

Volvo Excavators 38.9-40.6 t 313 hp



Volvo Construction Equipment



# Welcome to our world

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

# Working harder, working smarter

For over 180 years Volvo has been a pioneer in the design and manufacture of machines which set the standard for efficiency, performance and uptime. Across our range of excavators, wheel loaders and haulers, our reputation for engineering excellence is unrivalled, which means whatever your operation or application, we can provide a total fleet solution to help you succeed.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts, to ensure we offer customers machines which work harder and smarter long into the future.



# Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

## Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

### There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.



# **BUILDING TOMORROW**

# Elite efficiency

Fuel efficiency is at the center of the EC380E crawler excavator. With advanced technology including Volvo's unique ECO mode and a new electro-hydraulic control system, this production machine delivers a 9% improvement in fuel efficiency. Experience efficient production at its best with Volvo.

## 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.



### 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).

### 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).



### 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.

# Boost your productivity

It's a fact that operators work more efficiently when they're given the best tools for the job. That's why, on top of being a superior production machine, the EC380E has an ergonomic design with ideally placed controls and switches. With built in comfort and optimized control, operators will work efficiently and productively all day long.

## 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.



### 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.



#### 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.



#### 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.

# Non-stop productivity

Experienced and skilled Volvo engineers have developed and rigorously tested Stage V engine systems that deliver the ultimate combination of high productivity and low fuel consumption. Benefit from Volvo's signature high torque at low rpm and experience superior performance and reduced fuel consumption.

## 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<sup>®</sup>/Diesel Exhaust Fluid is heated to produce ammonia. This causes a chemical reaction which converts NOx to nitrogen and CO2 – both of which are naturally found in the air. Neither process interrupts machine operation, performance or productivity. <sup>®</sup> = registered trademark of the Verband der Automobilindustrie e.V. (VDA)



### **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.



## **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 V 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.

# Built to last

From quarries to mass excavation, this heavy-duty production machine has been built to work on tough job sites. Featuring a robust, reinforced structure and high quality welding, the EC380E boasts superior strength and durability. Experience reliability you can count on with Volvo.

## 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.



# Up your uptime

At Volvo we believe that maintaining your machine should be as quick and easy as possible. That's why our designers and engineers have developed innovative methods to make maintenance easy. With large, wide opening compartment doors and grouped service points, checks will be carried out faster and you'll get the most out of every operating shift.

### 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 fold-able provide safe and easy access to the cab and superstructure. The fold-able guardrail is to minimize transportation height when it is folded.



# 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.

# **Quality counts**

# Safe access

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

# Human Machine Interface (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.

# **Bucket range**

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.

# AdBlue®

Volvo offers a total AdBlue solution that is quality assured, cost efficient and easily accessible. Contact your Volvo dealer for more information. <sup>®</sup> = registered trademark of the Verband der Automobilindustrie e.V. (VDA)

# LCD monitor

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

VOLVO

# 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 V engine boasts more power while reducing both fuel consumption and emissions and delivering superior quality, reliability and durability.

# Volvo After Treatment System

in:

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

# Single module cooler

The radiator, charged air cooler and hydraulic oil cooler are situated side-byside on a single layer to maximize efficiency, reduce blockages and aid cleaning.

# The perfect match

Maximize your productivity and profitability with the EC380E 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.

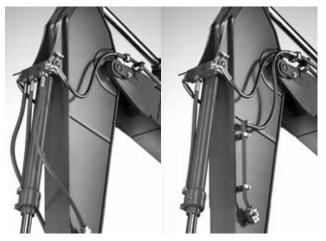
## **Bucket range**

Volvo's general purpose buckets are the perfect tool for digging and re-handling in soft to medium conditions. Heavyduty 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.



# ATTACHMENTS

Volvo's durable attachments have been purposebuilt 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.

# Adding value to your business

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

## **Complete Solutions**

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



## **Genuine Volvo Parts**

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



## Service Network

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





# 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 EC380E in detail

#### Engine

The latest generation, Volvo engine Stage V emissions certified 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, highpressure 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 Stage V	Volvo	D13J
Max power at	r/min	1 700
Net, ISO 9249/SAE J1349	kW	229
	hp	311
Gross, ISO 14396/SAE J1995	kW	230
	hp	313
Max torque	Nm	1692
at engine speed	r/min	1 275
No. of cylinders		6
Displacement	1	12.8
Bore	mm	131
Stroke	mm	158
Electrical system		

High-capacity electrical system that is well protected. Waterproof doublelock 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/A	28/80

#### Swing system

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

r/min 10.2 Max. slew speed kNm 130.5 Max. slew torque

#### Travel System

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	276.5
Max. travel speed (low)	km/h	3.4
Max. travel speed (high)	km/h	5.3
Gradeability	0	35
Undercarriage		
The undercarriage has a robust X-shaped chains are standard.	frame. Greased	and sealed track
Track shoes		2 x 50
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
Sound Level		
Sound pressure level in cab according to	ISO 6396	
L <sub>pA</sub>	dB	71
External sound level according to ISO 6395 a	and EU Noise Dir	ective 2000/14/EC
Lwa	dB	105

#### Hvdraulic system

The new electro-hydraulic system and new MCV (main control valve) use intelligent technology to control on-demand flow for highproductivity, highdigging capacity and excellent fuel consumption.

The following important functions are included in the system for optimum

performance: Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity. Boom priority: Gives priority to the boom operation for faster raising when

loading or performing deep excavations.

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

operations. Regeneration system: Prevents cavitation and provides flow to other

movements during simultaneous operations for maximum productivity. 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 300
Pilot pump, Type Gear pump		
Maximum flow	l/min	32.6
Implement	MPa	32.4/35.3
Travel circuit	MPa	35.3
Slew circuit	MPa	27.9
Pilot circuit	MPa	3.9

#### Hydraulic Motors

Hydraulic Cylinders		
Mono boom		2
Bore x Stroke	ø x mm	160 x 1 530
Arm		-
Bore x Stroke	ø x mm	175 x 1 700
Bucket		-
Bore x Stroke	ø x mm	145 x 1 285
ME Bucket		-
Bore x Stroke	ø x mm	160 x 1 250
Bucket for LR boom		
Bore x Stroke	ø x mm	140 x 1 140
Service Refill		
Fuel tank	I	620
DEF/AdBlue <sup>®</sup> tank	I	62.5
Hydraulic system, total	I	500
Hydraulic tank	I	225
Engine oil	I	42
Engine coolant	I	60
Slew reduction unit	I	6.5
Travel reduction unit	I	2 x 6.8

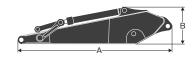
The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into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

Integrated airconditioning and heating system: The pressurized and filtered cab air is supplied by an automaticallycontrolled 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 12 different adjustments plus a seat belt for the operator's comfort and safety. Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1430 CO2-eq.

# **Specifications**



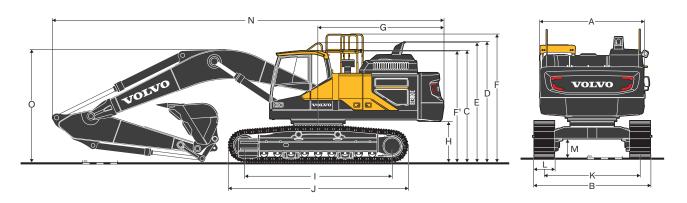


## DIMENSIONS

	Во	om			Arm							
	Unit	mono	mono	Description	Unit							
Boom	m	6.2 ME	6.45 HD	Arm	m	2.6	3.2 HD	3.9				
А	mm	6 460	6 700	А	mm	3 780	4 360	5 080				
В	mm	1 740	1800	В	mm	1 145	1 145	1 145				
Width	mm	820	820	Width	mm	560	560	560				
Weight	kg	3 355	3 310	Weight	kg	2 050	2 180	2 300				

\* Includes arm cylinder, piping and pin

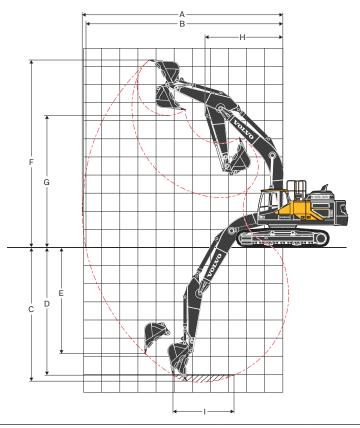
\* Includes bucket cylinder, linkage and pin



DIMENSIONS										
Description	Unit		EC3	BOEL	EC380ENL					
Boom	m	6.2		6.45		6.2				
Arm	m	2.6	2.6	3.2	3.9	2.6	2.6	3.2	3.9	
A. Overall width of upper structure	mm	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990	
B. Overall width	mm	3 340	3 340	3 340	3 340	2 990	2 990	2 990	2 990	
C. Overall height of cab	mm	3 220	3 220	3 220	3 220	3 220	3 220	3 220	3 220	
D. Overall height of diffuser	mm	3 465	3 465	3 465	3 465	3 465	3 465	3 465	3 465	
E. Overall height of handrail	mm	3 4 4 0	3 440	3 440	3 440	3 4 4 0	3 4 4 0	3 4 4 0	3 440	
F. Overall height of guardrail (unfolded)	mm	3 685	3 685	3 685	3 685	3 685	3 685	3 685	3 685	
F'. Overall height of guardrail (folded)	mm	3 215	3 215	3 215	3 215	3 215	3 215	3 215	3 215	
G. Tail swing radius	mm	3 600	3 600	3 600	3 600	3 600	3 600	3 600	3 600	
H. Counterweight clearance *	mm	1 150	1 150	1 150	1 150	1 150	1 150	1 150	1 150	
I. Tumbler length	mm	4 240	4 240	4 240	4 240	4 240	4 240	4 240	4 240	
J. Track length	mm	5 180	5 180	5 180	5 180	5 180	5 180	5 180	5 180	
K. Track gauge	mm	2 740	2 740	2 740	2 740	2 390	2 390	2 390	2 390	
L. Shoe width	mm	600	600	600	600	600	600	600	600	
M. Min. ground clearance *	mm	500	500	500	500	500	500	500	500	
N. Overall length	mm	11 0 6 0	11 310	11 2 2 0	11 270	11 060	11 310	11 220	11 270	
O. Overall height of boom	mm	3 610	3 580	3 360	3 605	3 610	3 580	3 360	3 605	

\* Without shoe grouser

# **Specifications**



Description		Unit		EC3	80E	
Boom		m	6.2		6.45	
Arm		m	2.6	2.6	3.2	3.9
A. Max. digging re	ach	mm	10 450	10 695	11 220	11 855
B. Max. digging re	ach on ground	mm	10 225	10 480	11 010	11 665
C. Max. digging de	pth	mm	6 755	6 990	7 590	8 290
D. Max. digging de	epth (2.44 m level)	mm	6 575	6 805	7 425	8 145
E. Max. vertical wa	all digging depth	mm	4 860	5 000	5 510	6 110
F. Max. cutting height		mm	10 055	10 195	0 195 10 370	
G. Max. dumping height		mm	6 800	6 950	7 140	7 415
H. Min. front slew	radius	mm	4 090	4 290	4 280	4 305
Digging forces wit	h direct fit bucket					
Breakout force -	SAE J1179	kN	214.5	198.0	198.0	198.0
bucket	SAE J1179	kN	234.5	215.0	215.0	215.0
(Normal/Power	ISO 6015	kN	243.4	221.7	221.7	221.7
boost)	ISO 6015	kN	265.4	242.7	242.7	242.7
Tearout force -	SAE J1179	kN	187.7	195.9	161.9	141.3
dipper arm	SAE J1179	kN	205.7	212.9	176.9	154.3
(Normal/Power	ISO 6015	kN	193.9	201.1	166.0	144.4
boost)	ISO 6015	kN	211.9	219.1	181.0	157.4

MACHINE WEIGHTS A	ND GROUND PRESSU	RE			
Description	Shoe width	Operating weight	Ground pressure	Operating weight	Ground pressure
	mm	kg	kPa	kg	kPa
Triple grouser	600	39 245	71.6	38 865	70.9
	700	39 690	62.0	39 305	61.4
	800	40 140	54.9	39 755	54.4
	900	40 585	49.3	40 200	48.9
Triple grouser(HD)	600	39 675	72.4	39 290	71.7
Double grouser	600	39 525	72.1	39 140	71.4

EC380E with LC undercarriage, 6.45 m boom, 3.2 m arm, 1 574 kg bucket, 6 700 kg counterweight

EC380E with NLC undercarriage, 6.45 m boom, 3.2 m arm, 1 574 kg bucket, 6 700 kg counterweight

							EC38	OENL			EC3	80EL		
		Capacity	Cutting	Weight	Teeth	600 mm	shoe, 6 70	00 kg coun	terweight	600 mm shoe, 6 700 kg counterweight				
Bucket typ	be	Capacity	width	weight	leeth	6.2 m Boom	6	.45 m Boo	m	6.2 m Boom	6	.45 m Boo	m	
		L	mm	kg	EA	2.6 m	2.6 m	3.2 m	3.9 m	2.6 m	2.6 m	3.2 m	3.9 m	
		870	750	1 176	3	С	С	С	С	С	С	С	С	
		1000	900	1 271	4	С	С	С	С	С	С	С	С	
	General	1420	1200	1 514	5	С	С	С	С	С	С	С	С	
	purpose	1 670	1350	1629	5	C	С	С	С	С	С	С	С	
Direct fit		1920	1500	1769	5	С	С	С	С	С	С	С	С	
Buckets		2 330	1 750	1986	5	С	С	С	В	С	С	С	В	
		1000	900	1 4 2 5	4	D	D	D	D	D	D	D	D	
	Heavy	1 4 2 0	1200	1 699	5	D	D	D	D	D	D	D	D	
	duty	1 920	1500	1970	5	D	D	D	С	D	D	D	С	
		2 330	1750	2 175	5	D	D	С	В	D	D	С	В	
		870	750	1 176	3	С	С	С	С	С	С	С	С	
		1000	900	1 271	4	С	С	С	С	С	С	С	С	
	General	1 4 2 0	1200	1 514	5	С	С	С	С	С	С	С	С	
Direct fit	purpose	1 670	1350	1629	5	С	С	С	С	С	С	С	С	
Buckets		1920	1500	1769	5	С	С	С	В	С	С	С	С	
(UQC		2 3 3 0	1 750	1967	5	С	С	В	A	С	С	В	А	
interface)		1000	900	1 4 2 5	4	D	D	D	D	D	D	D	D	
	Heavy	1420	1200	1 699	5	D	D	D	D	D	D	D	D	
	duty	1920	1500	1970	5	D	D	D	В	D	D	D	В	
		2 330	1 750	2 175	5	В	А	Х	Х	В	В	A	Х	
		1000	900	1239	4	С	С	С	С	С	С	С	С	
	General	1 4 2 0	1200	1482	5	С	С	С	С	С	С	С	С	
	purpose	1 670	1350	1597	5	С	С	С	С	С	С	С	С	
Quick	puipose	1 920	1500	1720	5	С	С	С	В	С	С	С	С	
coupler Buckets		2 330	1750	1 911	5	С	С	С	А	С	С	С	В	
(S3 Quick		1000	900	1 393	4	D	D	D	D	D	D	D	D	
coupler)	Heavy	1 4 2 0	1200	1648	5	D	D	D	D	D	D	D	D	
. ,	duty	1 670	1350	1 791	5	D	D	D	С	D	D	D	D	
	auty	1920	1500	1 921	5	D	D	С	В	D	D	D	В	
		2 330	1750	2 119	5	С	С	В	A	С	С	В	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 materal density

A 1200 - 1300 kg/m3 Coal, Caliche, Shale B 1400 - 1600 kg/m3 Wet earth and clay, Limestone, Sandstone

C 1700 - 1800 kg/m3 Granite, Wet sand, Well blasted rock

D > 1900 kg/m3 Wet mud, Iron ore

# **Specifications**

LIFTING CAPACITY Lifting capacity at the	e arm enc	l with															
For lifting capacity in	Lifting b			<u>subtrac</u> 5 m		<u>veight of</u> ) m		<u>st fit bucl</u> 5 m		<u>e bucket</u> ) m		ck couple m		he follow ) m	1	es. ax. reach	
	related	1															
	grour		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
	leve 7.5 m	l kg							*10 700	*10 700					*10 870	10.200	6.
	6m	kg									*10 740	8420			*10 760		7.7
De e ere + C 0 ere	4.5 m	kg					*15 850	*15 850			*11 200				10 840		8.
Boom : 6.2m Arm : 2.6m	3 m	kg						16 820			*12 030				10 120	6 5 4 0	8.
Shoe : 600mm	1.5 m	kg						15 990				7760			9 9 5 0	6400	8.6
CWT : 6 700kg	0 m -1.5 m	kg kg			*17 770	*17 770	*22 820	15720			12 010 11 990	7 600 7 590			10 300 11 370	6 600 7 230	8.3 7.8
	-3 m	kg			-	-	*19 850				11330	1 330			*12 530		6.9
	-4.5 m	kg					*15 320								*12 280		5.4
	7.5 m	kg													*10 420		7.0
	6m	kg					40.000	440.000			*10 360				*10 360		8.0
Boom : 6.45m	4.5 m 3 m	kg kg					^16 080	*16 080			*10 970 *11 870	8 250 7 970			10 340 9 680	6 730 6 270	8. 8.8
Arm : 2.6m	1.5 m	kg							*15 940		12 140	7 720			9 520	6 130	8.8
Shoe : 600mm CWT : 6 700kg	0 m	kg					*21850	15 620				7560			9830	6300	8.6
	-1.5 m	kg					*21890				11 930	7 530			10 770	6 870	8.
	-3 m	kg					*19 940		*15 270	10 350					*12 160		7.2
	-4.5 m 7.5 m	kg kg			20 930	20.930	*16 070	010070			*9 370	8 670			*12 110	11280	5.8 7.7
	6m	kg									*9 500	8 600			*7980	6 9 2 0 0	8.5
Boom : 6.45m	4.5 m	kg									*10 260	8360	*8 790		*8 060	6 150	9.
Arm : 3.2m	3 m	kg						17 030			*11 290	8 0 5 0	9 410	6100	*8390	5760	9.3
Shoe : 600mm	1.5 m	kg						16 030 15 610	*15 330		12 190 11 950	7 760 7 550	9 260 9 150	5960 5870	8740 8970	5 630 5 750	9.4 9.1
CWT : 6 700kg	0 m -1.5 m	kg kg			*15 110	*15 110	*22 370				11 850	7 4 6 0	9 150	5670	9 6 9 0	6 190	9. 8.6
	-3 m		*17 590	*17 590	*23 840						11930	7 520			11240	7 130	7.8
	-4.5 m	kg			*24 300	*24 300	*17 980	16 050	*13 490	10 470					*11830	9 270	6.6
	9 m	kg													*6920	*6 920	7.2
	7.5 m	kg									*8 160	*8 160	*7.000	C 400	*6 470		8.4
	6 m	kg									*8 510	*8 510	*7 680	6 4 3 0	*6 310	6 140	9.2
Boom : 6.45m	4.5 m	kg							*10 380	*10 380	*9380	8 4 8 0	*8 850	6320	*6 370	5530	9.7
Arm : 3.9m	3 m	kg						*16 410			*10 510	8 130	*9 430	6140	*6 600	5200	10.0
Shoe: 600mm	1.5 m	kg			*0.000	40.000		16 3 20			*11650	7 790	9 270	5960	*7 040	5 0 8 0	10.0
CWT : 6 700kg	0 m -1.5 m	kg kg	*9 510	*0.510	*9 320 *14 220		*22 030		*15 870		11940 11770	7 530 7 370	9 100 9 030	5810 5740	*7 760 8 590	5160 5480	9.8 9.3
	-3 m				*20 550						11750	7360	3 0 3 0	5740	9 710	6 160	8.6
	-4.5 m				*27 500										*11 110	7 590	7.5
	-6 m	kg			*20 790	*20 790	*15 130	*15 130							*11300		5.8
	7.5 m	kg								*10 700	*10 740	8 680			*10 870		6.7
	6 m 4.5 m	kg kg					*15.850	*15 850		-	*10740				*10 760 *10 870		7.7
Boom : 6.2m	3 m	kg						17 340			*12 030				10 400	6 770	8.6
Arm : 2.6m Shoe : 600mm	1.5 m	kg					*22 280	16 520	*15 980	10 950	12 520	8 0 2 0			10 2 30	6 6 2 0	8.6
CWT : 7 250kg	0 m	kg						16 250				7 870			10 600	6830	8.3
5	-1.5 m	kg					*22 010 *19 850				12340	7 850			11700		7.8 6.9
	-3 m -4.5 m	kg kg			~20490	~20490		*15 320	15 050	10780					*12 530 *12 280		_
	7.5 m	kg					10 020	10 020							*10 420		7.0
	6 m	kg							*11 020	*11 0 2 0	*10 360	8720			*10 360	7900	8.0
Boom : 6.45m	4.5 m	kg					*16 080	*16 080			*10 970				*10 480		8.5
Arm : 2.6m	3 m	kg									*11870				9 950	6480	8.8
Shoe : 600mm	1.5 m 0 m	kg kg					*21850	16 14 0			12 490 12 310	7 990 7 830			9 800 10 120	6350 6530	8.8 8.6
CWT : 7 250kg	-1.5 m	kg			*14 880	*14 880					12 280				11 090	7 110	8.
	-3 m	kg					*19 940		*15 270	10 700					*12 160		7.2
	-4.5 m	kg			*20 930	*20 930	*16 070	*16 070			+0.075	0.000			*12 110		5.8
	7.5 m	kg									*9 370 *9 500	8930			*8 200 *7 980		7.7
	6 m 4.5 m	kg kg					*14.350	*14.350	*11610	*11610	*10 260	8 860 8 620	*8 790	6450	*8 060	7 140	8.5 9.1
Boom : 6.45m	3 m	kg									*11 290	8 310	9 680	6320	*8 390	5960	9.3
Arm : 3.2m Shoe : 600mm	1.5 m	kg					*21460	16 560	*15 330	10 970	*12 280		9 530		8 9 9 0	5830	9.4
CWT : 7 250kg	0 m	kg			45.45	40.40		16 130				7 810	9 4 2 0	6080	9240	5960	9.1
	-1.5 m	kg	*17 500	*17 500			*22 370					7 720			9980	6 410	8.6
	-3 m -4.5 m	kg kg	17 590	°17 590	*23 840		*20 970				~12270	7 790			*11 520	7380 9580	7.8 6.6
		ny (		i) c	2-1000	2+000	0 The	10310	10 400	10 020			7 110	0.405.03	11000		0.0

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LIFTING CAPACITY E	IFTING CAPACITY EC380EL																
Lifting capacity at the	arm end	d with	nout buc	ket.													
For lifting capacity inc	luding b	bucke	t, simply	subtract	actual w	eight of	the direc	t fit bucl	ket or the	e bucket	with qui	ck couple	er from th	ne follow	ing value	es.	
	Lifting		1.5	<u>im</u>	3.0	) m	4.5	m	6.0	) m	7.5	m	9.0	) m	Max. reach		<u>.                                    </u>
	related to ground level		Along UC	Across UC	m												
	9 m	kg													*6920	*6 920	7.2
	7.5 m	kg									*8 160	*8 160			*6 470	*6 470	8.4
	6 m	kg									*8 510	*8 510	*7680	6 6 4 0	*6 310	*6 310	9.2
Deeres C 4Eres	4.5 m	kg							*10 380	*10 380	*9 380	8740	*8 850	6 530	*6 370	5720	9.7
Boom : 6.45m Arm : 3.9m	3m	kg					*16 410	*16 410	*12 460	11 710	*10 510	8400	*9 430	6360	*6 600	5380	10.0
Shoe : 600mm	1.5 m	kg					*20 040	16 850	*14 440	11 0 9 0	*11650	8060	9540	6 170	*7 040	5260	10.0
CWT: 7 250kg	0 m	kg			*9 320	*9 320	*22 030	16 170	*15 870	10 650	12 290	7 790	9 370	6 0 2 0	*7 760	5350	9.8
CW1.7250kg	-1.5 m	kg	*9 510	*9 510	*14 220	*14 220	*22 500	15 930	*16 510	10 4 2 0	12 120	7640	9 300	5960	8 850	5680	9.3
	-3 m	kg	*14 830	*14 830	*20 550	*20 550	*21740	15960	*16 250	10 390	12 100	7 620			9 9 9 0	6390	8.6
	-4.5 m	kg	*21 190	*21 190	*27 500	*27 500	*19 600	16 220	*14 770	10 550					*11 110	7850	7.5
	-6 m	kg			*20 790	*20 790	*15 130	*15 130							*11 300	*11 300	5.8

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.

## LIFTING CAPACITY EC380ENL

Lifting capacity at the arm end without bucket.

	Lifting hook		, simply subtract a 1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max, reach		
	related to														1		
	ground level	ł	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
	7.5 m	kg							*10 730	*10 730					*10 900	9 180	6.7
Boom : 6.2m Arm : 2.6m Shoe : 600mm CWT : 7 250kg Boom : 6.45m Arm : 2.6m Shoe : 600mm CWT : 7 250kg	6 m	kg							*11 250	10 850	*10 770	7 580			*10 800	7280	7.7
	4.5 m	kg					*15 890	*15 890	*12 700	10 4 0 0	*11230	7430			*10 900	6350	8.3
	3 m	kg					*19 810	14 740	*14 500	9 870	*12 070	7 180			10 320	5880	8.6
	1.5 m	kg					*22 330	13 960	*16 020	9430	12 4 2 0	6950			10 150	5750	8.6
	0 m	kg					*22 870	13 710	*16 800	9 170	12 250	6800			10 520	5910	8.4
	-1.5 m	kg			*17 780	*17 780	*22 050	13 730	*16 610	9 1 2 0	12 240	6790			11 600	6480	7.8
	-3 m	kg			*26 540	*26 540	*19 900	13 950	*15 090	9 250					*12 560	7 760	6.9
	-4.5 m	kg					*15360	14 450							*12 310	11 140	5.4
	7.5 m	kg													*10 420	8 5 3 0	7.0
	6m	kg							*11020	10 810	*10 360	7600			*10 360	6880	8.0
	4.5 m	kg					*16 080	15 750	*12 580	10 320	*10 970	7 400			*10 480	6 0 3 0	8.
	3 m	kq							*14 430	9 760	*11 870	7130			9850	5610	8.
	1.5 m	kg							*15 940	9 3 2 0	12 360	6 890			9 690	5480	8,
	0 m	kg					*21850	13 560	*16 690	9 0 7 0	12 180	6730			10 010	5620	8
	-1.5 m	kg			*14 880	*14 880	*21890	13 610	*16 550	9 0 2 0	12 140	6700			10 970	6 120	8
	-3 m	kg			*26 310	*26 310	*19 940	13 820	*15 270	9 1 4 0					*12 160	7240	7.
	-4.5 m	kg			*20 930	*20 930	*16 070	14 270							*12 110	9 990	5.
Boom : 6.45m Arm : 3.2m	7.5 m	kg									*9 370	7800			*8200	7 510	7.
	6 m	kg									*9 500	7 730			*7 980	6220	8
	4.5 m	kg					*14 350	*14 350	*11 610	10 510	*10 260	7 500	*8790	5590	*8060	5 5 2 0	9
	3 m	kg					*18 440	14 900	*13 580	9 920	*11 290	7200	9 580	5460	*8 390	5 150	9.
	1.5 m	kg					*21460	13 950	*15 3 30	9 410	*12 280	6910	9420	5330	8 8 9 0	5030	9.
Shoe : 600mm CWT : 7 250kg	0 m	kg					*22 610	13 550	*16 410	9 0 8 0	12 170	6 710	9320	5230	9 130	5 130	9
5001.7250kg	-1.5 m	kq			*15 110	*15 110	*22 370	13 480	*16 640	8950	12 070	6 6 2 0			9 870	5 5 10	8
	-3 m	kg	*17 590	*17 590	*23 840	*23 840	*20 970	13 620	*15 880	9 0 0 0	12 140	6 6 9 0			11440	6350	7.8
	-4.5 m	kg			*24 300	*24 300	*17 980	13 970	*13 490	9260					*11830	8230	6.
Boom : 6.45m Arm : 3.9m Shoe : 600mm CWT : 7 250kg	9 m	kg													*6 920	*6 920	7.
	7.5 m	kg									*8 160	8 0 1 0			*6 470	*6 470	8.
	6 m	kg									*8 510	7880	*7 680	5780	*6310	5 520	9.
	4.5 m	kg							*10 380	*10 380	*9380	7 610	*8 850	5670	*6 370	4950	9.
	3 m	kg					*16 410	15 380	*12 460	10 110	*10 510	7280	*9 430	5 500	*6 600	4 640	10.
	1.5 m	kg					*20 040				*11650	6950	9430	5320	*7 040	4 530	10.
	0 m	kg			*9 320	*9 320	*22 030	13 580	*15 870	9 0 9 0	12 160	6 6 9 0	9 270	5180	*7 760	4 600	9.
	-1.5 m		*9 510	*9 510			*22 500			8 870	11980	6540	9 2 0 0	5 110	8750	4880	9.
	-3 m						*21740			8 8 4 0	11970	6520			9880	5480	8.
	-4.5 m	0					*19 600								*11 110	6740	7.5
	-6 m	ka			*20 790										*11300	9 9 9 9 0	5.8

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.

# Equipment

STANDARD EQUIPMENT	STANDARD EQUIPMENT
Engine	Cab and interior
Turbocharged, 4 stroke diesel engine with water cooling, direct injection	ROPS (ISO12117-2) certified cab
and charged air cooler that meets EU Stage V requirements	Silicon oil and rubber mounts with spring
Air filter with indicator	Travel pedals and hand levers
Air intake heater	Adjustable operator seat and joystick control console
Cyclone pre-cleaner	Control joysticks with 4 switches each
Electric engine shut-off	Heater & air-conditioner, automatic
Fuel filter and water separator	Flexible antenna
Fuel filler pump: 50 l/min, with automatic shut-off	AM/FM stereo with MP3, USB and bluetooth input
Alternator, 80 A	Hydraulic safety lock lever
Electric / Electronic control system	Cab, all-weather sound suppressed, includes:
Contronics	Cup holders
Advanced mode control system	Door locks
Self-diagnostic system	Tinted glass
Machine status indication	Floor mat
Engine speed sensing power control	Horn
Automatic idling system	Large storage area
One-touch power boost	Pull-up type front window
Safety stop/start function	Removable lower windshield
Adjustable 8inch LCD color monitor	Seat belt
Master electrical disconnect switch	Safety glass
Engine restart prevention circuit	Sun screens, front, roof, rear
High-capacity halogen lights:	Rain shield
Frame-mounted 2	Windshield wiper with intermittent feature
Boom-mounted 2	Rear view camera
Batteries, 2 x 12 V / 200 Ah	Master key
Start motor, 24 V / 7 kW	Track shoes
Frame	600 mm with triple grousers
Access way with handrail	Digging Equipment
Tool storage area	Boom: 6.45 m HD
Punched metal anti-slip plates	Arm; 3.2 m HD
Undercover (heavy-duty)	Manual centralized lubrication
Undercarriage	Manual centralized lubrication
Undercover (heavy-duty)	
Hydraulic track adjusters	
Greased and sealed track link	
Track Guard	
Hydraulic system	OPTIONAL EQUIPMENT
Hose rupture valve: boom	Engine
Overload warning device	Block heater: 120 V, 240 V
Automatic sensing hydraulic system	Oil bath pre-cleaner
2-pump flow bucket circuit	Diesel coolant heater, 10 kW
Summation system	Water separator with heater
Boom priority	Auto engine shutdown
Arm priority	Electric
Swing priority	Extra work lights: Halogen/LED
Boom, arm and bucket regeneration valves	Cab-mounted 3
Swing anti-rebound valves	Boom-mounted 2
Boom and arm holding valves	Counterweight-mounted 1
Multi-stage filtering system	Travel alarm
Cylinder cushioning	Anti-theft system
Cylinder contamination seals	Rotating warning beacon
Auxiliary hydraulic valve	Undercarriage
Automatic two-speed travel motors	Full track guard

Hydraulic oil, ISO VG 46

OPTIONAL EQUIPMENT	OPTIONAL EQUIPMENT
Hydraulic system	Cab and interior
Hose rupture valve: arm	Fabric seat with heater
Boom float function	Fabric seat with heater and air suspension
Hydraulic piping:	Pilot control pattern change
Work tool management system (up to 20 programmable memories)	Opening top hatch
Hammer & shear, 1 and 2 pump flow	Falling object guard (FOG)
Hammer & shear:	Frame-mounted
variable flow and pressure pre-setting	Cab-mounted
Additional return filter	Cab-mounted falling object protective structure (FOPS)
Slope & rotator	Smoker kit (ashtray and lighter)
Grapple	Safety net for front window
Oil leak (drain) line	Lower wiper with intermittent control
Quick coupler piping	Anti-vandalism kit
Volvo hydraulic quick coupler S3	Specific key
Volvo hydraulic quick coupler VQC-HU	Track shoes
Volvo hydraulic quick coupler DR38	Track shoes 600/700/800/900 mm with triple grousers
Hydraulic oil, ISO VG 32	Track shoes 600 mm HD with triple grousers and HD links
Hydraulic oil, ISO VG 46	Track shoes 600 mm with double grousers
Hydraulic oil, ISO VG 68	Digging Equipment
Hydraulic oil, biodegradable 46	Boom: 6.2 m ME
Hydraulic oil, longlife oil 32	Arm: 2.6 m ME, 3.9 m HD
Hydraulic oil, longlife oil 46	Linkage with lifting eye
Hydraulic oil, longlife oil 68	Service
Counterweight	Tool kit, daily maintenance
6 200 kg, 6 700 kg, 7 250 kg	Tool kit, full scale
	Automatic lubrication system

Air compressor

### SELECTION OF VOLVO OPTIONAL EQUIPMENT



Air compressor

Mass excavation



VOLVO

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**