Volvo Construction Equipment

L250H

VOLVO WHEEL LOADERS 73,600-86,000 lbs (33.4-39.0 t) 389 hp (290 kW)

A passion for performance.

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for customers around the globe. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

Helping you to do more.
Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs.
There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.

You learn a lot in 180 years.
Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side.
We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.

Volvo Trucks

Renault Trucks








Mack Trucks

UD Trucks


Volvo Buses


Volvo Construction Equipment


Volvo Penta


Volvo Financial Services

OptiShift

Volvo's OptiShift technology combines the company's patented Reverse By Braking (RBB) technology and a torque converter with lock-up. Lock-up creates a direct drive between the engine and transmission – eliminating power losses in the torque converter and reducing fuel consumption by up to 18%.

An efficient operation.

Innovation is at the core of Volvo Construction Equipment. That's why our engineers are developing clever innovations to make equipment more fuel efficient while reducing emissions and environmental impact. OptiShift technology – a unique technical advancement which reduces fuel consumption by up to 18% and increases performance in wheel loaders – is just one example of this.

Reverse By Braking (RBB)

The Volvo patented RBB function senses the loader's direction and slows the machine down automatically by applying the service brakes when the operator changes direction between forward and reverse or the other way around. This increases fuel efficiency and improves operator comfort. RBB is ideal for short cycle or truck loading applications.

Intelligent hydraulics

Volvo's load-sensing hydraulics supply power to the hydraulic functions on demand, lowering fuel consumption. The powerful system ensures fast response for shorter cycle times while delivering smooth operation through superior control of both the load and the attachment.

Eco pedal

Volvo's unique eco pedal applies mechanical push-back force when the accelerator is used excessively and engine rpm is about to exceed the economic operating range. This encourages the operator to ease off the throttle, reducing fuel consumption.

Fully loaded.

The new L250H from Volvo is a high production machine designed to increase your productivity and profitability in applications including quarry, aggregates, mining and heavy infrastructure. Experience short cycle times, high breakout force and excellent controllability with this heavy-duty machine.

Z-bar linkage

Volvo's proven Z-bar linkage provides high breakout force for strong, powerful digging. The high lift capacity enables fully loaded buckets to be elevated to maximum height. Fast hydraulic speeds deliver quick load cycles, increasing productivity even in the toughest environments.

Boom Suspension System

The optional Boom Suspension System (BSS) boosts productivity by up to 20% by absorbing shock and reducing the bouncing and bucket spillage that occurs when operating on rough ground. This enables faster and more comfortable work cycles and increases machine life.

Volvo bucket design

Volvo buckets are developed and built as an integrated part of Volvo wheel loaders. As a result, the two are perfectly matched and work in harmony as one solid, reliable unit to deliver maximum productivity and long life.

Powertrain

The ideally-matched, all-Volvo powertrain has been built to work together in perfect harmony. The Volvo design has been rigorously tested to deliver optimized performance, high productivity, low fuel consumption and superior reliability.

Heavy-duty for tough applications

If you're looking for a strong, durable and reliable wheel loader to handle heavy-duty applications then look no further than the L250H. Powered by a premium Volvo Tier 4 Final/Stage IV engine, this robust machine provides the strength and reliability you need to optimize your operation.

Volvo engine

Featuring advanced technology and built on decades of experience, the powerful Volvo Tier 4 Final/Stage IV engine delivers high performance and low fuel consumption. During the fully automatic regeneration process, particulate matter collected in the DPF is burnt off without interrupting operation, performance or productivity.

Reversible cooling fan

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

Axle oil cooling

Both the front and the rear axle has an axle oil circulation feature which allows for better cooling.

Smart service access.

At Volvo we know that on site, time means money. That's why the L250H is fitted with a tilting cab – a feature which significantly improves service and maintenance access to give you more uptime. This is just one example of the many time-saving features Volvo incorporates into its machines. Trust Volvo to maintain your uptime.

Maintenance-free batteries

Two heavy-duty, maintenance-free 12V batteries in series provide a 24V electrical system. The batteries are located in a well-sealed compartment on the right side of the machine.

Lubrication system

The optional, automatic lubrication system controls greasing when the machine is in operation, resulting in more uptime and reduced maintenance. The operator can alter the amount of grease needed to suit the application.

Maintenance-free rear axle cradles/trunnions

The rear axle is supported on maintenance-free cradles and includes lubricated for life bearings and bushings – reducing overall service cost, increasing machine uptime and ensuring long life.

Engine access

Electrically activated, the wide-opening engine hood allows quick and easy service access to the engine and components for maximum uptime.

Tilting cab

The cab can be tilted in two positions – 35° and 70°. Tilting the cab greatly improves service and maintenance access which leads to more uptime and increased machine availability. The cab is tilted via a manually operated hydraulic pump.

Volvo cab

Volvo's industry-leading, certified ROPS/FOPS cab features ergonomically placed controls, low internal noise levels, vibration protection and ample storage space.

OptiShift

Volvo's OptiShift technology reduces fuel consumption by up to 18%, increases operator comfort and reduces stress in the drivetrain.

Z-bar linkage

Volvo's proven Z-bar linkage provides high breakout and lifting force.

Volvo bucket design

Volvo buckets are perfectly matched to Volvo machines – together they work in harmony as one solid, reliable unit to deliver maximum productivity.

Boom Suspension System (BSS)

The BSS boosts productivity by up to 20% by absorbing shock and reducing the bouncing and bucket spillage that occurs when operating at speed in rough terrain.

Intelligent hydraulics

Volvo's load-sensing hydraulics supply power to the hydraulic functions according to demand, lowering fuel consumption.

Powertrain

The ideally-matched, all-Volvo powertrain has been built to work together in perfect balance – ensuring optimized performance.

Diesel Exhaust Fluid (DEF)

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

Single lever (option)

The optional, multi-functional joystick gives the operator simultaneous and precise control of the linkage.

Volvo engine

Volvo's Tier 4 Final/Stage IV engine delivers high performance at low rpm which improves fuel consumption. Regeneration is automatic and is done without interrupting operation, performance or productivity.

Tilting cab

The cab can be tilted in two positions – 35° and 70° – for improved service and maintenance access. This leads to more uptime and increased machine availability.

Easy service access

Electrically activated, wide-opening engine hood allows quick and easy service access to the engine compartment.

Volvo cab

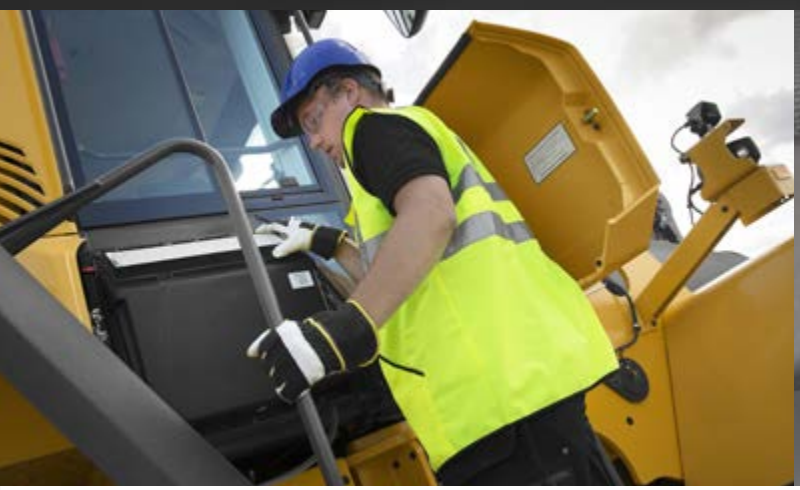
The spacious ROPS/FOPS certified cab provides a comfortable operating environment with ergonomically placed controls and ample storage space. With low internal noise levels and vibration protection, operators will experience a productive work shift.

Comfort increases productivity.

Spacious, comfortable, safe and quiet – those are just some of the words that describe Volvo's industry-leading cab. With ideally located controls, a comfortable seat and ample space for storage, it's no wonder that operators feel content and productive throughout the shift in a Volvo.

Visibility

Volvo offers a variety of options to improve safety and visibility when working in the dark. This includes reflectors which follow the contour of the machine, LED entrance lights which illuminate the cab for safe entry and exit and additional LED work lamps which increase visibility around the machine.



Cab air filter

The cab air intake is located high on the machine, where air is cleanest. The easy-to-replace pre-filter separates coarser dust and particles before the air passes through the main filter and finally enters the cab. Volvo's industry-leading design allows 90% of the cab air to be recirculated through the main filter for continuous dust removal.

Single lever control (option)

For ease of operation, the optional, multi-functional joystick gives the operator simultaneous and precise control of the hydraulic functions.

Adding value to your business.

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

Complete Solutions

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

Genuine Volvo Parts

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

Service Network

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

The power of CareTrack.

CareTrack is the Volvo Construction Equipment telematics system that gives you access to a wide range of machine monitoring information designed to save you time and money. With CareTrack you can reduce fuel costs, optimize machine and operator performance and pro-actively manage service and maintenance to maximize uptime. Stay connected to your machines via remote monitoring and experience new levels of control and efficiency with CareTrack.

Save time

Pro-actively manage your machines and increase your uptime by planning service and maintenance requirements in advance with CareTrack. The system strengthens the relationship between dealer and customer, helping you to maximize machine availability and avoid potential problems. Through CareTrack it's possible for your local Volvo dealer to troubleshoot faults remotely – minimizing service time.

Save money

Keeping track of your machines with CareTrack allows you to optimize productivity and save money. Through operational reports you can identify excessive idle time – information that gives you the power to reduce fuel consumption, non-productive machine hours and service costs.

Infinite opportunities

CareTrack presents infinite opportunities to help you get the most out of your machine. From fuel consumption data to location and machine usage reports, the system gives you access to a wealth of information – allowing you to take actions that will have a noticeable impact on your business. Begin by making a few simple changes and then discover specific functionalities to unlock further savings.

"CareTrack really helps us with our downtime. It alerts us via email directly to critical personnel's phones so they can respond immediately. A lot of times we will know of those alerts even before the operator does."

Don Morgan, Vice President

Morgan Contractors Inc., Clarkesville, Tennessee, U.S.A.

Volvo L250H in detail.

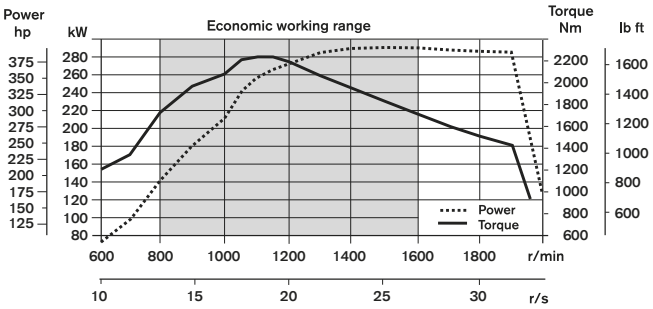
Engine

V-ACT Stage IV/Tier 4F 13 liter, 6-cylinder straight turbocharged diesel engine with 4 valves per cylinder, overhead camshaft and electronically controlled unit injectors. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats. The throttle applications is transmitted electrically from the throttle pedal or the optional hand throttle.

Air Cleaning 2 stages

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

Engine				D13J
Max power at	r/s (r/min)			25.0 (1,500)
SAE J1995 gross	kW / hp			291 (395)
ISO 9249, SAE J1349 net	kW / hp			290 (389)
Max torque at	r/s (r/min)			18.3 (1,100)
SAE J1995 gross	Nm	lbf-ft	2 231	1,645
ISO 9249, SAE J1349 net	Nm	lbf-ft	2 216	1,634
Economic working range		r/min		800 - 1,600
Displacement	l	in³	12.8	782



Brake system

Service brake: Volvo dual-circuit system. Outboard-mounted fully hydraulic operated, fully sealed oil circulation-cooled wet disc brakes.

Parking brake: Fully sealed, wet multi-disc brake built into the transmission. Applied by spring force, electro-hydraulic release.

Secondary brake: Dual brake circuits with rechargeable accumulators. One circuit or the parking brake fulfills all safety requirements.

Standard: The brake system complies with the requirements of ISO 3450.

Accumulators	l	US gal	2 x 1.0 + 1 x 0.5	2 x 0.26 + 1 x 0.13
Number of brake discs per wheel (front)				2

Electrical system

Central warning system: Contronic system including central warning light and buzzer for following functions: - Serious engine fault - Low steering system pressure - Over speed warning engine - Interruption in communication (computer fault) Central warning light and buzzer with the 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 crank case pressure - Low transmission oil pressure - High transmission oil temperature - Low brake pressure - Engaged parking brake - Fault on brake charging - 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.	A	1,000
Alternator rating	W/A	2,280 / 80
Starter motor output	kW	7

Drivetrain

Torque converter: Single-stage with Lock-Up.

Transmission: Volvo countershaft transmission with Fast and smooth shifting of gears with Pulse Width Modulation (PWM) valve. Torque converter with lockup.

Transmission: Volvo Automatic Power Shift (APS) with fully automatic shifting 1-4 and mode selector with 4 different gear shifting programs.

Axles: Volvo fully floating axle shafts with planetary hub reductions and nodular iron axle housing. Fixed front axle and oscillating rear axle. STD 100% differential lock available when needed on the front axle.

Transmission				Volvo HTL307	
Torque multiplication, stall ratio					2,094:1
Maximum speed, forward/reverse	1st gear	km/h	mph	7	4.3
	2nd gear	km/h	mph	11.5	7.1
	3rd gear	km/h	mph	24.5	15.2
	4th gear*	km/h	mph	38	23.6
Measured with tires					29,5R25 L4
Front axle/rear axle					AWB 50B / 41
Rear axle oscillation ±			°		15
Ground clearance at 15° osc.		mm	in	600	23.6

*) limited by ECU

Cab

Instrumentation: All important information is visible in the monitoring system display in the operator's field of vision.
Heater and defroster: Heater coil with filtered fresh air and fan with auto and 11 speeds. Defroster vents for all window areas.
Operator's seat: Operator's seat with adjustable suspension and retractable seat belt.
Standard: The cab is tested and approved according to ROPS (ISO 3471), FOPS (ISO 3449). The cab meets with requirements according to ISO 6055 (Operator overhead protection - Industrial trucks) and SAE J386 ("Operator Restraint System").

Sound level in cab according to ISO 6396/SAE J2105				
LpA			dB(A)	70
External sound level according to ISO 6395/SAE J2104				
LwA			dB(A)	109
Ventilation	m^3/min	yd^3/min	9	11.8
Heating capacity			kW	16
Air conditioning (optional)			kW	7.5

Steering system

Steering system: Load-sensing, hydrostatic articulated steering.
System supply: The steering system has priority feed from a load-sensing axial piston pump with variable displacement.
Steering cylinders: Two double-acting cylinders.

Cylinder bore	mm	in	100	3.9
Piston rod diameter	mm	in	60	2.4
Stroke	mm	in	525	20.7
Working pressure	MPa	bar	21 ± 0.35	210 ± 3.5
Maximum flow	l/min	gal/min	202	53.4
Maximum articulation		± °		37

Service

Service accessibility: Large, easy-to-open hood covering the whole engine department, electrically operated. Fluid filters and component breather air filters promote long service intervals. Possibility to monitor, log and analyze data to facilitate troubleshooting.

Fuel Tank	l	gal	366	96.7
DEF Tank	l	gal	31	8.2
Engine coolant	l	gal	55	14.5
Hydraulic oil tank	l	gal	226	59.7
Transmission oil	l	gal	48	12.7
Engine oil	l	gal	50	13.2
Axle oil front/rear	l	gal	78 / 80	20.6 / 21.1

Lift arm system

Z-bar

Cylinders lift			2
Cylinder bore	mm	190	7.5
Piston rod diameter	mm	100	3.9
Stroke	mm	873	34.4
Cylinder tilt			1
Cylinder bore	mm	220	8.7
Piston rod diameter	mm	120	4.7
Stroke	mm	570	22.4

Hydraulic system

System supply: Two load-sensing axial piston pumps with variable displacement. The steering system always has priority.
Valves: Double-acting 2-spool valve. The main valve is controlled by a 2-spool pilot valve.
Lift function: The valve has three positions; raise, hold and lower position. Inductive/magnetic automatic boom kickout can be switched on and off and is adjustable by the operator in cab to any position between maximum reach and full lifting height.
Tilt function: The valve has three functions including rollback, hold and dump. Inductive/magnetic automatic tilt can be adjusted to the desired bucket angle.
Cylinders: Double-acting cylinders for all functions.
Filter: Full flow filtration through 10 micron (absolute) filter cartridge.

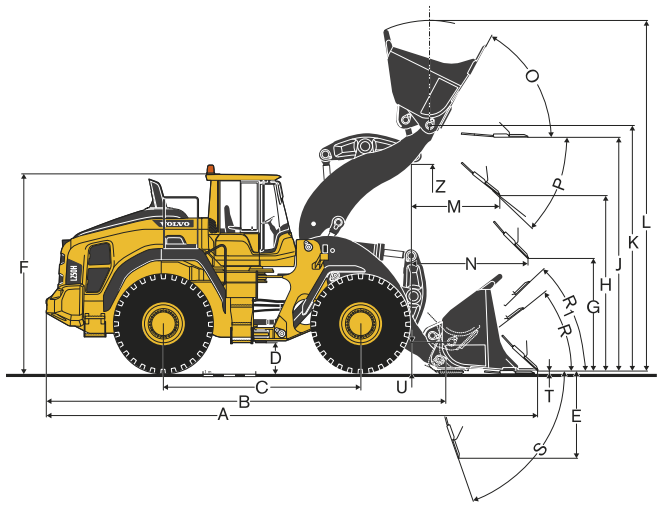
Working pressure maximum, pump 1	MPa	bar	29.0 ± 0.5	290 ± 5
Flow	l/min	gal/min	252	66.6
at	MPa	bar	10	100
engine speed		r/s(r/min)		32 (1,900)
Working pressure maximum, pump 2	MPa	bar	31.0 ± 0.5	310 ± 5
Flow	l/min	gal/min	202	53.4
at	MPa	bar	10	100
engine speed		r/s(r/min)		32 (1,900)
Working pressure maximum, pump 3	MPa	bar	25.0 ± 0.5	250 ± 5
Flow	l/min	gal/min	83	21.9
at	MPa	bar	10	100
engine speed		r/s(r/min)		32 (1,900)
Pilot system	MPa	bar	3.2 - 4.0	32 - 40
Cycle times				
Lift		s		7.1
Tilt		s		1.9
Lower, empty		s		4.1
Total cycle time		s		13.1

Specifications.

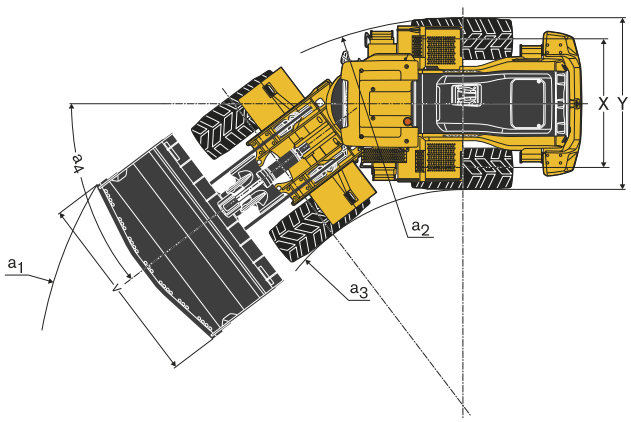
Tires L250H: 29.5 R25 L4 (Tire deflection: Standard)

			Standard boom		Long boom	
A	mm	in	9 490	373.6	9 800	385.8
B	mm	in	7 530	296.5	7 800	307.1
C	mm	in	3 750	147.6	3 750	147.6
D	mm	in	540	21.3	540	21.3
E	mm	in	1 790	70.5	1 890	74.4
F	mm	in	3 740	147.2	3 730	146.9
F_1	mm	in	3 630	142.9	3 630	142.9
F_2	mm	in	2 850	112.2	2 840	111.8
G	mm	in	2 132	83.9	2 133	84.0
H	mm	in	3 140	123.6	3 490	137.4
J	mm	in	4 340	170.9	4 700	185.0
K	mm	in	4 640	182.7	5 000	196.9
L	mm	in	6 330	249.2	6 680	263.0
M	mm	in	1 670	65.7	1 640	64.6
N	mm	in	2 340	92.1	2 610	102.8
O		°		62		57
P_2		°		45		45
P		°		47		47
R		°		41		43
R_1		°		48		51
S		°		75		81
S_1		°		42		46
T	mm	in	129	5.1	197	7.8
U*	mm	in	540	21.3	620	24.4
V	mm	in	3 580	140.9	3 580	140.9
X	mm	in	2 400	94.5	2 400	94.5
Y	mm	in	3 170	124.8	3 170	124.8
Z	mm	in	3 940	155.1	4 150	163.4
a_1	mm	in	15 860	624.4	16 060	632.3
a_2	mm	in	7 110	279.9	7 110	279.9
a_3	mm	in	3 950	155.5	3 950	155.5
a_4		°		37		37

* Carry position SAE
Bucket: 5.7 m³ (7.5 yd³) STE P T SEG



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



L250H

Tires 29.5 R25 L4			REHANDLING				GENERAL PURPOSE						ROCK***						LIGHT MATERIAL		LONG BOOM*	
			6.1 m³ (8.0 yd³) STE P BOE		6.9 m³ (9.0 yd³) STE P BOE		5.7 m³ (7.5 yd³) STE P T SEG		6.4 m³ (8.4 yd³) STE P T SEG		6.4 m³ (8.4 yd³) STE P BOE		5.5 m³ (7.2 yd³) STE P T SEG		5.5 m³ (7.2 yd³) SPN P T SEG		6 m³ (7.2 yd³) SPN P T SEG		10.2 m³ (13.3 yd³) LM P			
Volume, heaped ISO/SAE	m³	yd³	6.1	8.0	6.9	9.0	5.7	7.5	6.4	8.4	6.4	8.4	5.5	7.2	5.5	7.2	6.0	7.8	10.2	13.3	-	-
Volume at 110% fill factor	m³	yd³	6.7	8.8	7.6	9.9	6.3	8.2	7.0	9.2	7.0	9.2	6.1	8.0	6.1	8.0	6.6	8.6	11.2	14.6	-	-
Static tipping load, straight	kg	lb	27 590	60,826	27 260	60,098	25 640	56,527	25 370	55,931	25 601	56,441	26 310	58,004	25 790	56,857	25 350	55,887	24 680	54,410	-3 050	-6,724
at 35° turn	kg	lb	24 520	54,057	24 200	53,352	22 760	50,177	22 500	49,604	22 733	50,118	23 390	51,566	22 860	50,398	22 440	49,472	21 810	48,083	-2 760	-6,085
at full turn	kg	lb	24 170	53,286	23 860	52,602	22 440	49,472	22 180	48,899	22 406	49,398	23 060	50,839	22 530	49,670	22 110	48,744	21 490	47,377	-2 740	-6,041
Breakout force	kN	lbf	311.8	70,095	291.0	65,419	323.4	72,703	298.7	67,150	303.9	68,319	330.9	74,389	277.1	62,295	265.2	59,619	251.9	56,629	-28	-6,295
A	mm	in	9 230	363.4	9 350	368.1	9 490	373.6	9 600	378.0	9 280	365.4	9 410	370.5	9 740	383.5	9 840	387.4	9 610	378.3	310	12.2
E	mm	in	1 560	61.4	1 670	65.7	1 790	70.5	1 890	74.4	1 600	63.0	1 710	67.3	2 020	79.5	2 110	83.1	1 930	76.0	100	3.9
H**)	mm	in	3 320	130.7	3 230	127.2	3 140	123.6	3 060	120.5	3 280	129.1	3 200	126.0	2 980	117.3	2 910	114.6	3 010	118.5	350	13.8
L	mm	in	6 490	255.5	6 610	260.2	6 330	249.2	6 440	253.5	6 440	253.5	6 680	263.0	6 680	263.0	6 740	265.4	7 030	276.8	350	13.8
M**)	mm	in	1 520	59.8	1 610	63.4	1 670	65.7	1 750	68.9	1 550	61.0	1 620	63.8	1 860	73.2	1 930	76.0	1 770	69.7	-30	-1.2
N**)	mm	in	2 270	89.4	2 320	91.3	2 340	92.1	2 390	94.1	2 290	90.2	2 320	91.3	2 460	96.9	2 490	98.0	2 390	94.1	270	10.6
V	mm	in	3 580	140.9	3 580	140.9	3 580	140.9	3 580	140.9	3 580	140.9	3 580	140.9	3 580	140.9	3 580	140.9	3 700	145.7	-	-
a_1 clearance circle	mm	in	15 740	619.7	15 800	622.0	15 860	624.4	15 910	626.4	15 760	620.5	15 830	623.2	16 000	629.9	16 040	631.5	16 060	632.3	-	-
Operating weight	kg	lb	34 560	76,192	34 720	76,544	33 980	74,913	34 120	75,222	33 970	74,891	34 900	76,941	35 280	77,779	35 250	77,713	34 790	76,699	-80	-176

*) Measured with 5.7 m³ (7.5 yd³) GP STE P T SEG bucket
**) Measured to the tip of the bucket teeth or bolt-on edge.
Dump height to bucket edge measured at 45° dump angle. (Spade nose buckets at 42°.)
***) Measured with 29.5 R25 L5 tire

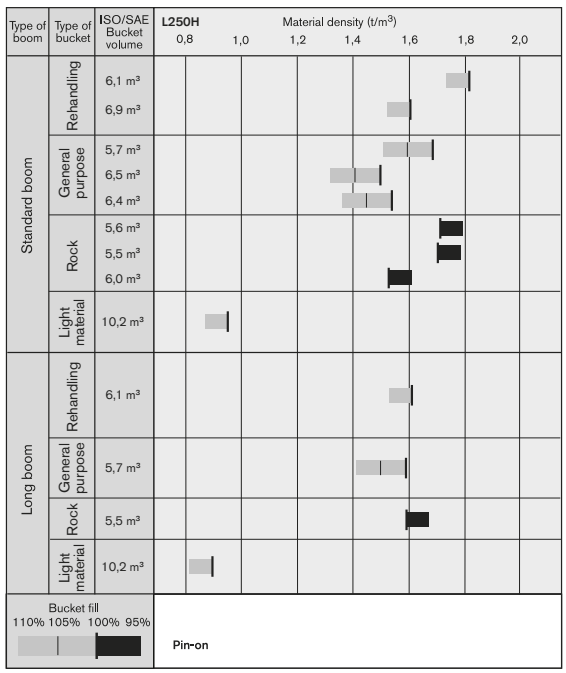
Note: This only applies to genuine Volvo attachments.

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/m³	Material density, lb/yd³
Earth	110 - 115	1.4 - 1.6	2,360 - 2,697
Clay	110 - 120	1.4 - 1.6	2,360 - 2,697
Sand	100 - 110	1.6 - 1.9	2,697 - 3,203
Gravel	100 - 110	1.7 - 1.9	2,865 - 3,203
Rock	75 - 100	1.5 - 1.9	2,528 - 3,203

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

			Standard boom		Long boom			
Tires 29.5 R25 L4			29.5 R25 L5		875/65R29 L3/L4		29.5 R25 L5	875/65R29 L3/L4
Width over tires	mm	in	35	1.4	95	3.7	35	1.4	95	3.7
Ground clearance	mm	in	40	1.6	-10	-0.4	40	1.6	-20	-0.8
Tipping load, full turn	kg	lb	1 010	2,227	180	397	930	2,050	180	397
Operating weight	kg	lb	1 490	3,284	650	1,433	1 500	3,307	650	1,433

Equipment.

STANDARD EQUIPMENT

Service and maintenance
- Engine oil remote drain and fill
- Lubrication manifolds, ground accessible
- Pressure check connections: transmission and hydraulic, quick connects
- Tool box, lockable
- CareTrack
- Telematics, 3 Year Subscription

Engine
- Exhaust after treatment system
- Two stage air cleaner, primary and secondary filter
- Preheating of induction air
- Fuel pre filter with water trap
- Fuel filter
- Crankcase breather oil trap
- Exhaust heat insulation
- Exterior radiator air intake protection

Electrical system
- 24 V, pre wired for optional accessories
- Alternator 24 V/ 80 A
- Battery disconnect switch with removable key
- Fuel gauge
- Hour meter
- Electric horn
- Instrument cluster:
  - Fuel level
  - Transmission temperature
  - Coolant temperature
  - Instrument lighting
- Lighting:
  - Twin halogen front headlights with high and low beams
  - Parking lights
  - Double brake and tail lights
  - Turn signals with flashing hazard light function
  - Halogen work lights (2 front and 2 rear)

Contronic monitoring system
- Monitoring and logging of machine data
- Contronic display
- Fuel consumption
- Ambient temperature
- Clock
- Test function for warning and indicator lights
- Brake test
- Test function, sound level at max fan speed
- Warning and indicator lights:
  - Battery charging
  - Parking brake
- Warning and display message:
  - Regeneration
  - Engine coolant temperature
  - Charge air temperature
  - Engine oil temperature
  - Engine oil pressure
  - Transmission oil temperature
  - Transmission oil pressure
  - Hydraulic oil temperature
  - Brake pressure
  - Parking brake applied
  - Brake charging
  - Overspeed at direction change
  - Axle oil temperature
  - Steering pressure
  - Crankcase pressure
  - Attachment lock open
- Level warnings:
  - Fuel level
  - Engine oil level
  - Engine coolant level
  - Transmission oil level
  - Hydraulic oil level
  - Washer fluid level
- Engine torque reduction in case of malfunction indication:
  - High engine coolant temperature
  - High engine oil temperature
  - Low engine oil pressure
  - High crankcase pressure
  - High charge air temperature
- Engine shutdown to idle in case of malfunction indication:
  - High transmission oil temperature
  - Slip in transmission clutches
- Keypad, background lit
- Start interlock when gear is engaged

Drivetrain
- Automatic Power Shift
- Fully automatic gearshifting, 1 4
- PWM controlled gearshifting
- Forward and reverse switch by hydraulic lever console
- Indicator glass for transmission oil level
- Differentials: Front, 100% hydraulic diff lock. Rear, conventional.
- OptiShift

Brake system
- Dual brake circuits
- Dual brake pedals
- Secondary brake system
- Parking brake, electrical hydraulic
- Brake wear indicators

Cab
- ROPS (ISO 3471), FOPS (ISO 3449)
- Tiltable Cab
- Single key kit door/start
- Acoustic inner lining
- Ashtray
- Cigarette lighter, 24 V power outlet
- Lockable door
- Cab heating with fresh air inlet and defroster
- Fresh air inlet with two filters
- Automatic heat control
- Floor mat
- Dual interior lights
- Interior mirror on the left and reverse camera monitor on the right
- Dual exterior rear view mirrors
- Sliding window, right side
- Tinted safety glass
- Retractable seat belt (SAE J386)
- 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

Hydraulic system
- Main valve, double acting 2 spool with hydraulic pilots
- Variable displacement axial piston pumps (3) for:
  - 1 Working hydraulic system
  - 2 Working hydraulic system, Steering and Brake system
  - 3 Cooling fan and Brake system
- Electro-hydraulic servo controls
- Electric level lock
- Boom kick out, automatic
- Bucket positioner, automatic
- Double acting hydraulic cylinders
- Indicator glass for hydraulic oil level
- Hydraulic oil cooler

External equipment
- Fenders, front and rear
- Viscous cab mounts
- Rubber engine and transmission mounts
- Easy to open engine hood
- Frame, joint lock
- Vandalism lock prepared for
  - Batteries
  - Engine compartment
  - Radiator grille
- Lifting eyes
- Tie down eyes
- Tow hitch
- Counterweight, pre drilled for optional guards

OPTIONAL EQUIPMENT

Service and maintenance
- Automatic lubrication system
- Automatic lubrication system for long boom
- Grease nipple guards
- Oil sampling valve
- Refill pump for grease to lube system
- Tool kit
- Cleaner kit, with air blow gun
- Wheel nut wrench kit

Engine
- Air pre-cleaner, cyclone type
- Air pre-cleaner, oil-bath type
- Air pre-cleaner, turbo type
- Radiator corrosion protection
- Radiator and hydraulic oil cooler, corr. prot.
- Engine block heater 230 V/110 V
- Fuel fill strainer
- Hand throttle control
- Max. fan speed, hot climate
- Reversible cooling fan
- Reversible cooling fan and axle oil cooler
- Fuel filter, extra
- Fuel heater

OPTIONAL EQUIPMENT

Electrical system
Alternator 120 amp, heavy-duty
Anti-theft device
Headlights, assym. left
License plate holder, lighting
Rear view camera incl. monitor, color
Rear-view mirrors, adjustable, el. heated
Rear view mirrors, Long arm
Rear view mirrors, adjustable, el. heated, Long arm
Reduced function working lights, reverse gear activated
Reverse alarm
Reverse warning light, strobe lighting
Shortened headlight support brackets
Side marker lamps
Rotating beacon
Working lights, attachments
Working lights front, high intensity discharge (HID)
Working lights front, on cab, dual
Working lights front, extra
Working lights front, extra, 2 LED lamps
Work lamp, front on cab, 2 LED lamps
Work lamp, front on cab, 4 LED lamps
Work lamp, rear on cab, 2 LED lamps
Work lamp, rear on cab, 4 LED lamps
Without work lamp side on cab, std
Work lamp, side on cab, 1 LED lamp
Work lamp, side on cab, 4 LED lamps
Work lamp, rear in grille, 2 LED lamps
Work lamp, rear in grille, 4 LED lamps
Work lamp, front above head lamps, 2 LED lamps
Tail Lights LED
Cab
Anchorage for Operator's manual
Automatic Climate Control, ACC
ACC control panel, with Fahrenheit scale
Asbestos dust protection filter
Cab air pre-cleaner, cyclone type
Carbon filter
Cab roof, heavy-duty
Cover plate, under cab
Lunch box holder
Operator's seat, Volvo air susp, heavy-duty, high back, heat, Elservo, not for CDC
Operator's seat, Volvo air susp, heavy-duty,high back,heat, Elservo, for CDC
Armrest, operator's seat, Volvo, left only
Armrest, operator's seat, ISRI, left only
Operator's seat, ISRI, air susp, heat, high back
Radio installation kit incl. 11 amp 12 volt outlet, left side
Radio installation kit incl. 11 amp 12 volt outlet, right side
Radio installation kit incl. 20 amp 12 volt outlet
Radio with CD-player
Remote door opener
Seat belt, width 75 mm (3")
Steering wheel knob
Sun blinds, rear windows
Sun blinds, side windows
Timer cab heating
Window, sliding, door
Universal door/ignition key
Front view mirror

Drivetrain
Diff lock front 100%, Limited Slip rear
Speed limiter, 20 km/h (12.4 mph)
Speed limiter, 30 km/h (18.6 mph)
Speed limiter, 40 km/h (24.8 mph)
Wheel/axle seal guards
Brake system
Oil cooler and filter front & rear axle
Stainless steel, brake lines
Hydraulic system
Boom suspension system
Arctic kit, pilot hoses and brake accum. incl. hydr. oil
Boom cylinder hose and tube guards
Boom cylinder hose and tube guards for long boom
Hydraulic fluid, biodegradable, Volvo
Hydraulic fluid, fire-resistant
Hydraulic fluid, for hot climate
Electro-hydraulic function, 3rd
Electro-hydraulic function, 3rd for long boom
Electro-hydraulic servo controls for long boom
External equipment
Cab ladder, rubber-suspended
Deleted front mudguards
Mudguard widener, front/rear for 80-series tires
Mudguard widener, front/rear for 65-series tires
Fire suppression system
Mudguards, full cover, rear for 80-series tires
Mudguards, full cover, rear for 65-series tires
Long boom
Protective equipment
Belly guard front
Belly guard rear
Belly guard rear, oil pan
Cover plate, heavy-duty, front frame
Cab roof heavy duty
Guards for front headlights
Guards for radiator grill
Guards for tail lights
Windows, side and rear guards
Windshield guard
Corrosion protection, painting of machine
Bucket Teeth protection
Other equipment
CE-marking
Reflecting stickers (decals), machine contour
Reflecting stickers (stripes), machine contour Cab
Comfort Drive Control (CDC)
Counterweight, re-handling
Counterweight, signal painted, chevrons
Secondary steering with automatic test function
Sound decal, EU
Year of manufacturing plate
Sign 50 Km/h
Sign, slow moving vehicle
CareTrack, GSM
CareTrack, GSM/Satellite
Tires
29.5 R25
875/65 R29

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.

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Comfort Drive Control (CDC)

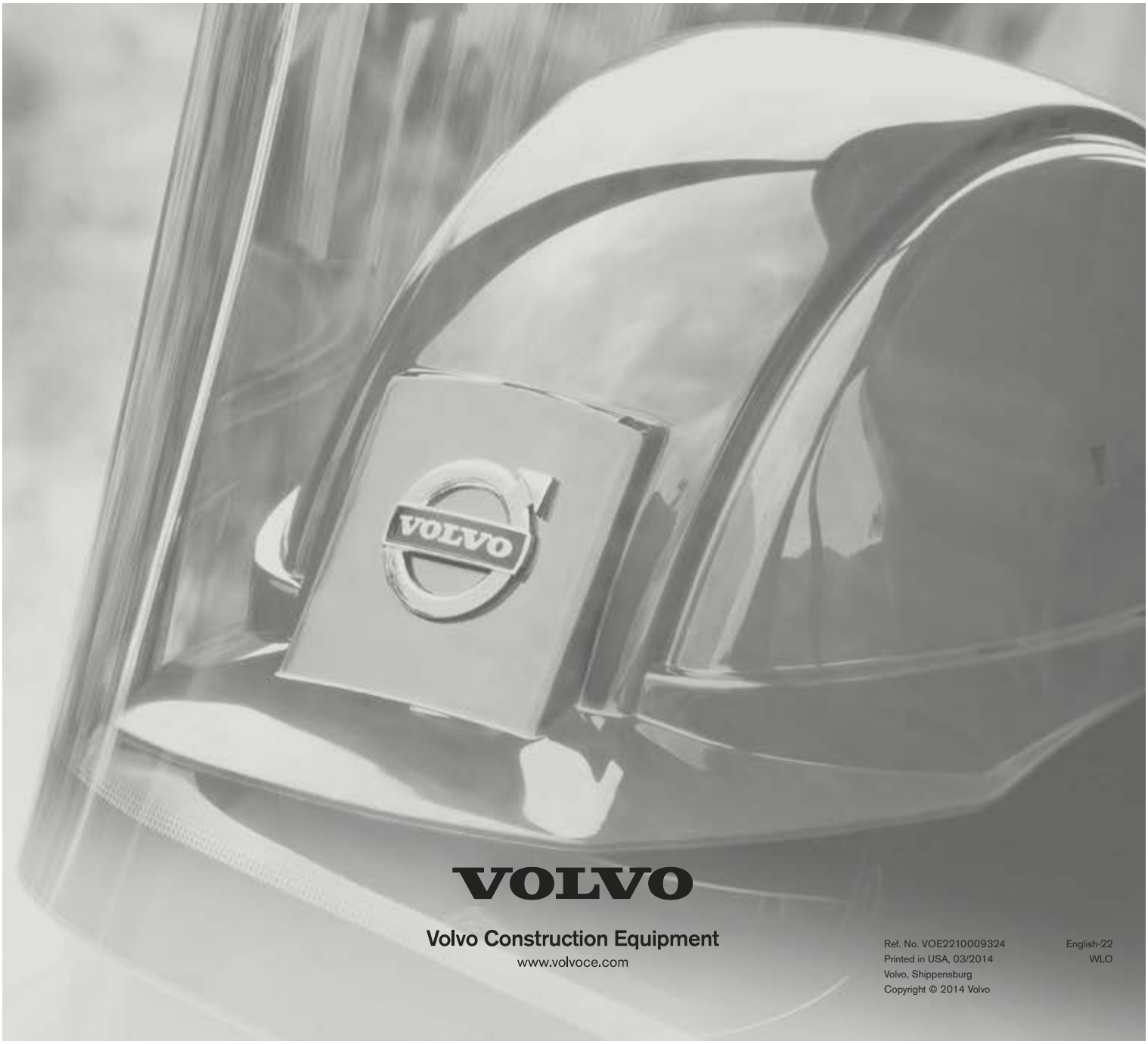
Auto-lube

Front / Rear-view camera

Fire suppressions system

Seat options

Boom Suspension System (BSS)



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