



Volvo Construction Equipment

# L250H

VOLVO WHEEL LOADERS 33.4-39.0t 395hp



# 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 industry experts. 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 when the operator changes direction by applying the service brakes automatically. 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 according to 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 in hard materials. 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 heavy duties.

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 automatically activates only when it's needed – reducing fuel consumption and noise. The optional 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 feature an axle oil circulation feature which allows the axle oil to flow inside the axle – this cools the oil.

# 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 lubrication cycle to suit the application.



## Maintenance-free rear axle cradles

The rear axle is supported on maintenance-free cradles and includes greased-for-life bearings and bushings – reducing overall service cost, increasing machine uptime and ensuring long life. Cradle oscillation pins are sealed to keep grease in and dirt out.

## 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.

# Lift more with Volvo.



## 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 force for strong, powerful loading in hard materials.



## 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 on 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 harmony – ensuring optimized performance.



### AdBlue®

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

### Single lever

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

### Volvo engine

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

### Easy service access

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



### 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.



#### 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 machine.

## 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

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 maximising uptime.



## Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your

machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



## Genuine Volvo Parts

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



## Service Network

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





**Customer Support Agreements**

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

# Volvo L250H in detail.

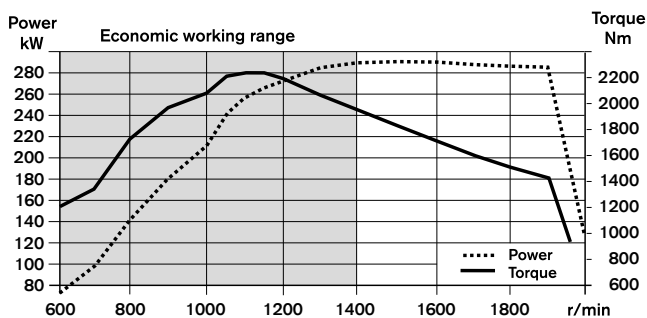
## Engine

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 (394)
Max torque at	r/s (r/min)	18.3 (1 100)
SAE J1995 gross	Nm	2 231
ISO 9249, SAE J1349 net	Nm	2 216
Economic working range	r/min	800 - 1 600
Displacement	l	12.81



## Brake system

**Service brake:** Volvo dual-circuit system with nitrogen-charged accumulators. Outboard-mounted fully hydraulic operated, fully sealed oil circulation-cooled wet disc brakes. The operator can select automatic declutch of the transmission when braking by a switch on the instrument panel.

**Parking brake:** Fully sealed, wet multi-disc brake built into the transmission. Applied by spring force, electro-hydraulic release with a switch on the instrument panel.

**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.

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

## Electrical system

**Central warning system:** Contronic electrical system with 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.

**Transmission:** Volvo countershaft transmission with single lever control. 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, including AUTO.

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

Transmission	Volvo	Volvo HTL307
		2.094:1
	1st gear	km/h
		7
Maximum speed,	2nd gear	km/h
forward/reverse	3rd gear	km/h
	4th gear	km/h
		38
Measured with tires		29.5R25 L4
Front axle/rear axle		AWB 50B / 41
Rear axle oscillation ±	°	15
Ground clearance at 15° osc.	mm	600

## 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 and fan with auto and 11 speeds. 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 cab wall and floor. The forces from the retractable seatbelt are absorbed by the seat rails.

**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
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### External sound level according to ISO 6395/SAE J2104

LwA	dB(A)	109
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Ventilation	m <sup>3</sup> /min	9
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Heating capacity	kW	16
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Air conditioning (optional)	kW	7.5
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## 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	100
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Piston rod diameter	mm	60
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Stroke	mm	525
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Working pressure	MPa	21.0 ± 0.35
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Maximum flow	l/min	202
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Maximum articulation	± °	37
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## Service

**Service accessibility:** Large, easy-to-open hood covering 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	366
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AdBlue Tank	l	31
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Engine coolant	l	55
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Hydraulic oil tank	l	226
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Transmission oil	l	48
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Engine oil	l	50
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Axle oil front/rear	l	78 / 80
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## Lift arm system

Z-bar

Cylinders lift		2
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Cylinder bore	mm	190
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Piston rod diameter	mm	100
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Stroke	mm	873
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Cylinder tilt		1
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Cylinder bore	mm	220
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Piston rod diameter	mm	120
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Stroke	mm	570
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## 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 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	29.0 ± 0.5
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Flow	l/min	252
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at	MPa	10
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engine speed	r/s(r/min)	32 (1 900)
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Working pressure maximum, pump 2	MPa	31.0 ± 0.5
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Flow	l/min	202
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at	MPa	10
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engine speed	r/s(r/min)	32 (1 900)
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Working pressure maximum, pump 3	MPa	25.0 ± 0.5
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Flow	l/min	83
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at	MPa	10
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engine speed	r/s(r/min)	32 (1 900)
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Pilot system	MPa	3.2 - 4.0
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Cycle times

Lift	s	7.1
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Tilt	s	1.9
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Lower, empty	s	4.1
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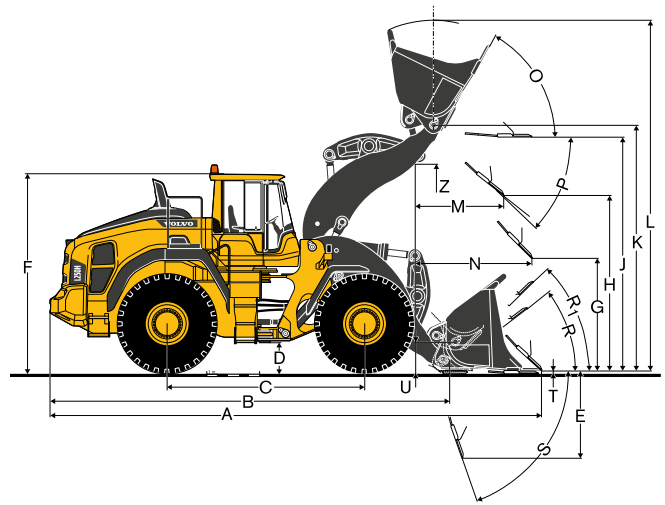
Total cycle time	s	13.1
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# Specifications.

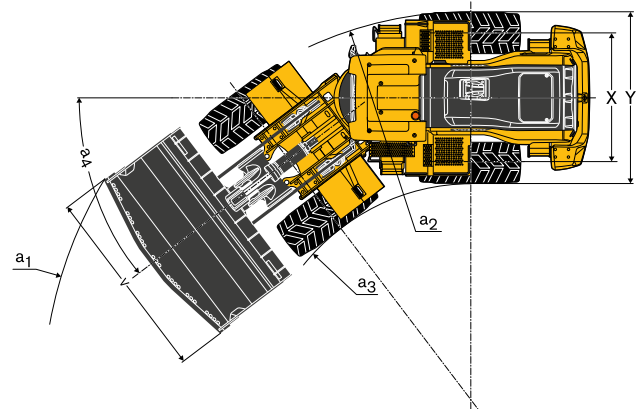
## Tires L250H: 29.5 R25 L4

		Standard boom	Long boom
A	mm	9 490	9 800
B	mm	7 530	7 800
C	mm	3 750	3 750
D	mm	540	540
E	mm	1 790	1 890
F	mm	3 740	3 730
F <sub>1</sub>	mm	3 630	3 630
F <sub>2</sub>	mm	2 850	2 840
G	mm	2 132	2 133
H	mm	3 140	3 490
J	mm	4 340	4 700
K	mm	4 640	5 000
L	mm	6 330	6 680
M	mm	1 670	1 640
N	mm	2 340	2 610
O	°	62	57
P <sub>2</sub>	°	45	45
P	°	47	47
R	°	41	43
R <sub>1</sub>	°	48	51
S	°	75	81
S <sub>1</sub>	°	42	46
T	mm	129	197
U*	mm	540	620
V	mm	3 580	3 580
X	mm	2 400	2 400
Y	mm	3 170	3 170
Z	mm	3 940	4 150
a <sub>1</sub>	mm	15 860	16 060
a <sub>2</sub>	mm	7 110	7 110
a <sub>3</sub>	mm	3 950	3 950
a <sub>4</sub>	°	37	37










\* Carry position SAE  
Bucket: 5.7 m<sup>3</sup> 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 STE P BOE	 6.9 m³ STE P BOE	 5.7 m³ STE P T SEG	 6.4 m³ STE P T SEG	 6.4 m³ STE P BOE	 5.5 m³ STE P T SEG	 5.5 m³ SPN P T SEG	 6 m³ SPN P T SEG	 10.2 m³ LM P		
Volume, heaped ISO/SAE	m³	6.1	6.9	5.7	6.4	6.4	5.5	5.5	6.0	10.2	-
Volume at 110% fill factor	m³	6.7	7.6	6.3	7.0	7.0	6.1	6.1	6.6	11.2	-
Static tipping load, straight	kg	27 590	27 260	25 640	25 370	25 601	26 310	25 790	25 350	24 680	-3 050
at 35° turn	kg	24 520	24 200	22 760	22 500	22 733	23 390	22 860	22 440	21 810	-2 760
at full turn	kg	24 170	23 860	22 440	22 180	22 406	23 060	22 530	22 110	21 490	-2 740
Breakout force	kN	311.8	291.0	323.4	298.7	303.9	330.9	277.1	265.2	251.9	-28
A	mm	9 230	9 350	9 490	9 600	9 280	9 410	9 740	9 840	9 610	310
E	mm	1 560	1 670	1 790	1 890	1 600	1 710	2 020	2 110	1 930	100
H**)	mm	3 320	3 230	3 140	3 060	3 280	3 200	2 980	2 910	3 010	350
L	mm	6 490	6 610	6 330	6 440	6 440	6 680	6 680	6 740	7 030	350
M**)	mm	1 520	1 610	1 670	1 750	1 550	1 620	1 860	1 930	1 770	-30
N**)	mm	2 270	2 320	2 340	2 390	2 290	2 320	2 460	2 490	2 390	270
V	mm	3 580	3 580	3 580	3 580	3 580	3 580	3 580	3 580	3 700	-
a <sub>1</sub> clearance circle	mm	15 740	15 800	15 860	15 910	15 760	15 830	16 000	16 040	16 060	-
Operating weight	kg	34 560	34 720	33 980	34 120	33 970	34 900	35 280	35 250	34 790	-80

\*) Measured with 5.7 m³ 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

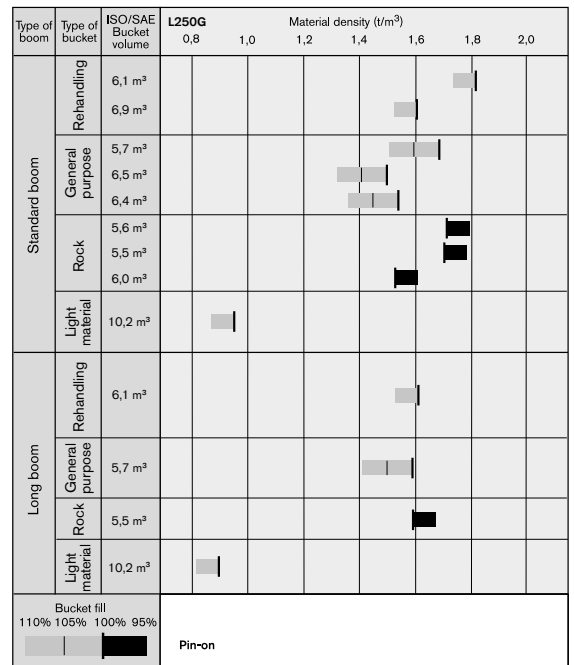
Note: This only applies to genuine Volvo attachments.

**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
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**

Tires 29.5 R25 L4	Standard boom		Long boom		
	29.5 R25 L5	875/65R29 L3	29.5 R25 L5	875/65R29 L3	
Width over tires	mm	35	95	35	95
Ground clearance	mm	40	-10	40	-20
Tipping load, full turn	kg	1 010	180	930	180
Operating weight	kg	1 490	650	1 500	650

# Equipment.

## STANDARD EQUIPMENT

### Service and maintenance

Engine oil remote drain and fill  
Transmission 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  
Three stage air cleaner, pre 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 24V/ 80A  
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)  
Tilttable 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  
Dual interior rear view mirrors  
Dual exterior rear view mirrors  
Sliding window, right side  
Tinted safety glass  
Retractable seatbelt (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 230V/110V  
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

### Electrical system

Alternator 120 amp, heavy-duty  
Anti-theft device  
Headlights, assym. left  
License plate holder, lighting  
Rear view camera incl. monitor, colour  
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

## OPTIONAL EQUIPMENT

### Electrical system

- Reverse warning light, strobe lighting
- Shortened headlight support brackets
- Side marker lamps
- Rotating beacon
- Tail Lights LED
- 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

### 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, not for CDC
- Operator's seat, Volvo air susp, heavy-duty, high back, heat,
- Armrest, operator's seat, Volvo, left only
- Armrest, operator's seat, ISRI, left only
- Operator's seat, ISRI, air susp, heat, high back, for CDC
- 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
- Seatbelt, 3", (width 75 mm)
- 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
- Speed limiter, 30 km/h
- Speed limiter, 40 km/h
- Wheel/axle seal guards

### Brake system

- Oil cooler and filter front & rear axle
- Stainless steel, brake lines

### Hydraulic system

- Boom suspension system
- Arctic kit, brake accum.
- Boom cylinder hose and tube guards
- Boom cylinder hose and tube guards for long boom
- Hydraulic fluid, mineral, for cold climate
- 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 function, 3rd-4th
- Electro-hydraulic function, 3rd-4th 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, logging
- 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

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

### Comfort Drive Control (CDC)



### Auto-lube



### Front / Rear-view camera



### Fire suppressions system



### Seat options

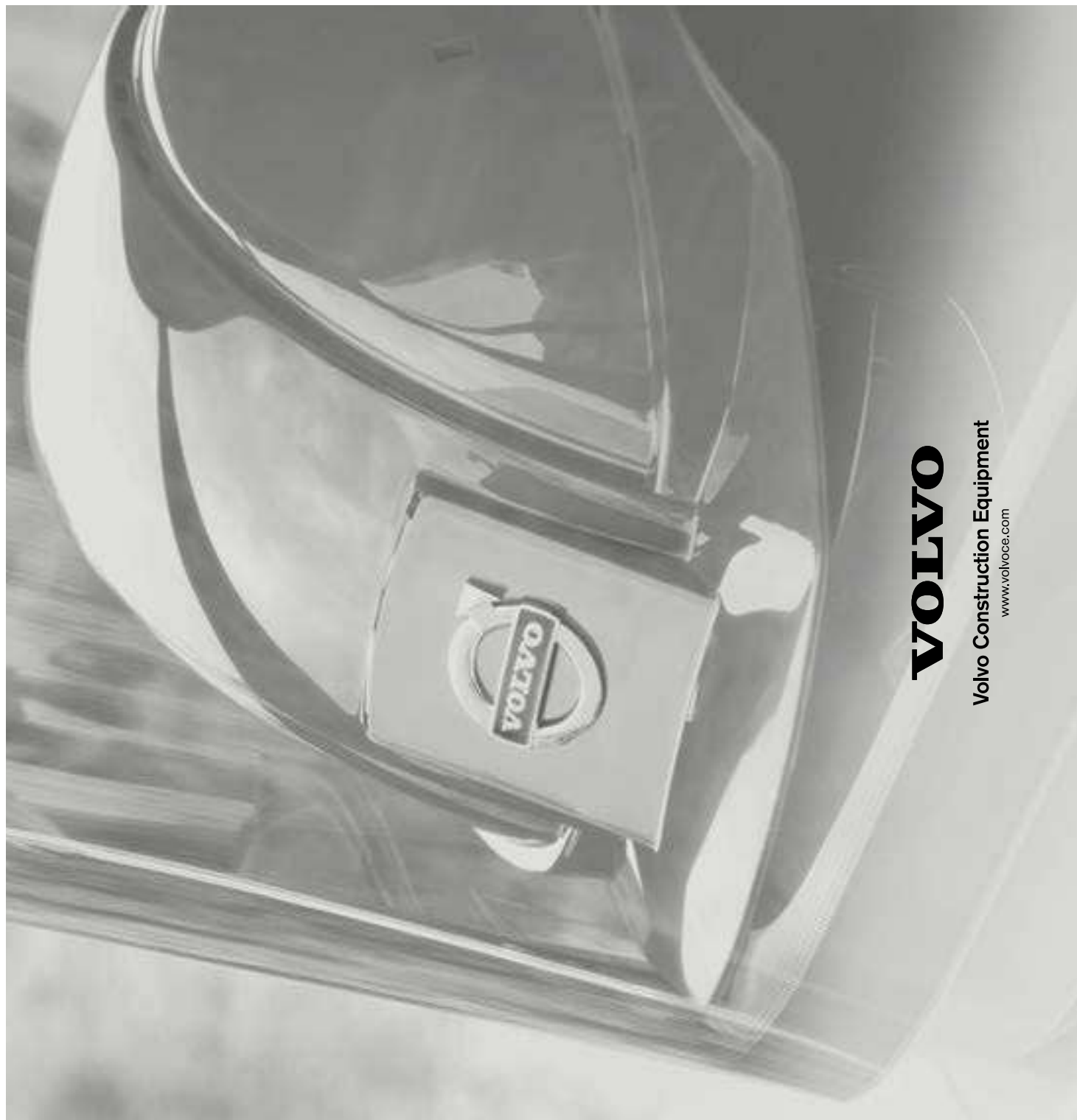


### Boom Suspension System (BSS)



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**

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