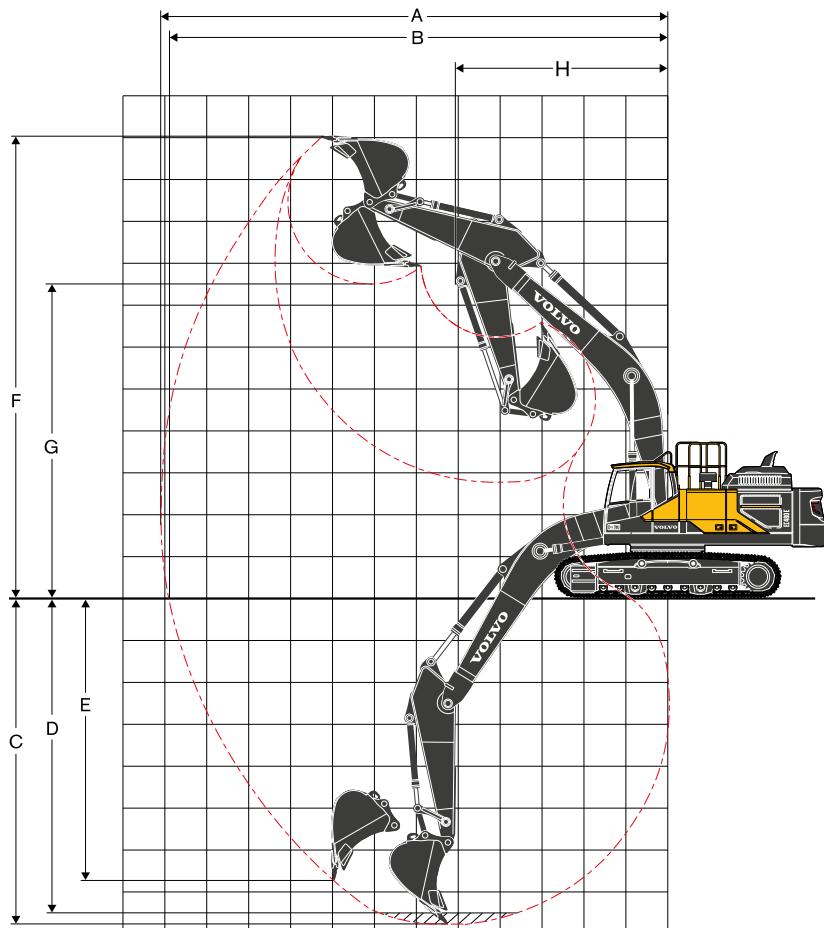


Description	Unit	EC480EL fixed undercarriage					EC480EL retractable undercarriage				
		6.5	7.0	6.5	7.0	6.5	7.0	6.5	7.0	6.5	7.0
Boom	m	6.5	7.0	6.5	7.0	6.5	7.0	6.5	7.0	6.5	7.0
Arm	m	2.55	2.55	3.35	3.9	4.8	2.55	2.55	3.35	3.9	4.8
A. Overall width of upper structure	mm	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990
B. Overall width (retracted)	mm	3 440	3 440	3 440	3 440	3 440	3 090	3 090	3 090	3 090	3 090
Overall width (extended)	mm						3 590	3 590	3 590	3 590	3 590
C. Overall height of cab	mm	3 282	3 282	3 282	3 282	3 282	3 392	3 392	3 392	3 392	3 392
D. Overall height of diffuser	mm	3 525	3 525	3 525	3 525	3 525	3 650	3 650	3 650	3 650	3 650
E. Overall height of guard rail	mm	3 747	3 747	3 747	3 747	3 747	3 857	3 857	3 857	3 857	3 857
F. Tail swing radius(Counterweight >9 050Kg)	mm	3 800	3 800	3 800	3 800	3 800	3 800	3 800	3 800	3 800	3 800
Tail swing radius(Counterweight 9 750Kg<)	mm	3 880	3 880	3 880	3 880	3 880	3 880	3 880	3 880	3 880	3 880
G. Counterweight clearance *	mm	1 211	1 211	1 211	1 211	1 211	1 321	1 321	1 321	1 321	1 321
Removal Counterweight clearance *	mm	1 207	1 207	1 207	1 207	1 207	1 317	1 317	1 317	1 317	1 317
H. Tumbler length	mm	4 370	4 370	4 370	4 370	4 370	4 370	4 370	4 370	4 370	4 370
I. Track length	mm	5 370	5 370	5 370	5 370	5 370	5 370	5 370	5 370	5 370	5 370
J. Track gauge (retracted)	mm	2 740	2 740	2 740	2 740	2 740	2 390	2 390	2 390	2 390	2 390
Track gauge (extended)	mm						2 890	2 890	2 890	2 890	2 890
K. Shoe width	mm	700	700	700	700	700	700	700	700	700	700
L. Min. ground clearance *	mm	515	515	515	515	515	710	710	710	710	710
M. Overall length(Counterweight >9 050Kg)	mm	11 614	12 114	12 134	12 130	12 014	11 615	12 116	12 115	12 107	12 066
Overall length(Counterweight 9 750Kg<)	mm	11 694	12 194	12 214	12 210	12 094	11 695	12 196	12 195	12 187	12 146
N. Overall height of boom	mm	4 010	3 850	3 537	3 565	4 572	4 041	3 877	3 570	3 580	4 561

\* Without shoe grouser

# Specifications.

## WORKING RANGE



Description	Unit	EC480E *					EC480E, mechanically retractable width **				
		m	6.5 ME	7.0		6.5 ME	7.0		6.5 ME	7.0	
Boom	m	2.55	2.55	3.35	3.9	4.8	2.55	2.55	3.35	3.9	4.8
Arm	mm	10 934	11 453	12 146	12 645	13 366	10 934	11 453	12 146	12 644	13 366
A. Max. digging reach	mm	10 690	11 221	11 927	12 434	13 168	10 665	11 197	11 905	12 413	13 148
B. Max. digging reach on ground	mm	6 586	7 028	7 828	8 378	9 278	6 476	6 918	7 718	8 268	9 168
C. Max. digging depth	mm	6 418	6 860	7 686	8 250	9 167	3 608	6 750	7 576	8 139	9 057
D. Max. digging depth (2.44 m level)	mm	5 769	6 242	6 774	7 214	7 625	5 659	6 132	6 664	7 104	7 515
E. Max. vertical wall digging depth	mm	10 584	10 910	11 064	11 234	11 168	10 694	11 021	11 174	11 344	11 278
F. Max. cutting height	mm	6 957	7 310	7 526	7 713	7 744	7 067	7 420	7 636	7 823	7 854
G. Max. dumping height	mm	4 758	5 040	5 088	5 050	5 100	4 757	5 043	5 088	5 050	5 100
<b>Digging forces with direct fit bucket</b>											
Bucket radius	mm	1 923	1 810	1 810	1 810	1 810	1 923	1 810	1 810	1 810	1 810
Breakout force - bucket (Normal/Power boost)	SAE J1179 kN	253	230	230	230	230	253	230	230	230	230
	ISO 6015 kN	275	251	251	251	251	275	251	251	251	251
Tearout force - dipper arm (Normal/Power boost)	SAE J1179 kN	285	261	261	261	261	285	261	261	261	261
	ISO 6015 kN	311	284	284	284	284	311	284	284	284	284
	SAE J1179 kN	225	232	196	176	160	225	232	196	176	160
Rotation angle, bucket	°	169	183	183	183	183	169	183	183	183	183

\* FIXED UNDERCARRIAGE, Machine with pin-on bucket

\*\* RETRACTABLE UNDERCARRIAGE, Machine with pin-on bucket

## MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width	Operating weight	Ground pressure	Operating weight	Ground pressure
	mm	kg	kPa	kg	kPa
Triple grouser	600	47 961	87.5	49 011	89.4
	700	48 463	75.8	49 513	77.4
	800	48 972	67.0	50 015	68.4
	900	49 476	60.2	50 517	61.4
Triple grouser(HD)	600	48 075	87.7	49 125	89.6
Double grouser	600	48 013	87.6	49 063	89.5
<b>EC480EL with FIXED undercarriage,</b> 7.0 m boom, 3.35 m arm, 2 200 kg bucket, 9 750 kg counterweight			<b>EC480EL with RETRACTABLE undercarriage,</b> 7.0 m boom, 3.35 m arm, 2 200 kg bucket, 9 750 kg counterweight		

## BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC480EL fixed undercarriage						
						6.5 ME		7.0m Boom				
						600mm shoe, 9 050kg counterweight						
L	mm	kg	EA	ME2.55m	2.55m	3.35m	3.9m	4.8m				
Direct fit Buckets	General purpose	1 550	1 200	1 763	4	C	C	C	C	C	C	
		2 100	1 500	2 085	5	C	C	C	C	B	B	
		2 380	1 650	2 217	5	C	C	C	C	B	B	
		2 660	1 800	2 350	5	C	C	B	B	A	A	
		2 840	1 900	2 441	5	C	C	B	A	X	X	
	Heavy duty	3 310	2 150	2 712	6	C	B	A	X	X	X	
		2 100	1 500	2 316	5	D	D	D	C	B	B	
		2 380	1 650	2 453	5	D	D	C	B	A	A	
		2 660	1 800	2 606	5	D	C	B	A	X	X	
		2 660	1 800	2 565	5	D	C	B	B	B	X	
	Heavy duty	2 840	1 900	2 698	5	D	C	B	A	X	X	
		2 840	1 900	2 657	5	D	C	B	A	X	X	
Bucket type		Capacity	Cutting width	Weight	Teeth	EC480EL retractable undercarriage						
						6.5 ME		7.0m Boom				
						600mm shoe, 9 050kg counterweight						
L	mm	kg	EA	ME2.55m	2.55m	3.35m	3.9m	4.8m				
Direct fit Buckets	General purpose	1 550	1 200	1 763	4	C	C	C	C	C	C	
		2 100	1 500	2 085	5	C	C	C	C	C	C	
		2 380	1 650	2 217	5	C	C	C	C	B	B	
		2 660	1 800	2 350	5	C	C	C	B	B	B	
		2 840	1 900	2 441	5	C	C	C	B	A	A	
	Heavy duty	3 310	2 150	2 712	6	C	B	A	A	X	X	
		2 100	1 500	2 316	5	D	D	D	D	C	C	
		2 380	1 650	2 453	5	D	D	D	C	B	B	
		2 660	1 800	2 606	5	D	D	C	B	A	A	
		2 660	1 800	2 565	5	D	D	C	B	A	A	
	Heavy duty	2 840	1 900	2 698	5	D	D	B	B	X	X	
		2 840	1 900	2 657	5	D	D	B	B	B	A	

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

The recommendations are given as a guide only, based on typical operation conditions.

Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

X : Not recommended

### Maximum material density

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

# Specifications.

## LIFTING CAPACITY EC480EL

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 Along UC	3.0 m Across UC	4.5 m Along UC	6.0 m Across UC	7.5 m Along UC	9.0 m Across UC	10.5 m Along UC	Max. reach Along UC m
Boom : 6.5m	7.5 m kg								*12 260 10 950 7.3
Arm : 2.55m	6 m kg								*12 020 8 980 8.2
Shoe : 600mm	4.5 m kg								*12 020 7 970 8.7
CWT : 9 050kg	3 m kg			*19 760 19 760 *15 080 14 020 *12 920 10 050					11 850 7 480 8.9
	1.5 m kg			*23 490 19 950 *17 140 13 310 *13 940 9 700					11 720 7 360 8.9
	0 m kg			*17 070 *17 070 *18 690 12 770 *14 810 9 400					12 170 7 600 8.7
	-1.5 m kg			*25 150 19 040 *19 320 12 500 *15 010 9 220					*13 220 8 320 8.1
	-3 m kg			*18 520 *18 520 *24 790 19 130 *18 890 12 460 *14 780 9 200					*13 320 9 910 7.2
	-4.5 m kg			*28 510 *28 510 *22 150 19 420 *17 070 12 650					5.8
				*17 040 *17 040					
Boom : 7.0m	9.0 m kg								*11 710 *11 710 6.6
Arm : 2.55m	7.5 m kg								*11 270 9 550 7.9
Shoe : 600mm	6 m kg								*11 180 8 030 8.7
CWT : 9 050kg	4.5 m kg			*14 950 13 740 *12 500 9 930 *11 320 7 520					*11 260 7 210 9.2
	3 m kg			*17 080 12 990 *13 610 9 540 *11 670 7 350					10 790 6 800 9.5
	1.5 m kg			*18 570 12 480 *14 540 9 230 11 490 7 190					10 680 6 700 9.5
	0 m kg			*19 110 12 260 14 820 9 050 11 400 7 110					11 040 6 900 9.2
	-1.5 m kg			*24 260 18 880 *18 750 12 240 *14 780 9 020					12 010 7 470 8.7
	-3 m kg			*27 060 *27 060 *22 120 19 160 *17 360 12 410 *13 500 9 180					*12 490 8 680 7.9
	-4.5 m kg			*18 270 *18 270 *14 090 12 840					*12 200 11 400 6.6
Boom : 7.0m	9.0 m kg								*10 650 *10 650 7.2
Arm : 3.0m	7.5 m kg								*10 380 8 750 8.3
Shoe : 600mm	6 m kg								*10 360 7 430 9.1
CWT : 9 050kg	4.5 m kg			*18 750 *18 750 *14 010 13 790 *11 810 9 890 *10 690 7 460					*10 490 6 700 9.6
	3 m kg			*16 220 12 970 *13 000 9 460 *11 270 7 250					10 090 6 320 9.8
	1.5 m kg			*17 920 12 360 *14 040 9 100 11 360 7 050					9 980 6 210 9.8
	0 m kg			*19 110 12 260 14 820 9 050 11 400 7 110					10 270 6 360 9.6
	-1.5 m kg			*13 630 *13 630 *24 700 18 450 *18 680 11 970 14 560 8 790 11 220 6 920					11 070 6 840 9.1
	-3 m kg			*25 270 *25 270 *22 860 18 700 *17 650 12 090 *13 860 8 890					*11 990 7 830 8.3
	-4.5 m kg			*19 560 19 180 *15 150 12 440					*12 050 9 950 7.1
Boom : 7.0m	9.0 m kg								*10 080 *10 080 7.6
Arm : 3.35m	7.5 m kg								*9 470 8 200 8.7
Shoe : 600mm	6 m kg								*9 270 7 050 9.5
CWT : 9 050kg	4.5 m kg			*17 590 *17 590 *13 440 *11 430 10 010 *10 360 7 540					*9 340 6 390 9.9
	3 m kg			*22 320 19 770 *15 730 13 150 *12 680 9 560 *11 020 7 310					9 640 6 050 10.2
	1.5 m kg			*15 350 *15 350 *17 590 12 490 *13 820 9 180 11 410 7 090					9 530 5 940 10.2
	0 m kg			*18 910 18 400 *18 640 12 110 *14 580 8 910 11 240 6 940					9 780 6 070 9.9
	-1.5 m kg			*13 700 *13 700 *25 160 18 410 *18 790 11 980 14 560 8 800 11 190 6 890					10 470 6 480 9.4
	-3 m kg			*23 340 *23 340 *23 580 18 620 *18 020 12 060 *14 180 8 850					*11 610 7 330 8.7
	-4.5 m kg			*27 470 *27 470 *20 660 19 040 *15 940 12 340 *11 940 9 150					*11 790 9 080 7.5
Boom : 7.0m	9 m kg								*8 060 *8 060 8.3
Arm : 3.9m	7.5 m kg								*7 630 7 470 9.3
Shoe : 600mm	6 m kg								*7 490 6 510 10.0
CWT : 9 050kg	4.5 m kg			*12 430 *12 430 *10 750 10 160 *9 800 7 630					*7 550 5 940 10.4
	3 m kg			*20 560 20 370 *14 830 13 390 *12 090 9 680 *10 550 7 370 9 210 5 780					*7 800 5 630 10.7
	1.5 m kg			*20 860 19 030 *16 920 12 640 *13 350 9 250 *11 300 7 120 9 080 5 660					*8 260 5 530 10.7
	0 m kg			*20 810 18 450 *18 280 12 170 *14 280 8 930 11 230 6 930					*9 000 5 630 10.4
	-1.5 m kg			*9 630 *9 630 *13 700 *13 700 *25 520 18 320 *18 780 11 950 14 530 8 760 11 130 6 830					9 630 5 960 10.0
	-3 m kg			*16 090 *16 090 *21 130 *21 130 *24 410 18 440 *18 370 11 950 *14 450 8 750 11 170 6 870					10 750 6 640 9.3
	-4.5 m kg			*30 400 *30 400 *22 040 18 770 *16 850 12 150 *13 070 8 920					*11 330 7 960 8.2
	-6 m kg			*17 660 *17 660 *13 260 12 630					*11 290 10 990 6.7
Boom : 7.0m	9 m kg								*7 880 *7 880 9.2
Arm : 4.8m	7.5 m kg								*7 720 *7 720 7 020 6 540 10.1
Shoe : 600mm	6 m kg								*8 080 7 980 *8 090 6 060 *6 950 5 770 10.8
CWT : 9 050kg	4.5 m kg								*8 760 *7 720 *8 380 5 940 *7 040 5 290 11.2
	3 m kg			*17 390 *17 390 *13 050 *13 050 *10 870 9 810 *9 610 7 410 *8 850 5 770 *7 300 5 020 11.4					
	1.5 m kg			*21 700 19 470 *15 450 12 810 *12 310 9 290 *10 500 7 100 9 020 5 590 *7 740 4 910 11.4					
	0 m kg			*24 290 18 440 *17 250 12 150 *13 490 8 880 11 160 6 840 8 870 5 450 8 080 4 960 11.2					
	-1.5 m kg			*9 300 *9 300 *13 830 *13 830 *25 250 18 010 *18 260 11 780 *14 250 8 610 10 970 6 670 8 780 5 370 8 490 5 190 10.8					
	-3 m kg			*14 260 *14 260 *19 340 *19 340 *24 960 17 960 *18 420 11 650 *14 260 8 500 10 900 6 610					9 300 5 680 10.1
	-4.5 m kg			*19 970 *19 970 *26 530 *26 530 *23 480 18 160 *17 630 11 730 *13 820 8 550 *10 870 6 720					*10 600 6 590 9.1
	-6 m kg			*28 670 *28 670 *20 450 18 630 *15 490 12 030 *11 730 8 840					*11 050 8 450 7.8
Boom : 6.5m	7.5 m kg								*12 260 11 050 7.3
Arm : 2.55m	6 m kg								*12 020 9 060 8.2
Shoe : 700mm	4.5 m kg			*19 760 *19 760 *15 080 14 140 *12 920 10 140					*12 020 8 050 8.7
CWT : 9 050kg	3 m kg			*23 490 20 140 *17 140 13 430 *13 940 9 790					11 970 7 550 8.9
	1.5 m kg			*17 070 *17 070 *18 690 12 900 *14 810 9 490					11 840 7 430 8.9
	0 m kg			*25 150 19 220 *19 320 12 620 15 170 9 310					12 290 7 680 8.7
	-1.5 m kg			*18 520 *18 520 *24 790 19 310 *18 890 12 590 *14 780 9 290					*13 220 8 400 8.1
	-3 m kg			*28 510 *28 510 *22 150 19 610 *17 070 12 770					*13 320 10 000 7.2
	-4.5 m kg			*17 040 *17 040					5.8
Boom : 7.0m	9.0 m kg								*11 710 *11 710 6.6
Arm : 2.55m	7.5 m kg								*11 270 9 630 7.9
Shoe : 700mm	6 m kg								*11 180 8 110 8.7
CWT : 9 050kg	4.5 m kg								*11 260 7 280 9.2
	3 m kg								*10 910 6 870 9.5
	1.5 m kg								*10 800 6 770 9.5
	0 m kg								11 160 6 970 9.2
	-1.5 m kg								12 130 7 550 8.7
	-3 m kg								*12 490 8 770 7.9
	-4.5 m kg								*12 200 11 500 6.6

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 EC480EL

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	9.0 m	10.5 m	Max. reach
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Along UC
Boom : 7.0m	9.0 m kg					*10 020	*10 020		*10 080 *10 080 7.6
Arm : 3.35m	7.5 m kg					*9 760	*9 760		*9 470 8 280 8.7
Shoe : 700mm	6 m kg					*10 360	*10 360 *9 900 7 800		*9 270 7 120 9.5
CWT : 9 050kg	4.5 m kg			*17 590 *17 590 *13 440 *13 440 *11 430 10 100 *10 360 7 620					*9 340 6 460 9.9
	3 m kg			*22 320 19 950 *15 730 13 270 *12 680 9 660 *11 020 7 380					*9 670 6 110 10.2
	1.5 m kg			*15 350 *15 350 *17 590 12 610 *13 820 9 270 11 530 7 170					*9 630 6 010 10.2
	0 m kg			*18 910 18 590 *18 640 12 240 *14 580 9 000 11 360 7 010					*9 880 6 140 9.9
	-1.5 m kg			*13 700 *13 700 *25 160 18 600 *18 790 12 110 *14 720 8 890 11 310 6 970					*10 590 6 550 9.4
	-3 m kg			*23 340 *23 340 *23 580 18 800 *18 020 12 180 *14 180 8 940					*11 610 7 410 8.7
	-4.5 m kg			*27 470 *27 470 *20 660 19 230 *15 940 12 460 *11 940 9 240					*11 790 9 170 7.5
Boom : 7.0m	9 m kg								*8 060 *8 060 8.3
Arm : 3.9m	7.5 m kg						*9 070	8 010	*7 630 7 540 9.3
Shoe : 700mm	6 m kg					*9 620	*9 620 *9 230 7 920		*7 490 6 570 10.0
CWT : 9 050kg	4.5 m kg			*12 430 *12 430 *10 750 10 250 *9 800 7 710					*7 550 6 000 10.4
	3 m kg			*20 560 20 550 *14 830 13 510 *12 090 9 770 *10 550 7 450 9 310 5 840					*7 800 5 690 10.7
	1.5 m kg			*20 860 19 210 *16 920 12 770 *13 350 9 340 *11 300 7 200 9 180 5 720					*8 260 5 590 10.7
	0 m kg			*20 810 18 630 *18 280 12 290 *14 280 9 030 11 360 7 000					*9 000 5 690 10.4
	-1.5 m kg			*9 630 *9 630 *13 700 *13 700 *25 520 18 500 *18 780 12 070 *14 680 8 860 11 250 6 910					*9 740 6 020 10.0
	-3 m kg			*16 090 *16 090 *21 130 *21 130 *24 410 18 620 *18 370 12 070 *14 450 8 840 11 290 6 950					*10 870 6 710 9.3
	-4.5 m kg			*30 400 *30 400 *22 040 18 960 *16 850 12 270 *13 070 9 020					*11 330 8 040 8.2
	-6 m kg			*17 660 *17 660 *13 260 12 750					*11 290 11 100 6.7
Boom : 7.0m	9 m kg						*7 880	*7 880	*7 290 *7 290 9.2
Arm : 4.8m	7.5 m kg						*7 720	*7 720	*7 020 6 600 10.1
Shoe : 700mm	6 m kg						*8 080	8 060 *8 090 6 120	*6 950 5 830 10.8
CWT : 9 050kg	4.5 m kg					*9 440	*9 440 *8 760 7 790 *8 380 6 000		*7 040 5 350 11.2
	3 m kg			*17 390 *17 390 *13 050 *13 050 *10 870 9 900 *9 610 7 480 *8 850 5 830					*7 300 5 070 11.4
	1.5 m kg			*21 700 19 650 *15 450 12 940 *12 310 9 390 *10 500 7 170 9 120 5 650					*7 740 4 970 11.4
	0 m kg			*24 290 18 620 *17 250 12 280 *13 490 8 970 *11 250 6 910 8 970 5 510					*8 180 5 020 11.2
	-1.5 m kg			*9 300 *9 300 *13 830 *13 830 *25 250 18 200 *18 260 11 900 *14 250 8 700 11 090 6 740 8 880 5 430					*8 590 5 250 10.8
	-3 m kg			*14 260 *14 260 *19 340 *19 340 *24 960 18 140 *18 420 11 770 *14 410 8 590 11 030 6 680					*9 400 5 740 10.1
	-4.5 m kg			*19 970 *19 970 *26 530 *26 530 *23 480 18 340 *17 630 11 850 *13 820 8 650 *10 870 6 790					*10 600 6 670 9.1
	-6 m kg			*28 670 *28 670 *20 450 18 810 *15 490 12 160 *11 730 8 930					*11 050 8 540 7.8
Boom : 7.0m	9.0 m kg								*11 710 *11 710 6.6
Arm : 2.55m	7.5 m kg								*11 270 9 980 7.9
Shoe : 600mm	6 m kg								*11 180 8 410 8.7
CWT : 9 750kg	4.5 m kg								*11 260 7 570 9.2
	3 m kg					*14 950 *14 350 *12 500 10 380 *11 320 7 880			
	1.5 m kg					*17 080 13 600 *13 610 10 000 *11 790 7 710			
	0 m kg					*18 570 13 090 *14 540 9 690 11 950 7 550			
	-1.5 m kg					*19 110 12 860 *15 020 9 510 11 860 7 470			
	-3 m kg					*24 260 19 790 *18 750 12 850 *14 830 9 480			
	-4.5 m kg					*27 060 *27 060 *22 120 20 070 *17 360 13 020 *13 500 9 640			
	-6 m kg					*18 270 *18 270 *14 090 13 450			
Boom : 7.0m	9.0 m kg					*10 020 *10 020			*10 080 *10 080 7.6
Arm : 3.35m	7.5 m kg					*9 760	*9 760		*9 470 8 580 8.7
Shoe : 600mm	6 m kg					*10 360 *10 360 *9 900 8 090			*9 270 7 400 9.5
CWT : 9 750kg	4.5 m kg			*17 590 *17 590 *13 440 *13 440 *11 430 10 470 *10 360 7 910					*9 340 6 720 9.9
	3 m kg			*22 320 20 680 *15 730 13 760 *12 680 10 020 *11 020 7 680					*9 670 6 370 10.2
	1.5 m kg			*15 350 *15 350 *17 590 13 100 *13 820 9 630 *11 660 7 460					*9 920 6 260 10.2
	0 m kg			*18 910 *18 910 *18 640 12 720 *14 580 9 370 11 700 7 310					*10 180 6 400 9.9
	-1.5 m kg			*13 700 *13 700 *25 160 19 320 *18 790 12 590 *14 780 9 260 11 650 7 260					*10 900 6 830 9.4
	-3 m kg			*23 340 *23 340 *26 530 *19 530 *18 020 12 660 *14 180 9 300					*11 610 7 720 8.7
	-4.5 m kg			*27 470 *27 470 *20 660 19 960 *15 940 12 950 *11 940 9 600					*11 790 9 530 7.5
Boom : 7.0m	9 m kg								*8 060 *8 060 8.3
Arm : 3.9m	7.5 m kg								*7 630 *7 630 9.3
Shoe : 600mm	6 m kg								*7 490 6 830 10.0
CWT : 9 750kg	4.5 m kg								*7 550 6 250 10.4
	3 m kg								*7 800 5 930 10.7
	1.5 m kg								*8 260 5 830 10.7
	0 m kg								*9 000 5 930 10.4
	-1.5 m kg								*10 030 6 280 10.0
	-3 m kg								*11 010 6 990 9.3
	-4.5 m kg								*11 330 8 370 8.2
	-6 m kg								*11 290 *11 290 6.7
Boom : 7.0m	9 m kg								*7 290 *7 290 9.2
Arm : 4.8m	7.5 m kg								*7 020 6 860 10.1
Shoe : 600mm	6 m kg								*6 950 6 060 10.8
CWT : 9 750kg	4.5 m kg								*7 040 5 570 11.2
	3 m kg								*7 300 5 300 11.4
	1.5 m kg								*7 740 5 190 11.4
	0 m kg								*7 940 5 240 11.2
	-1.5 m kg								*8 420 5 240 10.8
	-3 m kg								*9 690 6 000 10.1
	-4.5 m kg								*10 600 6 950 9.1
	-6 m kg								*11 050 8 890 7.8

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 EC480E mechanically retractable width

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	9.0 m	10.5 m	Max. reach				
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Along UC	Along UC	Along UC	Along UC	
Boom : 6.5m	7.5 m kg											*12 260 11 780 7.3	
Arm : 2.55m	6 m kg					*13 240 *13 240 *12 170 11 120						*12 020 9 680 8.2	
Shoe : 600mm	4.5 m kg			*19 760 *19 760 *15 080 *15 080 *12 920 10 830								*12 020 8 600 8.7	
CWT : 9 050kg	3 m kg			*23 490 21 790 *17 140 14 410 *13 940 10 480								12 150 8 080 8.9	
	1.5 m kg			*17 070 *17 070 *18 690 13 870 *14 810 10 170								12 020 7 960 8.9	
	0 m kg			*25 150 20 840 *19 320 13 590 *15 210 9 990								12 480 8 230 8.7	
	-1.5 m kg			*18 520 *18 520 *24 790 20 940 *18 890 13 550 *14 780 9 970								*13 220 9 010 8.1	
	-3 m kg			*28 510 *28 510 *22 150 21 240 *17 070 13 740								*13 320 10 730 7.2	
	-4.5 m kg			*17 040 *17 040									5.8
Boom : 7.0m	9.0 m kg											*11 710 *11 710 6.6	
Arm : 2.55m	7.5 m kg					*11 170 *11 170						*11 270 10 280 7.9	
Shoe : 600mm	6 m kg			*12 920 *12 920 *11 540 11 070								*11 180 8 660 8.7	
CWT : 9 050kg	4.5 m kg			*14 950 14 850 *12 500 10 710 *11 320 8 120								*11 260 7 790 9.2	
	3 m kg			*17 080 14 090 *13 610 10 320 *11 790 7 940								11 080 7 360 9.5	
	1.5 m kg			*18 570 13 570 *14 540 10 000 *11 790 7 780								10 970 7 260 9.5	
	0 m kg			*19 110 13 340 *15 020 9 820 11 700 7 700								11 330 7 470 9.2	
	-1.5 m kg			*24 260 20 680 *18 750 13 330 *14 830 9 790								*12 310 8 100 8.7	
	-3 m kg			*27 060 *27 060 *22 120 20 970 *17 360 13 500 *13 500 9 950								*12 490 9 400 7.9	
	-4.5 m kg			*18 270 *18 270 *14 090 13 940								*12 200 *12 200 6.6	
Boom : 7.0m	9.0 m kg					*10 020 *10 020						*10 080 *10 080 7.6	
Arm : 3.35m	7.5 m kg					*9 760 *9 760						*9 470 8 840 8.7	
Shoe : 600mm	6 m kg					*10 360 *10 360 *9 900 8 330						*9 270 7 610 9.5	
CWT : 9 050kg	4.5 m kg			*17 590 *17 590 *13 440 *13 440 *11 430 10 790 *10 360								*9 340 6 920 9.9	
	3 m kg			*22 320 21 600 *15 730 14 250 *12 680 10 340 *11 020 7 910								*9 670 6 560 10.2	
	1.5 m kg			*15 350 *15 350 *17 590 13 580 *13 820 9 950 *11 660 7 690								9 790 6 450 10.2	
	0 m kg			*18 910 *18 910 *18 640 13 200 *14 580 9 680 11 540 7 540								10 040 6 590 9.9	
	-1.5 m kg			*13 700 *13 700 *25 160 20 210 *18 790 13 070 *14 780 9 570 11 490 7 490								10 760 7 040 9.4	
	-3 m kg			*23 340 *23 340 *23 580 20 420 *18 020 13 140 *14 180 9 620								*11 610 7 960 8.7	
	-4.5 m kg			*27 470 *27 470 *20 660 *15 940 13 430 *11 940 9 920								*11 790 9 850 7.5	
Boom : 7.0m	9 m kg											*8 060 *8 060 8.3	
Arm : 3.9m	7.5 m kg											*7 630 *7 630 9.3	
Shoe : 600mm	6 m kg											*7 490 7 030 10.0	
CWT : 9 050kg	4.5 m kg					*12 430 *12 430 *10 750 *10 750 *9 800 8 240						*7 550 6 430 10.4	
	3 m kg			*20 560 *20 560 *14 830 14 500 *12 090 10 460 *10 550 7 970 *9 440 6 270								*7 800 6 110 10.7	
	1.5 m kg			*20 860 20 840 *16 920 13 740 *13 350 10 030 *11 300 7 720 9 320 6 140								*8 260 6 010 10.7	
	0 m kg			*20 810 20 250 *18 280 13 260 *14 280 9 710 11 540 7 530								*9 000 6 120 10.4	
	-1.5 m kg			*9 630 *9 630 *13 700 *13 700 *25 520 20 110 *18 780 13 040 *14 710 9 530 11 430 7 430								9 890 6 480 10.0	
	-3 m kg			*16 090 *16 090 *21 130 *21 130 *24 410 20 230 *18 370 13 030 *14 450 9 520 11 480 7 470								*11 010 7 210 9.3	
	-4.5 m kg			*30 400 *30 400 *22 040 20 580 *16 850 13 230 *13 070 9 700								*11 330 8 640 8.2	
	-6 m kg			*17 660 *17 660 *13 260 *13 260								*11 290 *11 290 6.7	
Boom : 7.0m	9 m kg											*7 880 *7 880 7.290 *7 290 7 290 9.2	
Arm : 4.8m	7.5 m kg											*7 720 *7 720 *7 020 *7 020 10.1	
Shoe : 600mm	6 m kg											*8 080 *8 080 *8 090 6 560 *6 950 6 240 10.8	
CWT : 9 050kg	4.5 m kg											*8 760 8 330 *8 380 6 430 *7 040 5 740 11.2	
	3 m kg			*17 390 *17 390 *13 050 *13 050 *10 870 10 600 *9 610 8 010 *8 850 6 260 *7 300 5 460 11.4									
	1.5 m kg			*21 700 21 300 *15 450 13 920 *12 310 10 070 *10 500 7 700 9 270 6 080 *7 740 5 350 11.4									
	0 m kg			*24 290 20 250 *17 250 13 240 *13 490 9 650 *11 250 7 440 9 110 5 930 8 310 5 410 11.2									
	-1.5 m kg			*9 300 *9 300 *13 830 *13 830 *25 250 19 810 *18 260 12 860 *14 250 9 380 11 270 7 260 9 030 5 850 8 730 5 660 10.8									
	-3 m kg			*14 260 *14 260 *19 340 *19 340 *24 960 19 750 *18 420 12 730 *14 430 9 270 11 210 7 210									
	-4.5 m kg			*19 970 *19 970 *26 530 *26 530 *23 480 19 960 *17 630 12 810 *13 820 9 330 *10 870 7 310								*10 600 7 180 9.1	
	-6 m kg			*28 670 *28 670 *20 450 15 490 11 730 9 620								*11 050 9 190 7.8	
Boom : 6.5m	7.5 m kg											*12 260 11 880 7.3	
Arm : 2.55m	6 m kg											*12 020 9 760 8.2	
Shoe : 700mm	4.5 m kg			*19 760 *19 760 *15 080 *15 080 *12 920 10 930								*12 020 8 680 8.7	
CWT : 9 050kg	3 m kg			*23 490 21 980 *17 140 14 540 *13 940 10 570								12 270 8 160 8.9	
	1.5 m kg			*17 070 *17 070 *18 690 14 000 *14 810 10 270								12 150 8 040 8.9	
	0 m kg			*25 150 21 040 *19 320 13 720 *15 210 10 090								12 610 8 310 8.7	
	-1.5 m kg			*18 520 *18 520 *24 790 21 130 *18 890 13 680 *14 780 10 070								*13 220 9 100 8.1	
	-3 m kg			*28 510 *28 510 *22 150 21 440 *17 070 13 870								*13 320 10 830 7.2	
	-4.5 m kg			*17 040 *17 040									5.8
Boom : 7.0m	9.0 m kg											*11 710 *11 710 6.6	
Arm : 2.55m	7.5 m kg											*11 270 10 370 7.9	
Shoe : 700mm	6 m kg											*11 180 8 740 8.7	
CWT : 9 050kg	4.5 m kg											*11 260 8 780 9.2	
	3 m kg												
	1.5 m kg												
	0 m kg												
	-1.5 m kg												
	-3 m kg												
	-4.5 m kg												
Boom : 7.0m	9.0 m kg											*10 080 *10 080 7.6	
Arm : 3.35m	7.5 m kg											*9 470 8 920 8.7	
Shoe : 700mm	6 m kg											*9 340 6 990 9.9	
CWT : 9 050kg	4.5 m kg											*9 670 6 620 10.2	
	3 m kg												
	1.5 m kg												
	0 m kg												
	-1.5 m kg												
	-3 m kg												
	-4.5 m kg												

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 EC480E mechanically retractable width

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	9.0 m	10.5 m	Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Along UC	Across UC	m
Boom : 7.0m	9 m kg										*8 060 *8 060 8.3
Arm : 3.9m	7.5 m kg										*7 630 *7 630 9.3
Shoe : 700mm	6 m kg										*7 490 7 100 10.0
CWT : 9 050kg	4.5 m kg										*7 550 6 500 10.4
	3 m kg										*7 800 6 170 10.7
	1.5 m kg										*8 260 6 070 10.7
	0 m kg										*9 000 6 180 10.4
	-1.5 m kg	*9 630 *9 630 *13 700 *13 700	*25 520 *20 310 *18 780 *13 170	*14 830 *14 630 *12 090 *10 560	*9 620 *9 620 *10 750 *10 750	*9 230 *8 530 *9 800 *8 320					10 000 6 550 10.0
	-3 m kg	*16 090 *16 090 *21 130 *21 130	*24 410 *20 430 *18 370 *13 160	*20 810 *20 450 *18 280 *13 390	*14 280 *9 800 *11 300 *11 550	*11 660 *7 610 *7 510					*11 010 7 280 9.3
	-4.5 m kg	*30 400 *30 400 *22 040 *20 780	*16 850 *13 360 *13 070 *9 790								*11 330 8 730 8.2
	-6 m kg										*11 290 *11 290 6.7
Boom : 7.0m	9 m kg										*7 290 *7 290 9.2
Arm : 4.8m	7.5 m kg										*7 020 *7 020 10.1
Shoe : 700mm	6 m kg										*6 950 6 300 10.8
CWT : 9 050kg	4.5 m kg										*7 040 5 800 11.2
	3 m kg										*7 300 5 520 11.4
	1.5 m kg										*7 740 5 410 11.4
	0 m kg										*8 410 5 470 11.2
	-1.5 m kg	*9 300 *9 300 *13 830 *13 830	*25 250 *20 010 *18 260 *12 990	*13 050 *13 050 *13 050 *10 870	*9 440 *9 440 *10 700 *9 610	*8 760 *8 080 *8 080 *8 090	8 410 *8 380 *6 620 *6 500	8 320 *6 320 *6 150 *6 040	8 850 *6 320 *6 150 *5 800	5 520 *5 410 *5 470 *5 800	8 830 5 730 10.8
	-3 m kg	*14 260 *14 260 *19 340 *19 340	*24 960 *19 950 *18 420 *18 860	*19 340 *19 950 *18 420 *18 860	*14 250 *9 480 *11 390 *7 340	*11 250 *9 750 *11 250 *9 130	5 920	5 920	5 920	5 920	9 660 6 260 10.1
	-4.5 m kg	*19 970 *19 970 *26 530 *26 530	*23 480 *20 160 *17 630 *12 940	*20 160 *17 630 *12 940 *13 820	*13 280 *9 420 *10 870 *7 390						*10 600 7 260 9.1
	-6 m kg										*11 050 9 280 7.8
Boom : 7.0m	9.0 m kg										*11 710 *11 710 6.6
Arm : 2.55m	7.5 m kg										*11 270 10 720 7.9
Shoe : 600mm	6 m kg										*11 180 9 050 8.7
CWT : 9 750kg	4.5 m kg										*11 260 8 160 9.2
	3 m kg										*11 450 7 710 9.5
	1.5 m kg										*11 400 7 610 9.5
	0 m kg										*11 780 7 840 9.2
	-1.5 m kg										*12 310 8 490 8.7
	-3 m kg										*12 490 9 850 7.9
	-4.5 m kg										*12 200 *12 200 6.6
Boom : 7.0m	9.0 m kg										*10 080 *10 080 7.6
Arm : 3.35m	7.5 m kg										*9 470 9 230 8.7
Shoe : 600mm	6 m kg										*9 270 7 970 9.5
CWT : 9 750kg	4.5 m kg										*9 340 7 250 9.9
	3 m kg										*9 670 6 880 10.2
	1.5 m kg										*10 180 6 780 10.2
	0 m kg										10 450 6 930 9.9
	-1.5 m kg										11 190 7 400 9.4
	-3 m kg										*11 610 8 350 8.7
	-4.5 m kg										*11 790 10 310 7.5
Boom : 7.0m	9 m kg										*8 060 *8 060 8.3
Arm : 3.9m	7.5 m kg										*7 630 *7 630 9.3
Shoe : 600mm	6 m kg										*7 490 7 360 10.0
CWT : 9 750kg	4.5 m kg										*7 550 6 750 10.4
	3 m kg										*7 800 6 420 10.7
	1.5 m kg										*8 260 6 310 10.7
	0 m kg										*9 000 6 430 10.4
	-1.5 m kg	*9 630 *9 630 *13 700 *13 700	*25 520 *21 060 *18 780 *13 660	*13 440 *13 440 *13 440 *12 090	*9 620 *9 620 *10 750 *10 930	*9 230 *8 830 *9 800 *10 550	8 610	8 610	8 610	8 610	*10 190 6 810 10.0
	-3 m kg	*16 090 *16 090 *21 130 *21 130	*24 410 *21 180 *18 370 *13 660	*14 830 *14 830 *14 830 *13 870	*12 310 *12 310 *12 310 *10 180	*11 250 *10 470 *10 470 *11 950	7 870	7 870	7 870	7 870	*11 010 7 570 9.3
	-4.5 m kg	*30 400 *30 400 *22 040 *22 040	*21 530 *16 850 *13 860 *13 070	*20 160 *17 630 *13 770 *14 180	*15 940 *14 050 *11 940 *10 390						*11 330 9 060 8.2
	-6 m kg										*11 290 *11 290 6.7
Boom : 7.0m	9 m kg										*7 290 *7 290 9.2
Arm : 4.8m	7.5 m kg										*7 020 *7 020 10.1
Shoe : 600mm	6 m kg										*6 950 6 540 10.8
CWT : 9 750kg	4.5 m kg										*7 040 6 030 11.2
	3 m kg										*7 300 5 740 11.4
	1.5 m kg										*7 740 5 630 11.4
	0 m kg										*8 240 5 700 11.2
	-1.5 m kg	*9 300 *9 300 *13 830 *13 830	*25 250 *20 760 *18 260 *13 490	*13 050 *13 050 *13 050 *10 870	*9 440 *9 440 *10 870 *9 610	*8 760 *8 080 *8 080 *8 090	8 700 *8 380 *6 870	8 380 *6 870	8 380 *6 870	8 380 *6 870	*10 600 5 970 10.8
	-3 m kg	*14 260 *14 260 *19 340 *19 340	*24 960 *20 700 *18 420 *13 360	*19 950 *19 950 *18 420 *13 360	*14 450 *14 450 *14 450 *12 120	*11 250 *10 470 *10 470 *11 950	7 580	7 580	7 580	7 580	*9 950 6 520 10.1
	-4.5 m kg	*19 970 *19 970 *26 530 *26 530	*23 480 *20 910 *17 630 *13 440	*20 910 *17 630 *13 440 *13 820	*16 850 *16 850 *16 850 *15 750	*10 870 *10 870 *10 870 *10 090	7 690	7 690	7 690	7 690	*10 600 7 550 9.1
	-6 m kg										*11 050 9 640 7.8

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.

# Equipments.

## 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

Fuel filler pump: 50 l/min, with automatic shut-off

Alternator, 80 A

### Electric/Electronic control system

Contronics

Advanced mode control system

Self-diagnostic system

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 lights:

Frame-mounted 2

Boom-mounted 2

Batteries, 2 x 12 V / 200 Ah

Start motor, 24 V / 7 kW

### Hydraulic system

Hose rupture valve: boom

Overload warning device

Automatic sensing hydraulic system

2-pump flow bucket circuit

Summation system

Boom priority

Arm priority

Swing priority

Boom, arm and bucket regeneration valves

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic two-speed travel motors

Hydraulic oil, ISO VG 46

### Frame

Access way with handrail

Tool storage area

Punched metal anti-slip plates

Undercover (heavy-duty)

### Cab and interior

ROPS (ISO12117-2) certified cab

Silicon oil and rubber mounts with spring

Travel pedals and hand levers

Adjustable operator seat and joystick control console

Control joysticks with 4 switches each

Heater & air-conditioner, automatic

Flexible antenna

Radio with MP3 & USB Jack with bluetooth

Hydraulic safety lock lever

Cab, all-weather sound suppressed, includes:

Cup holders

Door locks

Tinted glass

Floor mat

Horn

Large storage area

Pull-up type front window

Removable lower windshield

Seat belt

Safety glass

Sun screens, front, roof, rear

Rain shield

Windshield wiper with intermittent feature

Rear view camera

Master key

### Undercarriage

Undercover (heavy-duty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

### Track shoes

700 mm with triple grousers

### Digging equipment

Boom: 7.0 m HD

Arm: 3.35 m HD

Manual centralized lubrication

## OPTIONAL EQUIPMENT

### Engine

Block heater: 120 V, 240 V

Oil bath pre-cleaner

Diesel coolant heater, 10 kW

Water separator with heater

Auto engine shutdown

### Electric

Extra work lights: Halogen or LED

Cab-mounted 3

Boom-mounted 2

Counterweight-mounted 1

Travel alarm

Anti-theft system

Rotating warning beacon

### Hydraulic system

Hose rupture valve: arm

Boom float function

Hydraulic piping:

Work tool management system

(up to 20 programmable memories)

Hammer & shear, 1 and 2 pump flow

Hammer & shear:

variable flow and pressure pre-setting

Additional return filter

Slope & rotator

Grapple

Oil leak (drain) line

Quick coupler piping

Volvo hydraulic quick coupler S3

Volvo hydraulic quick coupler VQC-HU

Volvo hydraulic quick coupler DR48

Hydraulic oil, ISO VG 32

## OPTIONAL EQUIPMENT

Hydraulic oil, ISO VG 46

Hydraulic oil, ISO VG 68

Hydraulic oil, biodegradable 46

Hydraulic oil, longlife oil 32

Hydraulic oil, longlife oil 46

Hydraulic oil, longlife oil 68

### Frame

Hydraulic removable counterweight

Full height counterweight: 8 450 kg, 9 050 kg, 9 750 kg

### Cab and interior

Fabric seat with heater

Fabric seat with heater and air suspension

Pilot control pattern change

Opening top hatch

Falling object guard (FOG)

Frame-mounted

Cab-mounted

Cab-mounted falling object protective structure (FOPS)

Smoker kit (ashtray and lighter)

Safety net for front window

Lower wiper with intermittent control

Side view camera

Anti-vandalism kit

Specific key

### Undercarriage

Full track guard

Mechanically retractable width track gauge

### Track shoes

Track shoes 600/700/800/900 mm with triple grousers

Track shoes 600 mm HD with triple grousers

Track shoes 600 mm with double grousers

### Digging equipment

Boom: 6,5 m ME

Arm: 2.55 m, 3.9 m, 4.8 m

Linkage with lifting eye

### Service

Tool kit, daily maintenance

Tool kit, full scale

Automatic lubrication system

Air compressor

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

**Auxiliary hydraulics**  
Breaker / Shear  
Tilt / Rotator



**Side-view camera**



**LED Lights**



**Air compressor**



**Retractable undercarriage**



**Removable counterweight**



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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