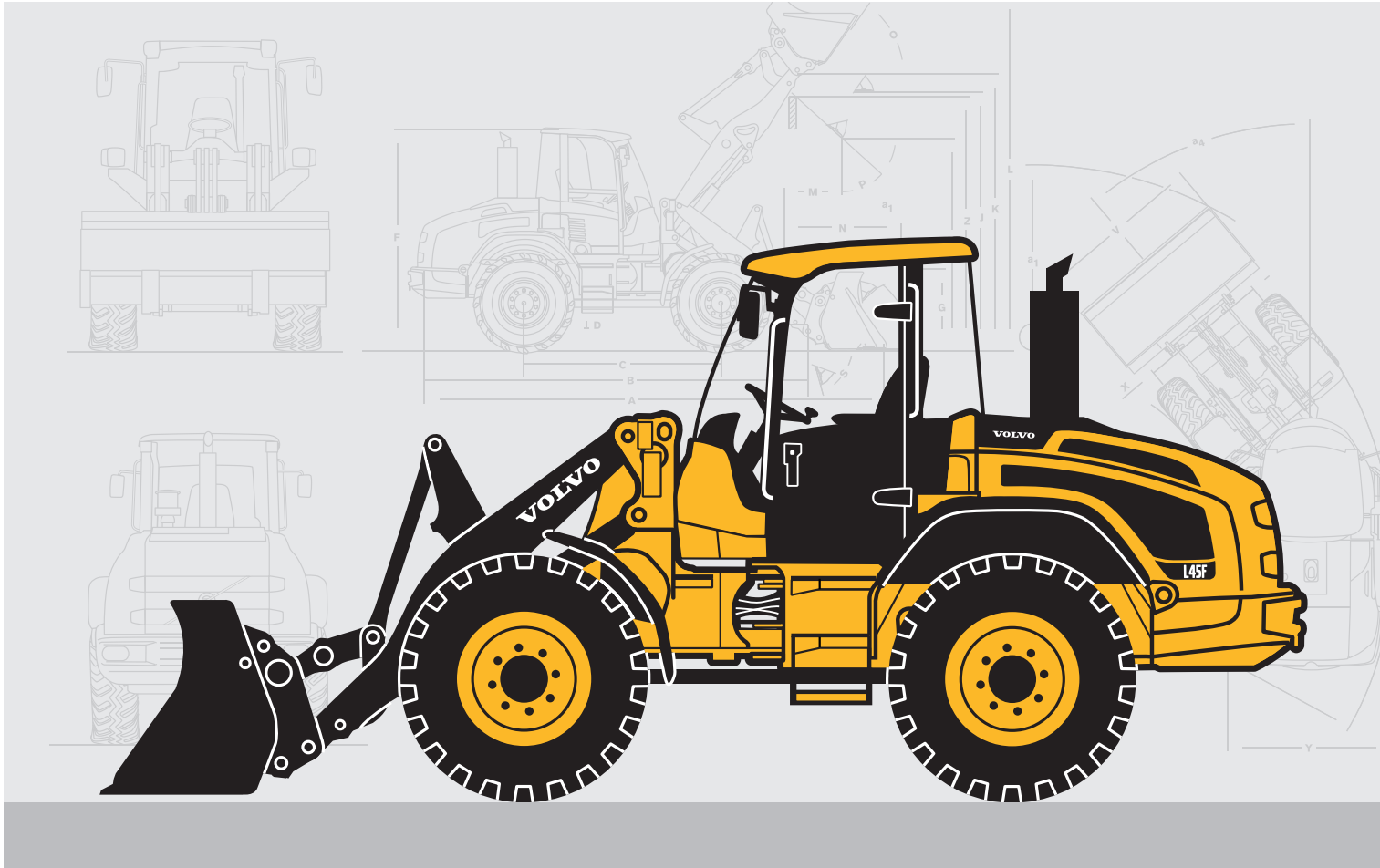


VOLVO WHEEL LOADER

L45F



• **Gross Power :**
SAE J1995 = 74.9 kW/ 100 hp

• **Net Power :**
SAE J1349 = 73 kW/ 98 hp

• **Operating Weight :**
8.69 - 9.17 t

• **Bucket Capacities :**
1.2 - 2.0 m³

• **High-performance, low environmental impact diesel engine:** quiet, low emissions, economical fuel consumption.

• **Hydrostatic drive with significant advantages:**

- Easy to operate due to automatic drive facility.
- Maintains high drawbar pull even when working hydraulics are engaged.
- Advantageous hydrostatic brakes, wear-free and safe.

• **Strong TP-loader linkage, perfect** for loading fork applications: high breakout and lift forces combine with optimum parallelity of the attachment.

• **Operator-selected 100% differential lock** on both axles to give optimum traction.

• **Standard hydraulic quickchange coupling:** Various tried-and-tested attachments for a wide range of applications.

• **Purpose designed cab comfort.**

• **Multi-function joystick.**

MORE CARE. BUILT IN.



SPECIFICATIONS

Engine

Volvo in-line 4-cylinder, 4 stroke, direct injection diesel engine with turbocharging, water cooled. EPA Tier 3 / EU STage IIIA compliant. Air cleaning:

1. Paper filter with indicator in cab / 2. Safety filter

Engine	D5DCAE3
Gross power @	2200 r/min
SAEJ1995	74.9 kW - 100 hp
Net power @	2200 r/min
SAEJ1349 - DIN ISO 1585	73 kW - 98 hp
Max. torque @	1600 r/min
SAEJ1349 net - DIN ISO 1585	409 Nm
Cubic capacity	4.76 l
Bore	108 mm
Stroke	130 mm

Electrical system

Rated voltage	24 V
Battery voltage	2 x 12 V
Battery capacity	2 x 90 Ah
Alternator rating	1540/55 W/A
Starter motor output	4.0 kW

Drivetrain

Hydrostatic driveline for full power shift under load, both when changing direction (forward and reverse) and between ranges. Maximum drawbar force can be achieved in all ranges. Inch/brake pedal for variable machine speed control and power transfer to bucket hydraulics at constant engine rpm. Multi-function joystick for change of direction, differential lock and use of the servo-control.

Oscillation at wheel, max.	360 mm
Track	1750 mm
Angle of oscillation	±12°

Tyres

Size	15.5-25
Rim	12 x 25 ET15

Differential hydraulically actuated 100% differential locks in both axles.

Frame: solid front and rear frame, robot-welded. Articulating joint for optimum manoeuvrability oscillating rear axle for optimum traction.

Speed, max.:	Standard	High travel speed*
1st range forward/reverse	0-5 km/h	0-5 km/h
2nd range forward/reverse	0-20 km/h	0-17 km/h
3rd range forward/reverse		0-40 km/h

* Optional equipment

Service fill capacities

Engine	14 l
Fuel tank	160 l
Front axle, total	18 l
Rear axle, incl. drop-box	18.7 l
Hydraulic tank, incl.	90 l

Braking system

Service brake: reliable, dual braking system, wet disc brakes (low speed : in rear axle, high-speed : in both axles), hydraulically actuated via pump accumulator.

1. Wear-free, hydrostatic inching brake / 2. Service brake, actuated via "inch/brake pedal". First stage of pedal application actuates the inching function, the last third of pedal application applies the service brake.

Parking brake: Central disc brake.

Hydraulic system

Load sensing hydraulic system with self-controlling power distribution. Thermostatically controlled oil circuit with integrated cooling system. Hydraulic control valve: Servo-controlled, double acting control valve three spool system, with primary and secondary pressure valves.

1. Lifting function / 2. Tilting function / 3. Additional function for hydraulic QC, Unlock, neutral, lock.

Hydraulic oil filter: Combined suction and return-filtration cartridge with a 10 µm filter. The filter can be replaced without emptying the hydraulic oil tank.

Axial piston pump

Flow	132 l/min
@ engine rpm	2200 r/min
Relief valve pressure	26 MPa

Steering

Load sensing hydrostatic steering. Steering pump: gear-type pump. Steering cylinder: 2 double-acting steering cylinders.

Steering:

Angle of articulation	±40°
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Steering pump:

Flow	64 l/min
@ engine rpm	2200 r/min
Relief valve pressure	22 MPa

Linkage

Linkage system	TP
Lift cylinders	2
Tilt cylinders	1
Lift time (loaded)	5.3 s
Lowering time (empty)	3.2 s
Dump time	1.1 s

Noise levels**

Sound pressure level (LpA) at operator position	70 dB(A)
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(Measurement according to ISO 6396)

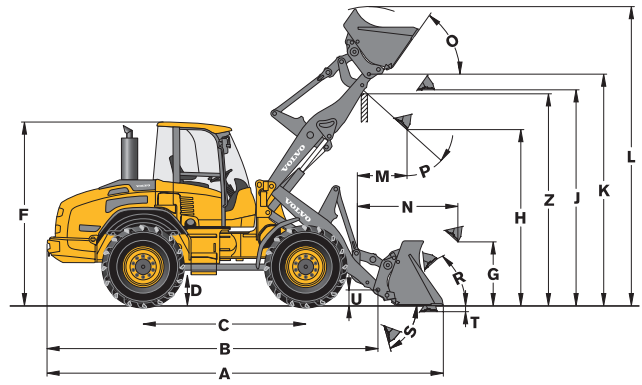
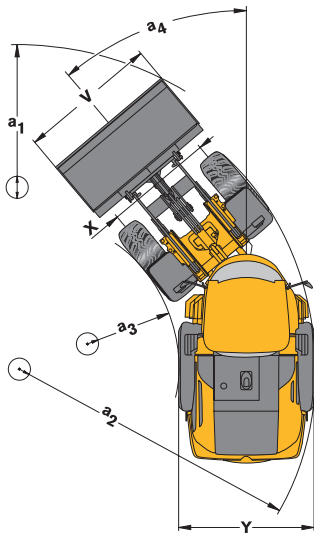
Sound power level (LWA) around the machine	102 dB(A)
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




(Measurement according to 2000/14/EC with applicable appendices and measuring method according to ISO 6395)

Whole body vibrations







Emission of whole-body vibration values and its uncertainties during operating conditions in different applications, when the machine is used as intended, is according to information in ISO/CEN Technical Report ISO/TR25398.

**NOTE! Uncertainties in given noise values (e.g. uncertainty in production and measuring instruments) are calculated in accordance with ISO 6395:2008 for the sound power level around the machine and ISO 6396:2008 for the sound pressure level at the operator position.





Data according to bucket type		Gen. Purpose		Light material		4-in-1	High-Tip
							
L45F with TP-Linkage, TPV attachment bracket (welded version) and 15.5-25 tires							
Capacity heaped	m ³	1.4	1.5	1.8	2.0	1.2	2
Material density	kg/m ³	1800	1700	1400	1200	1900	1000
Static tipping load, straight (ISO 14397)	kg	5970	5930	5780	5670	5650	4950
Static tipping load, full turn 40° (ISO 14397)	kg	5290	5250	5120	5020	5000	4370
Hydraulic lifting capacity, max.	kN	70	69.4	67.5	66	66.5	57.5
Breakout force	kN	62	59.7	53	48	66	-
A Total length	mm	6350	6385	6505	6615	6295	6955
L Lift height, max.	mm	4740	4790	4810	4940	4815	5695
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a ₁ Clearance circle	mm	10300	10320	10390	10460	10305	10675
T Digging depth	mm	85	85	85	85	120	95
H Dump height, 45°	mm	2800	2780	2690	2610	2790	4230
M Reach at max. height	mm	930	945	1025	1100	815	1490
N Reach, max.	mm	1750	1770	1850	1925	1640	2670
Operating weight	kg	8630	8650	8660	8690	8850	9090

L45F with TP-linkage, TPV attachment bracket and 15.5-25 tires	
B	5320 mm
C	2650 mm
D	395 mm
F	2950 mm
G	1000 mm
J	3430 mm
K	3685 mm
O	55 °
P	45 °
R	45 °
S	75 °
U	255 mm
X	1750 mm
Y	2150 mm
Z	3445 mm
a ₂	4745 mm
a ₃	2555 mm
a ₄	40 °

Data according to bucket type		Gen. Purpose		Light material		4-in-1	High-Tip
							
L45F with TP-Linkage, TPZ attachment bracket and 15.5-25 tires							
Capacity heaped	m ³	1.4	1.6	1.8	2.0	1,3	2
Material density	kg/m ³	1900	1600	1400	1300	1900	1100
Static tipping load, straight (ISO 14397)	kg	6220	6120	6020	5890	6050	5260
Static tipping load, full turn 40° (ISO 14397)	kg	5500	5420	5330	5210	5350	4650
Hydraulic lifting capacity, max.	kN	74	72.5	71.3	69.5	72	62
Breakout force	kN	66	60.5	55.5	50	65	-
A Total length	mm	6260	6335	6415	6525	6270	6825
L Lift height, max.	mm	4680	4750	4820	4890	4730	5610
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a ₁ Clearance circle	mm	10125	10165	10210	10275	10165	10590
T Digging depth	mm	90	90	90	90	45	80
H Dump height, 45°	mm	2875	2815	2755	2675	2865	4140
M Reach at max. height	mm	860	900	955	1030	850	1370
N Reach, max.	mm	1685	1725	1780	1855	1670	2540
Operating weight	kg	8580	8620	8610	8640	8830	9030

L45F with TP-linkage, TPZ attachment bracket and 15.5-25 tires	
B	5325 mm
C	2650 mm
D	395 mm
F	2950 mm
G	1000 mm
J	3430 mm
K	3685 mm
O	55 °
P	45 °
R	45 °
S	75 °
U	255 mm
X	1750 mm
Y	2150 mm
Z	3360 mm
a ₂	4745 mm
a ₃	2555 mm
a ₄	40 °

Data with Loading Fork		TPV attachment bracket	TPZ attachment bracket
Center of gravity 500 mm			
Tipping load, full turn (ISO 14397)	kg	4420	4670
Payload according to EN 474-3, 60/80%	kg	2650 / 3530	2800 / 3730
Payload 80%, transport position, 40° full turn	kg	4000	4000

SPECIFICATIONS

STANDARD EQUIPMENT

Engine

Diesel engine, direct fuel injection
Extra fuel filter
Cold start aid
Dry-type air filter
Preparation for pre-cleaner
Filtration screens on air inlets

Electrical system

Alternator 55 A

Lighting

Main head lights (halogen) upper/dipped/asymmetrical
Working lights (2 front/2 rear)
Parking lights
Rear lights
Brake lights
Direction indicators
Hazard warning lights
Reversing lights
Cab lighting

Instrumentation & controls

Multi-function joystick
24 Volt accessories socket
Forward horn
Hazard warning switch
Safety start

Electronic Information System

Analog information for:
Fuel level
Engine temperature
Drive system oil temperature
LED-illuminated symbols (colour-coded) for:
Direction (forward/reverse)
Indicators (left/right)
Pre-heater (option)
Main beam head lamp
Differential locks
Boom suspension system (option)
Loading fork operation (option)

LED-illuminated symbols (red) with acoustic signal for:
Parking brake
Air filter restriction
Drive system oil temperature
Engine temperature
Engine oil pressure
Battery charging
Return filter
Touch pad with symbols and integrated LEDs for:
Parking lights
Working lights (front/rear)
Windscreen wiper (rear)
Rotating beacon (option)
Boom suspension system on/off (option)
Locking and activation of Volvo-attachment bracket (option)
Activation of multi-function joystick for directional change
Digital LED display activated by dual function keys for:
Entry and retrieval of operating information

Drivetrain

Hydrostatic drive
Operator-selected 100% differential locks in both axles.
Tyres 15.5-25

Hydraulic system

Load-Sensing Hydraulics
Axial piston pump
Control valve three-spool system
3rd hydraulic circuit and couplings

Cab, Exterior

ROPS/FOPS-cab with flexible mountings
Lockable door
All-round tinted safety glass
Windscreen wiper (front/rear)
Windscreen washer (front/rear)
Door stops
External rear view mirrors (right/left)

Cab, Interior

4-way adjustable operator's seat
Adjustable steering column
Seat belt
Sunvisor
Left armrest
Heater with air-filter and defroster (front/rear)
Cab ventilation
Airconditioner
Storage box in the cab
Rear view mirrors (left/right)
Cup holder
Coat hook
Emergency hammer

Working Equipment

Automatic bucket leveller
Hydraulic quick-change attachment bracket

Carriage Body

Fenders (front/rear)
Lockable engine hood
Lockable fuel-tank cap
Vertical exhaust
Towing device
Lifting eyes
Tying down eyes

International Standards for Machines and Production

Quality: DIN/ISO 9001
Safety: CE - Criterion
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

OPTIONAL EQUIPMENT

Engine Equipment

Pre-heater
Pre cleaner air intake (Turbo II)
High travel speed
Alternator 80 A
Tropical kit
Air pre-cleaner, oil-bath type
Reversible fan (three mode selectable)

Hydraulics

Hydraulic couplings for 4th hydraulic circuit
Single lever with integrated 3rd function
3-lever control
4-lever control

Cab

Handthrottle
Hand control inch valve
Radio
Air suspension operator's seat
Heated air suspension operator's seat
Noise insulation
Sliding window in cab door

Working Equipment

Boom suspension system
Long boom

Environment

Biodegradable hydraulic oil

Safety

Anti-theft system
Headlights protection
Rear lights protection
Rotating beacon
Audible reverse alarm
Engine hood protection
Windshield guard, front
Windshield guard, rear
Belly guards, front/rear
Working light guards, front/rear
Xenon working lights, front/rear
Xenon working lights, front



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different - **More care. Built in.**



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