

**VOLVO WHEEL LOADER**

# **L50E**



**VOLVO**

# Volvo L50E – the allrounder



When it comes to construction equipment, it's the bottom line that counts. Volvo L50E is an all rounder based on years of experience with Volvo's basic concept for flexible, productive wheel loaders and tool carriers. This trustworthy wheel loader is well suited for a wide range of applications, especially when operating in tight spaces. The L50E is the obvious choice of loader for municipalities, road authorities, harbors, saw mills, agricultural and construction sites. You'd be hard pressed to find a more dependable, all round machine that's as much fun to operate - and to own - as this Volvo wheel loader.

## Smart solutions

Volvo's long experience has been used in designing the L50E, making it a highly reliable and true allround loader. The machine's low emission engine features quick response, good fuel economy, low sound levels and long life. The hydrostatic transmission gives fast acceleration and variable speed control. The load sensing hydraulic system only pumps oil when needed. The L50E is equipped with Volvo's patented lift arm system, TP-Linkage. This unique system combines superior breakout torque and parallel action

throughout the entire lifting range. The visibility-optimized attachment bracket gives the operator an excellent view of the attachment and the load. Together with Volvo's wide range of attachments, you get flexibility and economy that's tough to beat.

## Workplace with high comfort and excellent visibility

Matching of the visibility-optimized loader linkage, attachment bracket and attachments gives the operator excellent visibility of the load in any unloading, loading or transport

application. The operator has a very comfortable work environment in the cab, with extremely low sound levels and a unique air filtration system. The operator has an excellent view of the worksite around the machine, which ensures high productivity. The low external sound level makes the L50E the obvious choice for applications in sensitive environments such as urban and residential areas. Excellent operating economy, in combination with easy and quick maneuverability, makes the L50E a reliable winner in a wide range of applications.

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## Specifications L50E

● Engine:	Volvo D4D LAE2	● Buckets:	1,2 m <sup>3</sup> -3,9 m <sup>3</sup>
Max power at	36,7 r/s (2200 rpm)	● Log grapples:	0,7-1,3 m <sup>2</sup>
SAE J1995 gross	74,9 kW (102 hp)	● Operating weight:	8,2-9,4 t
ISO 9249,			
SAE J1349 net	73,9 kW (101 hp)		
● Breakout force:	70,9 kN*	● Tires:	17.5 R25
● Tipping load, fully turned:	5 220 kg*		

\*Bucket: 1,2 m<sup>3</sup> straight edge/w teeth  
Tires: 17.5 R25 L2





# Smart, fast and smooth

Volvo L50E is equipped with a turbocharged high performance low-emission engine. The efficient engine, combined with load sensing hydraulics and the intelligent hydrostatic transmission, gives fast response in all work phases. Volvo's unique lift arm system, Torque Parallel linkage (TP), gives constant high breakout torque and parallel lift throughout the entire lifting range. This results in high productivity and superior flexibility.

## Fast response

The power from Volvo's high performance low emission engine gives the allrounder high rimpull, excellent penetration capability and quick acceleration. Volvo's engines give high torque already at low engine speeds – a highly appreciated feature that results in unbeatable fast response.

## Shift with the application

The hydrostatic transmission gives the L50E fast acceleration and variable speed control. The system features a high/low transmission that allows shifting between two speed ranges. With the inching function\* engaged,

the operator has better control of the machine's speed when operating with hydraulically driven attachments.

## Power - when and where it's needed

The L50E features a highly efficient load sensing hydraulic system. In addition to superior high-precision maneuvering of the attachment and load, the system only provides hydraulic power when and where it's needed. The result is high efficiency and low fuel consumption. When no flow is required in the hydraulic system during the work cycle, all the engine power can be used by the drivetrain.

## TP-Linkage - superior torque throughout the entire lifting range

TP-Linkage, Volvo's unique lift arm system, delivers high and constant breakout torque throughout the entire lifting range. The system is extremely user-friendly and the operator can easily and effectively handle heavy materials with full power and control through the entire working range. No other lift arm system on the market provides such high, even breakout torque. The linkage provides excellent parallel movement, making it possible for the L50E to perform well in applications where others need two different machine types. The high breakout torque and the precision-performance hydraulics make the L50E extra suitable for operating with a bucket or other attachments.

In the L50E, technology, productivity and economy go hand in hand – all for your optimal profitability.

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## Engine

- Volvo D4D LAE2, low emission engine with high torque and fast response already at low engine speeds, even when fully loaded. The machine can work at low engine speeds, which contributes to good fuel economy, less noise, less wear and longer life.
- Hydraulically driven electronically controlled fan only works when there's a cooling demand, saving fuel.

## Transmission

- The hydrostatic transmission gives fast acceleration and variable speed control.

## Axles

- Volvo's in-house developed axles are integrated into the total drivetrain design to give effective rimpull.

## Brakes

- Fully hydraulic dual-circuit system for high safety.

- Circulation-cooled wet disc brakes in oil-bath for high reliability and long service life.
- Electronic brake test in Contronic gives fast information on the brake system's function.
- Brake wear indicator on each wheel for easy check of brake pad wear.

## Steering

- Load-sensing steering only uses power when it is needed, therefore saving fuel.
- The steering system's design provides smooth steering movements and higher operating safety.

## Frame

- Rugged frame design with high-strength steel.
- Volvo's articulation joint with center hinge bearings is a well-proven and service-friendly concept with renowned long service life.

## TP-linkage (Torque Parallel)

- Unique patented lift arm system provides two solutions in one – High torque and parallel action.

## Working hydraulics (load-sensing hydraulic system, LS)

- The load-sensing hydraulic system delivers exact hydraulic oil flow for activation when needed. This is an energy efficient system which lowers fuel consumption.
- Pilot-operated hydraulics – easy fingertip operation with short strokes allows precise control of movements, increasing the operator's efficiency and safety.

\* Optional equipment





# An alert operator is a productive operator

**Volvo Care Cab with the Contronic monitoring system reinforces Volvo's reputation as a leader in operator environment and cab comfort. We never forget the operator inside the machine. A comfortable, operator-friendly and safe environment makes the workday easier and more productive.**

## Care Cab

### A clean and comfortable workplace

A good cab climate does wonders for efficiency, keeping operators sharp during long shifts. All incoming air is filtered in two stages, making this one of the cleanest cabs on the market. Even the recirculated air is filtered. The efficient air conditioning\* provides a comfortable cab temperature all year round, regardless of cold or hot climate conditions. The air conditioning system also functions as an air dryer.

### Good comfort means higher productivity

There is a range of comfortable seats, all of them with multiple adjustment functions for optimal individual comfort. All instruments are visible at a glance, and all important information is right in front of the operator. The forward-reverse and kick-down functions are available both on the lever to the left of the steering wheel and on the hydraulic console to the right. With Comfort Drive Control (CDC)\*,



the operator can operate steering, forward, reverse and kick-down with controls on the left armrest. At any time, the operator can switch between steering with the steering wheel and CDC, which helps to minimize tiring and repetitive movements. This gives the operator the possibility to vary operating modes, thus combatting fatigue and static muscle strain.

### Contronic keeps an eye on everything

The machine's operation and performance are monitored continuously by Contronic, the highly reliable control and monitoring system from Volvo. The system is an electronic network made up of two computers. Operating at three levels, the system keeps an eye on the machine's functions in real-time. If a potential problem should occur, the system generates an immediate

warning, making the operator aware of the condition. All operating data is saved and can be used to analyze how the machine performs and to trace its history since the latest service. The machine's functions can be updated for optimal adaptation to new and changing operating conditions via the Contronic service display. With the MATRIS analysis software, it's also possible to check and adjust the machine's functions and performance.

### No noise to shout about

Thanks to its ingenious rubber mounting system and heavy-duty insulation, the Care Cab is one of the quietest cabs on the market. Without tiresome earfuls and annoying vibrations, the operator will stay sharp throughout the shift. In short, it's a great place to work.

## Care Cab

- Comfortable cab climate with one of the market's most efficient cab filtration systems.
- Pleasant interior, easy to keep clean.
- Adjustable steering wheel\*, seat, armrest and lever console for optimal operator comfort and high production.
- Contronic, a superior control and monitoring system, designed for higher safety and productivity.
- Large windows and narrow pillars give good all-round visibility, which means increased safety.
- All service platforms and steps feature improved anti-slip surfaces.
- Sloped entry ladder for easy cab access.

\* Optional equipment





# Volvo's commitment to nature and mankind

Quality, safety, and care for the environment are Volvo's core values. Indeed, we see our commitment as an integral part of our operation. Few machines have to work in tougher conditions. The ultimate goal is maximized productivity and efficiency for the lowest cost per hour, with minimized environmental impact. For instance, plants and manufacturing processes are certified in accordance with ISO 14001. This is but one example of our tangible commitments and high quality standards. And that's why Volvo customers get one of the most environmentally considerate and dependable wheel loaders on the market.

## A winner for years to come

Your Volvo L50E has to be a winner – both in day-to-day and long term operations, but also when it comes to operating economy and environmental consideration. The machinery has to be trusted in all aspects. It must deliver the anticipations of productivity and economy. High quality and easy maintenance are imperative for keeping up the work process. The high performance low emission engine is a good affair for you and the environment.

## Comfortable and quiet operator's environment

The operator inside deserves a comfortable, reliable and safe machine to work with. A good environment helps to spare operator, equipment and nature for years to come. The Volvo L50E is a super competitive wheel loader that puts the operator right in the middle, literally speaking. Tedious vibrations and noise have been heavily reduced. If the operator feels comfortable and secure, it's easier to stay attentive.

## More than 95 % recyclable

This wheel loader is almost fully recyclable. We see it as a natural step in our commitment. Components such as the engine, transmission and hydraulics are re-engineered and re-used in our Parts Exchange program. The equipment has to be as trustworthy, service-friendly, productive and cost-effective as possible. Choose this wheel loader for maximum productivity and minimal impact on operator, machinery and environment. Feel free to feel secure in a Volvo L50E.

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## Quality

- The air is vented from all major components with easy to replace breather filters, used to prevent dirty air from entering the transmission, axles, fuel tank, and hydraulic tank.
- High quality components for demanding environments, including Volvo's well-proven articulation joint with a center hinge bearing concept that is renown for long service life.
- All electrical wires are routed through sturdy conduits, protected from water, dust, and abrasion with rubberized connectors and terminal caps.
- The L50E is designed from the beginning for easy service and maintenance. Easy access to all components lays the foundation for shorter service and maintenance time and longer life.

## Safety

- A dual circuit service brake system that fulfills all requirements according to ISO 3450, electronic brake test in Contronic and easy to check brake wear indicators are all ways to ensure safe and effective braking.
- Volvo Care Cab is tested and approved according to ROPS ISO 3471 and FOPS ISO 3449 standards.
- Warning decals give clear information in the form of symbols and pictorials.
- Excellent panoramic visibility gives effective control over the entire work area.
- The L50E has steps and platforms that are equipped with anti-slip surfaces and well-positioned hand rails.

## Environment

- The low rpm, high performance D4D engine meets all current emission requirements according to step 2 legislation in Europe and the US.
- The L50E is manufactured in environmentally certified factories according to ISO 14001.
- The load sensing hydraulic system contributes to lower fuel consumption.
- The L50E is more than 95% recyclable according to material weight.
- Low external and internal sound levels.



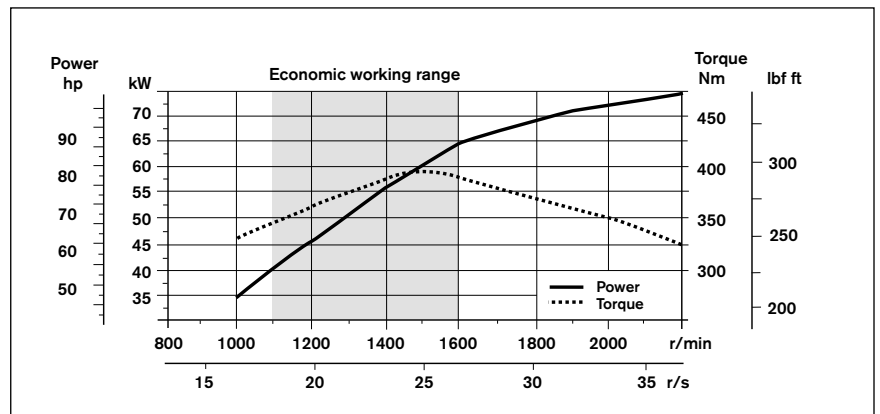


# The Volvo L50E in detail

## Engine

Engine: 4-stroke, 4-cylinder straight turbo charged diesel engine with conventional injectors. The engine is of heavy-duty-type. Air cleaning: three-stage. Cooling system: Hydrostatic, electronically controlled fan.

Engine..... Volvo D4D LAE2  
 Max power at..... 36,7 r/s (2 200 r/min)  
 SAE J1995 gross..... 74,9 kW (102 hp)  
 ISO 9249, SAE J1349 net..... 73,9 kW (101 hp)  
 Max torque at..... 25 r/s (1 500 r/min)  
 SAE J1995 gross..... 390 Nm  
 ISO 9249, SAE J1349 net..... 384 Nm  
 Economic working range..... 1100-1600 r/min  
 Displacement..... 4,0 l



## Drivetrain

The transmission consists of a hydraulic pump, hydraulic motor (both with variable displacement) and a two-stage Volvo Power Shift gearbox, which is controlled by either the gear selector or temporarily via a kick down function. Axles: Volvo fully floating axle shafts with planetary-type hub reductions. Cast steel axle housings. Fixed front axle and oscillating rear axle. Differential: conventional front and rear.

Maximum speeds, forward/reverse  
 Low range..... 19 km/h  
 High range..... 40 km/h  
 Hydrostatic motor lock  
 Low range..... 4,6 km/h  
 High range..... 10,8 km/h  
 Measured with tires..... 17,5 R25  
 Front axle/rear axle..... Volvo/AWB 10  
 Rear axle oscillation..... ±12°  
 Ground clearance at 12° oscillation..... 365 mm

## Brake system

Service brakes: Volvo dual-circuit system with nitrogen-charged accumulators. Outboard mounted, fully hydraulic operated, fully sealed, oil circulation cooled wet disc brakes. Parking brake: Mechanically operated drum brake on front axle input shaft. Electro-hydraulically operated (option). Secondary brake: Dual brake circuits with rechargeable accumulators. Either of the circuits or the parking brake fulfill all safety requirements. Standard: The brake system complies with the requirements of ISO 3450 and 71/320/EEC.

Number of brake discs per wheel front/rear..... 1/1  
 Accumulators..... 3x0,5 l

## Steering system

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

Steering cylinders..... 2  
 Cylinder bore..... 63 mm  
 Piston rod diameter..... 40 mm  
 Stroke..... 320 mm  
 Relief pressure..... 21 MPa  
 Maximum articulation..... ± 40°

## Cab

Instrumentation: All important information is centrally located in the operator's field of vision. Center console display for Contronic monitoring system. Heater and defroster: Heater coil with filtered fresh air and fan with four speeds. Defroster vents for all window areas. Operator's seat: Operator's seat with adjustable suspension and retractable seat-belt. The seat is mounted on a bracket on the rear cab wall. 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").

Emergency exits..... 1  
 Sound level in cab according to ISO 6396..... LpA 68 dB (A)  
 External sound level according to ISO 6395(Directive 2000/14/EC)... LwA 102 dB (A)  
 ISO 6395("Blauer Engel")..... LwA 100 dB (A)  
 Ventilation..... 9 m³/min  
 Heating capacity..... 11 kW  
 Air conditioning (optional)..... 8 kW

## Hydraulic system

System supply: One load-sensing axial piston pump with variable displacement. The steering function 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 four positions; raise, hold, lower and float 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; 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.

Relief pressure, maximum..... 26,0 MPa  
 Flow..... 120 l/min  
 at..... 10 MPa  
 and engine speed..... 36,7 r/s (2 200 r/min)  
 Pilot system  
 Relief pressure..... 3,0 MPa  
 Cycle times  
 Raise\*..... 5,4 s  
 Tilt\*..... 1,1 s  
 Lower, empty..... 3,0 s  
 Total cycle time..... 9,5 s

\* with load as per ISO 14397 and SAE J818

## Lift arm system

Torque parallel linkage with high breakout torque and excellent parallel lift-arm action throughout the entire working range.

Lift cylinders..... 2  
 Cylinder bore..... 100 mm  
 Piston rod diameter..... 70 mm  
 Stroke..... 669 mm  
 Tilt cylinder..... 1  
 Cylinder bore..... 125 mm  
 Piston rod diameter..... 70 mm  
 Stroke..... 434 mm





#### Electrical system

Central warning system: Central warning light for the following functions (buzzer with gear engaged): Engine oil pressure, hydrostatic charge pressure, gear box oil pressure, brake pressure, parking brake applied, hydraulic oil level, steering pressure, coolant temperature, gear box temperature, engine overspeeding, transmission overspeeding, computer malfunction, hydraulic oil temperature.

Voltage.....	24 V
Batteries.....	2x12 V
Battery capacity.....	2x105Ah
Cold cranking capacity, approx.....	690 A
Reserve capacity, approx.....	185 min
Alternator rating.....	2240W/80A
Starter motor output.....	4 kW (5.4 hp)

#### Service

Service accessibility: Large, easy-to-open service doors with gas struts. Swing-out radiator grille. Possibility to log and analyze data to facilitate troubleshooting.

#### Refill capacities

Fuel tank.....	150 l
Engine coolant.....	27 l
Hydraulic oil tank.....	65 l
Transmission oil.....	7 l
Engine oil.....	11 l
Axles front/rear.....	22/22 l

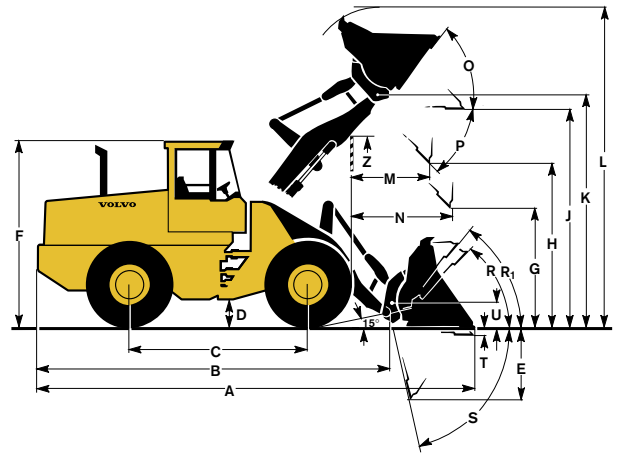
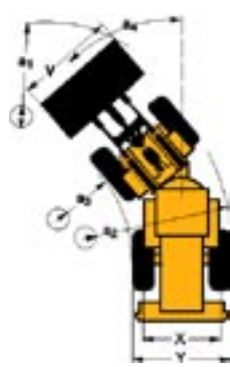
# Specifications

Tires: 17.5 R25 L2

B	5 410 mm
C	2 750 mm
D	400 mm
F	3 030 mm
G	2 133 mm
J	3 470 mm
K	3 740 mm
O	52 °
P <sub>max</sub>	45 °
R	43 °
R <sub>1</sub> *	48 °
S	90 °
T	77 mm
U	430 mm
X	1 750 mm
Y	2 200 mm
Z	3 060 mm
a <sub>2</sub>	4 880 mm
a <sub>3</sub>	2 680 mm
a <sub>4</sub>	±40 °

\* Carry position SAE

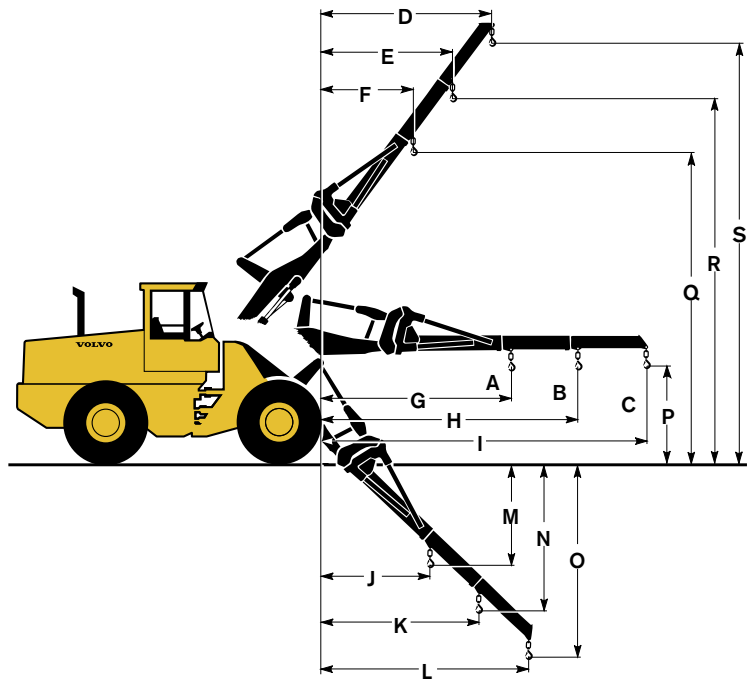
Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, ISO 14397, SAE J818.



Tires: 17.5 R25 L2

A*	1 120 kg
B*	890 kg
C*	720 kg
D	2 880 mm
E	2 220 mm
F	1 630 mm
G	3 290 mm
H	4 320 mm
I	5 460 mm
J	550 mm
K	690 mm
L	830 mm
M	2 300 mm
N	3 330 mm
O	4 450 mm
P	1 470 mm
Q	5 060 mm
R	5 910 mm
S	6 840 mm

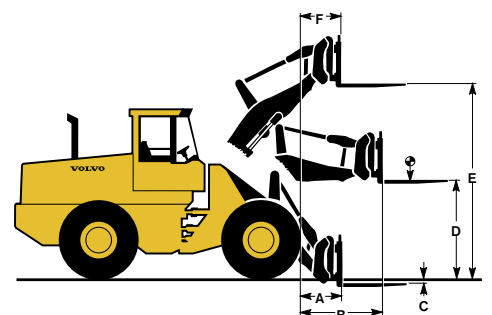
Order no: 92007  
Operating weight: 8 570 kg













Tires: 17.5 R25 L2

A	820 mm
B	1 580 mm
C	31 mm
D	1 710 mm
E	3 520 mm
F	750 mm

Fork tine order no.(per tine): 93527  
Length: 1200 mm  
Width: 1500 mm  
Rated operating load: 2 730 kg  
at load rated distance: 600 mm  
Operating weight: 8 630 kg





Tires 17.5 R25 L2	GENERAL PURPOSE								LIGHT MTRL	
										
Volume, heaped ISO/SAE m <sup>3</sup>	1,2	1,2	1,3	1,3	1,4	1,4	1,5	1,5	2,2	3,9
Volume at 110% fill factor m <sup>3</sup>	1,3	1,3	1,4	1,4	1,5	1,5	1,7	1,7	2,4	4,3
Static tipping load, straight kg	6 000	5 720	5 920	5 650	5 900	5 630	5 820	5 560	5 240	4 800
at 35° turn kg	5 400	5 130	5 320	5 060	5 300	5 040	5 230	4 970	4 670	4 240
at full turn kg	5 220	4 960	5 150	4 890	5 120	4 870	5 050	4 800	4 510	4 080
Breakout force kN	70,9	65,6	66,4	61,7	65,1	60,6	61,2	57,3	46,3	36,2
A mm	6 600	6 670	6 440	6 510	6 690	6 750	6 530	6 590	6 830	7 230
E mm	1 010	1 080	860	920	1 090	1 160	940	1 000	1 250	1 630
H <sup>***</sup> ) mm	2 770	2 730	2 870	2 830	2 710	2 670	2 820	2 770	2 600	2 340
L mm	4 750	4 790	4 750	4 790	4 820	4 860	4 820	4 860	4 950	5 410
M <sup>***</sup> ) mm	1 050	1 100	940	990	1 110	1 160	1 000	1 050	1 220	1 490
N mm	1 560	1 590	1 510	1 540	1 590	1 610	1 540	1 560	1 580	1 630
V mm	2 300	2 300	2 300	2 300	2 300	2 300	2 300	2 300	2 380	2 500
a <sub>1</sub> clearance circle mm	10 690	10 710	10 610	10 630	10 730	10 750	10 650	10 670	10 900	11 240
Operating weight kg	8 560	8 720	8 590	8 750	8 610	8 770	8 640	8 800	8 900	9 180

\*\*\*Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge. Measured at 45° dump angle.






Note: This only applies to Volvo original attachments.

## BUCKET SELECTION CHART

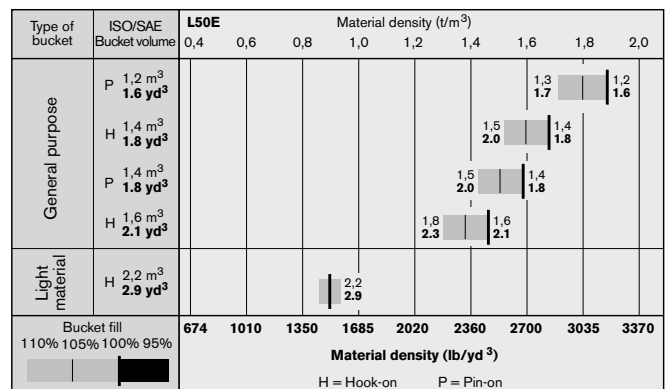
The choice of bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity due to the TP Linkage features: • Open bucket design. • Very good roll back in all positions. • Good bucket fill performance. **Example: Sand and gravel. Fill factor ~ 105%. Density 1,6 t/m<sup>3</sup>. Result: The 1,4 m<sup>3</sup> bucket carries 1,5 m<sup>3</sup>. For optimum stability, always consult the bucket selection chart.**

## SUPPLEMENTAL OPERATING DATA

		Tires 15.5 R25 L2	Axle-mounted fenders
Width over tires	mm	- 60	—
Ground clearance	mm	- 30	—
Tipping load, full turn	kg	- 190	+ 170
Operating weight	kg	- 320	+ 150

Material	Bucket fill, %		Material density, t/m <sup>3</sup>	ISO/SAE bucket volume, m <sup>3</sup>	Actual volume, m <sup>3</sup>
Earth/Clay	~ 110		~ 1,8	1,2	~ 1,3
			~ 1,5	1,4	~ 1,55
			~ 1,3	1,6	~ 1,8
Sand/Gravel	~ 105		~ 1,9	1,2	~ 1,25
			~ 1,6	1,4	~ 1,5
			~ 1,3	1,6	~ 1,7
Aggregate	~ 100		~ 1,9	1,2	~ 1,2
			~ 1,8	1,4	~ 1,4
			~ 1,5	1,6	~ 1,6
Rock	≤ 100		~ 1,7	1,2	~ 1,2

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



## STANDARD EQUIPMENT

### Engine

Three stage air cleaner with ejector and inner filters  
Indicator glass for coolant level  
Preheating of induction air  
Muffler, spark arresting  
Fuel filter with watertrap  
Crankcase with ventilation oil trap  
Water separator  
Fan air intake protection

### Electrical system

24V – prewired for optional accessories  
Alternator, 24V/80 A  
Battery disconnect switch  
Fuel gauge  
Hour meter  
Electric horn  
Temperature gauge, engine coolant  
Temperature gauge, hydrostatic system  
Instrument panel with symbols  
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 working lights (2 front and 2 rear)
- Instrument lighting

### Contronic monitoring system

ECU with log and analysis system  
Contronic display  
Engine shut down to idle in case of malfunction indication:  

- High engine coolant temperature
- Low engine oil pressure
- High oil temperature hydrostatic transmission

Start interlock when gear is engaged

Test function for warning and monitoring lights

Warning and indicator lights:

- Charging
- Oil pressure, engine
- Oil pressure, hydrostatic transmission
- Brake pressure
- Parking brake
- Hydraulic oil level
- Primary steering
- High beams
- Turn signals
- Rotating beacon
- Preheating coil
- Coolant temperature
- Oil temperature hydrostatic transmission
- Low fuel level

### Drivetrain

Hydrostatic transmission  
Forward and reverse switch by lever console

### Brake system

Wet oil circulation cooled disc brakes on all four wheels  
Dual brake circuits  
Secondary brake system, accumulator supplied  
Audible parking brake alarm

### Cab

ROPS (ISO 3471), FOPS (ISO 3449)  
Acoustic inner lining  
Ashtray  
Cigarette lighter  
Lockable door  
Single key door/start  
Cab heating with filter, fresh-air inlet and defroster  
Floor mat  
Interior light  
Two exterior rear-view mirrors

Two interior rear-view mirrors  
Openable window right-hand side  
Tinted safety glass  
Hip retractable seatbelt (SAE J386)  
Ergonomically designed operator's seat with adjustable suspension  
Adjustable hydraulic lever console  
Storage compartment  
Beverage holder  
Sun visor  
Windshield wipers front and rear  
Windshield washers front and rear  
Interval function for front wiper  
Cab access steps and handrails  
Speedometer

### Hydraulic system

Main valve, 2-spool,  
Pilot valve, 2-spool  
Axial piston pump  
Hydraulic control lever lock  
Bucket leveler, automatic with position indicator, adjustable  
Boom lever detent  
Boom kickout, automatic, adjustable  
Boom lowering system  
Hydraulic pressure test ports, quick connect  
Hydraulic fluid level, sight gauge  
Hydraulic oil cooler

### External equipment

Noise and vibration dampening suspension of cab, engine and transmission  
Lifting lugs  
Easy-to-open side panels  
Frame steering, joint lock  
Vandalism lock prepared for batteries and engine compartment  
Towing hitch

## OPTIONAL EQUIPMENT

(Standard on certain markets)

### Service and maintenance

Tool box, lockable  
Tool kit  
Wheel nut wrench kit  
Automatic lubrication system  
Automatic lubrication system for attachment bracket  
Refill pump for automatic lubrication system

### Engine equipment

Air pre-cleaner, oil-bath type  
Air pre-cleaner, turbo type  
Air pre-cleaner, Sy-Klone type  
Hand throttle control  
Coolant filter  
Engine block heater, 120 V USA  
Engine block heater, 230 V  
Fuel fill strainer  
Radiator and hydraulic oil cooler, corrosion prot.

### Electrical system

Assymetrical lights for left-hand traffic  
Side marker lights  
Working lights front, extra  
Working lights rear, extra  
Rotating beacon, amber with collapsible mount  
Light, license plate  
Reverse alarm (SAE J994)  
High intensity gas discharge lamps  
Warning beacon, flashing strobe light  
Warning beacon, rotating, collapsible  
Dual working lights front, on cab

### Cab

Installation kit for radio  
Radio with tape recorder  
Radio with CD player  
Sliding window, right  
Sliding window, door

Sun blinds, front and rear windows

Sun blinds, side windows

Operator's seat, air suspended with high backrest and electrical heating

Operator's seat with high backrest and electrical heating

Operator's seat with low backrest and electrical heating

Operator's seat with low backrest

Armrest (left) for operator seat

Retractable hipbelt, longer and wider than standard

Ventilation air filter for work in asbestos environment

Instructor's seat

Air conditioner 8 kW, 27 300 Btu/h

Adjustable steering wheel

Steering wheel knob

Noise reduction kit

Dual service brake pedals

Rear view mirrors, el. heated

Automatic temp control (ATC)

Lunch box holder

### Drivetrain

100 % differential lock, front

Speed control, inching pedal

Speed limiter, 20 km/h or 30 km/h

### Hydraulic system

3rd hydraulic function

Adjustable flow for 3rd hydraulic function

Detent for 3rd hydraulic function

3rd and 4th function hydraulic function

5th and 6th function hydraulic function

Single lever control

Single lever control incl. 3rd hydraulic function

Single acting lifting function

Biodegradable hydraulic fluid

Hydraulic PTO, general purpose

Boom Suspension System (BSS)

Attachment bracket, cast, visibility optimized

Separate attachment locking

### External system

Mudguards, small front/rear  
Mudguards, axle mounted with rubber extensions  
Logging counterweight

### Other equipment

Comfort Drive Control (CDC)  
Sign, slow moving vehicle  
Sign, 50 km/h  
Blauer Engel noise reduction kit  
Secondary steering  
Parking brake, el.-hydraulic  
Parking brake alarm, audible

### Tires

17.5-25

15.5 R25\* 17.5 R25\*

### Protective equipment

Guards for front headlights  
Guards for rear working lights  
Guards for taillights  
Windshield guard  
Guards for side and rear windows  
Cover plate under cab  
AC, corrosion protected condenser

### Attachments

Buckets  
Fork equipment  
Material handling arm  
Log grapples  
Snow blades  
Brooms  
Cutting edge in three sections, bolt-on, reversible  
Bucket teeth, bolt-on  
Bucket teeth, weld-on  
Bale clamp  
Drum rotator





**Boom Suspension System (BSS)\***

Gas/oil accumulators connected to the lift cylinders effectively reduce vibrations that often occur when running over rough ground. Boom Suspension System gives faster cycle times, less material spill and improved operator comfort.



**Comfort Drive Control\***

Significant reduction of repetitive and tiring steering wheel movements with CDC. Comfortable operation of steering and shifting with user-friendly controls in the left armrest.



**Hydraulic function\***

The hydraulic system in the L50E is prepared for installation of a third hydraulic function. The separate third hydraulic function, with its control lever and additional lines, can easily be installed to further increase the machine's flexibility.

L50E can also be equipped with a fourth control lever. This function is necessary when there's a need for a third and fourth hydraulic function, such as when using a sweeper attachment, foldable snowplow or brush mower.



**Single lever hydraulic control**

The L50E can be equipped with a single hydraulic control lever for operating the lifting, lowering, tilting and floating functions. Forward/Reverse and kick-down switches are integrated into the lever for easy and effective control of the machine's working hydraulics.



**Genuine Volvo attachments**

Genuine Volvo attachments are designed and manufactured for optimal fit and use of the TP-linkage, which makes the L50E a fast and effective machine in a wide range of applications. They can also be used with earlier models.



\* Optional equipment



## Technology on Human Terms

Volvo Construction Equipment is one of the world's leading manufacturers of construction machines, with a product range encompassing wheel loaders, excavators, articulated haulers, motor graders and more.

The tasks they face vary considerably, but they all share one vital feature: technology which helps man to perform better: safely, efficiently and with care of the environment. We refer to it as Technology on Human Terms.

The sheer width of the product range means it is always possible to choose exactly the right machine and attachment for the job. Each machine also comes with the quality, continuity and security which is represented by the Volvo

name. The strength of the service and parts organizations; the security of always having immediate access to leading-edge research and technical development are part of the Volvo name. A machine from Volvo meets the very highest demands in all kinds of jobs, under all conditions, the world over.

*Volvo Construction Equipment develops, manufactures and markets construction equipment. We are a Volvo company with production facilities on four continents and a market presence in over 100 countries.*

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# VOLVO

## Construction Equipment

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