

V O L V O



Volvo Compact Wheel Loaders 4.5-4.9 t 65 hp

# L20H, L25H

Volvo Construction Equipment



# Welcome to our world

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

## **Working harder, working smarter**

For over 180 years Volvo has been a pioneer in the design and manufacture of machines which set the standard for efficiency, performance and uptime. Across our range of excavators, wheel loaders and haulers, our reputation for engineering excellence is unrivalled, which means whatever your operation or application, we can provide a total fleet solution to help you succeed.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts, to ensure we offer customers machines which work harder and smarter long into the future.



## Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

### Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

### There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.

 <b>Fuel Efficiency Services</b>	 <b>Productivity Services</b>	 <b>Safety Services</b>
 <b>Financial Services</b>	 <b>Uptime Services</b>	 <b>Rental Services</b>
 <b>Volvo Attachments</b>	 <b>Genuine Volvo Parts</b>	 <b>New life Services</b>

# BUILDING TOMORROW



# Improve your efficiency

One of the keys to profitability is efficiency. Get the job done better and faster with the L20H and L25H. Bringing you quality as standard, all-around visibility and excellent stability, Volvo compact wheel loaders are the perfect partner for efficient performance.

## Tackle uneven terrains

Looking for excellent traction and stability on rough terrains? The L20H and L25H feature a  $38^{\circ} \pm 10^{\circ}$  articulated oscillating joint as well as 100% differential locks on both axles, activated by the operator.



## Access tight areas

Navigate safely in the confined spaces on your jobsite, thanks to the compact design of the L20H and L25H. Standing at a height of no more than 2500 mm, featuring a rounded hood, transversally mounted engine and 8210 mm turning radius, the machines deliver excellent manoeuvrability.



## More comfort to get more done

Enjoy all-around visibility and easy operation from the comfort of the Volvo cab. A single joystick lever, incorporating three functions, offers operation of hydraulic attachments, multi-purpose buckets, sweepers and augers. Operators can also customize their seating position, with the optional adjustable steering column.



## Designed with safety in mind

Get in and out the FOPS/ROPS certified cab easily, with a highly visible step that stands out against the surroundings. For ultimate control, the machines are fitted with a single inching brake pedal, allowing for operation at 'creep speed'. Offering a more pleasant working environment in dusty applications, the L20H and L25H also feature the largest cab air filter in the industry.





# POWER TO PERFORM

Improve your cycle times with the fully automatic two-speed range hydrostatic drive, and work at a speed of up to 30 km/h. The L20H and L25H are powered by a powerful engine – with diesel oxidation catalyst (DOC) – designed to the latest emission regulations, without the need for regeneration or additives. Trust your Volvo to keep performance high and downtime low.



# On to the next performance

To ensure your business runs smoothly, Volvo invests in the intelligent engineering of all machines – but we don't stop there. As your partner in production, we support what you do with the best equipment for the job. Our portfolio of attachments and services is designed to complement your machine's performance and boost your profitability.

## Small machine with big potential

Small in size but high in reach and dump height, the L20H and L25H are a great match for truck loading operations.



## Less service, more work

Keep downtime to a minimum with maintenance points located at ground level and long service intervals – 100 hours for greasing and 500 hours for engine oil change. The compact wheel loaders are built using the best-in-class components for increased longevity and great value for money.



## Here to support you

We stand ready to respond to your every need. Maintain productivity and machine uptime with our range of readily available, tested and approved Genuine Volvo Parts – all backed by Volvo warranty. Here with the complete solution, we'll help you stay on track, offering flexible maintenance and repair options to extend the life of your L20H and L25H.



## Machine monitoring made easy

Stay ahead of unscheduled downtime and check that your machine is being operated efficiently with CareTrack – Volvo's state-of-the-art telematics system. Stay informed and receive reports, alarms and information such as fuel status, machine location and hours, so you can plan your service more efficiently.





# ALL-ROUNDER COMPACT LOADER

We offer a wide range of attachments to make your L20H and L25H even more comprehensive. Perfectly matched to the machine's linkage system, hydraulics and driveline, Volvo attachments offer superior productivity and safety. For demanding attachments, engage the optional high flow hydraulics, delivering up to 200 bar/110 litres per minute.



# Fully loaded

## All-rounder compact loader

Volvo attachments are perfectly matched to the machine's linkage, hydraulics and driveline to increase productivity.

## Here to support you

Keep your machine in fighting form, with a range of Genuine Volvo Parts, as well as maintenance and repair plans.

## Power to perform

Travel up to 30 km/h with the fully automatic two-speed range hydrostatic drive and powerful engine - with diesel oxidation catalyst.

## Maximize attachments use

Make the most of your attachments with the Volvo Attachment Bracket, recognized as industry standard.





## Machine monitoring made easy

Achieve optimum productivity and maintain machine uptime with data efficiency reports, generated by CareTrack.



## More comfort to get more done

Enjoy all-around visibility and easy operation from the comfort of the Volvo cab, featuring a single lever, which incorporates three functions.

## Access tight areas

The compact design of the L20H and L25H, with an 8 210 mm turning radius, allows for manoeuvrability in confined spaces.

## Designed with safety in mind

The FOPS/ROPS certified Volvo cab is equipped with the largest air filter in the industry, a highly visible entrance step and single inching brake pedal.

## Small machine with big potential

Small in size but high in reach and dump height, the L20H and L25H are a great match for truck loading.

## Less service, more work

Keep downtime to a minimum, with ground level greasing points, best-in-class components and long service intervals.

## Tackle uneven terrains

Increase traction on unstable ground, the L20H and L25H feature a  $38^{\circ} \pm 10^{\circ}$  articulated oscillating joint and operator controlled 100% differential locks on both axles.

# Volvo L20H, L25H in detail

## Engine

The 4-cylinder Volvo common rail diesel engine is water-cooled, and compliant to EU Stage IIIB and EPA Tier 4 Final environmental regulations. An exhaust after treatment system and a Diesel Oxidation Catalyst are used. The engine is designed for high-performance cooling, facilitated by a main water-gallery and water passages between the cylinder bores. A Center Direct Injection System works as the combustion system, which provides increased injection pressure and a redesigned combustion chamber. The result is a 25% reduction of particles, which lowers the engine vibrations and radiated sound, and the total noise level.

		L20H	L25H
Engine	Volvo	D2.6M	D2.6M
Max power at	r/min	2 400	2 400
SAE J1995 gross	kW	48	48
	hp	65.3	65.3
SAE J1349, ISO 9249 net	kW	47.3	47.3
	hp	64.3	64.3
Max. torque at	r/min	1 500	1 500
SAE J1995 gross	Nm	225	225
	Nm	221.6	221
SAE J1349, ISO 9249 net	Nm	221.6	221
	Nm	221.6	221
Economic working range	r/min	1 500	1 500
Displacement	l	2.62	2.62
Bore	mm	87	87
Stroke	mm	110	110

## Electrical system

Contronic electrical system with central warning light and buzzer, providing clear and easy to read information to the operator. A keypad allows easy navigation on the central LCD display with main and sub information field. Indicators and activation lights are available for various control and monitoring functions. An audible warning alarm will sound and a central warning indicator will flash if abnormal operating values or error messages arise. Gauges are available for coolant temperature and fuel level. A fuse test port is available in the fuse box, allowing operators to perform initial investigations, reducing diagnostic time.

		L20H	L25H
Voltage	V	12	12
Batteries	V	12	12
Battery capacity	Ah	100	100
Alternator rating	W/A	70	70
Starter motor output	kW	2.5	2.5

## Drivetrain

The hydrostatic transmission allows a four-speed range change without tractive power interruption. Maximum tractive power is available in all speed ranges, regardless of the driving direction. The single 'inch brake pedal' offers variable machine speed control and a smooth transfer of power to the wheels, while maintaining a constant engine rpm. Using the multifunctional right joystick, easily reach the transmission's forward, neutral, reverse and differential locks buttons. The machine is designed for single-handed operation, providing the operator with excellent ergonomics and greater efficiency in all applications. Two rigid planetary axles provide durability. The central articulating-oscillating joint and all-wheel drive deliver excellent mobility across all ground conditions. The 100% differential lock on both axles ensures minimal tire wear when operating on hard ground and maximum traction force in soft terrain.

		L20H	L25H
Angle of oscillation	± °	10	10
Oscillation at wheel, max.	mm	226	245
Track	mm	1 300	1 410
High-speed version			
1st gear	km/h	7	7
2nd gear	km/h	30	30

## Brake System

The reliable dual service brake applies to all four wheels: 1. Wear-free hydrostatic inching brake. 2. Central disc brake, actuated via the 'inch/brake pedal'. The first stage of the pedal application actuates the inching facility; the last third of pedal application applies the central disc brake. The independent, mechanically operated parking brake activates a central disc brake, which applies to all four wheels.

## Steering System

The steering unit is designed in an open center system for high axial loads and high travel speeds. It has no mechanical connection between the steering unit and the articulating/oscillating joint. As a result, the external forces that affect the steering cylinder are absorbed without disrupting the driver's focus. Any reaction forces are absorbed via the steering wheel. Thanks to the dual hydraulic pumps, the speed of the working hydraulic (lifting/tilting) system is not influenced by the steering system.

		L20H	L25H
Steering cylinders		1	1
Working pressure	MPa	21	21
Maximum flow	l/min	30	30
Max articulation	± °	38	38



## Cab

The cab is tested and approved according to ROPS (ISO 3471, SAE J1040) and FOPS (ISO 3449) specifications. The cab is compliant with ISO 6055 requirements for operator overhead protection. The cab is also compliant with industrial trucks and SAE J386 regarding Operator Restraint System. The operator seat features adjustable suspension and a retractable seatbelt. Fresh air is filtered through large elements prior entering the cab, ensuring clean air distribution in the cab. Several air vents enable fast de-misting and defrosting. The conronic monitoring system provides important information and is located in a central position to ensure all machine controls are within the operator's field of vision.

## Hydraulic system

Working hydraulics system with mechanical operated control valves. **System supplies:** a gear pump provides flow to the working hydraulics. **System control:** double-acting 3-spool main control valve. **The lift function has four positions:** lift, hold (neutral), lower and float. **The tilt function has three positions:** rollback, hold and dump. A fourth hydraulic function is available as an option to power the hydraulic implements (Hi-Tip bucket, angle sweeper, etc...) **Filtration:** full-flow filtration through 10 micron (absolute) filter cartridge in a combined suction-return-filter. **Cooling:** thermostatically controlled oil flow to the oil cooler (fast warm-up, optimized cooling).

		L20H	L25H
Working pressure max	MPa	20	23
Flow	l/min	55	55
at engine speed	r/min	2 400	2 400
High Flow Working pressure max	MPa	20	20
High Flow	l/min	110	110
at engine speed	r/min	2 400	2 400

## Linkage

The parallel linkage system offers 100% parallel lift with the loading fork. The linkage system and the attachment bracket are designed for an excellent visibility to the front attachment, fork tines and fork tines end. The Volvo Attachment Bracket P (parallel) is equipped with long guide pins and an additional sealing ring for protection against dust and mud.

		L20H	L25H
Linkage system		Parallel Linkage System	Parallel Linkage System
Lift cylinders		2	2
Tilt cylinders		1	1
Lift time (loaded)	s	5.2	5.2
Lowering time (empty)	s	3	3
Dump time	s	3.9	3.9

## Service Refill

The wide opening engine hood provides fast and easy service access. The redesigned counterweight features a service opening on the left side, offering excellent service access to the hydraulic pumps. The main fuse box and control valve are located behind the right-hand side hood. This service panel is locked with a key.

		L20H	L25H
Fuel tank	l	60	60
Engine oil	l	10.2	10.2
Engine coolant	l	9.3	9.3
Hydraulic tank	l	59	59
Front axle oil	l	4.1	4.1
Rear axle oil	l	5.4	5.4

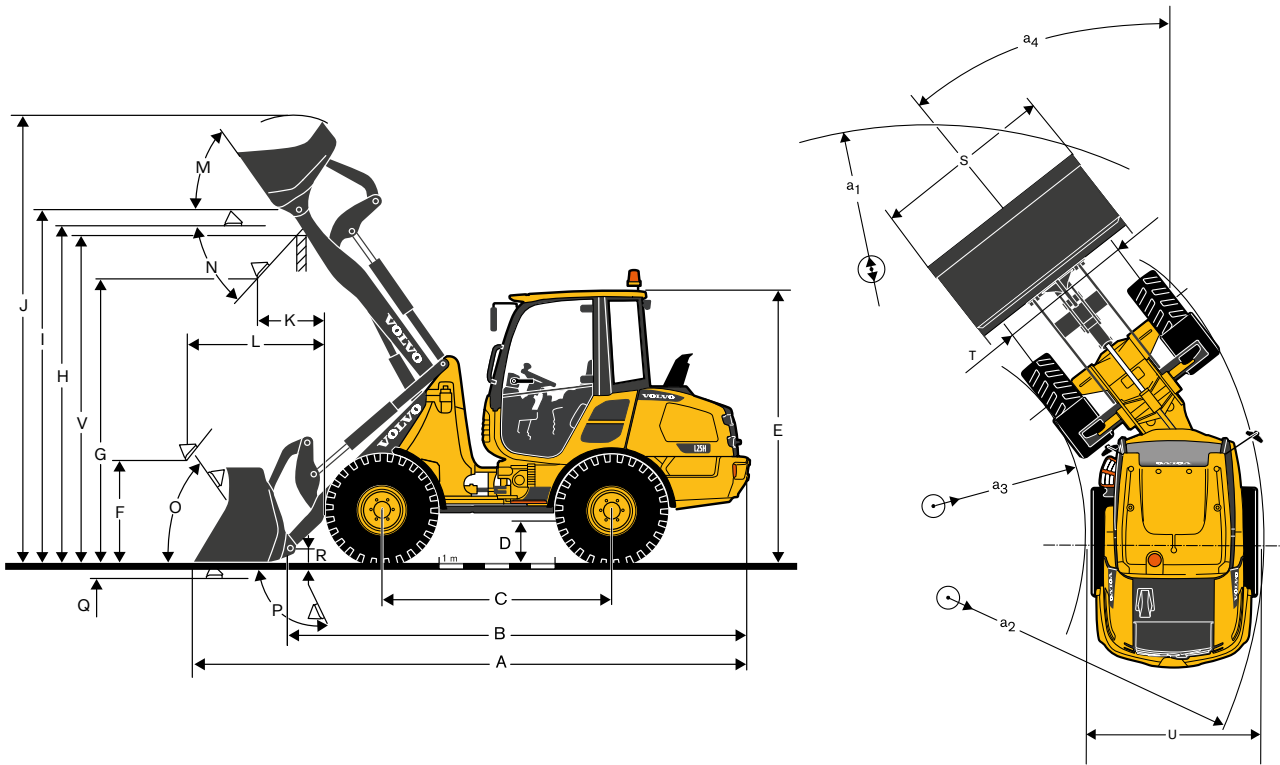
## Tires

		L20H	L25H
Size		335/80R18	335/80R18
Rim		11 x 18	11 x 18

## Sound Level

		L20H	L25H
Sound level in cab according to ISO 6396			
L <sub>pA</sub>	dB(A)	75	75
External sound level according to ISO 6395			
L <sub>WA</sub>	dB(A)	99	99

# Specifications



## SPECIFICATIONS ACCORDING TO BUCKET TYPE

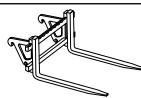
Description	Unit	L20H			
		General Purpose		Light Material	4-in-1
<b>with 335/80 R18 tires</b>					
Capacity heaped	m <sup>3</sup>	0.7	0.85	1.0	0.65
Material density	kg/m <sup>3</sup>	1900	1700	1400	1900
Static tipping load, straight (ISO / DIS)	kg	3 350	3 300	3 250	3 050
Static tipping load, full turn 38° (ISO / DIS)	kg	3 000	2 950	2 900	2 750
Hydraulic lifting capacity, max.	kN	35	34	33.5	32.5
Breakout force	kN	35	30.5	28	36.5
A Total length	mm	5 035	5 135	5 195	5 030
J Lift height, max.	mm	4 065	4 145	4 195	4 070
S Bucket width	mm	1 650	1 650	1 800	1 650
a <sub>1</sub> Clearance circle	mm	8 205	8 260	8 435	8 205
Q Digging depth	mm	105	105	105	145
G Dump height	mm	2 520	2 445	2 405	2 500
K Reach at max. height	mm	640	705	745	555
L Reach, max.	mm	1 455	1 520	1 560	1 370
Operating weight	kg	4 480	4 500	4 520	4 650

## DIMENSIONS

### L20H parallel linkage with 335/80 R18 tires and Parallel Attachment Bracket

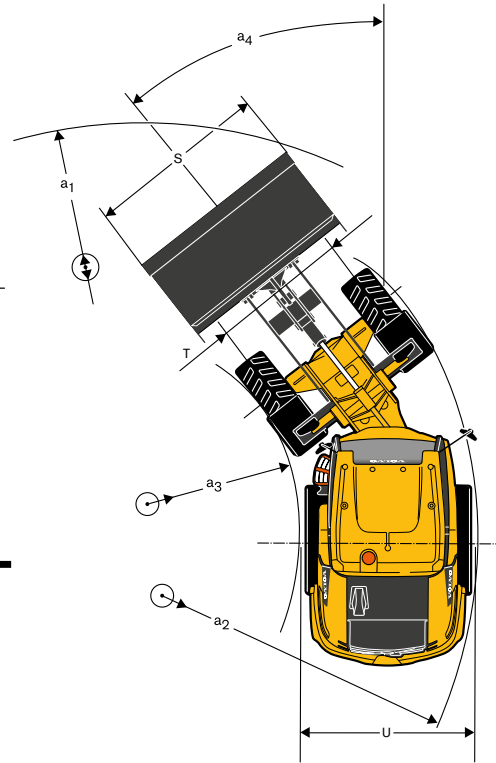
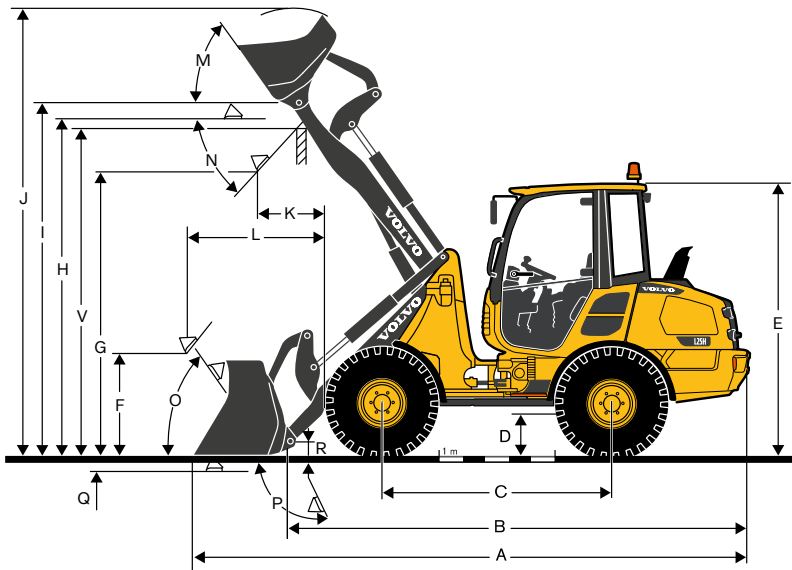
Description	Unit	
B	mm	4 275
C	mm	2 050
D	mm	290
E	mm	2 485
F	mm	884
H	mm	2 990
I	mm	3 140
M	°	56
N	°	45
O	°	54
P	°	65
R	mm	145
T	mm	1 300
U	mm	1 630
V	mm	2 905
a <sub>2</sub>	mm	3 830
a <sub>3</sub>	mm	2 155
a <sub>4</sub>	°	± 38

## LOADING FORKS SPECIFICATIONS



Description	Unit	L20H
With Loading Fork  Centre of gravity	mm	500
Tipping load, full turn (ISO / DIS)	kg	2 290
Payload according to EN 474-3, 60/80%	kg	1 350/1 800
Payload 80%, transport position, 40 ° full turn	kg	2 200





#### SPECIFICATIONS ACCORDING TO BUCKET TYPE

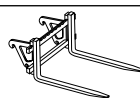
Description	Unit	L25H				
		General Purpose		Light Material	4-in-1	
with 335/80 R18 tires						
	Capacity heaped	m <sup>3</sup>	0.85	1.0	1.2	0.8
	Material density	kg/m <sup>3</sup>	1900	1700	1400	1900
	Static tipping load, straight (ISO / DIS)	kg	3 800	3 750	3 700	3 600
Static tipping load, full turn 38° (ISO / DIS)	kg	3 400	3 350	3 300	3 150	
Hydraulic lifting capacity, max.	kN	41	40.2	39.5	37.8	
Breakout force	kN	37	32.5	29	35.7	
A Total length	mm	5 059	5 195	5 295	5 150	
J Lift height, max.	mm	4 100	4 195	4 290	4 090	
S Bucket width	mm	1800	1800	1800	1800	
a <sub>1</sub> Clearance circle	mm	8 380	8 435	8 490	8 410	
Q Digging depth	mm	105	105	105	145	
G Dump height	mm	2 480	2 405	2 330	2 415	
K Reach at max. height	mm	680	745	810	640	
L Reach, max.	mm	1 495	1 560	1 610	1 455	
Operating weight	kg	4 920	4 930	4 950	5 090	

#### DIMENSIONS

##### L25H parallel linkage with 335/80 R18 tires and Parallel Attachment Bracket

Description	Unit	
B	mm	4 275
C	mm	2 050
D	mm	290
E	mm	2 485
F	mm	840
H	mm	2 990
I	mm	3 140
M	°	56
N	°	45
O	°	54
P	°	65
R	mm	145
T	mm	1 410
U	mm	1 740
V	mm	2905
a <sub>2</sub>	mm	3 890
a <sub>3</sub>	mm	2 100
a <sub>4</sub>	°	± 38

#### LOADING FORKS SPECIFICATIONS



Description	Unit	L25H
With Loading Fork  Centre of gravity	mm	500
Tipping load, full turn (ISO / DIS)	kg	2 670
Payload according to EN 474-3, 60/80%	kg	1 600/2 100
Payload 80%, transport position, 40 ° full turn	kg	2 500

# Equipment

## STANDARD AND OPTIONAL EQUIPMENT

- = Standard
- o = Optional

	L20H	L25H
<b>Engine</b>		
Diesel engine, watercooled, with Diesel Oxidation Catalyst (DOC)	•	•
Automatic engine shut down	o	o
Hand throttle	•	•
Extra fuel filter with water separator	o	o
Fuel pre-heater (12 Volt)	o	o
Cold start aid with grid heater (110/220 Volt)	o	o
Two stage air filter with primary filter and safty element	•	•
Pre cleaner air filter (Turbo II)	o	o
Safety start	•	•
<b>Drivetrain</b>		
Hydrostatic drive	•	•
Combined Brake/Inch pedal	•	•
Operator-selected 100% differential locks in both axles	•	•
Hand control inch valve.	o	o
Driveline shut off (via parking brake)	o	o
Driveline shut off (via parking brake and seat belt)	o	o
<b>Electrical system</b>		
Halogen front headlights with high and low beams and integrated parking lights	•	•
Brake and rear lights, turn signals with hazard lights	•	•
Working light (rear right)	•	•
Working lights(2 front/2 rear), Halogen	o	o
Working lights (2 front/2 rear), LED	o	o
Power outlet 12Volt/20Ampere (for fuel filling pump)	o	o
CareTrack Basic	o	o
CareTrack Advanced	o	o
<b>Hydraulic system</b>		
Separate gear- pump-section for working and steering hydraulic	•	•
Control valve with three-spool system	•	•
Additional hydraulic pump (high flow)	o	o
Single lever with integrated 3rd function	o	o
Flow sharing valve	o	o
Boom suspension system (BSS)	o	o
Additional couplings for 3rd hydraulic circuit	o	o
Additional 4th hydraulic circuit including couplings	o	o
<b>Environmental</b>		
Biodegradable hydraulic oils	o	o

## STANDARD AND OPTIONAL EQUIPMENT

- = Standard
- o = Optional

	L20H	L25H
<b>Instrumentation &amp; controls</b>		
Single lever control with Working hydraulic functions boom and bucket	•	•
Single lever control with Float function	•	•
Single lever control with Forward/reverse/neutral	•	•
Single lever control with Differential lock	•	•
Single lever control with Speed range low/high	•	•
Single lever control with 3rd hydraulic function	•	•
Single lever control with Horn	•	•
Single lever control with Hazard warning switch	•	•
Analogue indicator for Fuel level	•	•
Analogue indicator for Hydraulic oil temperature	•	•
Illuminated symbols (colour-coded) for Operating hours	•	•
Illuminated symbols (colour-coded) for Direction (forward/reverse)	•	•
Illuminated symbols (colour-coded) for Turn signal (left/right)	•	•
Illuminated symbols (colour-coded) for Grid heater (option)	o	o
Illuminated symbols (colour-coded) for Headlights	•	•
Illuminated symbols (colour-coded) for Differential locks	•	•
Illuminated symbols (colour-coded) for Battery charging	•	•
Illuminated symbols (colour-coded) for Travel speed (low/high)	•	•
Illuminated warning symbols with acoustic signal (with ignition on) for : Coolant temperature, hydraulic oil temperature, hydraulic oil filter, engine oil pressure, air filter restriction, alternator, parking brake	•	•
<b>Safety</b>		
Rotating beacon, Halogen	o	o
Rotating beacon, LED	o	o
Audible reverse alarm	o	o
Audible reverse alarm, switchable	o	o
Audible reverse alarm, smooth sound	o	o
Anti-theft system	o	o
Safety valves for lifting	o	o
Safety valves for tilting	o	o
Wheel block	o	o
Warning triangle	o	o
Protective guards for Main head lights	o	o
Protective guards for Working lights	o	o
Protective guards for Rear lights	o	o
<b>Cab, Exterior</b>		
ROPS/FOPS-cab isolation mounted	•	•
Lockable door	•	•
All-round tinted tempered glass	•	•
Laminated windscreen	•	•
Cab door latching when open (within machine width)	•	•
Window right hand side openable and lockable at 180° (within machine width)	•	•
Windscreen wiper with washer (front/rear)	•	•
External rear view mirrors (right/left)	•	•
External rear view mirrors (right/left), heated	o	o
External rear view mirrors (right/left), enhanced	o	o



## STANDARD AND OPTIONAL EQUIPMENT

- = Standard
- o = Optional

	L20H	L25H
<b>Cab, Interior</b>		
Cab light	•	•
12 Volt accessories socket	•	•
Mechanic-suspension driver's seat with hand wheel for weight adjustment, integrated 2-point belt system, height and tilt adjustment, horizontal adjustment and backrest adjustment	•	•
Air-suspension and heated driver's seat with automatic weight adjustment, 12 Volt, pneumatic height adjustment, back rest adjustment, horizontal and tilt adjustment, adjustable shock absorber, seat cushion adjustment, pneumatic lumbar support and quick release	o	o
Seat belt	•	•
Sunvisor	•	•
Heater with air-filter and defroster (front/rear)	•	•
Cab ventilation	•	•
Storage box	•	•
Air conditioning (AC)	o	o
Radio	o	o
Preparation for radio	o	o
<b>Working Equipment</b>		
Bucket level indicator mechanical	o	o
Sweeper preparation (switch inside cab, 7 pin electrical socket on boom)	o	o

## STANDARD AND OPTIONAL EQUIPMENT

- = Standard
- o = Optional

	L20H	L25H
<b>Carriage Body</b>		
Fenders (front/rear)	•	•
Lockable engine hood	•	•
Vertical exhaust pipe	•	•
Towing device	•	•
Lifting eyes	•	•
Tying down eyes	•	•
<b>Service and Maintenance</b>		
Tool kit (tools and grease gun)	o	o
Document box	o	o
<b>Other</b>		
Parallel Attachment Bracket (P)	•	•
Universal Attachment Bracket (SSL)	o	o
Customized machine colour	o	o
<b>Official approval</b>		
Quality: DIN/ISO 9001	•	•
Safety: CE - Criteron	•	•
Machine guide-lines 2006/42/EC	•	•
ROPS ISO 3471	•	•
FOPS ISO 3449	•	•
Operating weight: ISO 7131	•	•
Tipping load / Payload: ISO 14397-1	•	•
EMC (Electromagnetic Compatibility)	•	•
89/336/EEC plus supplement	•	•
Environment: DIN/ISO 14001	•	•
Sound regulation: 2000/14/EC	•	•

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

High flow hydraulics



Additional working lights



Material handling arm



Boom suspension system



Tire options



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.

**V O L V O**