

V O L V O



Volvo Wheel Loaders 34-39 t / 74,957-85,980 lb 416 hp

L260

Volvo Construction Equipment

L260

A leader in its class, the L260 is primed for productivity in rehandling, quarrying and mining projects.



Fast cycle times



- Second generation load sensing hydraulics
- Automatic traction control
- Bucket leveling function
- Entirely Volvo powertrain
- Reduced steps between gears for faster acceleration and smooth operation.
- Z-Bar Linkage
- Volvo Attachments

Efficient and profitable operations



- Powerful and efficient engine
- Second generation OptiShift
- Reverse By Braking
- Smart control with reduced fuel consumption
- Attachment optimization
- External dry P-Brake, which eliminates drag losses
- Auto bucket fill
- Compatible with HVO

Make light work of big projects

Take productivity to the next level in large-scale rehandling, quarrying and mining projects thanks to the perfect combination of power, performance and intelligent solutions. Designed to deliver faster cycle times, maximum payload and unrivalled operator comfort, the L260 has Volvo quality running throughout every detail – delivering durability and safety you can count on. Combine that with a range of Volvo smart solutions including Load Assist, On-Board Weighing and Load Ticket, and the L260 is primed to deliver outstanding results.

The operator's choice



- Interactive, integrated Volvo Co-Pilot display
- Dynamic instrument cluster
- Comfort Drive Control (CDC)
- Customizable operator settings

Durable by design



- A durability leader in its class
- Outstanding uptime
- Volvo-renowned quality runs throughout every component
- Strong frame structure and robust axles, ideally matched to the Volvo powertrain
- Self-cleaning hydraulically driven cooling fan
- Outboard mounted brakes
- Front and rear axles are cooled by the oil circulation
- You demand a durable machine to withstand extreme work site conditions. Volvo assures it with the Lifetime Frame and Structure warranty

Ultimate performance across a range of segments



- Quarry / Aggregate
- Rehandling
- Block handling
- Tunneling
- Mining
- Slag handling
- Waste & Recycling
- And more...

Loaders and beyond



- Load Assist with On Board Weighing
- Load Ticket
- Connected Map with Performance Indicator
- Operator Coaching
- CareTrack telematics system

A new level in cab comfort



- Most comfortable and quietest cab on the market
- Enhanced storage options
- New armrest, new cupholder and USB chargers
- Extensive range of seats - including premium seats with heating and cooling functionality.

Industry leading serviceability



- Cab can be tilted to either a 30° or 70° angle
- Electronically operated engine hood
- Captive oil filters, captive fuel filters with electric pump
- Optional fast fuel fill
- Service light under the grille
- Brake wear indicators

Safety inside and out



- Excellent in-cab visibility and field of vision
- High definition rear view camera integrated in the Volvo Co-Pilot display
- Volvo Smart View with 360°
- Collision Mitigation System
- Battery disconnect/service switch with lockout/tagout
- Radar detect system
- Orange handrails
- Remote door opening
- Enhanced LED lighting packages
- New service platform

Fast cycle times

Achieve fast cycle times with second generation load sensing hydraulics.

The second generation load sensing hydraulics are designed to enhance the responsiveness of the hydraulic system and improve the lifting and lowering speed of the boom.

Boost productivity further with the bucket leveling function which automatically returns the bucket to level from both dump and curl positions, enhancing operator performance.

Fuel efficiency, lower emissions

Do more with less fuel, thanks to the industry-renowned fuel efficiency of Volvo Wheel Loaders.

Contributing to the fuel-efficient performance is Smart Control, powerful engine, second generation OptiShift, attachment optimization and external dry P-Brake, which eliminates drag losses.

What's more, the renewable synthetic diesel fuel, HVO (Hydro-treated Vegetable Oils), has been approved for use in Volvo Construction Equipment diesel engines with the potential to reduce CO₂ emissions by up to 90%.



Intuitive operator interface

Operators can stay in-the-know and focused on the task at hand thanks to all essential in-cab information conveniently displayed on just two screens.

The interactive, integrated Volvo Co-Pilot display offers easy control over essential functions such as media, camera settings, climate control and machine status.

This is combined with the dynamic instrument cluster, positioned in front of the steering wheel, which provides essential vehicle data at a glance.

Durable by design

A durability leader in its class, Volvo Wheel Loaders deliver an outstanding uptime.

Volvo-renowned quality runs throughout every component, including a strong frame structure and robust axles, ideally matched to the Volvo powertrain.

Quality is synonymous with the Volvo brand, and has been central to the products we engineer and produce for more than 175 years; that is why we are passing that on to you through the Lifetime Frame and Structure Warranty.

The hydraulically driven cooling fan regulates component temperature and can be automatically reversed to permit self-cleaning of the cooling units.

For long service life, the brakes are outboard mounted and the front and rear axles are cooled by the oil circulation.

Safety first

Excellent in-cab visibility and field of vision is complemented by a host of safety-enhancing features including high definition rear view camera integrated in the Volvo Co-Pilot display, Collision Mitigation System and radar detect system that provides visual and audible alerts when encountering unseen objects.

Orange handrails and steps improve visibility for operators and maintenance staff, while automatic door opening allows the door to be opened with the key or button.

Ultimate performance across a range of applications

Get ready to achieve maximum results across a wide range of applications in the Volvo L260 thanks to a range of options and attachments which equip the machine to take on the unique challenges and requirements of your segment.

A comprehensive range of attachments designed to work in perfect harmony provide the ideal match of machine and attachment to succeed across applications working with rock bucket, side-dump bucket, general purpose bucket, slag handling, rehandling, light material buckets and more.



Volvo L260 in detail

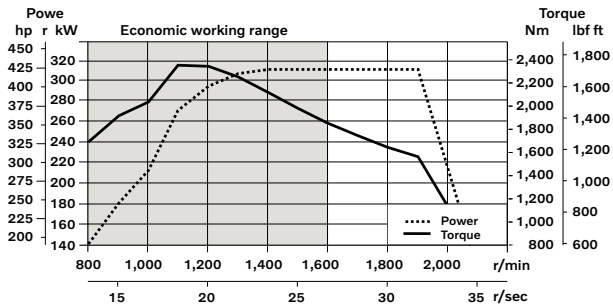
Engine

V-ACT Tier 4 Final, 13-liter (3.43 gal), 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 application is transmitted electrically either 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 | Volvo | D13J |
|-------------------------|----------------------|--------------------------------|
| Max. power at | r/min (r/s) | 1 400 - 1 900 (23,3 - 31,7) |
| ECE R120 net | kW (hp) | 310 (416) |
| ISO 9249, SAE J1349 net | kW (hp) | 309 (414) |
| Max. torque at | r/min (r/s) | 1,100 (18.3) |
| ECE R120 net | Nm (ft lbf) | 2,343 (1,728) |
| ISO 9249, SAE J1349 net | Nm (ft lbf) | 2,328 (1,717) |
| Economic working range | r/min (r/s) | 800 - 1 600 (13.3 - 26.7) |
| Displacement | l (in ³) | 12.8 (78.1) |



Drivetrain

Torque converter: Single-stage torque converter with lockup.

Transmission: The electronically controlled Volvo countershaft transmission features the Full Automatic Power Shift (FAPS) function, which offers fully automatic shifting in all four forward gears and from the second to the fourth gear in reverse. It is complemented by a mode selector with four gear-shifting programs. The Rimpull Control function helps prevent wheel spin and optimizes bucket filling. The single lever control and the Pulse Width Modulation (PWM) valves ensure effortless, fast, and smooth shifting, providing higher precision and reliability.

Axles: Volvo's fully floating drive shafts with planetary hub reductions and cast iron axle housing. The axles are now equipped with the innovative Automatic Traction Control (ATC) system, which enhances traction capability significantly. This system automatically engages a 100% differential lock, providing superior grip and stability. The ATC is standard on the front axle, ensuring optimal performance in challenging conditions, and is available as an optional feature for the rear axle, offering additional flexibility and control.

| Transmission | Volvo | HTL310 |
|---------------------------------------|-------------|------------------------------|
| Torque multiplication, stall ratio | | 2.02:1 |
| Maximum speed, forward/reverse | | |
| 1st gear | km/h (mi/h) | 6.7 / 6.6 (4.2 / 4.1) |
| 2nd gear | km/h (mi/h) | 11.6 / 11.4 (7.2 / 7.1) |
| 3rd gear | km/h (mi/h) | 21.7 / 21.4 (13.5 / 13.3) |
| 4th gear | km/h (mi/h) | 36.5 / 36.1 (22.7 / 22.4) |
| Measured with tires | | 29.5R25 L4 |
| Front axle/rear axle | | AWB 50B / 41 |
| Rear axle oscillation | ± ° | 15 |
| Ground clearance | mm (in) | 540 (21.3) |
| at oscillation | ° | 15 |

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 |

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: Dry disc brake. 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/rear | | 2 - 1 |
| Number of brake discs per wheel front | | 2 |
| Number of brake discs per wheel | | 1 |
| Accumulators | l (gal) | 2 x 1.0 + 1 x 0.5 (2 x 0.26 + 1 x 0.13) |
| Accumulators for parking brake | l (gal) | 1 x 0.5 (1 x 0.13) |

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 manual settings (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. The forces from the retractable seatbelt are absorbed by the seat rails.

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

| | | |
|-----------------------------|--|----------|
| Ventilation | m ³ /min (yd ³ /min) | 9 (11.8) |
| Heating capacity | kW | 16 |
| Air conditioning (optional) | kW | 7.5 |

Sound Level

Sound pressure level in cab according to ISO 6396

| | | |
|--|----|-----|
| L _{pA} | dB | 70 |
| External sound level according to ISO 6395 | | |
| L _{WA} | dB | 109 |

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 for working hydraulic system | MPa (bar) | 29.0 ± 0.5 (290 ± 5) |
| Flow | l/min (gal/min) | 252 (66.6) |
| at | MPa (bar) | 10 (100) |
| engine speed | r/min (r/s) | 1,900 (31.7) |
| Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system | MPa (bar) | 31.0 ± 0.5 (310 ± 5) |
| Flow | l/min (gal/min) | 202 (53.4) |
| at | MPa (bar) | 10 (100) |
| engine speed | r/min (r/s) | 1,900 (31.7) |
| Working pressure maximum, pump 3 for brake- and cooling fan system | MPa (bar) | 25.0 ± 0.5 (250 ± 5) |
| Flow | l/min (gal/min) | 83 (21.9) |
| at | MPa (bar) | 10 (100) |
| engine speed | r/min (r/s) | 1,900 (31.7) |
| Pilot system, working pressure | 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 |

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.

| | | |
|----------------------|-----------------|------------|
| Steering cylinders | | 2 |
| Cylinder bore | mm (in) | 90 (3.54) |
| Rod diameter | mm (in) | 60 (2.36) |
| Stroke | mm (in) | 525 (20.7) |
| Working pressure | MPa (bar) | 26 (260) |
| Maximum flow | l/min (gal/min) | 202 (53.4) |
| Maximum articulation | ± ° | 37 |

Service Refill

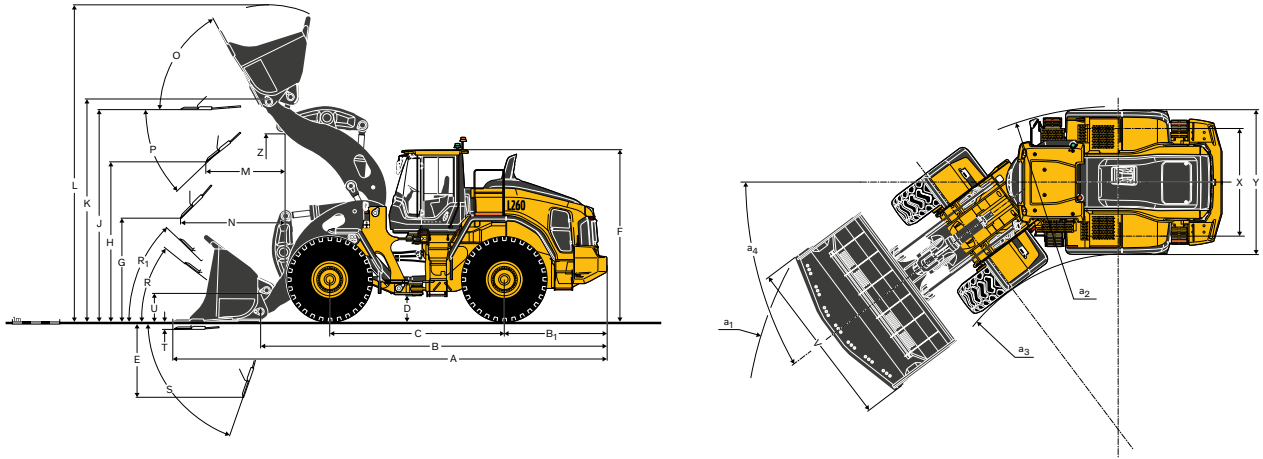
Service accessibility: Large, easy-to-open hood covering whole engine compartment, electrically operated. Fluid filters and component breather air filters promote long service intervals. A quick-fit adapter on the hydraulic tank provides faster hydraulic oil fill. Possibility to monitor, log and analyze data to facilitate troubleshooting.

| | | |
|--------------------|---------|------------|
| Fuel tank | l (gal) | 366 (96.7) |
| DEF/AdBlue® tank | l (gal) | 31 (8.19) |
| 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 | l (gal) | 78 (20.6) |
| Axle oil rear | l (gal) | 80 (21.1) |

Lift Arm System

| Z-bar | | |
|---------------------|---------|------------|
| Lift cylinders | | 2 |
| Cylinder bore | mm (in) | 190 (7.48) |
| Piston rod diameter | mm (in) | 110 (4.33) |
| Stroke | mm (in) | 873 (34.4) |
| Tilt cylinder | | 1 |
| Cylinder bore | mm (in) | 220 (8.66) |
| Piston rod diameter | mm (in) | 120 (4.72) |
| Stroke | mm (in) | 570 (22.4) |

Specifications



DIMENSIONS

Tires : 875/65 R29 L3











| | Unit | L260K | | | |
|---|----------|---------------|--------|-----------|--------|
| | | Standard boom | | Long boom | |
| B Overall length w/o bucket / attachm. bracket | mm ft in | 7,590 | 24'11" | 7,860 | 25'9" |
| B ₁ Rear overhang | mm ft in | 2,240 | 7'4" | 2,240 | 7'4" |
| C Wheel base | mm ft in | 3,800 | 12'6" | 3,800 | 12'6" |
| D Ground clearance | mm ft in | 540 | 1'9" | 530 | 1'9" |
| F Height to top of ROPS | mm ft in | 3,730 | 12'3" | 3,730 | 12'3" |
| G Specific height for reach (N) | mm ft in | 2,134 | 7'0" | 2,133 | 7'0" |
| J Lift height under level bucket | mm ft in | 4,410 | 14'5" | 4,760 | 15'7" |
| K Height to hinge pin | mm ft in | 4,640 | 15'3" | 5,000 | 16'5" |
| O Rollback angle, max., fully raised | ° | | 62 | | 57 |
| P _{max} Dump angle, max., fully raised | ° | | 39 | | 42 |
| R Rollback angle, max., at ground level | ° | | 39 | | 42 |
| R ₁ * Rollback angle at SAE carry position | ° | | 47 | | 50 |
| S Digging angle, max. | ° | | 70 | | 77 |
| T Digging depth | mm in | 67 | 2.64 | 137 | 5.39 |
| U Hinge pin height at carrying position | mm ft in | 490 | 1'7" | 580 | 1'11" |
| X Track width | mm ft in | 2,400 | 7'10" | 2,400 | 7'10" |
| Y Machine width over tire | mm ft in | 3,260 | 10'8" | 3,260 | 10'8" |
| Z Max. load-over height | mm ft in | 3,860 | 12'8" | 4,250 | 13'11" |
| a ₂ Turning radius outer circle | mm ft in | 7,310 | 24'0" | 7,310 | 24'0" |
| a ₃ Turning radius inner circle | mm ft in | 4,050 | 13'3" | 4,050 | 13'3" |
| a ₄ Max. articulation | ±° | | 37 | | 37 |

* Carry position SAE

Bucket: WLA86782 7.3 m³ STE FF P BOE

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

L260K

| Tires 875/65 R29 L3 | REHANDLING ⁽¹⁾ | | | | | | | | GENERAL PURPOSE ⁽²⁾ | | | | | | ROCK ⁽³⁾ | | LIGHT MATERIAL ⁽²⁾ | | LONG BOOM ⁽¹⁾ | | | |
|--|---|-----------------|---|--------|---|--------|---|--------|---|--------|--|--------|---|--------|---|--------|---|--------|---|--------|--------|--------|
| |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | | | |
| | WLA86764 | | WLA86765 | | WLA86782 | | WLA87146 | | WLA87150 | | WLA87533 | | WLA87532 | | WLA87534 | | WLA54067748 | | WLA86782 | | | |
| | 6.9 m ³ (9 yd ³) STE P BOE | | 7.3 m ³ (9.5 yd ³) STE P BOE | | 7.3 m ³ (9.5 yd ³) STE FF P BOE | | 6.4 m ³ (8.4 yd ³) STE P BOE | | 6.8 m ³ (8.9 yd ³) STE PT SEG | | 5.9 m ³ (7.7 yd ³) STEROPT SEG | | 5.5 m ³ (7.2 yd ³) SPN P T SEG | | 6.4 m ³ (8.4 yd ³) SPN P T SEG | | 10.2 m ³ (13.3 yd ³) LM P BOE | | 7.3 m ³ (9.5 yd ³) STE FF P BOE | | | |
| Volume, heaped ISO/SAE | m ³ | yd ³ | 6.9 | 9.0 | 7.3 | 9.5 | 7.3 | 9.5 | 6.4 | 8.4 | 6.8 | 8.9 | 5.9 | 7.7 | 5.5 | 7.2 | 6.4 | 8.4 | 10.2 | 13.3 | - | - |
| Volume at 110% fill factor | m ³ | yd ³ | 7.6 | 9.9 | 8.0 | 10.5 | 8.0 | 10.5 | 7.0 | 9.2 | 7.5 | 9.8 | 6.5 | 8.5 | 6.1 | 7.9 | 7.0 | 9.2 | 11.2 | 14.7 | - | - |
| Static tipping load, straight | kg | lb | 28,870 | 63,660 | 28,630 | 63,120 | 28,890 | 63,700 | 27,140 | 59,840 | 26,790 | 59,060 | 27,690 | 61,060 | 27,290 | 60,170 | 26,760 | 59,010 | 25,270 | 55,710 | -3,480 | -7,670 |
| at 35° turn | kg | lb | 25,690 | 56,640 | 25,440 | 56,090 | 25,690 | 56,650 | 24,160 | 53,270 | 23,800 | 52,490 | 24,660 | 54,370 | 24,250 | 53,470 | 23,740 | 52,340 | 22,350 | 49,280 | -3,170 | -6,990 |
| at full turn | kg | lb | 25,320 | 55,840 | 25,080 | 55,290 | 25,330 | 55,850 | 23,820 | 52,530 | 23,460 | 51,740 | 24,310 | 53,610 | 23,900 | 52,710 | 23,400 | 51,590 | 22,020 | 48,550 | -3,140 | -6,920 |
| Breakout force | kN | lbf | 290 | 65,280 | 283 | 63,710 | 284 | 63,900 | 304 | 68,310 | 300 | 67,450 | 301 | 67,780 | 263 | 59,110 | 244 | 54,960 | 229 | 51,370 | -25.3 | -5,690 |
| A Overall length | mm | ft in | 9,420 | 30'11" | 9,470 | 31'1" | 9,430 | 30'11" | 9,350 | 30'8" | 9,640 | 31'7" | 9,620 | 31'7" | 9,890 | 32'5" | 10,050 | 33'0" | 9,890 | 32'5" | +320 | +1'1" |
| E Digging depth, max dump (S) | mm | ft in | 1,680 | 5'6" | 1,720 | 5'8" | 1,710 | 5'7" | 1,620 | 5'4" | 1,880 | 6'2" | 1,850 | 6'1" | 2,100 | 6'11" | 2,240 | 7'4" | 2,140 | 7'0" | +100 | +0'4" |
| H ⁽⁴⁾ Dump clearance | mm | ft in | 3,260 | 10'9" | 3,230 | 10'7" | 3,260 | 10'9" | 3,300 | 10'10" | 3,110 | 10'3" | 3,140 | 10'4" | 2,970 | 9'9" | 2,870 | 9'5" | 3,060 | 10'1" | +290 | +0'11" |
| L Overall operating height | mm | ft in | 6,610 | 21'8" | 6,650 | 21'10" | 6,640 | 21'9" | 6,450 | 21'2" | 6,480 | 21'3" | 6,570 | 21'6" | 6,490 | 21'4" | 6,630 | 21'9" | 6,850 | 22'6" | +350 | +1'2" |
| M ⁽⁴⁾ Dump reach | mm | ft in | 1,650 | 5'5" | 1,680 | 5'6" | 1,710 | 5'7" | 1,610 | 5'3" | 1,800 | 5'11" | 1,760 | 5'9" | 1,970 | 6'6" | 2,070 | 6'10" | 2,150 | 7'1" | -110 | -1'8" |
| N ⁽⁴⁾ Reach at 45° discharge, pos. G | mm | ft in | 2,320 | 7'7" | 2,340 | 7'8" | 2,220 | 7'3" | 2,300 | 7'6" | 2,400 | 7'10" | 2,370 | 7'9" | 2,490 | 8'2" | 2,540 | 8'4" | 2,470 | 8'1" | +260 | +0'10" |
| V Bucket width | mm | in | 3,580 | 141 | 3,650 | 144 | 3,650 | 144 | 3,580 | 141 | 3,650 | 144 | 3,650 | 144 | 3,650 | 144 | 3,650 | 144 | 3,700 | 146 | 0 | 0 |
| a ₁ Outer clearance circle (diameter) | mm | ft in | 16,230 | 53'3" | 16,320 | 53'7" | 16,290 | 53'5" | 16,190 | 53'2" | 16,410 | 53'10" | 16,410 | 53'10" | 16,570 | 54'4" | 16,660 | 54'8" | 16,580 | 54'5" | +220 | +0'9" |
| Operating weight without load | kg | lb | 35,260 | 77,750 | 35,420 | 78,090 | 35,230 | 77,680 | 33,870 | 74,690 | 34,100 | 75,200 | 35,460 | 78,200 | 35,730 | 78,790 | 35,990 | 79,360 | 34,920 | 77,000 | +480 | +1,060 |

⁽¹⁾ Measured with additional counterweight and 875/65 R29 L3 tires.

⁽²⁾ Measured with 29.5 R25 L4 tires.

⁽³⁾ Measured with 29.5 R25 L5 tires.

⁽⁴⁾ 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 genuine Volvo attachments.

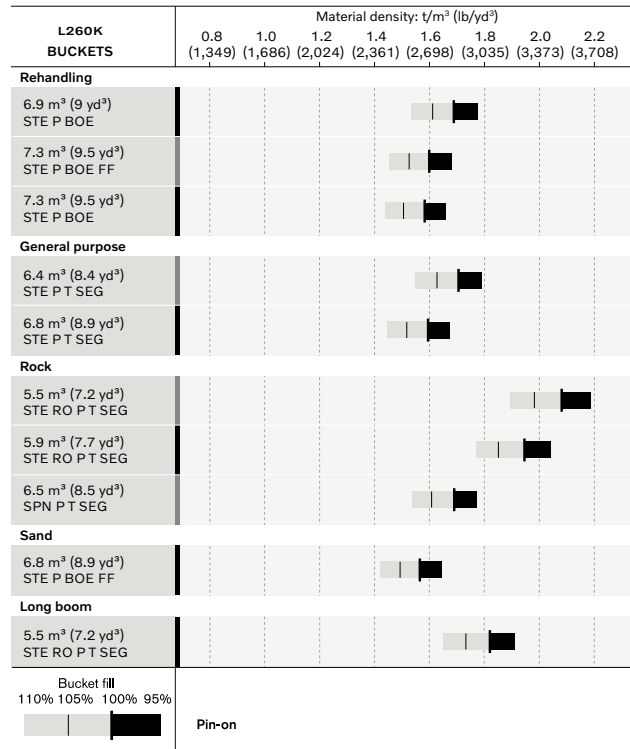
Specifications

Bucket Selection Chart

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

| Material | Bucket fill, % | Material density | |
|----------|----------------|------------------|--------------------|
| | | t/m ³ | lb/yd ³ |
| 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

| Tires 875/65 R29 L3 | Unit | | Standard boom | | | | | | Long boom | | | | | |
|-------------------------|------|----|---------------|------|-------------|--------|---------------|------|-------------|------|-------------|--------|---------------|------|
| | | | 29.5 R25 L4 | | 29.5 R25 L5 | | 875/65 R29 L4 | | 29.5 R25 L4 | | 29.5 R25 L5 | | 875/65 R29 L4 | |
| Width over tires | mm | in | -90 | -3.5 | -50 | -2 | +10 | +0.4 | -90 | -3.5 | -50 | -2 | +10 | +0.4 |
| Ground clearance | mm | in | +20 | +0.8 | +20 | +0.8 | -30 | -1.2 | +20 | +0.8 | +20 | +0.8 | 0 | 0 |
| Tipping load, full turn | kg | lb | -50 | -110 | +720 | +1,590 | -30 | -70 | -30 | -70 | +660 | +1,450 | +170 | +350 |
| Operating weight | kg | lb | -230 | -510 | +840 | +1,860 | +70 | +150 | -230 | -520 | +840 | +1,850 | +70 | +150 |



Equipment

STANDARD EQUIPMENT

Engine

Exhaust after-treatment system
Three-stage air cleaner, primary and secondary filter
Indicator for coolant level
Preheating of induction air
Fuel pre-filter with water trap
Fuel filter
Electric fuel prime pump
Crankcase breather oil trap
Exterior radiator air intake protection

Drivetrain

Automatic Power Shift
Fully automatic gearshifting, 1-4
PWM-controlled gearshifting
Forward and reverse switch by hydraulic lever console
Rimpull control
Smart control
Indicator glass for transmission oil level
Differentials: Front, 100% diff lock with Automatic Traction Control.
Rear, conventional.
OptiShift transmission with Lock-up RBB
Lock-up first gear

Electrical system

24V, pre-wired for optional accessories
Alternator 24V/130A/3479W
Battery disconnect (service) switch
Electric horn
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)
Dual LED reversing strobe lights

STANDARD EQUIPMENT

Dynamic Instrument Cluster

8-inch dynamic instrument cluster display
Fuel consumption
Diesel Exhaust Fluid/AdBlue consumption
Ambient temperature
Clock

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
Safety Belt Warning

Level warnings:

Fuel level
Diesel Exhaust Fluid/AdBlue level
Engine oil level
Engine coolant level
Transmission oil level
Hydraulic oil level
Washer fluid level

Climate control temperature and fan speed

Speed indicator

Engine revolutions per minute indicator

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

Start interlock when gear is engaged

Integrated Volvo Co-Pilot

12.8-inch High Definition vertical Co-Pilot display
Machine integration
Machine information
Machine settings
Service information
Service mode
Smart View with rear view camera
Climate controls
Radio and media (with Bluetooth and USB connection)
Load Assist portfolio
Operator Coaching Start
Toolbox applications
Remote support
Help center (digital operator's manual)

STANDARD EQUIPMENT

Hydraulic System

Main valve, double acting 2-spool with hydraulic pilots

Variable displacement axial piston pumps (3) for:

- 1 Working hydraulics, Pilot hydraulics and Brake system
- 2 Working hydraulics, Pilot hydraulics, Steering and Brake system
- 3 Cooling fan and Brake system

Secondary steering with automatic test function

Electro-hydraulic servo controls

Electronic hydraulic lever lock

Automatic boom kick-out

Automatic bucket positioner

Double-acting hydraulic cylinders

Indicator glass for hydraulic oil level

Hydraulic oil cooler

Brake system

Dual brake circuits

Dual brake pedals

Secondary brake system

Parking brake, electro-hydraulic

Brake wear indicators

Cab

ROPS (ISO 3471), FOPS (ISO 3449)

Harness Anchor Points

Single key kit door/start

Acoustic inner lining

Cigarette lighter, 24V power outlet

Lockable door

Cab heating with fresh air inlet and defroster

Fresh air inlet with two filters

Automatic heat control

Floor mat

Interior lights

Interior rear-view mirrors

Dual exterior rear-view mirrors

Sliding window, right side

Tinted windshield 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

STANDARD EQUIPMENT

Service and Maintenance

Engine oil remote drain and fill

Volvo High Performance oil filters with 1,000 hours service interval

Transmission oil remote drain and fill

Quick-fit transmission oil change

Lubrication manifolds, ground accessible

Pressure check connections: transmission and hydraulic, quick-connects

Quick-fit hydraulic oil fill

Service platform on the front frame

Tool box, lockable

External equipment

Orange hand rails

Fenders, front and rear

Reflecting stickers (decals), machine contour and cab

Viscous cab mounts

Rubber engine and transmission mounts

Frame, joint lock

Vandalism lock prepared for

Engine compartment

Radiator grille

Lifting eyes

Tie-down eyes

Fabricated counterweight

Counterweight, pre-drilled for optional guards

Equipment

OPTIONAL EQUIPMENT

Engine

Air pre-cleaner, cyclone type
 Air pre-cleaner, oil-bath type
 Air pre-cleaner, turbo type II
 Air pre-cleaner, turbo type III
 Engine auto shutdown
 Engine delayed shutdown
 Engine block heater 230V/110V
 Fuel fill strainer
 Fuel heater
 Fuel filter, extra
 Hand throttle control
 Max. fan speed, hot climate
 Radiator, corrosion-protected
 Reversible cooling fan
 Reversible cooling fan and axle oil cooler

Drivetrain

Automatic Traction Control 100% diff lock, front & rear
 Speed limiter
 Wheel/axle seal guards

Electrical system

Anti-theft device
 Emergency stop
 Locking device, Tag out Lock out
 License plate holder, lighting
 Rear view mirrors, Long arm
 Rear view mirrors, adjustable, el.heated, Long arm
 Reduced function working lights, reverse gear activated
 Reverse alarm, audible
 Reverse alarm, white noise
 Seatbelt indicator, external
 Shortened headlight support brackets
 Side marker lamps
 Warning beacon LED
 Warning beacon LED automatic
 Halogen Economy package
 Halogen Feature package
 Halogen Power package
 Headlights, assymetric left, halogen
 Working lights, attachments, halogen
 LED Economy package
 LED Feature package
 LED Power package
 LED Intense package
 Headlights, assymetric Left, LED
 Headlights, assymetric Right, LED
 Working lights, attachments, LED
 Electrical distribution unit 24 volt
 Parking brake alarm, audible for air susp seats
 Jump start connector, ISO-Type
 Max Boom height
 Can Bus Interface

OPTIONAL EQUIPMENT

Integrated Volvo Co-Pilot

Tire pressure monitoring system
 Handsfree telephone
 Smart View
 Smart View with 360°
 Smart View with radar detect system
 Forward camera
 Dual forward cameras
 Collision Mitigation System
 Load Assist portfolio
 Load Assist OBW
 Load Assist Task Modes
 Operator Coaching Advanced
 Site services enabled
 Site Operations
 Connected Map
 Load Ticket
 File Upload
 Performance indicators
 Task Manager
 Media player

Hydraulic System

Boom suspension system
 Boom cylinder hose and tube guards
 Hydraulic fluid, biodegradable, Volvo
 Hydraulic fluid, fire-resistant
 Hydraulic fluid, for hot climate
 Mineral oil for cold climate
 Hydraulic 3rd function
 Single lever control, hydraulics 2 functions
 Single lever control, hydraulics 3 functions
 Auto bucket fill

Brake system

Oil cooler and filter front & rear axle

OPTIONAL EQUIPMENT

Cab

Anchorage for Operator's manual
Automatic Climate Control, ACC
ACC control panel, with Fahrenheit scale
Asbestos dust protection filter
Ashtray
Cab air pre-cleaner, cyclone type
Carbon filter
Cover plate, under cab
Lunch box holder
Volvo Armrest, operator's seat, left
Operator's seat, Mechanical ISRI, 2pt seat belt
Operator's seat, Volvo Air Suspension, Heavy Duty, 2pt seat belt
Operator's seat, Volvo Air Suspension, 2pt seat belt
Operator's seat, Volvo Air Suspension, 3pt seat belt
Operator's seat, Comfort ISRI, 2pt seat belt
Operator's seat, Comfort ISRI, 3pt seat belt
Operator's seat, Premium ISRI, 2pt seat belt
Operator's seat, Premium ISRI, 3pt seat belt
Subwoofer
Steering wheel knob
Sun blinds, rear windows
Sun blinds, side windows
Timer cab heating
Window, sliding, door
Universal door/ignition key
Remote door opener
Forward view mirrors
Cab heater power outlet 240V
Cab, Hot applications. Roof, steel
Fire extinguisher cab
Outside steel protection cab
Rear view mirrors long arm, cab
Reinforced windshield, flat

Service and Maintenance

Automatic lubrication system
Cleaner kit, with air blow gun
Oil sampling valve
Quick engine oil change
Refill pump for grease to lube system
Tool kit
Wheel nut wrench kit
CareTrack, GSM, GSM/Satellite
Telematics, Subscription

OPTIONAL EQUIPMENT

Wheel/Tires

29.5 R25
875/65 R29

Protective equipment

Belly guard front
Belly guard rear
Belly guard rear, oil pan
Center hinge and rear frame guard
Cover plate, heavy-duty, front frame
Cover plate, rear 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
Option for machines without dinitrol

External equipment

Cab ladder, rubber-suspended
Handles on counterweight
Deleted front mudguards
Fire suppression system
Fire extinguisher
Fire extinguisher , two pieces
Mudguards, full cover, front and rear
Mudguards, full cover wideners and prot. Included
Long boom
Tow hitch

Other equipment

CE-marking
Comfort Drive Control (CDC)
Counterweight, re-handling
Counterweight, signal painted, chevrons
Sound decal, EU
Sound decal, USA
Noise reduction kit, exterior
Rock Loader package
Rehandler package
Slag Handler package

Attachment

Buckets:
Rock straight or spade nose
General purpose
Rehandling
Side dump
Light material

Wear parts:
Bolt-on and weld-on bucket teeth
Segments
Cutting edge in three sections, bolt-on

V O L V O