

Volvo Construction Equipment
Building Tomorrow



EC350E

Volvo Excavators 34.7-40.6 t 299 hp



A large wind turbine stands in a field of grazing cattle under a warm, orange-hued sunset sky. The turbine's blades are partially visible, with one blade extending from the left side of the frame. The scene is peaceful and rural, with rolling hills in the background.

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

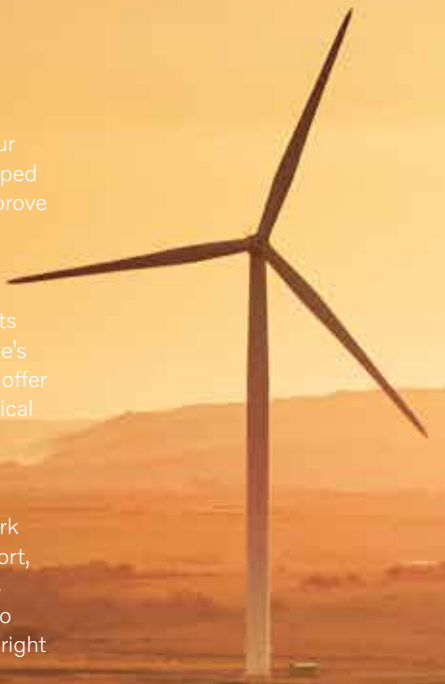
Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

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

The value of versatility

Introducing the Volvo EC350E, a true 35-tonne machine. The new size class excavator features the very latest in engineering excellence, including D8M Volvo engine and electro-hydraulic control system. The EC350E is designed to deliver outstanding versatility, efficiency and productivity, making it the perfect partner for general construction projects.

Transport with ease

When loaded on a trailer, the total height of the vehicle and machine is less than 4-meters, meaning the 35-tonne excavator can be easily transported without the need for dismantling, allowing you to move between jobsites in no time. Just load and go.



Adapt to the job

Operators can easily select and adjust a number of functions depending on personal preferences and the task at hand, including Boom/Swing and Boom/Travel priority which enables to prioritize one function over another. Operators can also easily adjust the boom down speed, ideal for precision tasks which require optimum control.



Productivity up, fuel down

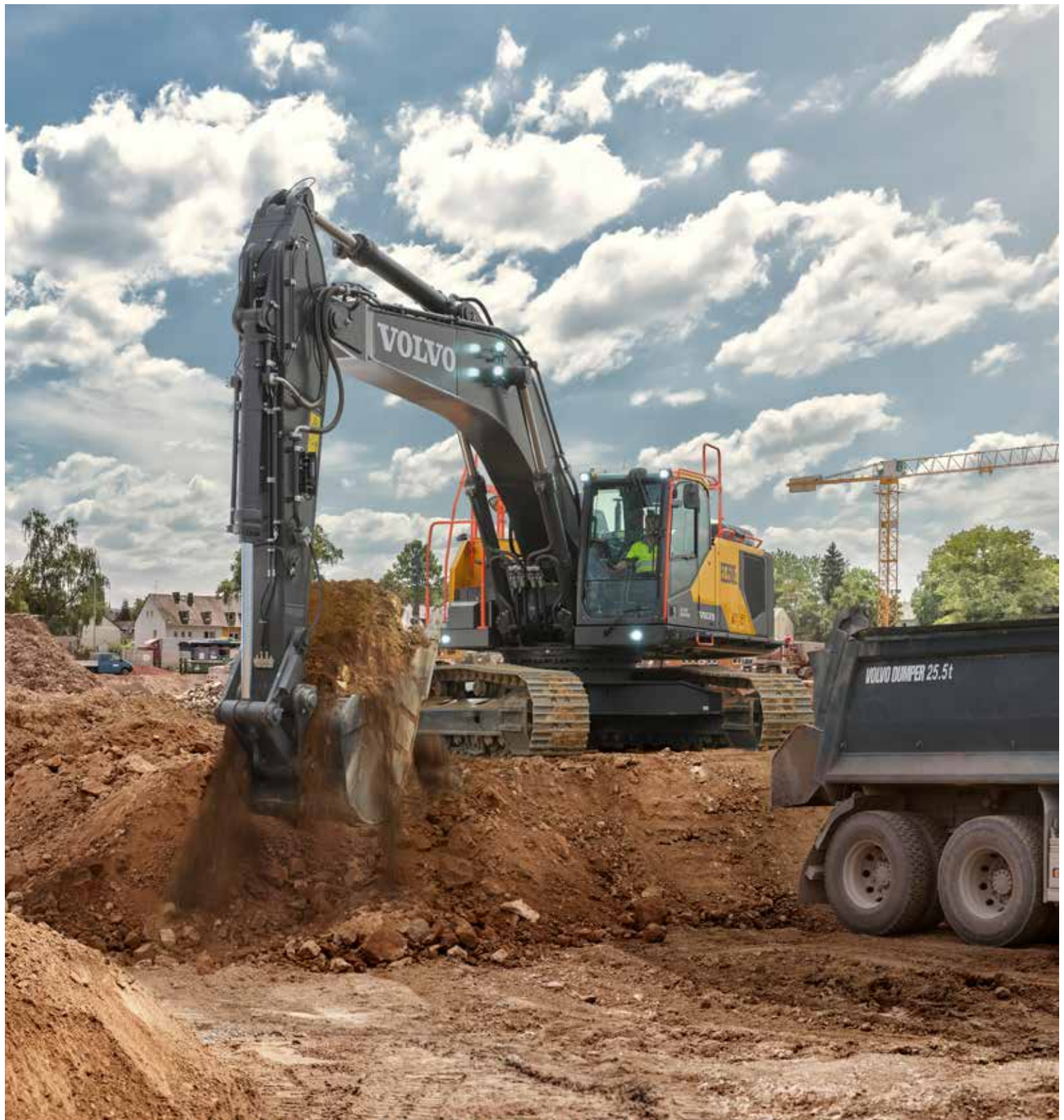
Count on the EC350E to deliver outstanding levels of productivity and fuel efficiency. The next generation electro-hydraulic system provides on-demand flow and reduces internal losses in the hydraulic circuit, while the Volvo D8M engine features a rated power of 1600rpm and delivers impressively high torque at low rpm. Auto-engine idle and auto-engine shutdown further reduce unnecessary fuel consumption.



Do it all

Take on any job with a range of factory-delivered attachments, such as Volvo buckets, breakers and quick couplers. Volvo Attachments are perfectly matched to your machine, helping to get the job done with optimum efficiency, productivity and performance.





A PURPOSE-BUILT 35-TONNER

In the EC350E Volvo has extended its excavator range to offer a 35-tonne machine which combines quality with exceptional value. The result is a machine which delivers performance, efficiency and maximum profitability in general construction applications.



A SMOOTHER SHIFT

Boom and arm bouncing reduction technology reduces machine shock, resulting in a more comfortable and productive operator performance. Optional Comfort Drive Control further helps to reduce fatigue by enabling operators to steer the machine using the L8 joystick rollers instead of the pedals.

Operate efficiently

Operators can work in comfort and control thanks to a host of features designed to boost operator efficiency. Bouncing reduction technology, customizable settings, Dig Assist apps and the best cab on the market all combine to help operators achieve optimum results and a profitable performance.

How you like it

Get ready for the working day in no time with customizable settings, including preferred control patterns and joystick responsiveness easily selected from the monitor. A 'long push' function on the joystick allows another shortcut to be set, and with the L8 joystick operators can create a shortcut to hydraulic priority functions.



Industry-renowned cab

Step inside the best cab on the market, the Volvo Care Cab. With low noise, low vibration and best-in-class visibility, operators will experience the ultimate in comfort and productivity. A convenient cab layout and ergonomic controls add to the unrivalled operator environment, all contributing towards an enhanced operator performance.



More precision

Unlock the full potential of your machine's productivity with Dig Assist, powered by the 10" Volvo Co-Pilot display. Gain access to a set of smart apps, including 2D, In-Field Design, 3D software packages, On-Board Weighing and Volvo Active Control, designed to optimize the digging process.



More control

The working day just got easier with Volvo Active Control functions, including automated boom and bucket movements, making the digging process more accurate and twice as fast. Simply set the grade from the Volvo Co-Pilot display, push the button and get to work – all controlled using a single lever.



Safety, inside and out

Whether working inside or on the machine, features such as unrivalled visibility and 3-point right-hand side access mean you can be sure that the highest levels of safety have been considered in every design detail of the EC350E.

Get around safely

Industry renowned features such as bolted anti-slip plates, high visibility handrails and guardrails ensure the highest levels of safety when negotiating the machine. For further convenience, the optional foldable cab entrance step and side walkways easily fold away to enable easy transportation.



Industry-leading visibility

The low machine hood design contributes to best-in-class visibility to the side and rear of the machine from the operator's seat. This direct visibility is complemented by rear and side view cameras.



Volvo Smart View

The optional Volvo Smart View uses front, rear and side cameras to provide a real-time, overhead view of the machine, resulting in safer machine rotation while working, especially in confined spaces.



Know your limits

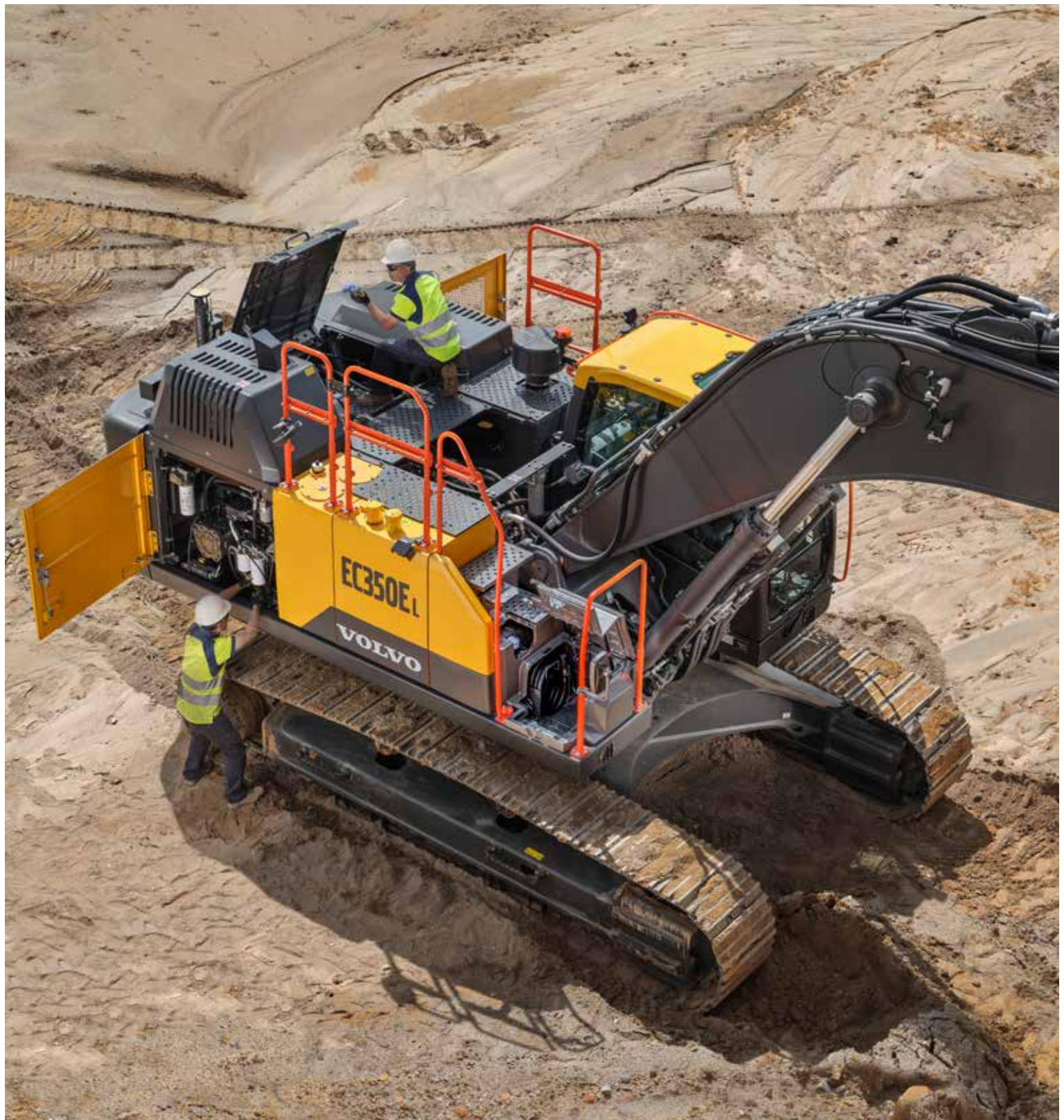
With Volvo Active Control, operators can easily set swing fence, height limit and depth limit from the Volvo Co-Pilot. This helps to avoid contact with side obstacles, overhead obstacles such as power lines and underground hazards such as pipes and cables.





EASY AS 1, 2, 3

Reach the upper structure with safety and confidence thanks to 3-point right-hand side access, also providing access to the handily located UREA tank. A splash guard on the UREA tank makes filling quicker and easier, reducing the risk of spillage and subsequent corrosion.



SIMPLE TO SERVICE

Maintenance is quicker and easier thanks to the electro-hydraulic system which requires less hoses. This reduces the need for couplings, which in turn minimizes maintenance requirements and increases reliability. 1000hr engine oil and engine oil filter change intervals further ensure the time and cost spent on maintenance is kept to a minimum.

Lower maintenance costs

Keep uptime to a maximum and maintenance costs to a minimum in the EC350E. Reduced maintenance requirements and easy servicing ensures your machine stays productive, for longer. A comprehensive range of Uptime Services further help to minimize downtime and keep your operation moving.

Ground-level access to filters

Grouped service points accessed from the ground level make routine maintenance quick and easy.



Engine protection

Keep your turbocharger working in top condition for longer with the optional delayed engine shutdown. To avoid overheating, the intelligent function turns the machine off when the turbocharger has cooled down to the appropriate temperature – and can be set to activate automatically by the operator.



Machine monitoring made easy

Maximize machine uptime and reduce repair costs with the CareTrack telematic system. Choose to keep track of your machine yourself or let us take care of it with Volvo Active Care. Our Volvo Uptime Center will provide 24/7 machine monitoring, supplying weekly reports and notifying you should preventive maintenance action be required.



Keeping you moving

Maintain productivity and machine uptime with our range of widely available, tested and approved Genuine Volvo Parts – all backed by Volvo warranty. Your Volvo dealer can help you stay on track, offering flexible maintenance and repair options, as well as planned servicing, to extend the life of your excavator.



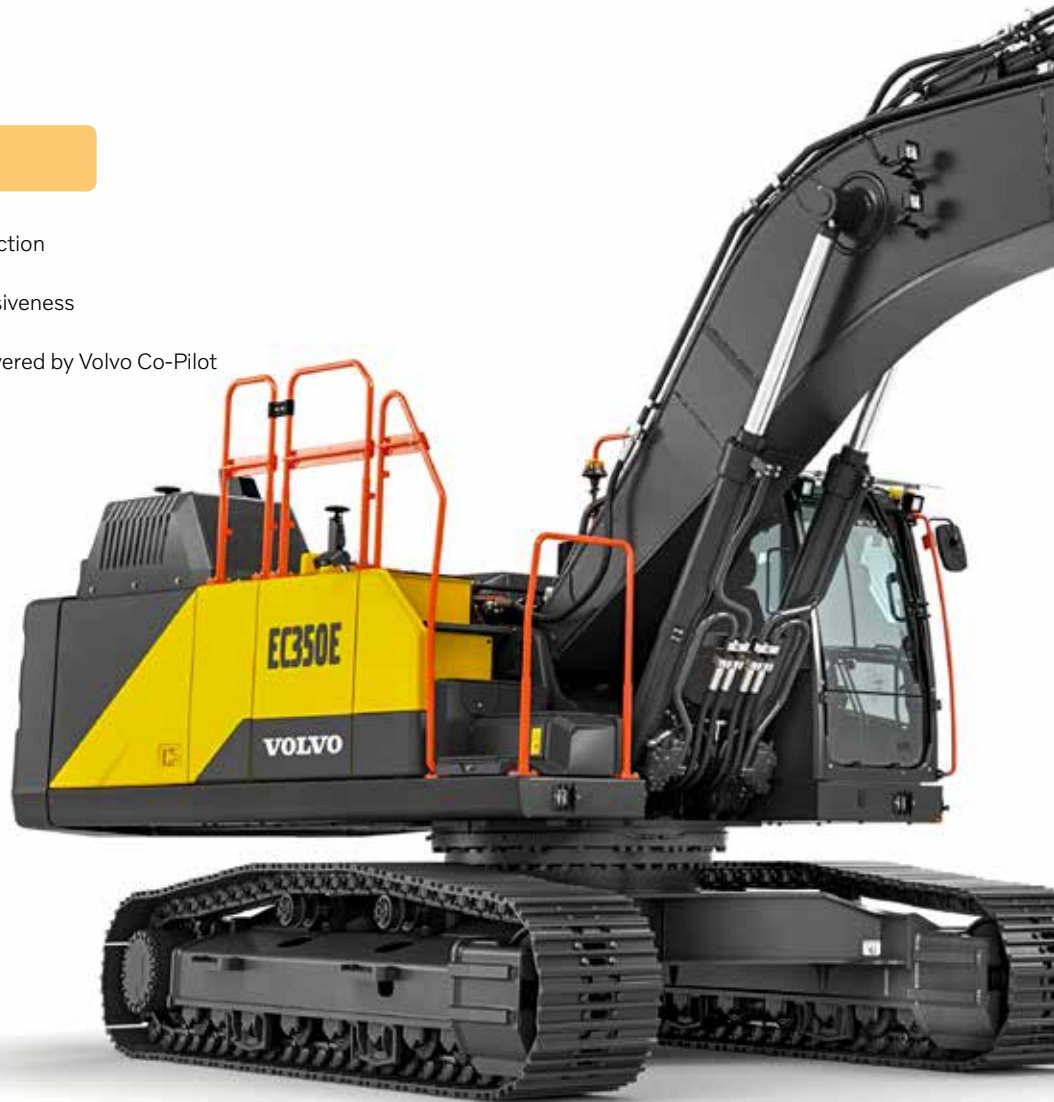
35-tonnes of excellence

A VERSATILE PERFORMER

- Easy machine transportation: load and go
- Selectable boom/swing and boom/travel priority
- Adjustable boom down speed
- Range of Volvo Attachments: buckets, breakers and quick couplers

THE OPERATOR'S CHOICE

- Volvo Care Cab
- Boom and arm bouncing reduction
- Comfort Drive Control
- Customizable joystick responsiveness
- Selectable pattern changes
- Range of Dig Assist apps, powered by Volvo Co-Pilot



OUTSTANDING FUEL EFFICIENCY

- Next generation electro-hydraulic system
- Rated engine power of 1600rpm, high torque at low rpm
- Automatic engine idle & shutdown
- ECO mode, Work modes
- Fuel Efficiency Report

For a dramatic improvement in fuel efficiency, look no further than the EC350E Hybrid.



SAFETY, INSIDE AND OUT

- Best-in-class side and rear visibility
- Volvo Smart View
- Swing fence, height/depth limits (Volvo Active Control)
- 3-point right-hand side access to the upper structure
- Anti-slip plates, high visibility guardrails/handrails
- Foldable cab entrance step and side walkways (Options)

LOWER MAINTENANCE COSTS

- Electro-hydraulic system: less hoses/couplings required
- Ground-level access to grouped filters
- Splash guard on the UREA tank
- 1000hr engine oil and engine oil filter change intervals
- Engine auto-regeneration
- Delayed engine shutdown: extend turbocharger lifetime (Option)

UPTIME SERVICES: BOOST YOUR PROFITS

- CareTrack telematic system
- Volvo Active Care: 24/7 machine monitoring
- Care Inspection
- Maintenance and repair agreements
- Oil Analysis
- Undercarriage Inspections

Volvo EC350E in detail

Engine

The next-generation Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions, superior performance and fuel efficiency. The engine uses precise, highpressure fuel injectors, turbo charger and intercooler, and electronic engine controls to optimize machine performance.

Engine	Volvo	D8M
Max power at	r/min	1 600
Net, ISO 9249/SAE J1349	kW	219
	hp	298
Gross, ISO 14396/SAE J1995	kW	220
	hp	299
Max torque	Nm	1 400
at engine speed	r/min	1 400
No. of cylinders		6
Displacement	l	7.7
Bore	mm	110
Stroke	mm	135

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.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	170
Alternator	V/A	28/120
Start motor	V - kW	24 - 5.5

Undercarriage

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

Track shoe		2 x 48
Link pitch	mm	215.9
Shoe width, triple grouser	mm	600 / 700 / 800 / 900
Shoe width, triple grouser (HD)	mm	600
Shoe width, double grouser	mm	600
Bottom rollers		2 x 8
Top rollers		2 x 2

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	10.3
Max. slew torque	kNm	126.2

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	261
Max. travel speed (low)	km/h	3.3
Max. travel speed (high)	km/h	5.1
Gradeability	°	35

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.

Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO₂-eq.

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, arm and bucket regeneration provides optimum performance.

The following important functions are included in the system:

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

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 288
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Pilot pump, Type Gear pump

Maximum flow	l/min	20
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Relief value setting pressure

Implement	MPa	33.3/36.3
Travel circuit	MPa	33.3
Slew circuit	MPa	27.9
Pilot circuit	MPa	3.9

Hydraulic Motors

Travel: Variable displacement axial piston motor with mechanical brake.
Slew: Fixed displacement piston motor with mechanical brake.

Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm	150 x 1 530
Arm		1
Bore x Stroke	ø x mm	170 x 1 700
Bucket		1
Bore x Stroke	ø x mm	140 x 1 285

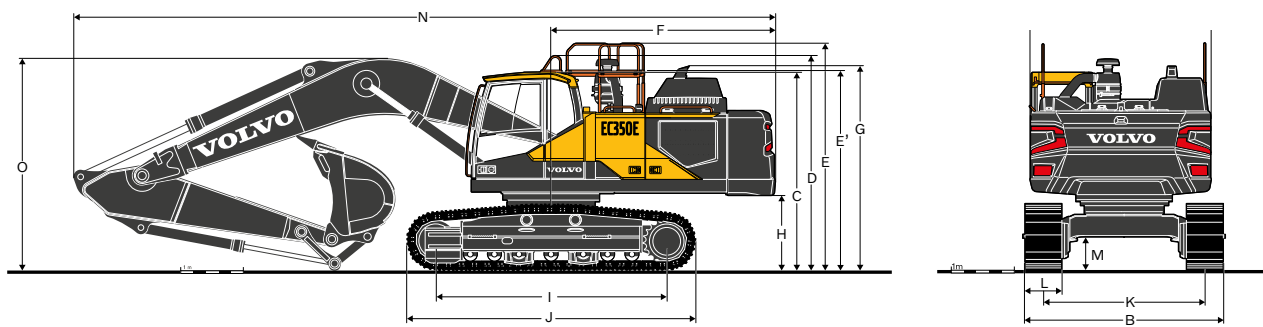
Service Refill

Fuel tank	l	580
DEF/AdBlue® tank	l	50
Hydraulic system, total	l	465
Hydraulic tank	l	215
Engine oil	l	30
Engine coolant	l	44
Slew reduction unit	l	6
Travel reduction unit	l	2 x 6.8

Sound Level

Sound pressure level in cab according to ISO 6396		
L _{pA}	dB	71
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L _{WA}	dB	105

Specifications



DIMENSIONS

Description	Unit	EC350EL			EC350ENL		
Boom	m	6.45			6.45		
Arm	m	2.6 HD	3.2 HD	3.9 GP	2.6 HD	3.2 GP	3.9 GP
A. Overall width of upper structure	mm	2 890	2 890	2 890	2 890	2 890	2 890
B. Overall width	mm	3 190	3 190	3 190	2 990	2 990	2 990
C. Overall height of cab	mm	3 175	3 175	3 175	3 175	3 175	3 175
D. Overall height of handrail (Unfolded)	mm	3 440	3 440	3 440	3 440	3 440	3 440
E. Overall height of guardrail (Unfolded)	mm	3 650	3 650	3 650	3 650	3 650	3 650
E'. Overall height of handrail&guardrail (Folded)	mm	3 165	3 165	3 165	3 165	3 165	3 165
F. Tail swing radius	mm	3 600	3 600	3 600	3 600	3 600	3 600
G. Overall height of diffuser	mm	3 265	3 265	3 265	3 265	3 265	3 265
H. Counterweight clearance *	mm	1 170	1 170	1 170	1 170	1 170	1 170
I. Tumbler length	mm	4 020	4 020	4 020	4 020	4 020	4 020
J. Track length	mm	4 945	4 945	4 945	4 945	4 945	4 945
K. Track gauge	mm	2 590	2 590	2 590	2 390	2 390	2 390
L. Shoe width	mm	600	600	600	600	600	600
M. Min. ground clearance *	mm	500	500	500	500	500	500
N. Overall length	mm	11 295	11 200	11 245	11 295	11 210	11 245
O. Overall height of boom	mm	3 565	3 380	3 575	3 565	3 380	3 575

* Without shoe grouser

DIMENSIONS

Boom			
Description	Unit	EC350E	
Boom	m	6.45 GP	6.45 HD
A. Length	mm	6 710	6 710
B. Height	mm	1 845	1 845
Width	mm	815	815
Weight	kg	3 205	3 490

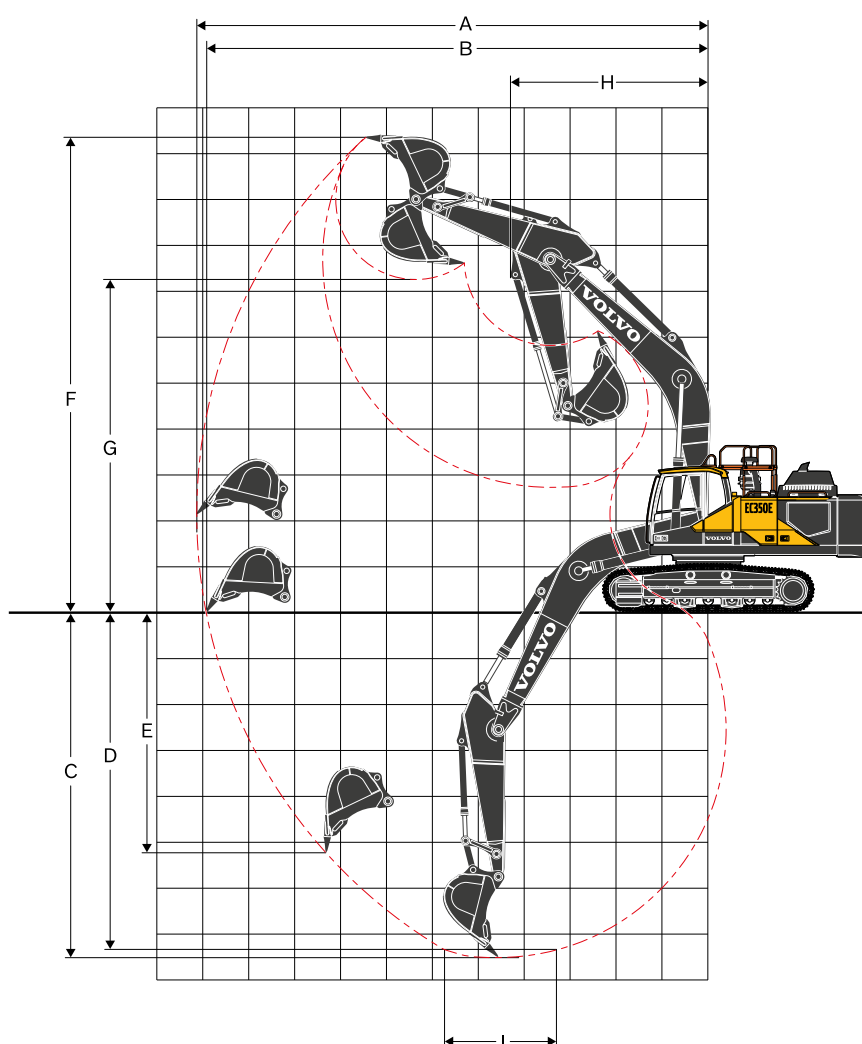
* Includes cylinder, piping and pin, excludes boom cyl. Pin

DIMENSIONS

Arm					
Description	Unit	EC350E			
Arm	m	2.6 HD	3.2 GP	3.2 HD	3.9 GP
A. Length	mm	3 670	4 350	4 345	5 045
B. Height	mm	1 135	1 060	1 080	1 080
Width	mm	570	570	570	570
Weight	kg	1 940	1 920	2 020	2 140

* Includes cylinder, linkage and pin

Specifications



WORKING RANGES

Description	Unit	EC350E		
Boom	m	6.45		
Arm	m	2.6	3.2	3.9
A. Max. digging reach	mm	10 600	11 120	11 760
B. Max. digging reach on ground	mm	10 380	10 910	11 560
C. Max. digging depth	mm	6 890	7 490	8 190
D. Max. digging depth (2.44 m/8' level)	mm	6 690	7 310	8 040
E. Max. cutting height	mm	10 170	10 330	10 600
F. Max. dumping height	mm	7 050	7 240	7 510
G. Max. vertical wall digging depth	mm	4 790	5 220	5 800
H. Min. front swing radius	mm	4 320	4 290	4 240

DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius		mm	1 746	1 746	1 746
Breakout force	Normal	SAE J1179	kN	176	177
	Power boost		kN	192	192
	Normal	ISO 6015	kN	201	201
	Power boost		kN	218	219
Tearout force	Normal	SAE J1179	kN	187	156
	Power boost		kN	203	169
	Normal	ISO 6015	kN	192	160
	Power boost		kN	209	174
Rotation angle, bucket		°	178	178	178

BUCKET SELECTION GUIDE

Bucket type				Capacity	Cutting width	Weight	Teeth	EC350EL			EC350ENL		
								600 mm shoe, 7 000 kg counterweight			600 mm shoe, 7 000 kg counterweight		
								6.45 m HD Boom			6.45 m GP Boom		
								2.6 m arm	3.2 m arm	3.9 m arm	2.6 m arm	3.2 m arm	3.9 m arm
Direct Fit Buckets	Without Quick Coupler	V4	GP	870	750	1 082	3	C	C	C	C	C	C
				1 000	900	1 281	4	C	C	C	C	C	C
				1 420	1 200	1 514	5	C	C	C	C	C	C
				1 670	1 350	1 629	5	C	C	C	C	C	B
				1 920	1 500	1 769	5	C	C	B	C	B	A
				2 330	1 750	1 967	5	B	B	A	B	A	X
			HD	870	750	1 352	3	D	D	D	D	D	D
				1 000	900	1 425	4	D	D	D	D	D	D
				1 420	1 200	1 679	4	D	D	D	D	D	D
				1 420	1 200	1 699	5	D	D	D	D	D	D
				1 670	1 380	1 821	5	D	D	C	D	C	B
				1 920	1 500	1 970	5	D	C	B	C	B	A
Quick Coupler Buckets	U type quick coupler	V4	GP	870	750	1 082	3	C	C	C	C	C	C
				1 000	900	1 281	4	C	C	C	C	C	C
				1 420	1 200	1 514	5	C	C	C	C	C	B
				1 670	1 350	1 629	5	C	C	B	C	B	A
				1 920	1 500	1 769	5	C	B	A	B	A	X
				2 330	1 750	1 967	5	A	A	X	A	X	X
			HD	870	750	1 352	3	D	D	D	D	D	D
				1 000	900	1 425	4	D	D	D	D	D	D
				1 420	1 200	1 699	5	D	D	B	D	C	A
				1 670	1 380	1 821	5	D	B	A	B	B	A
				1 920	1 500	1 970	5	B	A	X	A	A	X
	S-quick coupler	V4	GP	1 000	900	1 328	4	C	C	C	C	C	C
				1 180	1 050	1 419	4	C	C	C	C	C	C
				1 420	1 200	1 571	5	C	C	C	C	C	B
				1 670	1 350	1 686	5	C	C	B	C	B	A
				1 920	1 500	1 809	5	C	B	A	B	A	A
				2 330	1 750	1 918	5	B	A	X	A	X	X
			HD	1 000	900	1 400	4	D	D	D	D	D	D
				1 420	1 200	1 655	5	D	D	C	D	D	B
				1 670	1 350	1 782	5	D	C	B	C	B	A
				1 920	1 500	1 928	5	C	B	A	B	A	X
				2 330	1 750	2 126	5	A	A	X	A	X	X

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

(In case of using bigger bucket than regional standard MRS, consultation with R&D is highly recommended)

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

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

Maximum load : Payload, bucket and additional tools such as quick coupler, rotator,...

Maximum material density

A: 1 200 - 1 300 kg/m³ Coal, Caliche, Shale

B: 1 400 - 1 600 kg/m³ Wet earth and clay, Limestone, Sandstone

C: 1 700 - 1 800 kg/m³ Granite, Wet sand, Well blasted rock

D: > 1 900 kg/m³ Wet mud, Iron ore

X : Not recommended

Specifications

GROUND PRESSURE										
Description	Shoe width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width
	mm	kg	kPa	mm	kg	kPa	mm	kg	kPa	mm
		EC350E with L undercarriage, 6.45 m boom (HD), 2.6 m arm (HD), 1 730 kg bucket, 7 000 kg counterweight			EC350E with L undercarriage, 6.45 m boom (HD), 3.2 m arm (HD), 1 730 kg bucket, 7 000 kg counterweight			EC350E with L undercarriage, 6.45 m boom (HD), 3.9 m arm (GP), 1 730 kg bucket, 7 000 kg counterweight		
Triple grouser	600	36 240	69.5	3 190	36 320	69.7	3 190	36 390	69.8	3 190
	600 (HD)	36 280	69.6	3 190	36 360	69.7	3 190	36 430	69.9	3 190
	700	36 860	60.6	3 290	36 950	60.7	3 290	37 010	60.8	3 290
	800	37 260	53.6	3 390	37 340	53.7	3 390	37 410	53.8	3 390
	900	37 650	48.1	3 490	37 730	48.2	3 490	37 790	48.3	3 490
Double grouser	600	36 940	70.6	3 190	37 020	70.7	3 190	37 080	70.9	3 190
		EC350E with NL undercarriage, 6.45 m boom (HD), 2.6 m arm (HD), 1 675 kg bucket, 7 000 kg counterweight			EC350E with NL undercarriage, 6.45 m boom (HD), 3.2 m arm (HD), 1 675 kg bucket, 7 000 kg counterweight			EC350E with NL undercarriage, 6.45 m boom (HD), 3.9 m arm (GP), 1 675 kg bucket, 7 000 kg counterweight		
Triple grouser	600	36 040	69.1	2 990	36 120	69.3	2 990	36 240	69.5	2 990
	600 (HD)	36 080	69.2	2 990	36 170	69.4	2 990	36 290	69.6	2 990
	700	36 670	60.3	3 090	36 750	60.4	3 090	36 870	60.6	3 090
	800	37 060	53.3	3 190	37 140	53.4	3 190	37 260	53.6	3 190
	900	37 450	47.9	3 290	37 530	48.0	3 290	37 650	48.1	3 290
Double grouser	600	36 740	70.2	2 990	36 820	70.4	2 990	36 940	70.6	2 990
		EC350E with NL undercarriage, 6.45 m boom (GP), 2.6 m arm (HD), 1 675 kg bucket, 7 000 kg counterweight			EC350E with NL undercarriage, 6.45 m boom (GP), 3.2 m arm (GP), 1 675 kg bucket, 7 000 kg counterweight			EC350E with NL undercarriage, 6.45 m boom (GP), 3.9 m arm (GP), 1 675 kg bucket, 7 000 kg counterweight		
Triple grouser	600	35 760	68.6	2 990	35 740	68.6	2 990	35 960	69.0	2 990
	600 (HD)	35 800	68.6	2 990	35 780	68.6	2 990	36 000	69.0	2 990
	700	36 380	59.8	3 090	36 360	59.8	3 090	36 580	60.1	3 090
	800	36 780	52.9	3 190	36 760	52.9	3 190	36 980	53.2	3 190
	900	37 160	47.5	3 290	37 140	47.5	3 290	37 370	47.8	3 290
Double grouser	600	36 450	69.7	2 990	36 430	69.6	2 990	36 660	70.1	2 990

LIFTING CAPACITY EC350EL

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 point		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom : 6.45 m HD	7.5 m	kg													*9 170	8 120	7.02
Arm : 2.6 m HD	6.0 m	kg							*9 720	*9 720	*9 100	7 210			*9 100	6 490	7.96
Shoe : 600 mm	4.5 m	kg					*14 200	*14 200	*11 080	9 860	*9 630	7 000			8 710	5 660	8.53
CWT : 7 000 kg	3.0 m	kg							*12 690	9 290	*10 420	6 720			8 130	5 250	8.81
	1.5 m	kg							*14 010	8 830	10 180	6 470			7 970	5 120	8.83
	0 m	kg					*19 980	12 970	13 990	8 580	10 000	6 310			8 230	5 250	8.59
	-1.5 m	kg			*14 400	*14 400	*19 240	13 020	13 930	8 520	9 970	6 280			9 010	5 730	8.06
	-3.0 m	kg			*23 080	*23 080	*17 500	13 240	*13 380	8 650					*10 630	6 810	7.19
	-4.5 m	kg			*18 270	*18 270	*14 030	13 710							*10 550	9 500	5.80
Boom : 6.45 m HD	7.5 m	kg									*8 230	7 420			*7 460	7 120	7.67
Arm : 3.2 m HD	6.0 m	kg									*8 340	7 350			*7 260	5 850	8.54
Shoe : 600 mm	4.5 m	kg					*12 680	*12 680	*10 230	10 070	*9 010	7 110	*8 040	5 250	*7 330	5 170	9.07
CWT : 7 000 kg	3.0 m	kg					*16 270	14 380	*11 950	9 450	*9 900	6 800	7 910	5 120	7 450	4 810	9.34
	1.5 m	kg					*18 910	13 390	*13 470	8 930	10 220	6 510	7 760	4 970	7 310	4 690	9.36
	0 m	kg					*19 910	12 980	14 020	8 590	9 990	6 300	7 650	4 880	7 500	4 780	9.13
	-1.5 m	kg			*14 600	*14 600	*19 680	12 910	13 870	8 460	9 890	6 210			8 100	5 150	8.63
	-3.0 m	kg	*17 000	*17 000	*23 050	*23 050	*18 420	13 050	*13 920	8 510	9 970	6 280			9 400	5 950	7.82
	-4.5 m	kg			*21 290	*21 290	*15 750	13 410	*11 790	8 780					*10 320	7 780	6.58
Boom : 6.45 m HD	9.0 m	kg													*6 290	*6 290	7.26
Arm : 3.9 m GP	7.5 m	kg									*7 170	*7 170			*5 870	*5 870	8.44
Shoe : 600 mm	6.0 m	kg									*7 480	*7 480	*7 020	5 460	*5 730	5 190	9.24
CWT : 7 000 kg	4.5 m	kg							*9 150	*9 150	*8 230	7 240	*7 750	5 350	*5 780	4 640	9.73
	3.0 m	kg					*14 490	*14 490	*10 960	9 670	*9 220	6 900	7 980	5 170	*5 990	4 340	9.98
	1.5 m	kg					*17 660	13 690	*12 700	9 060	*10 220	6 560	7 780	4 990	*6 390	4 220	10.00
	0 m	kg			*9 000	*9 000	*19 400	13 030	*13 950	8 620	10 000	6 300	7 620	4 840	6 730	4 280	9.79
	-1.5 m	kg	*9 190	*9 190	*13 740	*13 740	*19 800	12 790	13 810	8 400	9 830	6 140	7 540	4 770	7 180	4 550	9.33
	-3.0 m	kg	*14 330	*14 330	*19 870	*19 870	*19 110	12 820	13 770	8 360	9 810	6 130			8 110	5 130	8.58
	-4.5 m	kg	*20 480	*20 480	*24 140	*24 140	*17 190	13 080	*12 940	8 520					*9 700	6 350	7.46
	-6.0 m	kg			*18 140	*18 140	*13 190	*13 190							*9 820	9 520	5.76
Boom : 6.45 m HD	7.5 m	kg							*9 720	*9 720	*9 100	7 380			*9 170	8 300	7.02
Arm : 2.6 m HD	6.0 m	kg							*11 080	10 090	*9 640	7 170			*9 100	6 650	7.96
Shoe : 800 mm	4.5 m	kg					*14 210	*14 210	*11 080	10 090	*9 640	7 170			8 940	5 810	8.53
CWT : 7 000 kg	3.0 m	kg							*12 690	9 520	*10 420	6 900			8 350	5 390	8.81
	1.5 m	kg							*14 010	9 060	10 460	6 650			8 200	5 260	8.83
	0 m	kg					*19 980	13 320	14 380	8 810	10 280	6 490			8 460	5 400	8.59
	-1.5 m	kg			*14 440	*14 440	*19 230	13 360	14 310	8 750	10 250	6 460			9 270	5 890	8.06
	-3.0 m	kg			*23 060	*23 060	*17 490	13 590	*13 380	8 880					*10 630	7 000	7.18
	-4.5 m	kg			*18 240	*18 240	*14 020	*14 020							*10 540	9 760	5.79
Boom : 6.45 m HD	7.5 m	kg									*8 230	7 600			*7 460	7 280	7.67
Arm : 3.2 m HD	6.0 m	kg									*8 340	7 520			*7 250	6 000	8.54
Shoe : 800 mm	4.5 m	kg					*12 690	*12 690	*10 230	*10 230	*9 010	7 280	*8 050	5 390	*7 320	5 310	9.07
CWT : 7 000 kg	3.0 m	kg					*16 280	14 710	*11 950	9 680	*9 900	6 970	8 130	5 260	*7 630	4 950	9.34
	1.5 m	kg					*18 910	13 740	*13 480	9 160	10 500	6 680	7 980	5 110	7 520	4 820	9.36
	0 m	kg					*19 910	13 320	14 410	8 820	10 270	6 470	7 870	5 020	7 720	4 920	9.13
	-1.5 m	kg			*14 630	*14 630	*19 680	13 250	14 250	8 690	10 170	6 390			8 330	5 300	8.63
	-3.0 m	kg	*17 020	*17 020	*23 090	*23 090	*18 410	13 390	*13 920	8 740	10 250	6 450			9 680	6 120	7.82
	-4.5 m	kg			*21 270	*21 270	*15 730	13 760	*11 770	9 010					*10 320	7 990	6.57
Boom : 6.45 m HD	9.0 m	kg													*6 290	*6 290	7.26
Arm : 3.9 m GP	7.5 m	kg									*7 170	*7 170			*5 870	*5 870	8.45
Shoe : 800 mm	6.0 m	kg									*7 480	*7 480	*7 030	5 600	*5 730	5 320	9.24
CWT : 7 000 kg	4.5 m	kg							*9 160	*9 160	*8 240	7 420	*7 750	5 490	*5 780	4 770	9.74
	3.0 m	kg					*14 510	*14 510	*10 970	9 900	*9 230	7 070	8 200	5 310	*6 000	4 460	9.98
	1.5 m	kg					*17 670	14 030	*12 710	9 290	*10 230	6 730	8 000	5 130	*6 390	4 340	10.00
	0 m	kg			*9 020	*9 020	*19 400	13 370	*13 950	8 850	10 270	6 470	7 840	4 980	6 930	4 410	9.79
	-1.5 m	kg	*9 210	*9 210	*13 760	*13 760	*19 800	13 130	14 200	8 630	10 110	6 320	7 760	4 910	7 390	4 680	9.32
	-3.0 m	kg	*14 350	*14 350	*19 900	*19 900	*19 110	13 170	14 160	8 590	10 090	6 300			8 350	5 280	8.58
	-4.5 m	kg	*20 510	*20 510	*24 130	*24 130	*17 180	13 420	*12 930	8 750					*9 700	6 530	7.46
	-6.0 m	kg			*18 110	*18 110	*13 170	*13 170							*9 820	9 790	5.75

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 EC350ENL

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 point		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom : 6.45 m GP	7.5 m	kg													*9 220	7 500	7.02
Arm : 2.6 m HD	6.0 m	kg							*9 760	9 560	*9 150	6 660			*9 150	6 000	7.96
Shoe : 600 mm	4.5 m	kg					*14 260	13 930	*11 130	9 080	*9 690	6 470			8 680	5 230	8.53
CWT : 7 000 kg	3.0 m	kg							*12 770	8 540	10 420	6 200			8 110	4 850	8.81
	1.5 m	kg							*14 100	8 110	10 150	5 970			7 960	4 720	8.83
	0 m	kg					*20 130	11 810	13 980	7 870	9 990	5 820			8 220	4 850	8.59
	-1.5 m	kg			*14 400	*14 400	*19 390	11 860	13 920	7 820	9 960	5 790			9 000	5 290	8.06
	-3.0 m	kg			*23 280	*23 280	*17 640	12 070	*13 490	7 950					*10 720	6 280	7.19
	-4.5 m	kg			*18 460	*18 460	*14 170	12 510							*10 650	8 740	5.80
Boom : 6.45 m GP	7.5 m	kg									*8 290	6 860			*7 380	6 590	7.67
Arm : 3.2 m GP	6.0 m	kg									*8 410	6 800			*7 180	5 430	8.54
Shoe : 600 mm	4.5 m	kg					*12 790	*12 790	*10 320	9 300	*9 090	6 580	*7 960	4 870	*7 250	4 800	9.07
CWT : 7 000 kg	3.0 m	kg					*16 480	13 220	*12 090	8 750	*10 010	6 310	7 910	4 750	7 450	4 470	9.34
	1.5 m	kg					*19 190	12 350	*13 660	8 280	10 240	6 050	7 770	4 620	7 320	4 350	9.36
	0 m	kg					*20 220	11 990	14 100	7 980	10 030	5 860	7 670	4 530	7 520	4 440	9.13
	-1.5 m	kg			*14 520	*14 520	*20 000	11 920	13 960	7 860	9 940	5 780			8 120	4 780	8.63
	-3.0 m	kg	*16 920	*16 920	*22 970	*22 970	*18 720	12 040	14 010	7 910	10 000	5 840			9 430	5 530	7.82
	-4.5 m	kg			*21 710	*21 710	*16 020	12 360	*11 980	8 140					*10 480	7 220	6.58
Boom : 6.45 m GP	9.0 m	kg													*6 290	*6 290	7.26
Arm : 3.9 m GP	7.5 m	kg									*7 200	7 070			*5 870	5 690	8.44
Shoe : 600 mm	6.0 m	kg									*7 510	6 950	*7 020	5 040	*5 730	4 790	9.24
CWT : 7 000 kg	4.5 m	kg							*9 190	*9 190	*8 280	6 690	*7 800	4 940	*5 780	4 280	9.73
	3.0 m	kg					*14 560	13 590	*11 020	8 890	*9 280	6 360	7 950	4 770	*5 990	4 000	9.98
	1.5 m	kg					*17 770	12 460	*12 780	8 310	10 260	6 040	7 760	4 590	*6 390	3 890	10.00
	0 m	kg			*9 000	*9 000	*19 530	11 850	14 040	7 910	9 970	5 790	7 610	4 460	6 720	3 940	9.79
	-1.5 m	kg	*9 190	*9 190	*13 740	*13 740	*19 950	11 630	13 790	7 700	9 810	5 650	7 540	4 390	7 170	4 190	9.33
	-3.0 m	kg	*14 330	*14 330	*19 870	*19 870	*19 260	11 660	13 760	7 670	9 800	5 640			8 100	4 730	8.58
	-4.5 m	kg	*20 480	*20 480	*24 360	23 510	*17 340	11 910	*13 040	7 820					*9 780	5 850	7.46
	-6.0 m	kg			*18 340	*18 340	*13 320	12 430							*9 920	8 740	5.76
Boom : 6.45 m GP	7.5 m	kg									*8 290	6 960			*7 380	6 680	7.67
Arm : 2.6 m HD	6.0 m	kg							*9 760	9 690	*9 150	6 760			*9 150	6 090	7.96
Shoe : 700mm	4.5 m	kg					*14 280	14 110	*11 140	9 210	*9 690	6 560			8 820	5 320	8.53
CWT : 7 000 kg	3.0 m	kg							*12 770	8 670	*10 490	6 300			8 240	4 930	8.81
	1.5 m	kg							*14 110	8 240	10 320	6 060			8 100	4 800	8.83
	0 m	kg					*20 130	12 000	14 210	8 000	10 160	5 920			8 360	4 930	8.59
	-1.5 m	kg			*14 440	*14 440	*19 380	12 050	14 150	7 950	10 130	5 890			9 160	5 380	8.06
	-3.0 m	kg			*23 270	*23 270	*17 630	12 260	*13 490	8 080					*10 720	6 390	7.18
	-4.5 m	kg			*18 430	*18 430	*14 150	12 710							*10 650	8 890	5.79
Boom : 6.45 m GP	7.5 m	kg									*8 290	6 960			*7 380	6 680	7.67
Arm : 3.2 m GP	6.0 m	kg									*8 410	6 900			*7 180	5 510	8.54
Shoe : 700mm	4.5 m	kg					*12 810	*12 810	*10 320	9 420	*9 090	6 680	*7 980	4 940	*7 250	4 870	9.07
CWT : 7 000 kg	3.0 m	kg					*16 490	13 410	*12 090	8 880	*10 020	6 400	8 050	4 830	*7 560	4 540	9.34
	1.5 m	kg					*19 200	12 540	*13 660	8 410	10 410	6 140	7 900	4 700	7 450	4 430	9.36
	0 m	kg					*20 220	12 180	14 340	8 110	10 200	5 960	7 810	4 610	7 650	4 520	9.13
	-1.5 m	kg			*14 550	*14 550	*20 000	12 110	14 200	7 990	10 110	5 880			8 270	4 870	8.63
	-3.0 m	kg	*16 950	*16 950	*23 000	*23 000	*18 710	12 230	*14 130	8 040	10 180	5 930			9 600	5 630	7.82
	-4.5 m	kg			*21 690	*21 690	*16 010	12 550	*11 960	8 270					*10 480	7 340	6.57
Boom : 6.45 m GP	9.0 m	kg													*6 290	*6 290	7.26
Arm : 3.9 m GP	7.5 m	kg									*7 200	7 170			*5 870	5 770	8.45
Shoe : 700mm	6.0 m	kg									*7 520	7 040	*7 030	5 120	*5 730	4 870	9.24
CWT : 7 000 kg	4.5 m	kg							*9 190	*9 190	*8 280	6 780	*7 800	5 010	*5 780	4 350	9.74
	3.0 m	kg					*14 580	13 770	*11 030	9 010	*9 280	6 460	8 080	4 850	*6 000	4 070	9.98
	1.5 m	kg					*17 780	12 650	*12 790	8 440	*10 290	6 140	7 890	4 670	*6 390	3 960	10.00
	0 m	kg			*9 020	*9 020	*19 530	12 030	*14 050	8 030	10 140	5 890	7 740	4 530	6 850	4 010	9.79
	-1.5 m	kg	*9 210	*9 210	*13 760	*13 760	*19 950	11 820	14 030	7 820	9 990	5 750	7 670	4 470	7 300	4 260	9.32
	-3.0 m	kg	*14 350	*14 350	*19 900	*19 900	*19 260	11 850	13 990	7 800	9 970	5 730			8 250	4 810	8.58
	-4.5 m	kg	*20 510	*20 510	*24 340	23 870	*17 330	12 100	*13 040	7 950					*9 780	5 950	7.46
	-6.0 m	kg			*18 300	*18 300	*13 300	12 620							*9 920	8 900	5.75

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, four stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements

Air filter with indicator

Air intake heater

Cyclone precleaner

Electric engine shutoff

Fuel filter and water separator

Fuel filler pump: 50 l/min, with automatic shutoff

Alternator, 120 A

Electric / Electronic control system

Advanced mode control system

Selfdiagnostic system

Machine status indication

Engine speed sensing power control

Automatic idling system

Onetouch power boost

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

Highcapacity LED lights:

- Frame-mounted 2

- Boom-mounted 2

Batteries, 2 x 12 V / 200 Ah

Start motor, 24 V / 5.5 kW

Frame

Access way with handrail

Tool storage area

Punched metal antislip plates

counterweight: 7 000kg

Undercarriage

Undercover (heavy duty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

Hydraulic system

Boom up swing priority function

Boom travel priority function (Creep)

Boom down speed control

Hose rupture valve: boom & Arm

Overload warning device

Automatic sensing hydraulic system

Summation system

Boom priority

Arm priority

Swing priority

ECO mode fuel saving technology

Boom, arm and bucket regeneration valves

Swing antirebound valves

Boom and arm holding valves

Multistage filtering system

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic twospeed travel motors

Hydraulic oil, ISO VG 46

STANDARD EQUIPMENT

Cab and interior

ROPS (ISO121172) certified cab

Silicon oil and rubber mounts with spring

Travel pedals and hand levers

Adjustable operator seat and joystick control console

Proportional joysticks with 3 switches each

Heater & airconditioner, automatic

Flexible antenna

Radio with MP3 & USB Jack with bluetooth

Hydraulic safety lock lever

Cab, allweather sound suppressed, includes:

Cup holders

Door locks

Tinted glass

Floor mat

Horn

Large storage area

Pullup 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

Side view camera

Master key

Track shoes

600 mm with triple grousers

Digging equipment

Boom: 6.45 m

Arm: 3.2 m

Manual centralized lubrication

Equipment

OPTIONAL EQUIPMENT

Engine

Block heater: 240 V
Oil bath pre-cleaner
Diesel coolant heater, 10 kW
Water separator with heater
Auto engine shutdown
Reversible fan
Delayed engine shutdown

Electric

Extra work lights(Halogen or LED):
- Cab-mounted 3
- Boom-mounted 2
- Counterweight-mounted 1
Green light beacon
Travel alarm
Anti-theft system
Rotating warning beacon

Frame

Foldable Cabin Entrance
Foldable Walkway

Undercarriage

Full track guard

Hydraulic system

CDC, Comfort Driving Control
Boom float function
Attachment management system (up to 32 programmable memories)
- Variable flow and pressure pre-setting
Hammer & shear, 1 and 2 pump flow
Additional return filter
Hydraulic piping:
- Slope & rotator
- Grapple
- Oil leak (drain) line
Quick coupler piping
Volvo hydraulic quick coupler S3
Volvo hydraulic quick coupler U38
Hydraulic oil, biodegradable 46
Hydraulic oil, longlife oil 32
Hydraulic oil, longlife oil 46
Hydraulic oil, longlife oil 68
Fuel tank-fast fuel fill prep
Straight travel pedal

Machine control system

Dig Assist
Volvo Active Control (Semi-autonomous)
Please refer to separate Brochure for more details

Cab and interior

High visibility cabin
Fabric seat with heater
Fabric seat with heater and air suspension
Deluxe seat
High-strength one piece front windshield (P5A)
Opening top hatch
Falling object guard, FOG (fixed type or hinge type)
- 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

OPTIONAL EQUIPMENT

Anti-vandalism kit
Specific key
Cleaning air gun

Track shoes

700/800/900 mm with triple grousers
600 mm HD with triple grousers
600 mm with double grousers

Digging equipment

Boom: 6.45m HD
Arm: 2.6 m HD, 3.2m HD, 3.9 m
Linkage with lifting eye

Service

Tool kit, daily maintenance
Tool kit, full scale

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Foldable walkways and foldable cab entrance



Air gun



Deluxe seat



Comfort Drive Control



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.



VOLVO

Volvo Construction Equipment
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