

Volvo Construction Equipment Building Tomorrow



Volvo Wheel Loaders 50.0-56.3 t 540 hp



THE BEST JUST GOT EVEN BETTER

DLVO

Smarter, faster and tougher than the L350F, the L350H has been built on the success of its forerunner, first introduced to the market in 2007. Upgraded with the latest innovative technology, the L350H is ready to tackle a range of applications, from mining and quarrying to heavy infrastructure.

Lowering your total cost of ownership

As your trusted partner in production, Volvo is here to support you with the best equipment for the job. Boasting a comprehensive portfolio of attachments designed to complement your machines performance, as well as a range of services to boost your profitability, we'll help you tailor the perfect package to suit your business needs.

L350F across the world

A machine that's always in demand, over 700 L350F wheel loaders are being put to work in 50 countries across the world, and have so far accumulated 6 369 606 operating hours – ranging from 290 to 48 000.

> L350F in action

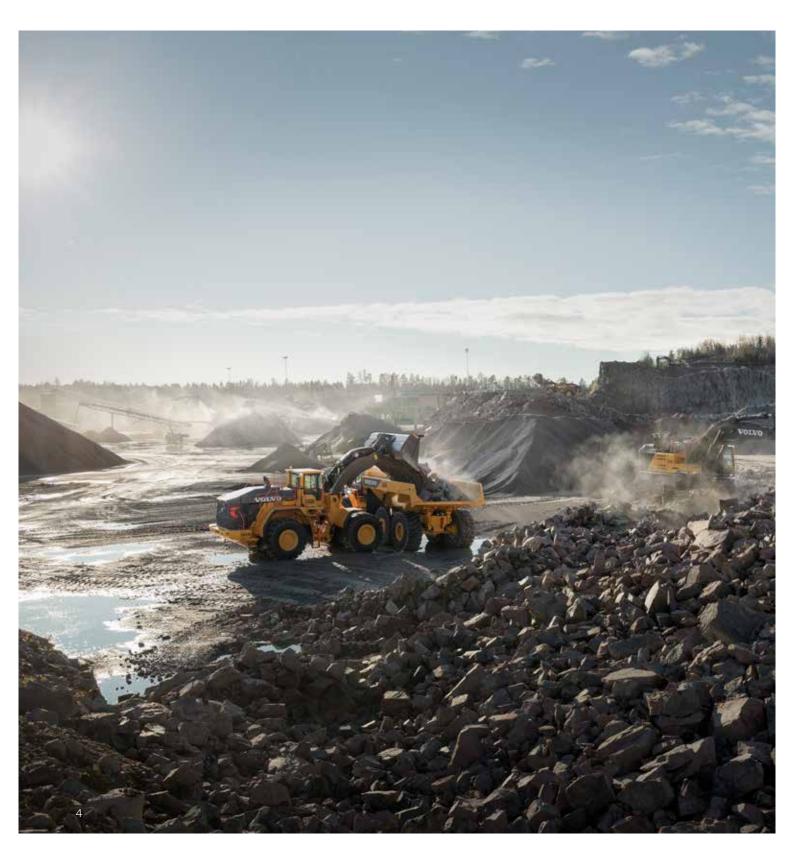
> > "We like their speed, their uptime and their fuel efficiency." Dan Johnson, Vice president of equipment for William Charles Purchasing Inc (USA)

At a large quarry in Germany, an L350F was instrumental in producing and transporting 1.2 million tons of limestone a year. The L350F loaded a 60-ton hauler in only five passes, ensuring a highly profitable rate of production.



BOOST YOUR PRODUCTIVITY BY UP TO 5%

Increase your productivity by up to 5%. Next generation load sensing hydraulics have been designed to enhance the responsiveness of the attachment and reduce cycle times, by improving the lifting and lowering speed of the boom.



Stronger and smarter

Primed for productivity, the intelligent L350H combines the latest Volvo technology with power and comfort. To achieve ultimate performance, select from a range of tailor-made Volvo attachments.

Easy operation

Customize your machine with a choice of three hydraulic modes to suit your preferred responsiveness – soft, normal or active. To reduce operator fatigue and improve productivity, Comfort Drive Control gives you the opportunity to steer the machine from a small lever – particularly effective for fast-paced truck loading operations.



Matched and attached

Get the most out of your L350H with our range of purpose-built attachments, perfect for applications such as block handling, logging and slag handling. Form one solid and reliable unit with attachments that are ideally matched by size and design to your machine's parameters – including link-arm geometry, and breakout and lifting forces.



Designed to perform

Achieve unrivalled performance thanks to the drivetrain, specially developed by Volvo, to work in harmony with the hydraulic system on a range of demanding applications. Offering the perfect combination of power and control, the L350H has been designed to boost productivity.



Power up, fuel down

Engineered for efficiency, the L350H is fitted with a powerful Volvo engine and new generation hydraulics. Decrease cycle times and fuel consumption with intelligent machine monitoring and available operator training.

Eco pedal

Save on machine wear and increase fuel efficiency with the eco pedal. Uniquely designed by Volvo, the eco pedal encourages economical operation, by applying a mechanical push-back force in response to excess use of the accelerator.



Train for efficiency

Increase productivity and reduce fuel consumption by learning how to operate your wheel loader in the most efficient way. Volvo offers operator training, which encompasses the best practices in the industry.



Machine monitoring made easy

Keep on top of unscheduled downtime and check that your machine is being operated efficiently with CareTrack – Volvo's state-of-the-art telematics system. Stay informed and receive reports including fuel status, machine location and hours, so you can optimize your productivity and save money.

Volvo Site Simulation

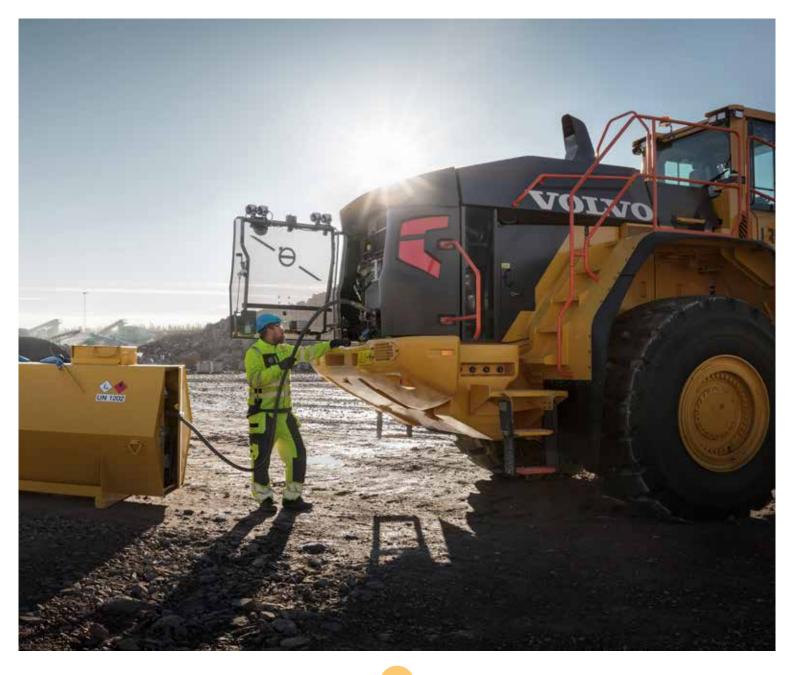
Lower your cost per tonne and gain valuable insight into your operations, with Volvo Site Simulation. Using detailed information about your machinery, fleet choices and site configuration, we'll devise a list of personalized recommendations to increase the efficiency and profitability of your operation.





UP TO 20% GREATER FUEL EFFICIENCY

Do more with less fuel, thanks to redesigned buckets, which are easier to fill. Save hydraulic pump power for other functions, by reducing fluid flow during lowering and dumping operations. Powered by a D16 engine, delivering high torque at low rpm, the L350H can also be fitted with the option of auto engine shut down, which turns off the machine during prolonged periods of idle.





L350F in action

A quarry in the UK used a Volvo L350F to load more than 500 000 tons of blasted limestone a year. The L350F replaced two older machines and was chosen for its excellent fuel economy and an outstanding performance.

BUILT For the Job

Unlock the full potential of your machine and take on demanding applications, with tailor-made attachments. You can even have your attachment custom built to suit your needs - just talk to your local dealer!





L350F in action

Working at one of the biggest wood production sites in Finland, L350F wheel loaders were used to help process over 100 trailers of timber a day. Featuring log grapple attachments for quick and easy log handling, these machines worked 24 hours a day in temperatures that often plumeted to -30°c.

For extreme production environments

Working around the clock, the L350H has been put to the test in extreme environments, carrying out operations such as face loading, heavy-duty block handling and log handling. The L350H can be fitted with a range of Volvo attachments, to ensure high reliability and safe operation.

Face-loading and tunneling

For easier filling and up to 15% more productivity, the new Volvo Rock bucket* boasts a longer floor and optimized radius. For tunneling applications, the L350H can also be equipped with a Side Dump Rock bucket. To increase your productivity, the long boom configuration enables the loading of a 65 tonne truck in no more than six passes.



Rehandling

Experience up to 5% greater productivity with the new 10.7 m³ Volvo Rehandling bucket. The redesigned bucket is easier to fill and minimizes spillage, thanks to new convex sides and the improved spill guard. To enhance productivity and absorb shocks, opt for the Boom Suspension System, which automatically engages depending on gear and speed.



L350H in block handling

For high lifting force and maximum stability in block handling applications, choose from two kit variants – standard or heavy duty – and a range of robust Volvo attachments, including block forks, breaker tine and clearing rakes.



Made to move

MAINTENANCE MADE EASIER

- Maintenance-free rear axle trunnion
- Redesigned engine side hood panels
- Surrounding walkways

BOOST YOUR PRODUCTIVITY BY UP TO 5%

- Next generation load sensing hydraulics
- Comfort Drive Control
- Three hydraulic mode options
- Matched Volvo attachments

BUILT FOR THE JOB

- Redesigned Rock bucket boost your productivity by 15%
- New Rehandling bucket up to 5% more productivity
- Block handling attachments
- Custom built attachments

DURABLE BY DESIGN

- Z-bar lifting arm with double sealing on each pin
- Strong frame and central hinge

VOLVO SERVICES

- Genuine Volvo Parts
- CareTrack
- Proactive Monitoring
- Volvo Site Simulation

THE OPERATOR'S CHOICE

- Easy cab access
- Remote-control door opener
- New adjustable seat
- Upgraded Human Machine Interface

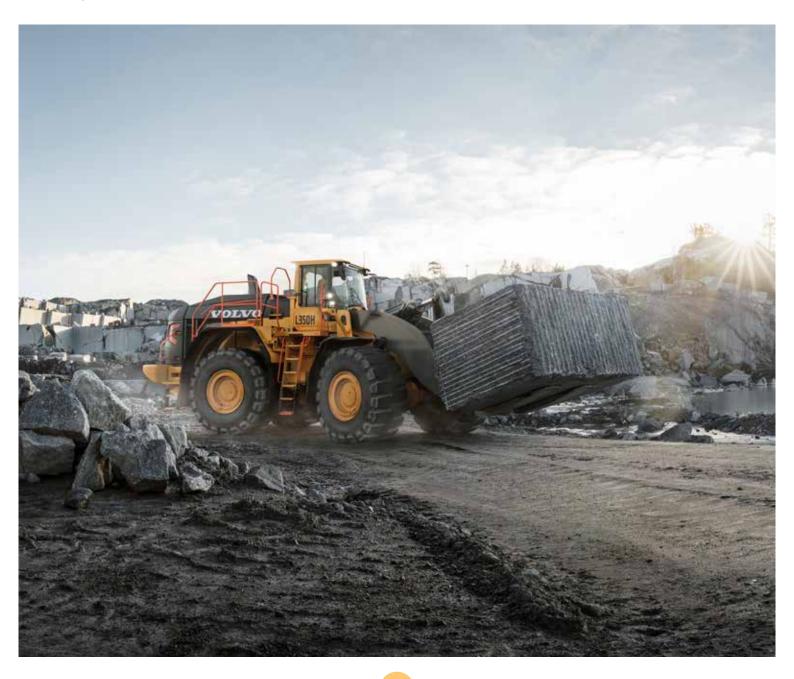
UP TO 20% GREATER FUEL EFFICIENCY

- Easier to fill redesigned buckets
- Saved hydraulic pump power
- Powerful D16 engine, with optional auto shut down
- Eco pedal



DURABLE By Design

Designed with durability in mind, the L350H is built with robust components and a strong frame structure. The central hinge offers strength in demanding applications, and the specially designed Z-bar lifting arm has double sealing on each of the pins, for sustained uptime and increased machine life.





L350F in action

As part of a fleet of 34 Volvo machines working at a marble mine in Turkey, an L350F proved that its durable components and easy serviceability made it the perfect addition to the team. The owner relied on the L350F to operate under high stress levels and in tough conditions, producing 170,000 tons of marble a year.

Full proof performance

Offering strength in demanding applications, the L350H is built to last. Maintain the life of your machine with simple serviceability and proactive dealer support, as well as flexible maintenance and repair plans.

Minimize downtime

Minimize machine downtime and increase components life thanks to heavy-duty axles with fully floating shafts, planetary hub reduction and maintenance-free rear axle trunnion bearings.



Maintenance made easier

Keep your machine up and running with improved serviceability. Daily routine checks are made easier thanks to engine side hood panels, while essential maintenance points are safely accessed using the surrounding walkway.



Proactive Monitoring

Keep your machine moving with Proactive Monitoring. Volvo monitors machine health remotely, from our very own Uptime Center, helping to predict potential failures before they occur. This gives you more time to focus on your operation, helping to reduce unplanned downtime and minimize repair costs.



Here to support you

Maintain productivity and machine uptime with our range of readily available Genuine Volvo Parts – all backed by Volvo warranty. We're here to help you stay on track, offering flexible maintenance and repair plans.



Setting the standard

Built with the customer, for the customer, the L350H boasts a range of features to enhance your operating experience. As your partner in production, we'll help to make your business more profitable, whether it's through reducing fuel emissions or supporting you with our range of products and services.

Safe and sound

To enhance visibility, the L350H Volvo cab has a rear-view camera and new rear view mirrors. Orange handrails and steps have also been placed on the machine, intended to stand out to the operators and maintenance staff.



Committed to the environment

Reduce your carbon footprint and fuel emissions between 30% to 90%, by switching to renewable fuels. Confirming its commitment to the environment, Volvo has designed its latest wheel loader to be compatible with HVO alternative fuel.



Volvo Services

To ensure your business runs smoothly, Volvo invests in the intelligent engineering of all our machines – but we don't stop there. As your partner, we support you in how you use the equipment, maintain it, pay for it and even how you sell it. Our portfolio of products and services is designed to complement your machine's performance and boost your profitability.



THE OPERATOR'S CHOICE

Operate in comfort from the best cab on the market. The Volvo cab is equipped with a new adjustable seat and upgraded Human Machine Interface, which comes as standard across all H-series Volvo wheel loaders. Access the cab safely and effortlessly using the steps, and open the door with ease thanks to the remote-control opener.





"Basically, I move rock for 10 hours each day so I like the comfort of the Volvo wheel loader. My back doesn't hurt and it is easy to steer with the joystick controls. I really enjoy running it. We are picking up blocks weighing more than 50 000 pounds and the power is still there." David Porter, loader operator, Colorado Stone Quarries (USA)

Volvo L350H in detail

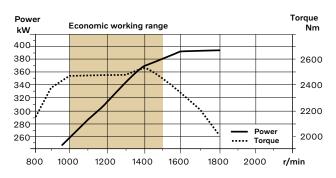
Engine

Engine: V-ACT Stage III A/Tier 3, 16 liter, 6-cylinder in-line turbocharged, air-to-air intercooler diesel engine with double rockers and Internal Exhaust Gas Recirculation (I-EGR). One-piece cylinder head with four valves per cylinder and one overhead camshaft. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats. Mechanically actuated electronically controlled unit injectors. The throttle application is

transmitted electrically from the throttle pedal. Air cleaning: Three stage cyclone pre-cleaner - primary filter - secondary filter.

Cooling system: Hydrostatic, electronically controlled fan and intercooler of the air-to-air type.

Engine	Volvo	D16E
Max. power at	r/min	1 700
SAE J1995 gross	kW	397
	hp	540
ISO 9249, SAE J1349 net	kW	394
	hp	536
Max. torque at	r/min	1 400
SAE J1995 gross	Nm	2 550
ISO 9249, SAE J1349 net	Nm	2 532
Economic working range	r/min	1000 - 1500
Displacement	I	16.1



Electrical system

Central warning system: Contronic electrical system with central warning light and buzzer for following functions: - Serious engine malfunction - Low steering system pressure - Overspeed warning engine - Interruption in communication (computer error)

(computer error) Central warning light and buzzer with gear engaged for the following functions: - Low engine oil pressure - High engine oil temperature - High charge-air temperature - Low coolant level - High coolant temperature - High crankcase pressure - Low transmission oil pressure - High transmission oil temperature - Low brake pressure - Engaged parking brake - Brake charging failure - Low hydraulic oil level - High hydraulic oil temperature - Overspeeding in engaged gear - High brake cooling oil temperature front and rear axles.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	2 x 170
Cold cranking capacity, approx	А	1000
Alternator rating	W/A	2 280/80
Starter motor output	kW	7

Drivetrain

Torque converter: 3-element ,1-stage, 1-phase torque converter with Lock-Up function and free-wheel stator.

Transmission:Planetary Power Shift transmission with full modulated electronically controlled shifting of 4 gears forward and reverse. Volvo Automatic Power Shift (APS) gear shifting system with fully automatic shifting 1-4 (Lock-Up in 3-4) and mode selector with 4 different gear shifting programs, including AUTO mode. Also equipped with Rimpull control to avoid wheel spin and optimize bucket filling. **Axles:** Fully floating axle shafts with planetary-type heavy-duty hub

reductions. Fixed front axle and oscillating rear axle.

Transmission	Volvo	HTE 400
Torque multiplication, stall ratio		2.65
Maximum speed, forward/reverse		
1st gear	km/h	6.8/7.5
2nd gear	km/h	12.1 / 13.2
3rd gear	km/h	21/22.9
4th gear	km/h	35.7 / 38.2
Measured with tires		35/65 R33 L4
Front axle/rear axle		Volvo AHW 90/ AHW 90
Rear axle oscillation	±°	12
Ground clearance	mm	550
at oscillation	٥	12

Steering System

Steering system: Load-sensing hydrostatic articulated steering with an accumulator system and a non-pressurized tank. System supply: The steering system has priority feed from a loadsensing

System supply: The steering system has priority feed from a loadsensing axial pump with variable displacement.

CDC: Speeddependent electro-hydraulic power steering system with closed center hydrostatic back-up and end-stroke damping.

closed center hydrostatic back up and end sti	closed center hydrostatic back up and end stroke damping.			
Steering cylinders		2		
Cylinder bore	mm	110		
Rod diameter	mm	70		
Stroke	mm	586		
Working pressure	MPa	26		
Maximum flow	l/min	340		
Maximum articulation	±°	37		

Service Refill

Service accessibility: Large, easy-to-open service doors with gas struts. Swing-out radiator grill. Fluid filters and component breather filters promote long service intervals. A quick-fit adapter on the hydraulic tank provides faster hydraulic oil fill. Possibility to monitor, log, and analyze data to facilitate troubleshooting.

Fuel tank	I	540
Engine coolant	I	68
Hydraulic oil tank	I	365
Transmission oil	I	79
Engine oil	I	55
Axle oil front	I	155
Axle oil rear	1	155

Hydraulic system

System supply: Two load-sensing axial piston pumps with variable displacement. The steering function always has priority from one of the pumps. Valves: Double-acting 2-spool valve. The main valve is controlled by an electric pilot. Lift function: The valve has four positions; lift, hold, lower, and float position. Inductive/magnetic automatic boom kickout can be switched on prod off add is adjustable to any position between provinging reach and full

and off and is adjustable to any position between maximum reach and full liftning height.

Tilt function: The valve has three functions; rollback, hold, and dump.

Inductive/magnetic automatic bucket positioner can be switched on and off.

Cylinders: Doubleacting cylinders for all functions. Filter: Full-flow filtration through 20 micron (absolute) filter cartridge. Hydraulic oil cooler: Aircooled oil cooler mounted on radiator.

Working pressure maximum, pump 1 for working hydraulic system	MPa	25		
Flow	l/min	256		
at	MPa	10		
engine speed	r/min	1800		
Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system	MPa	26		
Flow	l/min	354		
at	MPa	10		
engine speed	r/min	1800		
Working pressure maximum, pump 3 for brake- and cooling fan system	MPa	26		
Flow	l/min	84		
at	MPa	10		
engine speed	r/min	1800		
Cycle times				
Lift	S	8		
Tilt	S	1.9		
Lower, empty	S	4.7		
Total cycle time	s	14.6		
Raise and tilt cycle times with load according to ISO 14397 and SAE J818				

Lift Arm System

Z-bar linkage system with high breakout forces. The lift arms are single plate construction with a high-strength steel cast cross tube. The single

Dell Crank and Ducket link are nodular iron castings.				
Lift cylinders		2		
Cylinder bore	mm	200		
Piston rod diameter	mm	110		
Stroke	mm	1264		
Tilt cylinder		1		
Cylinder bore	mm	260		
Piston rod diameter	mm	120		
Stroke	mm	728		

Brake System

Service brake: Service brakes are dual circuit a brakes with nitrogen-charged accumulators ar adjusters. Outboard-mounted oil-cooled, wet Transmission disengagement during braking o Contronic. Parking brake: Wet multi-disc type in transmis electro-hydraulically released with a switch on automatically when the key is turned off. Secondary brake: Dual circuit axle-by-axle syst brake pedal. Low pressure alarm. Dead engine by three nitrogencharged accumulators. Standard: The brake system complies with the ISO 3450:1996.	nd automatic slac disc brakes at ea an be preselecte son housing. Spr instrument pane tem. Actuated by braking capabili	ck ch wheel. d in ing-applied, el. Applies r service ty provided			
Number of brake discs per wheel front/rear		11/11			
Accumulators I 8×					
Accumulators for parking brake I 1 x 0.5					
Cab					
Instrumentation: All important information is centrally located in the operator's field of vision. Display for Contronic monitoring system.					

Heater and defroster: Heater coil with filtered fresh air, fan with auto function and 11 manually selectable steps, defroster vents for all window areas.

Operator's seat: Operator's seat with adjustable suspension and retractable seatbelt. The seat is mounted on a bracket on the rear wall and floor. The forces from the retractable seatbelt are absorbed by the seat rails.

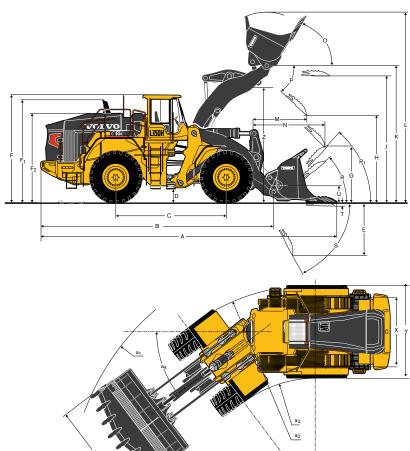
rails. Standard: The cab is tested and approved according to ROPS (ISO 3471, SAE J1040), FOPS (ISO 3449). The cab meets with requirements according to ISO 6055 ("Operator overhead protection - Industrial trucks") and SAE J386 ("Operator Restraint System"). Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO2-eq

Emergency exit: Use emergency hammer to break window

Ventilation	m³/min	9
Heating capacity	kW	13
Air conditioning	kW	8
Sound Level		
Sound level in cab according to ISO 6396/SA	E J2105	
LpA	dB	72
External sound level according to ISO 6395/S	AE J2104	
LWA	dB	111

Specifications

Tires: 875/65 R33** RL-5K L5 Goodyear						
		Standard boom	Long boom			
В	mm	9 130	9 560			
С	mm	4 300	4 300			
D	mm	540	540			
F	mm	4 170	4 170			
F1	mm	3 990	3 990			
F2	mm	3 450	3 450			
G	mm	2 134	2 134			
J	mm	4 960	5 430			
К	mm	5 320	5 800			
0	٥	60	58			
P _{max}	0	44	43			
R	٥	43	45			
R ₁ *	0	49	51			
S	٥	63	69			
Т	mm	87	91			
U	mm	650	760			
V	mm	4 500	4 500			
Х	mm	2 720	2 720			
Y	mm	3 630	3 630			
Z	mm	4 460	4 880			
a2	mm	8 240	8 240			
a ₃	mm	4 610	4 610			
a4	±°	37	37			



*Carry position SAE Where applicable, specifications and dimensions are according to ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818.

L350H	Material density: t/m³							
BUCKETS	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2
Rehandling								
8.8 m ³ STE P T SEG								
9.4 m ³ STE P BOE								
10.7 m ³ STE P BOE								
General purpose	_							
7.3 m ³ STE P BOE								
7.7 m ³ STE P T SEG								
8.4 m ³ STE P BOE						=	I	
Rock								
7.7 m ³ SPN P T SEG						I		
6.9 m ³ STE RO P T SEG								
Light material	_							
12.7 m ³ LM P								
Bucket fill 110% 105% 100% 95%	Pin-on							

Bucket Selection Chart

The volume handled varies with the bucket fill and is often greater than indicated by the bucket's ISO/SAE volume. The table shows optimum bucket choice with regard to the material density.

Material	Bucket fill, %	Material density, t/m ³				
Earth	110-115	1.4-1.6				
Clay	110-120	1.4-1.6				
Sand	100-110	1.6-1.9				
Gravel	100-110	1.7-1.9				
Rock	75-100	1.5-1.9				

The size of rock buckets is optimized for optimal penetration and filling capability rather than the density of the material.

How to read bucket fill factor

Supplemental Operating Data							
	Width	Ground	Operating	Static tipping load, full turn			
	over tires	clearance	weight	Standard boom	Long boom		
	mm	mm	kg	kg	kg		
36/65 R33 XTXL L4 Michelin	10	-20	-1 140	-1 030	-910		
35/65 R33 XLD D2 L5 Michelin	10	-20	-440	-580	-510		
35/65 R33 X-Mine D2 L5 Michelin	20	-20	260	-50	-40		

L350H								Light			
Standard boom Tires 875/65 R33 RL5K L5 Pin-on buckets		Rehandling			General purpose			Rock		material	
			8.8 m ³ STE P BOE		10.7 m ³ STE P BOE	7.3 m ³ STE P BOE	7.7 m ³ STE P T SEG	8.4 m ³ STE P BOE	7.7 m ³ SPN P T SEG	6.9 m ³ STE P T SEG	12.7 m ³ LM P
Volu	me heaped ISO/SAE	m³	8.8	9.4	10.7	7.3	7.7	8.4	7.7	6.9	12.7
Volu	me at 110% fill factor	m³	9.7	10.3	11.8	8.0	8.5	9.2	8.5	7.6	14.0
Stat mac	ic tipping load, straight hine	kg	37 380	37 390	36 790	39 060	38 570	38 520	37 470	38 830	37 500
Stati	c tipping load at 35°. Turn	kg	33 180	33 200	32 620	34 820	34 340	34 300	33 270	34 600	33 290
Stat	ic tipping load at full turn	kg	32 700	32 720	32 140	34 340	33 860	33 820	32 790	34 120	32 820
Brea	kout force	kΝ	391	378	352	449	434	416	342	450	376
А	Overall length	mm	11 430	11 180	11 330	10 850	11 220	10 990	11 700	11 160	11 170
Е	Digging depth, max dump (S)	mm	1980	1 770	1900	1 490	1 810	1 610	2 220	1750	1770
H*)	Dump clearance	mm	3 470	3 640	3 540	3 860	3 610	3 770	3 300	3 650	3 640
L	Overall operating height	mm	7 300	7 380	7 540	7 110	7 170	7 270	7 400	7 300	7 670
M*)	Dump reach	mm	2 030	1870	1980	1 650	1890	1750	2 250	1850	1890
N*)	Reach at 45deg discharge, Pos. G	mm	2 840	2 740	2 810	2 570	2 740	2 650	2 990	2 720	2 700
V	Bucket width	mm	3 970	3 970	3 970	3 970	3 970	3 970	4 110	3 970	4 500
a ₁	Outer clearance circle (diameter)	mm	18 530	18 390	18 480	18 210	18 420	18 290	18 800	18 370	18 860
Ope	rating weight without load	kg	51 460	51 410	51 730	50 720	51 040	51 010	51 690	50 930	51890

*) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge. Note: This only applies to genuine Volvo attachments. Measured at 45° dump angle. (Spade nose buckets at 42°.)

L350H											
Long boom		Rehandling			General purpose			Rock		Light material	
Tires 875/65 R33 RL5K L5 Pin-on buckets											
			8.8 m ³ STE P BOE	9.4 m ³ STE P BOE	10.7 m ³ STE P BOE	7.3 m ³ STE P BOE	7.7 m ³ STE P T SEG	8.4 m ³ STE P BOE	7.7 m ³ SPN P T SEG	6.9 m ³ STE P T SEG	12.7 m ³ LM P
Volu	ime heaped ISO/SAE	m³	8.8	9.4	10.7	7.3	7.7	8.4	7.7	6.9	12.7
Volu	ime at 110% fill factor	m³	9.7	10.3	11.8	8.0	8.5	9.2	8.5	7.6	14.0
	ic tipping load, straight hine	kg	35 250	35 270	34 710	36 790	36 320	36 290	35 280	36 560	35 310
Stat	ic tipping load at 35°. Turr	n kg	31 160	31 190	30 650	32 670	32 210	32 190	31 200	32 450	31 210
Stat	ic tipping load at full turn	kg	30 700	30 730	30 190	32 200	31 740	31 720	30 740	31 980	30 750
Brea	akout force	kN	355	344	320	408	395	377	311	409	341
А	Overall length	mm	11 840	11 590	11 740	11 260	11 630	11 400	12 110	11 570	11 580
Е	Digging depth, max dump (S)	mm	2 060	1830	1970	1540	1 870	1 670	2 310	1820	1840
H*)	Dump clearance	mm	3 950	4 120	4 010	4 340	4 080	4 240	3 770	4 120	4 130
L	Overall operating height	mm	7 780	7 850	8 020	7 580	7 640	7 750	7 870	7 770	8 150
M*)	Dump reach	mm	2 040	1880	1980	1660	1900	1750	2 250	1860	1920
N*)	Reach at 45deg discharge, Pos. G	mm	3 200	3 090	3 170	2 930	3 100	3 000	3 350	3 070	3 050
V	Bucket width	mm	3 970	3 970	3 970	3 970	3 970	3 970	4 110	3 970	4 500
a ₁	Outer clearance circle (diameter)	mm	18 880	18 730	18 820	18 550	18 760	18 630	19 160	18 720	19 200
Ope	rating weight without load	d kg	53 100	53 040	53 360	52 350	52 670	52 640	53 330	52 560	53 520

*) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge. Note: This only applies to genuine Volvo attachments. Measured at 45° dump angle. (Spade nose buckets at 42°.)

Equipment

STANDARD EQUIPMENT	STANDARD EQUIPMENT					
Engine	Contronic monitoring system					
Three stage air cleaner, pre-cleaner, primary and secondary filter	Monitoring and logging of machine data					
Indicator glass for coolant level	Contronic display					
Preheating of induction air	Fuel consumption					
Fuel pre-filter with water trap	Ambient temperature					
Fuel filter	Clock					
Crankcase breather oil trap	Brake test					
Drivetrain	Test function for warning and indicator lights					
Automatic Power Shift (APS) with operator controlled transmission disengagement	Warning and indicator lights: Battery charging					
when braking and mode selector with AUTO mode	Parking brake					
Fully automatic gear shifting, 1-4	Warning and display message:					
Pulse Width Modulation (PWM) controlled gear shifting	- Engine coolant temperature					
Torque converter with Lock-Up						
Automatic Lock-Up shifting, 3-4 (gear selector in 4) and 2 (gear	- Charge-air temperature - Engine oil temperature					
selector in 2)	- Engine oil pressure					
Forward and reverse switch by hydraulic lever console	- Transmission oil temperature					
Indicator glass for transmission oil level	- Transmission oil pressure					
Electrical system	- Hydraulic oil temperature					
24 V, pre-wired for optional accessories	- Brake pressure					
Alternator 24V/ 80A	- Parking brake applied					
Battery disconnect switch with removable key	- Parking brake NOT applied					
Fuel gauge	- Brake charging					
Hour meter	- Overspeed at direction change					
Electric horn	- Axle oil temperature					
Instrument cluster:	- Steering pressure					
Fuel level	- Crankcase pressure					
Transmission temperature	Level warnings:					
Coolant temperature	- Low fuel level					
Instrument lighting	- Engine oil level					
Lighting:	- Engine coolant level					
- Twin halogen front headlights with high and low beams	- Transmission oil level					
- Parking lights	- Hydraulic oil level					
- Double brake and tail lights	- Washer fluid level					
- Turn signals with flashing hazard light function	Engine torque reduction in case of malfunction indication:					
- Work lamp, front on cab, 2 Halogen lamps, std	- High engine coolant temperature					
- Work lamp, rear in grille, 4 Halogen lamps, std	- High engine oil temperature					

Low engine oil pressureHigh crankcase pressureHigh charge-air temperature

High transmission oil temperature
Slip in transmission clutches
Keypad, background lit

Start interlock when gear is engaged

Engine shutdown to idle in case of malfunction indication:

STANDARD EQUIPMENT	STANDARD EQUIPMENT
Hydraulic system	Service and maintenance
Main valve, double-acting 2-spool with electric pilots	Engine oil remote drain and fill
Variable displacement axial piston pumps (3) for:	Transmission oil remote drain and fill
Steering system, working hydraulics	Grouped lubrication points, ground accessible
Working hydraulics, brakes	Pressure check connections: transmission and hydraulic, quick-connect
Cooling fan, brakes	grouped on console for easy access
Electric-hydraulic servo control	Tool box, lockable
Electric level lock	Wheel nut wrench kit
Boom kick-out, automatic, adjustable from cab	External equipment
Return-to-dig, automatic, adjustable from cab	Fenders, front with rubber extensions
Bucket positioner, automatic, adjustable from cab	Viscous cab mounts
Double-acting hydraulic cylinders with end-damping	Rubber engine and transmission mounts
Indicator glass for hydraulic oil level	Lifting eyes
Hydraulic oil cooler	Easy-to-open side panels with gas struts
Brake System	Frame, joint lock
Wet oil circulation-cooled disc brakes on all four wheels	Vandalism lock prepared for:
Dual brake circuits	- Batteries
Dual brake pedals	- Engine compartment
Secondary brake system	- Radiator
Parking brake, electric-hydraulic	Tie-down eyes
Brake wear indicators	Recovery eyes
Cab	Tow hitch
ROPS (ISO 3471), FOPS (ISO 3449)	
Acoustic inner lining	
Cigarette lighter, 24 V power outlet	
Lockable door	
Cab heating with fresh air inlet and defroster	
Fresh air inlet with two filters	
Automatic climate control (ACC)	
Floor mat	
Interior light	
Rear view mirror, interior	
Dual exterior rear-view mirrors	
Sliding window, right side	
Tinted safety glass	
Seat-mounted adjustable lever console, working hydraulics	
Adjustable steering wheel	
Storage compartment	
Document pocket	
Sun visor	
Beverage holder	
Windshield washer front and rear	
Windshield wipers front and rear	
Interval function for front and rear wipers	
Service platforms with slip protected surfaces on front and rear fenders	
Comfort Drive Control (CDC)	
Remote door opener	

Equipment

OPTIONAL EQUIPMENT	OPTIONAL EQUIPMENT
Engine	Hydraulic system
Air pre-cleaner, oil-bath type	Boom suspension system with single-acting lift function
Air pre-cleaner, cyclone type	Arctic kit, pilot hoses, brake accumulators and hydraulic oil
Cooling package: Radiator and charge air cooler, corrosion-protected	Hydraulic 2 functions, Single lever control
Engine block heater, 230 V	Hydraulic 3 functions, Single lever control
Engine block heater, 120V, USA	3rd electro-hydraulic function
Engine auto shutdown	3rd electro-hydraulic function for long boom
Hand throttle control	Attachment bracket
Fuel fill strainer	Separate attachment locking
Fast fill fuel system	Biodegradable hydraulic fluid
Fuel heater	Fire-resistant hydraulic fluid
Reversible cooling fan	Hot climate hydraulic fluid
Max. fan speed, hot climate	Mineral oil for cold climate
Drivetrain	Brake System
Limited Slip, front axle	Oil coolers for front and rear axles
Limited Slip, rear axle	Cab
Limited Slip, front and rear axle	Radio with Bluetooth/USB/AUX
Speed limiter, 20 km/h	Radio installation kit incl. 11 A, 12 V outlet, left side
Speed limiter, 30 km/h	Radio installation kit incl. 11 A, 12 V outlet, right side
Electrical system	Rear-view camera incl. monitor, colour
Cab heater, power outlet 240V	Forward camera, colour
Travel lights:	Rear-view mirrors, electrically adjustable and heated
- Headlights, assym. left	Asbestos dust protection filter
- Headlights, assym. right LED	Carbon filter
- Headlights, assym. left LED	Automatic climate control panel, with Fahrenheit scale
Tail lights, LED	Lunchbox holder
Work lights, Halogen:	Universal key EU, remote door open
- Work lamp, rear on cab, 2 Halogen lamps	Universal key US, remote door open
- Work lamp, front, on cab, dual , 4 Halogen lamps	Steering wheel knob
- Work lamp, rear on cab, dual, 4 Halogen lamps	Sun blind, rear window
- Work lamp, front above head lamps, 2 Halogen lamps	Sun blind, side windows
Work lights, LED:	Timer cab heating
- Work lamp, front above headlamps, 2 LED lamps	Window sliding, door
- Work lamp, front on cab, 2 LED lamps	Operator's seat, Volvo air susp, heavy-duty, high back, heat, for CDC
- Work lamp, front on cab, 4 LED lamps	Parking brake alarm, audible for air susp seats
- Work lamp, rear on cab, 2 LED lamps	Operator's seat, Premium Comfort
- Work lamp, rear on cab, 4 LED lamps	Operator's seat, (air seat std) 3-point seat belt and CDC
- Work lamp, side on cab, 4 LED lamps	Ashtray
- Work lamp, side on cab, 1 LED lamp	Anchorage for Operator's manual
- Work lamp,rear in grille, 4 LED lamps	Forward view mirror
- LED Light packages	Service and maintenance
Warning beacon(flasher), LED	Tool kit
Reverse warning light, Strobe	Automatic lubrication system
Reverse alarm, audible, multi-frequency (white noise)	Automatic lubrication system for long boom
Reverse alarm, audible	Refill pump for automatic lubrication system
Jump start connector NATO	Oil sampling valve
Emergency stop	
Electrical distribution unit 24 volt	
Alternator 120 amp, heavy-duty	
A set to be standard to a	

Anti-theft device

OPTIONAL EQUIPMENT	OPTIONAL EQUIPMENT
Protective equipment	Tires and Rims
Guards for front headlights	35/65 R33 (875/65 R33):
Tail light guards, heavy-duty	- L4
Guards for tail lights, heavy-duty	- L5
Guards for rear work lights	Rims, 33-28.00/3,5:
Radiator grille guard	- Five piece, heavy-duty
Cab roof, heavy duty	Attachments
Windows, side and rear guards	Buckets (pin-on):
Windshield guard	- Rock, straight edge
Belly guard, front	- Rock, spade nose
Belly guard, rear	- Rock, side-dump, spade nose
Fire extinguisher	- General purpose, straight edge
Bracket for fire extinguisher	- Rehandling bucket, straight edge
External equipment	- Light material, straight edge
Long boom	Wear parts:
Other equipment	- Adapters for teeth, weld-on
Secondary steering with automatic test function	- Teeth
Counterweight, re-handling	- Segments, bolt-on
Logger version	- Edge savers, bolt-on (reversible)
Block handler kit	Block handling equipment (hook-on):
Block handler kit, heavy-duty	- Rock bucket, spade nose
CE-marking	- Stone fork
Decals, USA	- Breaker tine
Sound decal, EU	- Rake
Cleaner kit, with air blow gun (Stage V/Tier4f)	
Reflecting stickers (stripes), machine contour Cab	
CareTrack	

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Boom suspension system



Axle oil cooler



Long boom



Fast fill fueling system



Limited slip differentials



Radar detect system



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



Volvo Construction Equipment