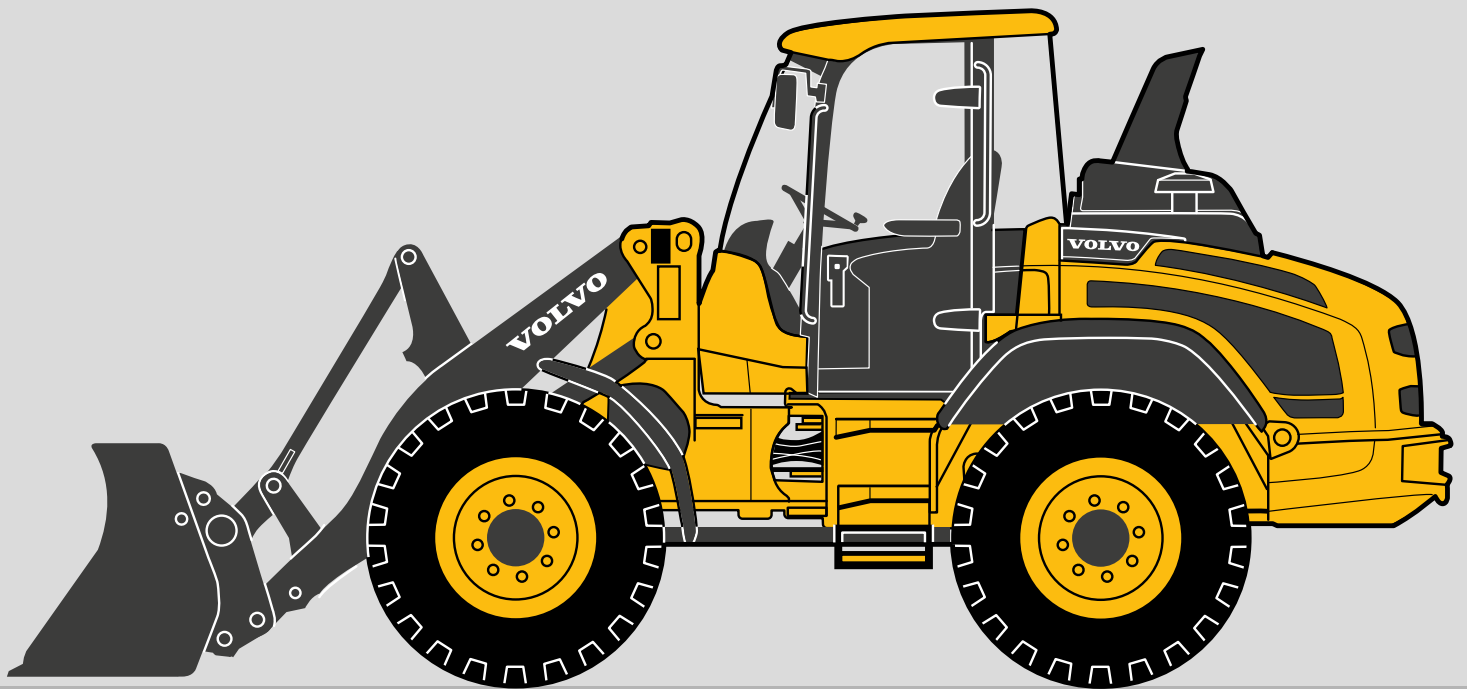


V O L V O

ENVIRONMENTAL DECLARATION

VOLVO COMPACT WHEEL LOADERS



Environmental Declaration

VOLVO COMPACT WHEEL LOADERS

Environmental characteristics below specified by the manufacturer, related to machines leaving the manufacturers production line. For other technical specifications, see specification sheet and operator manual for the respective machine.

MANUFACTURER

Volvo Construction Equipment Germany GmbH
54329 Konz
Germany

Model		L30H	L35H	L45H	L50H
Engine type, Net power, ISO 9249 / SAE J1349, netto	kW	D3.3H 55.4	D3.3H 55.4	D4J 75	D4J 87
Metric	hp	75	75	102	118
Imperial	hp	73	73	99	115

Transmission: Hydrostatic transmission, full powershift under load

CORE VALUES

Quality, safety and environmental care are Volvo's core values. They are designed from the beginning into the product's entire service life. This includes design and engineering, material selection, manufacturing processes, use and recycling.

MANUFACTURERS

The assembly of the complete machines takes place at one of Volvo Construction Equipment's production plants. Our production facilities are all certified according to ISO 14001.

Many of our components and parts are purchased from external suppliers. Volvo Construction Equipment works closely with these suppliers in order to safeguard the environmental requirements for purchased components and parts.

DECLARATIONS

Upholstery and other materials in the cab do not contain mercury.

Plastics and other interior materials are fire-classed according to Volvo Standard 5031,1. (104-0001)

Brake pads do not contain mercury, cadmium or asbestos.

The complete machine does not contain any mercury, cadmium or asbestos.

If the machine is equipped with air conditioning (option), refrigerant type R134A (0.5 – 1.8 kg/1.1 – 4.0 lb) is used.

PAINT AND SURFACE TREATMENT

In order to reduce solvent emissions, the machines are painted using (high solid) powder paints and water-based paints. To reduce consumption of water and chemicals, cleaning and recirculation takes place during the pre-treatment processes in the factories.

Specification of paint

Main components	Paint type	Heavy metals	Chlorine	Pre-treatment
Rear frame	2K Water-based	no	no	Blasting
Cab	Powder	-	-	Zinc-nickel-manganate-phosphatizing
Front frame & lifting frame	Powder	no	no	Blasting
Axles and transmission	2K Water-based	no	no	Blasting

Environmental Declaration

ENGINE/EMISSIONS TIER 4F

The engine is certified according to US requirements: US EPA and CARB Tier 4f.

To comply with the regulated PM-levels, a DPF (Diesel Particulate Filter) is used as exhaust aftertreatment system. Exhaust emissions are measured as specific emissions in g/kWh according to RMC (C1) and NRTC for US. All engines fulfil the legal requirements as outlined below.

Legal requirements for US EPA and CARB Tier 4f exhaust emissions

L30H, L35H

PM	HC + Nox	CO	Power range (kW)
0.03	4.7	5.0	> 37 – ≤ 56

Exhaust emissions' legal requirements given in g/kWh

ENGINE/EMISSIONS TIER 4F/ STAGE V

The engine is certified through official testing according to EU Regulation 2016/1628, Stage V.

The engine is certified according to US requirements: US EPA and CARB Tier 4f.

To comply with the regulated PM-levels, a DPF (Diesel Particulate Filter) is used as exhaust aftertreatment system. Exhaust emissions are measured as specific emissions in g/kWh according to NRSC and NRTC for EU as well as RMC (C1) and NRTC for US. All engines fulfil the legal requirements as outlined below.

Legal requirements for US EPA and CARB Tier4f exhaust emissions

L45H, L50H

PM	NMHC	NOx	CO	Power range (kW)
0.02	0.19	0.4	5.0	> 56 – ≤ 130

Legal requirements for Stage V exhaust emission regulation

L30H, L35H, L45H, L50H

PM	HC	NOx	CO	PN (1xkW)	Power Range
0.015	4.7		5.0	1x1 012	> 37 – ≤ 56
0.015	0.19	0.4	5.0	1x1 012	> 56 – ≤ 130

Exhaust emissions' legal requirements given in g/kWh

SOUND LEVELS

If the machine is specified for sale within the EU, it is certified according to EU Directive 2000/14/EC, (external sound power level). A decal with external sound power level is found on the machine. For further information about sound levels please see the operator's manual.

Model	L30H	L35H	L45H	L50H
External sound power level dB(A)	101	101	102	102
Internal sound power level dB(A)	75	75	70 (68 opt)	70 (68 opt)

OPERATOR'S ENVIRONMENT

Incoming air for the cab first passes through a pre-filter which separates coarser particles (optional available for some models), and then through the main filter into the cab. Up to 90% of all air can be recirculated through the main filter. This creates an overpressure in the cab, which results in a cleaner work environment.

SERVICE

To facilitate draining and to reduce the risk of spilling engine oil and hydraulic oil, there are special hoses supplied with each machine. For bleeding air from axles, transmission and hydraulic oil tank there is a breather filter to reduce appearance of any oil mist. *The hydraulic tank as well as front and rear axle has a protective valve in the breather filter, minimizing leakage in case of machine turn-over/rollover.*

The fuel tank cap seals tightly to prevent fuel leaks in case of machine turn-over/rollover. For service intervals and other maintenance, see applicable operator's manuals for each respective machine model. All engines have a system for cleaning the crankcase ventilation's emissions of oil particles.

* Not applicable to all models.

OILS AND FLUIDS

Ethylene glycol coolant is filled at the factory.

Biologically degradable oil for the hydraulic system is available as an option. We recommend the following oil; this is also available as an option. Besides we refer to the respective operator's manual.

- Volvo Biodegradable Hydraulic Oil

TIRES

Tires without high-aromatic oils (HA-oils) are available from our suppliers.

Environmental Declaration

RECYCLING

Volvo Compact Wheel Loaders are designed from the beginning for recycling at the end of their useful life cycle. Materials can be reused in new Volvo Construction Equipment or other products.

According to our own calculations 96% of the machine's weight is recyclable. Most of our plastic parts are marked for recycling according to Volvo Standards 5052,41, 5042,411 as well as 5052,412.

These material fractions can be recycled (material and energy recycling) where such recycling possibilities are available.

Model	Units (rounded)	L30H	L35H	L35HT	L45H	L50H
Steel and iron	kg	4 881	5 271	5 535	7 100	7 830
Lead (batteries)	kg	22	22	22	56	56
Other non-iron metals	kg	73	73	73	95	95
Glass	kg	55	55	55	69	69
Polymer and rubber	kg	150	150	150	200	200
Tires	kg	244	281	281	344	444
Fluids, Oil & chemicals	kg	159	159	159	326	326
Other	kg	113	113	113	405	405
Total	kg	5 584	6 011	6 275	8 190	9 020
Total weight of machine	kg	5 700	6 150	6 375	8 595	9 425
Steel and iron	lb	10,761	11,621	12,203	15,653	17,262
Lead (batteries)	lb	49	49	49	123	123
Other non-iron metals	lb	161	161	161	209	209
Glass	lb	121	121	121	152	152
Polymer and rubber	lb	331	331	331	441	441
Tires	lb	538	619	619	758	979
Fluids, Oil & chemicals	lb	361	361	361	719	719
Other	lb	249	249	249	893	893
Total	lb	12,311	13,252	13,834	18,056	19,885
Total weight of machine	lb	12,566	13,558	14,054	18,949	20,778
Recycling quota	%	98.0	97.7	98.4	95	95

The calculation of the weights is based on defined machines. Variations are caused by different equipment.

These material fractions can be recycled (material and energy recycling) where such recycling possibilities are available.

PRODUCER RESPONSIBILITY

In most countries today, there is a producer responsibility for our products, applicable to components such as batteries, tires etc. There are special regulations for these components. For further information, please contact your dealer.

Machine model

Delivery date

Machine's serial number

Engine's manufacturing number

Place for stamp

V O L V O