

V O L V O



Volvo Excavators

# EC380E HYBRID

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

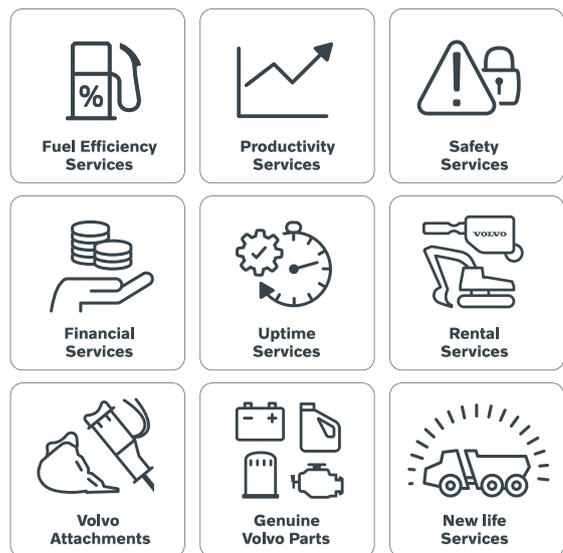
Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

### Designed for your business

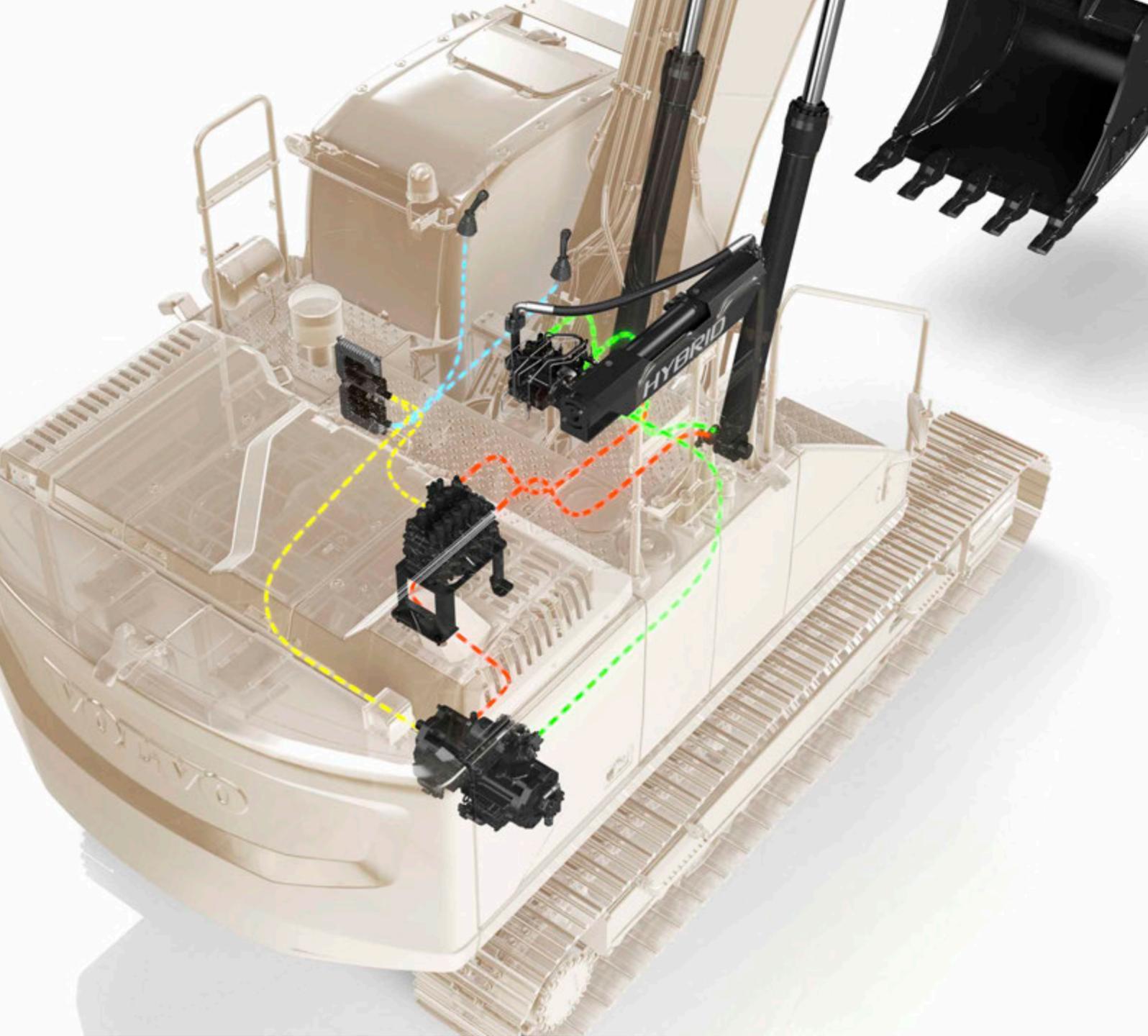
Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

### 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



## Simple solution, big savings

Introducing the new EC380E Hybrid. Featuring unique hydraulic hybrid Volvo technology, the excavator utilizes the boom down motion to charge the accumulator, with the stored energy used to drive the assist motor, which powers the engine system.

The result is up to 12%\* increase in fuel efficiency while delivering all the power and performance you would expect from a conventional EC380E.

\*Efficiency and savings may vary based on operator, application and conditions.



**12%**  
greater fuel  
efficiency\*



**15%**  
lower fuel  
consumption\*



**15%**  
reduction in CO<sub>2</sub>  
emissions\*



**100%**  
Volvo engineered  
hydraulic hybrid



### Simply reliable

The uncomplicated and reliable hybrid solution is easy to maintain and consists of just a handful of add-on components, meaning no disruption or complication to how the high performing EC380E is engineered.

### Cleaner and greener

The EC380E Hybrid reduces CO<sub>2</sub> emissions by up to 15%\* making it a more environmentally respectful choice, especially when working in built-up areas.

### Rapid payback

When working in dig and dump applications, the EC380E Hybrid is a straightforward solution with fast payback. Save fuel, lower emissions and boost the profitability of your operation.

# EC380E Hybrid in detail

## Engine

The latest generation, Volvo engine Tier4f 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, high-pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

**Air Filter:** 3-stage with precleaner.

**Automatic Idling System:** Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

Engine	Volvo	D13J
Max power at	r/min (r/s)	1,700 (28.3)
Net, ISO 9249/SAE J1349	kW (hp)	229 (307)
Gross, ISO 14396/SAE J1995	kW (hp)	230 (308)
Max torque	Nm (ft lbf)	1,692 (1,248)
at engine speed	r/min (r/s)	1,275 (21.3)
No. of cylinders		6
Displacement	l (in <sup>3</sup> )	12.8 (781)
Bore	mm (in)	131 (5.16)
Stroke	mm (in)	158 (6.22)

## Hybrid

The uncomplicated and reliable hybrid solution, Volvo's novel hydraulic hybrid harvests 'free' energy generated by the down motion of the excavator's boom and uses it to supercharge the engine system.

The powerful and regular boom-down motions charge 32 litre hydraulic accumulators (8.5 gallon), which then deliver energy to drive hydraulic assist motors that help power the engine system. There are the same levels of controllability and performance as the standard EC380E, including the ability to work in ECO mode and Hybrid mode simultaneously.

## Accumulator

No. of accumulator		1
Displacement	l (gal)	32 (8.5)

## 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/A	28/80

## Undercarriage

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

Track shoes		2 x 50
Link pitch	mm	216
Shoe width, triple grouser	mm (in)	600 / 600HD / 700 / 800 / 900 (24 / 24HD / 28 / 32 / 36)
Shoe width, double grouser	mm (in)	600 (23.6)
Bottom rollers		2 x 9
Top rollers		2 x 2

## 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 airconditioning 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 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 CO<sub>2</sub>-eq.

## Swing system

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

Max. slew speed	r/min	10.2
Max. slew torque	kNm (ft lbf)	131 (96.62)

## 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 (lbf)	277 (62.27)
Max. travel speed (low)	km/h (mi/h)	3.4 (2.1)
Max. travel speed (high)	km/h (mi/h)	5.3 (3.3)
Gradeability	°	35

## Sound Level

Sound pressure level in cab according to ISO 6396

L <sub>pA</sub>	dB	71
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External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC

L <sub>WA</sub>	dB	105
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### Hydraulic system

The new electro-hydraulic system and new MCV (main control valve) use intelligent technology to control on-demand flow for high productivity, high-digging 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 (gal/min)	2 x 300 (2 x 79.3)
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### Pilot pump, Type Gear pump

Maximum flow	l/min (gal/min)	32.6 (8.6)
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Relief value setting pressure

Implement	MPa (psi)	32.4/35.3 (4,699/5,120)
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Travel circuit	MPa (psi)	35.3 (5.12)
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Slew circuit	MPa (psi)	27.9 (4.05)
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Pilot circuit	MPa (psi)	3.9 (566)
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### Hydraulic Motors

**Travel:** Variable displacement axial piston motor with mechanical brake.

**Slew:** Fixed displacement axial piston motor with mechanical brake

### Hydraulic Cylinders

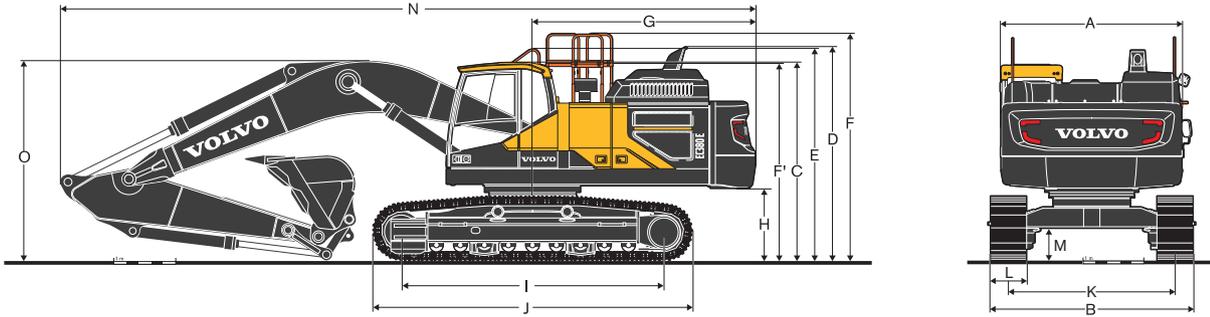
Mono boom		2
Bore x Stroke	ø x mm (ø x in)	160 x 1 530 (6.3 x 60.2)
Arm		1
Bore x Stroke	ø x mm (ø x in)	175 x 1 700 (6.9 x 66.9)
Bucket		1
Bore x Stroke	ø x mm (ø x in)	145 x 1 285 (5.7 x 50.6)
ME Bucket		1
Bore x Stroke	ø x mm (ø x in)	160 x 1 250 (6.3 x 49.2)
Bucket for LR boom		1
Bore x Stroke	ø x mm (ø x in)	140 x 1 140 (5.5 x 44.9)

### Service Refill

Fuel tank	l (gal)	620 (164)
DEF/AdBlue® tank	l (gal)	62.5 (16.5)
Hydraulic system, total	l (gal)	500 (132)
Hydraulic tank	l (gal)	225 (59.4)
Engine oil	l (gal)	42 (11.1)
Engine coolant	l (gal)	60 (15.9)
Slew reduction unit	l (gal)	6.5 (1.7)
Travel reduction unit	l (gal)	2 x 6.8 (2 x 1.8)



# Specifications



## DIMENSIONS

Description	Unit	EC380EL Hybrid						EC380ENL Hybrid					
Boom	m (ft in)	6.2 (20'4")		6.45 (21'2")				6.2 (20'4")		6.45 (21'2")			
Arm	m ft in	2.6 8'6"	2.6 8'6"	3.2 10'6"	3.2 10'6"	3.9 12'10"	3.9 12'10"	2.6 8'6"	2.6 8'6"	3.2 10'6"	3.2 10'6"	3.9 12'10"	3.9 12'10"
A. Overall width of upper structure	mm ft in	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"
B. Overall width	mm ft in	3,340 10'11"	3,340 10'11"	3,340 10'11"	3,340 10'11"	3,340 10'11"	3,340 10'11"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"	2,990 9'10"
C. Overall height of cab	mm ft in	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"	3,220 10'7"
D. Overall height of diffuser	mm ft in	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"	3,465 11'4"
E. Overall height of handrail	mm ft in	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"	3,440 11'3"
F. Overall height of guardrail (unfolded)	mm ft in	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"	3,685 12'1"
F' Overall height of guardrail (folded)	mm ft in	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"	3,215 10'7"
G. Tail swing radius	mm ft in	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"	3,600 11'10"
H. Counterweight clearance *	mm ft in	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"	1,150 3'9"
I. Tumbler length	mm ft in	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"	4,240 13'11"
J. Track length	mm ft in	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"	5,180 17'0"
K. Track gauge	mm ft in	2,740 9'0"	2,740 9'0"	2,740 9'0"	2,740 9'0"	2,740 9'0"	2,740 9'0"	2,390 7'10"	2,390 7'10"	2,390 7'10"	2,390 7'10"	2,390 7'10"	2,390 7'10"
L. Shoe width	mm ft in	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"	600 2'0"
M. Min. ground clearance *	mm ft in	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"	500 1'8"
N. Overall length	mm ft in	11,060 36'3"	11,310 37'1"	11,220 36'10"	11,270 37'0"	11,060 36'3"	11,310 37'1"	11,220 36'10"	11,270 37'0"	11,060 36'3"	11,310 37'1"	11,220 36'10"	11,270 37'0"
O. Overall height of boom	mm ft in	3,610 11'10"	3,580 11'9"	3,360 11'0"	3,605 11'10"	3,610 11'10"	3,580 11'9"	3,360 11'0"	3,605 11'10"	3,610 11'10"	3,580 11'9"	3,360 11'0"	3,605 11'10"

\* Without shoe grouser

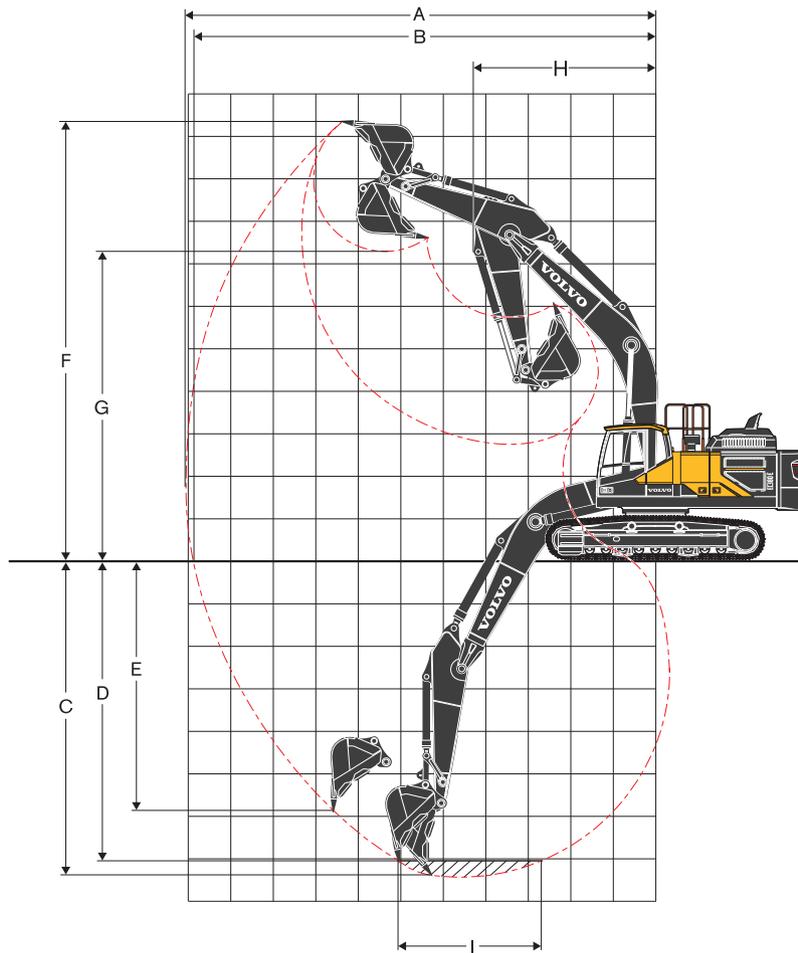


## DIMENSIONS

Boom					Arm										
Description	Unit		mono		mono		Description	Unit		mono		mono			
Boom	m	ft in	6.2 ME	20'4" ME	6.45 HD	21'2" HD	Arm	m	ft in	2.6	8'6"	3.2 HD	10'6" HD	3.9	12'10"
A	mm	ft in	6,460	21'2"	6,700	22'0"	A	mm	ft in	3,780	12'5"	4,360	14'4"	5,080	16'8"
B	mm	ft in	1,740	5'9"	1,800	5'11"	B	mm	ft in	1,145	3'9"	1,145	3'9"	1,145	3'9"
Width	mm	ft in	820	2'8"	820	2'8"	Width	mm	ft in	560	1'10"	560	1'10"	560	1'10"
Weight	kg	lb	3,355	7,390	3,310	7,297	Weight	kg	lb	2,050	4,520	2,180	4,810	2,300	5,070

\* Includes arm cylinder, piping and pin

\* Includes bucket cylinder, linkage and pin



**WORKING RANGE**

Description	Unit		EC380E Hybrid							
	m (ft in)		6.2 (20'4")				6.45 (21'2")			
Boom										
Arm	m	ft in	2.6	8'6"	2.6	8'6"	3.2	10'6"	3.9	12'10"
A. Max. digging reach	mm	ft in	10,450	34'3"	10,695	35'1"	11,220	36'10"	11,855	38'11"
B. Max. digging reach on ground	mm	ft in	10,225	33'7"	10,480	34'5"	11,010	36'1"	11,665	38'3"
C. Max. digging depth	mm	ft in	6,755	22'2"	6,990	22'11"	7,590	24'11"	8,290	27'2"
D. Max. digging depth (2.44 m level)	mm	ft in	6,575	21'7"	6,805	22'4"	7,425	24'4"	8,145	26'9"
E. Max. vertical wall digging depth	mm	ft in	4,860	15'11"	5,000	16'5"	5,510	18'1"	6,110	20'1"
F. Max. cutting height	mm	ft in	10,055	33'0"	10,195	33'5"	10,370	34'0"	10,640	34'11"
G. Max. dumping height	mm	ft in	6,800	22'4"	6,950	22'10"	7,140	23'5"	7,415	24'4"
H. Min. front slew radius	mm	ft in	4,090	13'5"	4,290	14'1"	4,280	14'1"	4,305	14'1"

**DIGGING FORCES WITH DIRECT FIT BUCKET**

Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	lb	214.5	48,220	198.0	44,510	198.0	44,510	198.0	44,510
	SAE J1179	kN	lb	234.5	52,720	215.0	48,335	215.0	48,335	215.0	48,335
	ISO 6015	kN	lb	243.4	54,720	221.7	49,840	221.7	49,840	221.7	49,840
	ISO 6015	kN	lb	265.4	59,665	242.7	54,560	242.7	54,560	242.7	54,560
Tearout force - dipper arm (Normal/Power boost)	SAE J1179	kN	lb	187.7	42,195	195.9	44,040	161.9	36,395	141.3	31,765
	SAE J1179	kN	lb	205.7	46,245	212.9	47,860	176.9	39,770	154.3	34,690
	ISO 6015	kN	lb	193.9	43,590	201.1	45,210	166.0	37,320	144.4	32,460
	ISO 6015	kN	lb	211.9	47,635	219.1	49,255	181.0	40,690	157.4	35,385

# Specifications

## MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width		Operating weight		Ground pressure		Operating weight		Ground pressure	
	mm	in	kg	lb	kPa	psi	kg	lb	kPa	psi
Triple grouser	600	24	39,825	87,799	72.6	10.5	39,445	86,961	71.9	10.4
	700	28	40,270	88,780	63.0	9.1	39,885	87,931	62.4	9.1
	800	32	40,720	89,772	55.7	8.1	40,335	88,923	55.2	8.0
	900	36	41,165	90,753	50.1	7.3	40,780	89,904	49.6	7.2
Triple grouser(HD)	600	24	40,255	88,747	73.4	10.6	39,870	87,898	72.7	10.5
Double grouser	600	24	40,105	88,416	73.1	10.6	39,720	87,568	72.4	10.5
			EC380E Hybrid with LC undercarriage, 6.45 m/21'2" boom, 3.2 m/10'6" arm, 1 574 kg/3,470 lb bucket, 6 700 kg/14,770 lb counterweight				EC380E Hybrid with NLC undercarriage, 6.45 m/21'2" boom, 3.2 m/10'6" arm, 1 574 kg/3,470 lb bucket, 6 700 kg/14,770 lb counterweight			

## BUCKET SELECTION GUIDE

Bucket type		Capacity			Cutting width		Weight		Teeth	EC380ENL Hybrid				EC380EL Hybrid			
										600 mm (24") shoe, 6 700 kg (14,770 lb) counterweight							
										6.2 m (20'4") Boom		6.45 m (21'2") Boom		6.2 m (20'4") Boom		6.45 m (21'2") Boom	
		L	m <sup>3</sup>	yd <sup>3</sup>	mm	ft in	kg	lb	EA	2.6 m (8'6")	2.6 m (8'6")	3.2 m (10'6")	3.9 m (12'10")	2.6 m (8'6")	2.6 m (8'6")	3.2 m (10'6")	3.9 m (12'10")
Direct fit Buckets	General purpose	870	0.87	1.1	750	2'6"	1,176	2,593	3	C	C	C	C	C	C	C	C
		1,000	1.00	1.3	900	2'11"	1,271	2,802	4	C	C	C	C	C	C	C	C
		1,420	1.42	1.9	1,200	3'11"	1,514	3,338	5	C	C	C	C	C	C	C	C
		1,670	1.67	2.2	1,350	4'5"	1,629	3,591	5	C	C	C	C	C	C	C	C
		1,920	1.92	2.5	1,500	4'11"	1,769	3,900	5	C	C	C	C	C	C	C	C
	2,330	2.33	3.1	1,750	5'9"	1,986	4,378	5	C	C	C	B	C	C	C	B	
	Heavy duty	1,000	1.00	1.3	900	2'11"	1,425	3,142	4	D	D	D	D	D	D	D	D
		1,420	1.42	1.9	1,200	3'11"	1,699	3,746	5	D	D	D	D	D	D	D	D
		1,920	1.92	2.5	1,500	4'11"	1,970	4,343	5	D	D	D	C	D	D	D	C
		2,330	2.33	3.1	1,750	5'9"	2,175	4,795	5	D	D	C	B	D	D	C	B
2,330		2.33	3.1	1,750	5'9"	2,175	4,795	5	D	D	C	B	D	D	C	B	
Direct fit Buckets (UQC interface)	General purpose	870	0.87	1.1	750	2'6"	1,176	2,593	3	C	C	C	C	C	C	C	C
		1,000	1.00	1.3	900	2'11"	1,271	2,802	4	C	C	C	C	C	C	C	C
		1,420	1.42	1.9	1,200	3'11"	1,514	3,338	5	C	C	C	C	C	C	C	C
		1,670	1.67	2.2	1,350	4'5"	1,629	3,591	5	C	C	C	C	C	C	C	C
		1,920	1.92	2.5	1,500	4'11"	1,769	3,900	5	C	C	C	B	C	C	C	C
	2,330	2.33	3.1	1,750	5'9"	1,967	4,337	5	C	C	B	A	C	C	B	A	
	Heavy duty	1,000	1.00	1.3	900	2'11"	1,425	3,142	4	D	D	D	D	D	D	D	D
		1,420	1.42	1.9	1,200	3'11"	1,699	3,746	5	D	D	D	D	D	D	D	D
		1,920	1.92	2.5	1,500	4'11"	1,970	4,343	5	D	D	D	B	D	D	D	B
		2,330	2.33	3.1	1,750	5'9"	2,175	4,795	5	B	A	X	X	B	B	A	X
2,330		2.33	3.1	1,750	5'9"	2,175	4,795	5	B	A	X	X	B	B	A	X	
Quick coupler Buckets (S3 Quick coupler)	General purpose	1,000	1.00	1.3	900	2'11"	1,239	2,732	4	C	C	C	C	C	C	C	C
		1,420	1.42	1.9	1,200	3'11"	1,482	3,267	5	C	C	C	C	C	C	C	C
		1,670	1.67	2.2	1,350	4'5"	1,597	3,521	5	C	C	C	C	C	C	C	C
		1,920	1.92	2.5	1,500	4'11"	1,720	3,792	5	C	C	C	B	C	C	C	C
		2,330	2.33	3.1	1,750	5'9"	1,911	4,213	5	C	C	C	A	C	C	C	B
	Heavy duty	1,000	1.00	1.3	900	2'11"	1,393	3,071	4	D	D	D	D	D	D	D	D
		1,420	1.42	1.9	1,200	3'11"	1,648	3,633	5	D	D	D	D	D	D	D	D
		1,670	1.67	2.2	1,350	4'5"	1,791	3,949	5	D	D	D	C	D	D	D	D
		1,920	1.92	2.5	1,500	4'11"	1,921	4,235	5	D	D	C	B	D	D	D	B
		2,330	2.33	3.1	1,750	5'9"	2,119	4,672	5	C	C	B	A	C	C	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> (2,000 - 2,200 lb/yd<sup>3</sup>) Coal, Caliche, Shale  
B : 1,400 - 1,600 kg/m<sup>3</sup> (2,300 - 2,700 lb/yd<sup>3</sup>) Wet earth and clay, Limestone, Sandstone  
C : 1,700 - 1,800 kg/m<sup>3</sup> (2,800 - 3,100 lb/yd<sup>3</sup>) Granite, Wet sand, Well blasted rock  
D : > 1,900 kg/m<sup>3</sup> (3,200 lb/yd<sup>3</sup>) Wet mud, Iron ore

**LIFTING CAPACITY EC380EL Hybrid**

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		9.0 m, 30 ft		Max. reach			
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	max.	
<b>Boom : 6.2 m (20'4")</b> <b>Arm : 2.6 m (8'6")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 6,700 kg (14,770 lb)</b>	7.5 m	kg							*10,700	*10,700					*10,870	10,200	6.7 m
	25 ft	lb							*23,589	*23,589					*23,964	22,487	22.0 ft
	6 m	kg							*11,220	*11,220	*10,740	8,420			*10,760	8,080	7.7 m
	20 ft	lb							*24,736	*24,736	*23,678	18,563			*23,722	17,813	25.3 ft
	4.5 m	kg					*15,850	*15,850	*12,670	11,620	*11,200	8,250			10,840	7,050	8.3 m
	15 ft	lb					*34,943	*34,943	*27,933	25,618	*24,692	18,188			23,898	15,543	27.2 ft
	3 m	kg					*19,770	16,820	*14,470	11,060	*12,030	8,000			10,120	6,540	8.6 m
	10 ft	lb					*43,585	37,082	*31,901	24,383	*26,522	17,637			22,311	14,418	28.2 ft
	1.5 m	kg					*22,280	15,990	*15,980	10,600	12,180	7,760			9,950	6,400	8.6 m
	5 ft	lb					*49,119	35,252	*35,230	23,369	26,852	17,108			21,936	14,110	28.2 ft
	0 m	kg					*22,820	15,720	*16,750	10,340	12,010	7,600			10,300	6,600	8.3 m
	0 ft	lb					*50,309	34,657	*36,927	22,796	26,477	16,755			22,708	14,550	27.2 ft
	-1.5 m	kg			*17,770	*17,770	*22,010	15,740	*16,560	10,280	11,990	7,590			11,370	7,230	7.8 m
	-5 ft	lb			*39,176	*39,176	*48,524	34,701	*36,509	22,663	26,433	16,733			25,067	15,939	25.6 ft
	-3 m	kg			*26,490	*26,490	*19,850	15,980	*15,050	10,430					*12,530	8,690	6.9 m
	-10 ft	lb			*58,400	*58,400	*43,762	35,230	*33,180	22,994					*27,624	19,158	22.6 ft
	-4.5 m	kg					*15,320	*15,320							*12,280	*12,280	5.4 m
-15 ft	lb					*33,775	*33,775							*27,073	*27,073	17.7 ft	
<b>Boom : 6.45 m (21'2")</b> <b>Arm : 2.6 m (8'6")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 6,700 kg (14,770 lb)</b>	7.5 m	kg													*10,420	9,500	7.0 m
	25 ft	lb													*22,972	20,944	23.0 ft
	6 m	kg							*11,020	*11,020	*10,360	8,460			*10,360	7,660	8.0 m
	20 ft	lb							*24,295	*24,295	*22,840	18,651			*22,840	16,887	26.2 ft
	4.5 m	kg					*16,080	*16,080	*12,580	11,570	*10,970	8,250			10,340	6,730	8.5 m
	15 ft	lb					*35,450	*35,450	*27,734	25,507	*24,185	18,188			22,796	14,837	27.9 ft
	3 m	kg							*14,430	10,990	*11,870	7,970			9,680	6,270	8.8 m
	10 ft	lb							*31,813	24,229	*26,169	17,571			21,341	13,823	28.9 ft
	1.5 m	kg							*15,940	10,530	12,140	7,720			9,520	6,130	8.8 m
	5 ft	lb							*35,142	23,215	26,764	17,020			20,988	13,514	28.9 ft
	0 m	kg					*21,850	15,620	*16,690	10,280	11,960	7,560			9,830	6,300	8.6 m
	0 ft	lb					*48,171	34,436	*36,795	22,663	26,367	16,667			21,671	13,889	28.2 ft
	-1.5 m	kg			*14,880	*14,880	*21,890	15,660	*16,550	10,220	11,930	7,530			10,770	6,870	8.1 m
	-5 ft	lb			*32,805	*32,805	*48,259	34,524	*36,486	22,531	26,301	16,601			23,744	15,146	26.6 ft
	-3 m	kg			*26,310	*26,310	*19,940	15,890	*15,270	10,350					*12,160	8,130	7.2 m
	-10 ft	lb			*58,004	*58,004	*43,960	35,031	*33,665	22,818					*26,808	17,924	23.6 ft
	-4.5 m	kg			*20,930	*20,930	*16,070	*16,070							*12,110	11,280	5.8 m
-15 ft	lb			*46,143	*46,143	*35,428	*35,428							*26,698	24,868	19.0 ft	

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 EC380EL Hybrid

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		9.0 m, 30 ft		Max. reach			
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	max.	
<b>Boom : 6.45 m (21'2")</b> <b>Arm : 3.2 m (10'6")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 6,700 kg (14,770 lb)</b>	7.5 m	kg								*9,370	8,670			*8,200	*8,200	7.7 m	
	25 ft	lb								*20,657	19,114			*18,078	*18,078	25.3 ft	
	6 m	kg								*9,500	8,600			*7,980	6,920	8.5 m	
	20 ft	lb								*20,944	18,960			*17,593	15,256	27.9 ft	
	4.5 m	kg					*14,350	*14,350	*11,610	*11,610	*10,260	8,360	*8,790	6,230	*8,060	6,150	9.1 m
	15 ft	lb					*31,636	*31,636	*25,596	*25,596	*22,619	18,431	*19,379	13,735	*17,769	13,558	29.9 ft
	3 m	kg					*18,440	17,030	*13,580	11,160	*11,290	8,050	9,410	6,100	*8,390	5,760	9.3 m
	10 ft	lb					*40,653	37,545	*29,939	24,604	*24,890	17,747	20,745	13,448	*18,497	12,699	30.5 ft
	1.5 m	kg					*21,460	16,030	*15,330	10,620	12,190	7,760	9,260	5,960	8,740	5,630	9.4 m
	5 ft	lb					*47,311	35,340	*33,797	23,413	26,874	17,108	20,415	13,140	19,268	12,412	30.8 ft
	0 m	kg					*22,610	15,610	*16,410	10,280	11,950	7,550	9,150	5,870	8,970	5,750	9.1 m
	0 ft	lb					*49,846	34,414	*36,178	22,663	26,345	16,645	20,172	12,941	19,775	12,677	29.9 ft
	-1.5 m	kg			*15,110	*15,110	*22,370	15,530	*16,640	10,150	11,850	7,460			9,690	6,190	8.6 m
	-5 ft	lb			*33,312	*33,312	*49,317	34,238	*36,685	22,377	26,125	16,446			21,363	13,647	28.2 ft
	-3 m	kg	*17,590	*17,590	*23,840	*23,840	*20,970	15,680	*15,880	10,200	11,930	7,520			11,240	7,130	7.8 m
	-10 ft	lb	*38,779	*38,779	*52,558	*52,558	*46,231	34,568	*35,009	22,487	26,301	16,579			24,780	15,719	25.6 ft
	-4.5 m	kg			*24,300	*24,300	*17,980	16,050	*13,490	10,470					*11,830	9,270	6.6 m
-15 ft	lb			*53,572	*53,572	*39,639	35,384	*29,740	23,082					*26,081	20,437	21.7 ft	
<b>Boom : 6.45 m (21'2")</b> <b>Arm : 3.9 m (12'10")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 6,700 kg (14,770 lb)</b>	9 m	kg												*6,920	*6,920	7.2 m	
	30 ft	lb												*15,256	*15,256	23.6 ft	
	7.5 m	kg								*8,160	*8,160			*6,470	*6,470	8.4 m	
	25 ft	lb								*17,990	*17,990			*14,264	*14,264	27.6 ft	
	6 m	kg								*8,510	*8,510	*7,680	6,430	*6,310	6,140	9.2 m	
	20 ft	lb								*18,761	*18,761	*16,931	14,176	*13,911	13,536	30.2 ft	
	4.5 m	kg							*10,380	*10,380	*9,380	8,480	*8,850	6,320	*6,370	5,530	9.7 m
	15 ft	lb							*22,884	*22,884	*20,679	18,695	*19,511	13,933	*14,043	12,192	31.8 ft
	3 m	kg					*16,410	*16,410	*12,460	11,350	*10,510	8,130	*9,430	6,140	*6,600	5,200	10.0 m
	10 ft	lb					*36,178	*36,178	*27,470	25,022	*23,171	17,924	*20,790	13,536	*14,550	11,464	32.8 ft
	1.5 m	kg					*20,040	16,320	*14,440	10,740	*11,650	7,790	9,270	5,960	*7,040	5,080	10.0 m
	5 ft	lb					*44,181	35,979	*31,835	23,678	*25,684	17,174	20,437	13,140	*15,521	11,199	32.8 ft
	0 m	kg			*9,320	*9,320	*22,030	15,650	*15,870	10,300	11,940	7,530	9,100	5,810	*7,760	5,160	9.8 m
	0 ft	lb			*20,547	*20,547	*48,568	34,502	*34,987	22,708	26,323	16,601	20,062	12,809	*17,108	11,376	32.2 ft
	-1.5 m	kg	*9,510	*9,510	*14,220	*14,220	*22,500	15,400	*16,510	10,070	11,770	7,370	9,030	5,740	8,590	5,480	9.3 m
	-5 ft	lb	*20,966	*20,966	*31,350	*31,350	*49,604	33,951	*36,398	22,201	25,948	16,248	19,908	12,655	18,938	12,081	30.5 ft
	-3 m	kg	*14,830	*14,830	*20,550	*20,550	*21,740	15,430	*16,250	10,040	11,750	7,360			9,710	6,160	8.6 m
-10 ft	lb	*32,695	*32,695	*45,305	*45,305	*47,928	34,017	*35,825	22,134	25,904	16,226			21,407	13,580	28.2 ft	
-4.5 m	kg	*21,190	*21,190	*27,500	*27,500	*19,600	15,700	*14,770	10,190					*11,110	7,590	7.5 m	
-15 ft	lb	*46,716	*46,716	*60,627	*60,627	*43,211	34,613	*32,562	22,465					*24,493	16,733	24.6 ft	
-6 m	kg			*20,790	*20,790	*15,130	*15,130							*11,300	11,300	5.8 m	
-20 ft	lb			*45,834	*45,834	*33,356	*33,356							*24,912	24,912	19.0 ft	

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 EC380EL Hybrid**

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		9.0 m, 30 ft		Max. reach			
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	max.	
<b>Boom : 6.2 m (20'4")</b> <b>Arm : 2.6 m (8'6")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 7,250 kg (15,985 lb)</b>	7.5 m	kg							*10,700	*10,700					*10,870	10,500	6.7 m
	25 ft	lb							*23,589	*23,589					*23,964	23,149	22.0 ft
	6 m	kg							*11,220	*11,220	*10,740	8,680			*10,760	8,340	7.7 m
	20 ft	lb							*24,736	*24,736	*23,678	19,136			*23,722	18,387	25.3 ft
	4.5 m	kg					*15,850	*15,850	*12,670	11,970	*11,200	8,520			*10,870	7,280	8.3 m
	15 ft	lb					*34,943	*34,943	*27,933	26,389	*24,692	18,783			*23,964	16,050	27.2 ft
	3 m	kg					*19,770	17,340	*14,470	11,420	*12,030	8,260			10,400	6,770	8.6 m
	10 ft	lb					*43,585	38,228	*31,901	25,177	*26,522	18,210			22,928	14,925	28.2 ft
	1.5 m	kg					*22,280	16,520	*15,980	10,950	12,520	8,020			10,230	6,620	8.6 m
	5 ft	lb					*49,119	36,420	*35,230	24,141	27,602	17,681			22,553	14,595	28.2 ft
	0 m	kg					*22,820	16,250	*16,750	10,690	12,350	7,870			10,600	6,830	8.3 m
	0 ft	lb					*50,309	35,825	*36,927	23,567	27,227	17,350			23,369	15,058	27.2 ft
	-1.5 m	kg			*17,770	*17,770	*22,010	16,270	*16,560	10,630	12,340	7,850			11,700	7,480	7.8 m
	-5 ft	lb			*39,176	*39,176	*48,524	35,869	*36,509	23,435	27,205	17,306			25,794	16,491	25.6 ft
	-3 m	kg			*26,490	*26,490	*19,850	16,500	*15,050	10,780					*12,530	8,990	6.9 m
	-10 ft	lb			*58,400	*58,400	*43,762	36,376	*33,180	23,766					*27,624	19,820	22.6 ft
	-4.5 m	kg					*15,320	*15,320							*12,280	*12,280	5.4 m
-15 ft	lb					*33,775	*33,775							*27,073	*27,073	17.7 ft	
<b>Boom : 6.45 m (21'2")</b> <b>Arm : 2.6 m (8'6")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 7,250 kg (15,985 lb)</b>	7.5 m	kg													*10,420	9,790	7.0 m
	25 ft	lb													*22,972	21,583	23.0 ft
	6 m	kg							*11,020	*11,020	*10,360	8,720			*10,360	7,900	8.0 m
	20 ft	lb							*24,295	*24,295	*22,840	19,224			*22,840	17,416	26.2 ft
	4.5 m	kg					*16,080	*16,080	*12,580	11,920	*10,970	8,510			*10,480	6,950	8.5 m
	15 ft	lb					*35,450	*35,450	*27,734	26,279	*24,185	18,761			*23,104	15,322	27.9 ft
	3 m	kg							*14,430	11,340	*11,870	8,240			9,950	6,480	8.8 m
	10 ft	lb							*31,813	25,000	*26,169	18,166			21,936	14,286	28.9 ft
	1.5 m	kg							*15,940	10,880	12,490	7,990			9,800	6,350	8.8 m
	5 ft	lb							*35,142	23,986	27,536	17,615			21,605	13,999	28.9 ft
	0 m	kg					*21,850	16,140	*16,690	10,630	12,310	7,830			10,120	6,530	8.6 m
	0 ft	lb					*48,171	35,583	*36,795	23,435	27,139	17,262			22,311	14,396	28.2 ft
	-1.5 m	kg			*14,880	*14,880	*21,890	16,190	*16,550	10,570	12,280	7,800			11,090	7,110	8.1 m
	-5 ft	lb			*32,805	*32,805	*48,259	35,693	*36,486	23,303	27,073	17,196			24,449	15,675	26.6 ft
	-3 m	kg			*26,310	*26,310	*19,940	16,410	*15,270	10,700					*12,160	8,410	7.2 m
	-10 ft	lb			*58,004	*58,004	*43,960	36,178	*33,665	23,589					*26,808	18,541	23.6 ft
	-4.5 m	kg			*20,930	*20,930	*16,070	*16,070							*12,110	11,650	5.8 m
-15 ft	lb			*46,143	*46,143	*35,428	*35,428							*26,698	25,684	19.0 ft	

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 EC380EL Hybrid

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		9.0 m, 30 ft		Max. reach			
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	max.	
<b>Boom : 6.45 m (21'2")</b> <b>Arm : 3.2 m (10'6")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 7,250 kg (15,985 lb)</b>	7.5 m	kg								*9,370	8,930			*8,200	*8,200	7.7 m	
	25 ft	lb								*20,657	19,687			*18,078	*18,078	25.3 ft	
	6 m	kg								*9,500	8,860			*7,980	7,140	8.5 m	
	20 ft	lb								*20,944	19,533			*17,593	15,741	27.9 ft	
	4.5 m	kg					*14,350	*14,350	*11,610	*11,610	*10,260	8,620	*8,790	6,450	*8,060	6,360	9.1 m
	15 ft	lb					*31,636	*31,636	*25,596	*25,596	*22,619	19,004	*19,379	14,220	*17,769	14,021	29.9 ft
	3 m	kg					*18,440	17,560	*13,580	11,510	*11,290	8,310	9,680	6,320	*8,390	5,960	9.3 m
	10 ft	lb					*40,653	38,713	*29,939	25,375	*24,890	18,320	21,341	13,933	*18,497	13,140	30.5 ft
	1.5 m	kg					*21,460	16,560	*15,330	10,970	*12,280	8,020	9,530	6,170	8,990	5,830	9.4 m
	5 ft	lb					*47,311	36,509	*33,797	24,185	*27,073	17,681	21,010	13,603	19,820	12,853	30.8 ft
	0 m	kg					*22,610	16,130	*16,410	10,630	12,300	7,810	9,420	6,080	9,240	5,960	9.1 m
	0 ft	lb					*49,846	35,561	*36,178	23,435	27,117	17,218	20,768	13,404	20,371	13,140	29.9 ft
	-1.5 m	kg			*15,110	*15,110	*22,370	16,060	*16,640	10,500	12,200	7,720			9,980	6,410	8.6 m
	-5 ft	lb			*33,312	*33,312	*49,317	35,406	*36,685	23,149	26,896	17,020			22,002	14,132	28.2 ft
	-3 m	kg	*17,590	*17,590	*23,840	*23,840	*20,970	16,200	*15,880	10,550	*12,270	7,790			*11,520	7,380	7.8 m
	-10 ft	lb	*38,779	*38,779	*52,558	*52,558	*46,231	35,715	*35,009	23,259	*27,051	17,174			*25,397	16,270	25.6 ft
	-4.5 m	kg			*24,300	*24,300	*17,980	16,570	*13,490	10,820					*11,830	9,580	6.6 m
-15 ft	lb			*53,572	*53,572	*39,639	36,531	*29,740	23,854					*26,081	21,120	21.7 ft	
<b>Boom : 6.45 m (21'2")</b> <b>Arm : 3.9 m (12'10")</b> <b>Shoe : 600 mm (24")</b> <b>CWT : 7,250 kg (15,985 lb)</b>	9 m	kg												*6,920	*6,920	7.2 m	
	30 ft	lb													*15,256	*15,256	23.6 ft
	7.5 m	kg								*8,160	*8,160			*6,470	*6,470	8.4 m	
	25 ft	lb								*17,990	*17,990			*14,264	*14,264	27.6 ft	
	6 m	kg								*8,510	*8,510	*7,680	6,640	*6,310	*6,310	9.2 m	
	20 ft	lb								*18,761	*18,761	*16,931	14,639	*13,911	*13,911	30.2 ft	
	4.5 m	kg							*10,380	*10,380	*9,380	8,740	*8,850	6,530	*6,370	5,720	9.7 m
	15 ft	lb							*22,884	*22,884	*20,679	19,268	*19,511	14,396	*14,043	12,610	31.8 ft
	3 m	kg					*16,410	*16,410	*12,460	11,710	*10,510	8,400	*9,430	6,360	*6,600	5,380	10.0 m
	10 ft	lb					*36,178	*36,178	*27,470	25,816	*23,171	18,519	*20,790	14,021	*14,550	11,861	32.8 ft
	1.5 m	kg					*20,040	16,850	*14,440	11,090	*11,650	8,060	9,540	6,170	*7,040	5,260	10.0 m
	5 ft	lb					*44,181	37,148	*31,835	24,449	*25,684	17,769	21,032	13,603	*15,521	11,596	32.8 ft
	0 m	kg			*9,320	*9,320	*22,030	16,170	*15,870	10,650	12,290	7,790	9,370	6,020	*7,760	5,350	9.8 m
	0 ft	lb			*20,547	*20,547	*48,568	35,649	*34,987	23,479	27,095	17,174	20,657	13,272	*17,108	11,795	32.2 ft
	-1.5 m	kg	*9,510	*9,510	*14,220	*14,220	*22,500	15,930	*16,510	10,420	12,120	7,640	9,300	5,960	8,850	5,680	9.3 m
	-5 ft	lb	*20,966	*20,966	*31,350	*31,350	*49,604	35,120	*36,398	22,972	26,720	16,843	20,503	13,140	19,511	12,522	30.5 ft
	-3 m	kg	*14,830	*14,830	*20,550	*20,550	*21,740	15,960	*16,250	10,390	12,100	7,620			9,990	6,390	8.6 m
-10 ft	lb	*32,695	*32,695	*45,305	*45,305	*47,928	35,186	*35,825	22,906	26,676	16,799			22,024	14,088	28.2 ft	
-4.5 m	kg	*21,190	*21,190	*27,500	*27,500	*19,600	16,220	*14,770	10,550					*11,110	7,850	7.5 m	
-15 ft	lb	*46,716	*46,716	*60,627	*60,627	*43,211	35,759	*32,562	23,259					*24,493	17,306	24.6 ft	
-6 m	kg			*20,790	*20,790	*15,130	*15,130							*11,300	*11,300	5.8 m	
-20 ft	lb			*45,834	*45,834	*33,356	*33,356							*24,912	*24,912	19.0 ft	

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 Hybrid**

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		9.0 m, 30 ft		Max. reach			
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	max.	
Boom : 6.2 m (20'4") Arm : 2.6 m (8'6") Shoe : 600 mm (24") CWT : 7,250 kg (15,985 lb)	7.5 m	kg							*10,730	*10,730					*10,900	9,180	6.7 m
	25 ft	lb							*23,656	*23,656					*24,030	20,238	22.0 ft
	6 m	kg							*11,250	10,850	*10,770	7,580			*10,800	7,280	7.7 m
	20 ft	lb							*24,802	23,920	*23,744	16,711			*23,810	16,050	25.3 ft
	4.5 m	kg					*15,890	*15,890	*12,700	10,400	*11,230	7,430			*10,900	6,350	8.3 m
	15 ft	lb					*35,031	*35,031	*27,999	22,928	*24,758	16,380			*24,030	13,999	27.2 ft
	3 m	kg					*19,810	14,740	*14,500	9,870	*12,070	7,180			10,320	5,880	8.6 m
	10 ft	lb					*43,674	32,496	*31,967	21,760	*26,610	15,829			22,752	12,963	28.2 ft
	1.5 m	kg					*22,330	13,960	*16,020	9,430	12,420	6,950			10,150	5,750	8.6 m
	5 ft	lb					*49,229	30,776	*35,318	20,790	27,381	15,322			22,377	12,677	28.2 ft
	0 m	kg					*22,870	13,710	*16,800	9,170	12,250	6,800			10,520	5,910	8.4 m
	0 ft	lb					*50,420	30,225	*37,038	20,216	27,007	14,991			23,193	13,029	27.6 ft
	-1.5 m	kg			*17,780	*17,780	*22,050	13,730	*16,610	9,120	12,240	6,790			11,600	6,480	7.8 m
	-5 ft	lb			*39,198	*39,198	*48,612	30,269	*36,619	20,106	26,985	14,969			25,574	14,286	25.6 ft
	-3 m	kg			*26,540	*26,540	*19,900	13,950	*15,090	9,250					*12,560	7,760	6.9 m
	-10 ft	lb			*58,511	*58,511	*43,872	30,754	*33,268	20,393					*27,690	17,108	22.6 ft
	-4.5 m	kg					*15,360	14,450							*12,310	11,140	5.4 m
-15 ft	lb					*33,863	31,857							*27,139	24,559	17.7 ft	
Boom : 6.45 m (21'2") Arm : 2.6 m (8'6") Shoe : 600 mm (24") CWT : 7,250 kg (15,985 lb)	7.5 m	kg												*10,420	8,530	7.0 m	
	25 ft	lb												*22,972	18,805	23.0 ft	
	6 m	kg							*11,020	10,810	*10,360	7,600			*10,360	6,880	8.0 m
	20 ft	lb							*24,295	23,832	*22,840	16,755			*22,840	15,168	26.2 ft
	4.5 m	kg					*16,080	15,750	*12,580	10,320	*10,970	7,400			*10,480	6,030	8.5 m
	15 ft	lb					*35,450	34,723	*27,734	22,752	*24,185	16,314			*23,104	13,294	27.9 ft
	3 m	kg							*14,430	9,760	*11,870	7,130			9,850	5,610	8.8 m
	10 ft	lb							*31,813	21,517	*26,169	15,719			21,716	12,368	28.9 ft
	1.5 m	kg							*15,940	9,320	12,360	6,890			9,690	5,480	8.8 m
	5 ft	lb							*35,142	20,547	27,249	15,190			21,363	12,081	28.9 ft
	0 m	kg					*21,850	13,560	*16,690	9,070	12,180	6,730			10,010	5,620	8.6 m
	0 ft	lb					*48,171	29,895	*36,795	19,996	26,852	14,837			22,068	12,390	28.2 ft
	-1.5 m	kg			*14,880	*14,880	*21,890	13,610	*16,550	9,020	12,140	6,700			10,970	6,120	8.1 m
	-5 ft	lb			*32,805	*32,805	*48,259	30,005	*36,486	19,886	26,764	14,771			24,185	13,492	26.6 ft
	-3 m	kg			*26,310	*26,310	*19,940	13,820	*15,270	9,140					*12,160	7,240	7.2 m
	-10 ft	lb			*58,004	*58,004	*43,960	30,468	*33,665	20,150					*26,808	15,961	23.6 ft
	-4.5 m	kg			*20,930	*20,930	*16,070	14,270							*12,110	9,990	5.8 m
-15 ft	lb			*46,143	*46,143	*35,428	31,460							*26,698	22,024	19.0 ft	

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 EC380ENL Hybrid

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		9.0 m, 30 ft		Max. reach			
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	max.	
Boom : 6.45 m (21'2") Arm : 3.2 m (10'6") Shoe : 600 mm (24") CWT : 7,250 kg (15,985 lb)	7.5 m	kg								*9,370	7,800			*8,200	7,510	7.7 m	
	25 ft	lb								*20,657	17,196			*18,078	16,557	25.3 ft	
	6 m	kg								*9,500	7,730			*7,980	6,220	8.5 m	
	20 ft	lb								*20,944	17,042			*17,593	13,713	27.9 ft	
	4.5 m	kg					*14,350	*14,350	*11,610	10,510	*10,260	7,500	*8,790	5,590	*8,060	5,520	9.1 m
	15 ft	lb					*31,636	*31,636	*25,596	23,171	*22,619	16,535	*19,379	12,324	*17,769	12,170	29.9 ft
	3 m	kg					*18,440	14,900	*13,580	9,920	*11,290	7,200	9,580	5,460	*8,390	5,150	9.3 m
	10 ft	lb					*40,653	32,849	*29,939	21,870	*24,890	15,873	21,120	12,037	*18,497	11,354	30.5 ft
	1.5 m	kg					*21,460	13,950	*15,330	9,410	*12,280	6,910	9,420	5,330	8,890	5,030	9.4 m
	5 ft	lb					*47,311	30,754	*33,797	20,745	*27,073	15,234	20,768	11,751	19,599	11,089	30.8 ft
	0 m	kg					*22,610	13,550	*16,410	9,080	12,170	6,710	9,320	5,230	9,130	5,130	9.1 m
	0 ft	lb					*49,846	29,873	*36,178	20,018	26,830	14,793	20,547	11,530	20,128	11,310	29.9 ft
	-1.5 m	kg			*15,110	*15,110	*22,370	13,480	*16,640	8,950	12,070	6,620			9,870	5,510	8.6 m
	-5 ft	lb			*33,312	*33,312	*49,317	29,718	*36,685	19,731	26,610	14,595			21,760	12,147	28.2 ft
	-3 m	kg	*17,590	*17,590	*23,840	*23,840	*20,970	13,620	*15,880	9,000	12,140	6,690			11,440	6,350	7.8 m
	-10 ft	lb	*38,779	*38,779	*52,558	*52,558	*46,231	30,027	*35,009	19,842	26,764	14,749			25,221	13,999	25.6 ft
	-4.5 m	kg			*24,300	*24,300	*17,980	13,970	*13,490	9,260					*11,830	8,230	6.6 m
-15 ft	lb			*53,572	*53,572	*39,639	30,799	*29,740	20,415					*26,081	18,144	21.7 ft	
Boom : 6.45 m (21'2") Arm : 3.9 m (12'10") Shoe : 600 mm (24") CWT : 7,250 kg (15,985 lb)	9 m	kg												*6,920	*6,920	7.2 m	
	30 ft	lb												*15,256	*15,256	23.6 ft	
	7.5 m	kg								*8,160	8,010			*6,470	*6,470	8.4 m	
	25 ft	lb								*17,990	17,659			*14,264	*14,264	27.6 ft	
	6 m	kg								*8,510	7,880	*7,680	5,780	*6,310	5,520	9.2 m	
	20 ft	lb								*18,761	17,372	*16,931	12,743	*13,911	12,170	30.2 ft	
	4.5 m	kg							*10,380	*10,380	*9,380	7,610	*8,850	5,670	*6,370	4,950	9.7 m
	15 ft	lb							*22,884	*22,884	*20,679	16,777	*19,511	12,500	*14,043	10,913	31.8 ft
	3 m	kg					*16,410	15,380	*12,460	10,110	*10,510	7,280	*9,430	5,500	*6,600	4,640	10.0 m
	10 ft	lb					*36,178	33,907	*27,470	22,289	*23,171	16,050	*20,790	12,125	*14,550	10,229	32.8 ft
	1.5 m	kg					*20,040	14,220	*14,440	9,510	*11,650	6,950	9,430	5,320	*7,040	4,530	10.0 m
	5 ft	lb					*44,181	31,350	*31,835	20,966	*25,684	15,322	20,790	11,729	*15,521	9,987	32.8 ft
	0 m	kg			*9,320	*9,320	*22,030	13,580	*15,870	9,090	12,160	6,690	9,270	5,180	*7,760	4,600	9.8 m
	0 ft	lb			*20,547	*20,547	*48,568	29,939	*34,987	20,040	26,808	14,749	20,437	11,420	*17,108	10,141	32.2 ft
	-1.5 m	kg	*9,510	*9,510	*14,220	*14,220	*22,500	13,350	*16,510	8,870	11,980	6,540	9,200	5,110	8,750	4,880	9.3 m
	-5 ft	lb	*20,966	*20,966	*31,350	*31,350	*49,604	29,432	*36,398	19,555	26,411	14,418	20,283	11,266	19,290	10,759	30.5 ft
	-3 m	kg	*14,830	*14,830	*20,550	*20,550	*21,740	13,380	*16,250	8,840	11,970	6,520			9,880	5,480	8.6 m
-10 ft	lb	*32,695	*32,695	*45,305	*45,305	*47,928	29,498	*35,825	19,489	26,389	14,374			21,782	12,081	28.2 ft	
-4.5 m	kg	*21,190	*21,190	*27,500	26,760	*19,600	13,630	*14,770	8,990					*11,110	6,740	7.5 m	
-15 ft	lb	*46,716	*46,716	*60,627	58,996	*43,211	30,049	*32,562	19,820					*24,493	14,859	24.6 ft	
-6 m	kg			*20,790	*20,790	*15,130	14,160							*11,300	9,990	5.8 m	
-20 ft	lb			*45,834	*45,834	*33,356	31,217							*24,912	22,024	19.0 ft	

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

# Equipment

## STANDARD EQUIPMENT

### Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler

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 (13.2 gal/min), with automatic shut-off

Alternator, 80 A

### Hybrid

Accumulator, 32 L (8.5 gal)

Boom regeneration valves

Assist motor

Main pump with PTO

### 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 8inch 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

### Frame

Access way with handrail

Tool storage area

Punched metal anti-slip plates

Undercover (heavy-duty)

### Undercarriage

Undercover (heavy-duty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

### 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

ECO mode fuel saving technology

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

## STANDARD EQUIPMENT

### 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

AM/FM stereo with MP3, USB and bluetooth input

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

### Track shoes

24" with triple grousers

### Digging equipment

Boom: 6.45 m (21.2 ft) HD

Arm: 3.2 m (10.5 ft) HD

Manual centralized lubrication

# Equipment

## 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

Delayed engine shutdown

### Electric

Extra work lights: Halogen/LED

Cab-mounted 3

Boom-mounted 2

Counterweight-mounted 1

Green light beacon

Travel alarm

Anti-theft system

Rotating warning beacon

### Undercarriage

Full track guard

### 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 DR38

Hydraulic oil, ISO VG 32

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

## OPTIONAL EQUIPMENT

### Counterweight

6 200 kg (13,669 lbs), 6 700 kg (14,771 lbs), 7 250 kg (15,984 lbs), 8 200 kg (18,078 lbs) LR

### Cab and interior

Fabric seat with heater

Fabric seat with heater and air suspension

Deluxe seat

High-strength one piece front windshield (P5A)

Pilot control pattern change

Opening top hatch

Falling object guard (FOG)

Frame-mounted

Cab-mounted

Cab-mounted falling object protective structure (FOPS)

Volvo smart view

Smoker kit (ashtray and lighter)

Safety net for front window

Lower wiper with intermittent control

Anti-vandalism kit

Specific key

### Track shoes

Track shoes 600/700/800/900 mm (24/28/32/34") with triple grousers

Track shoes 600 mm (24") HD with triple grousers and HD links

Track shoes 600 mm (24") with double grousers

### Digging equipment

Boom: 6.2 m (20.3 ft) ME, 8.5 m (27.9 ft) LR

Arm: 2.6 m (8.5 ft) ME, 3.9 m (12.8 ft) HD, 5.0 m (16.4) LR

Linkage with lifting eye

### Machine controls

Dig Assist

Please refer to separate Brochure for more details

### Service

Tool kit, daily maintenance

Tool kit, full scale

Automatic lubrication system

Air compressor

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

Dig Assist



Air gun



Deluxe seat



Volvo Smart View



High-strength one-piece front windshield



Demolition package



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.

**V O L V O**