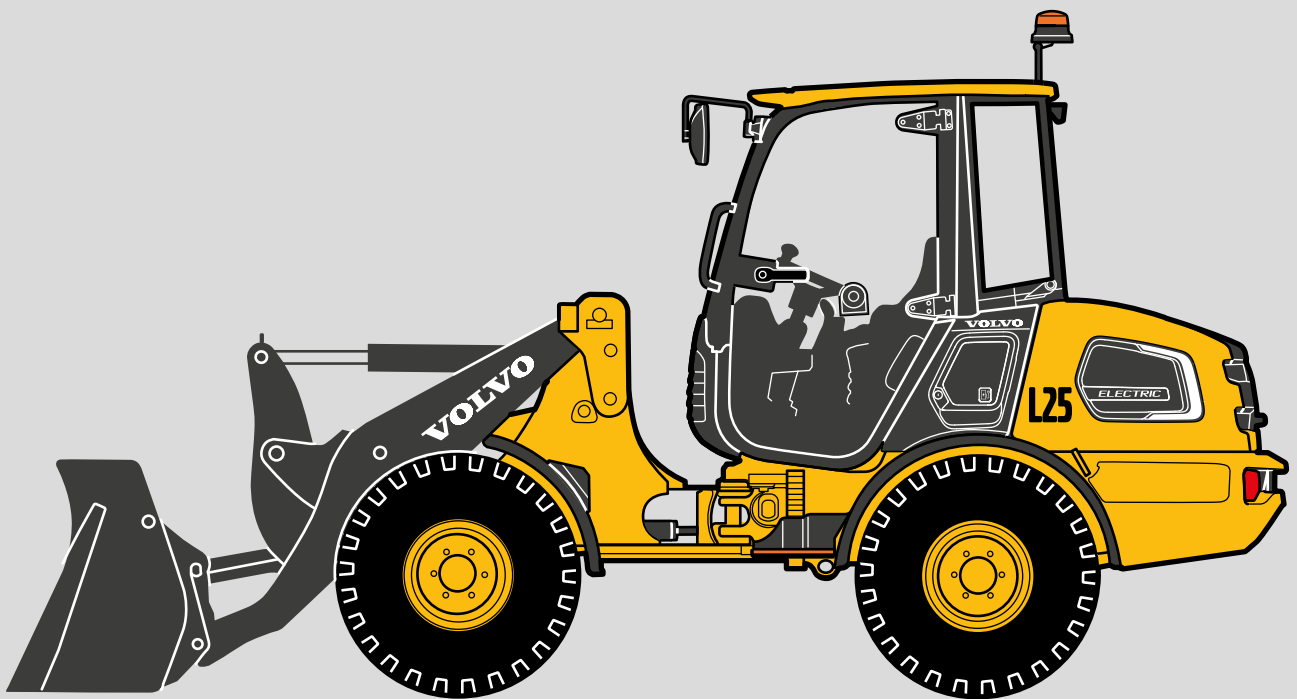


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ENVIRONMENTAL DECLARATION

VOLVO ELECTRIC COMPACT WHEEL LOADERS



Volvo Construction Equipment

Environmental declaration

COMPACT ELECTRIC WHEEL LOADERS

Environmental characteristics below specified by the manufacturer, relate 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
D-54329 Konz
Germany

Model		L20 (P) ELECTRIC	L25 (P) ELECTRIC	L25 (Z) ELECTRIC
Type		Electric	Electric	Electric
Electric motor power driveline S1 60 min	kW	22	22	22
Electric motor power driveline S2 2 min	kW	36	36	36
Electric motor power hydraulics S1 60 min	kW	14	14	14
Electric motor power hydraulics S2 2 min	kW	32	32	32

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.

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	L20 ELECTRIC	L25 ELECTRIC
External sound power level, dB(A)	89	89
Sound pressure level, LpA dB(A), standard	72	72
Sound pressure level, LpA dB(A), optional	-	-

OPERATOR'S ENVIRONMENT

Incoming air for the cab passes through the main filter in to the cab whereof 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

For bleeding air from the rear axle, transmission and hydraulic oil tank there is a breather filter to reduce appearance of any oil mist. The hydraulic tank as well as the rear axle has a protective valve in the breather filter, minimizing leakage in case of machine turn-over/rollover. For service intervals and other maintenance, see applicable operator's manuals for each respective machine model. Further on to reduce the overall maintenance and service we are using maintenance free inverters, electric motors and Lilon-Batteries for the L20 ELECTRIC and L25 ELECTRIC.

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 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.

ZERO EMISSIONS

Volvo Electric Compact Wheeled Loaders are powered by battery supply, with no exhaust emissions. Electrically-driven moving parts in the driveline also result in a more silent machine, qualifying Volvo Electric Compact Wheeled Loaders for applications in low noise and low emission zones (LEZ).

RECYCLING

Volvo Compact Wheel Loaders are designed from the beginning for recycling at the end of their useful life cycle. The recycling rate is according to ISO 16714:2008. 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, 5052,411 as well as 5052,412.

The materials included in machines are divided into the following approximate weights:

Machine model	Units (rounded)	L20 ELECTRIC	L25 ELECTRIC
Steel & Iron	kg	3 451	4 055
Lead (Batteries)	kg	15	15
Other non-iron metals	kg	145	148
Glass	kg	57	57
Polymer & Rubber	kg	84	84
Tires	kg	196	196
Fluids, Oil / Chemicals	kg	49	49
Li-Ion battery	kg	285	337
Cobalt oxide	%	< 20	< 20
Manganese dioxide	%	< 20	< 20
Nickel oxide	%	< 60	< 60
Carbon	%	10 - 30	10 - 30
Polyvinylidene fluoride (PVdF)	%	10 - 30	10 - 30
Aluminium foil	%	2 - 10	2 - 10
Copper foil	%	2 - 10	2 - 10
Aluminium and inert materials	%	5 - 10	5 - 10
Others	kg	1	1
Total recyclable material	kg	4 283	4 942
Total weight of machine (MUC*)	kg	4 486	5 199
Steel & Iron	lbs	7 608	8 940
Lead (Batteries)	lbs	33	33
Other non-iron metals	lbs	320	326
Glass	lbs	126	126
Polymer & Rubber	lbs	185	185
Tires	lbs	432	432
Fluids, Oil / Chemicals	lbs	108	108
Li-Ion battery	lbs	628	743
Cobalt oxide	%	< 20	< 20
Manganese dioxide	%	< 20	< 20
Nickel oxide	%	< 60	< 60
Carbon	%	10 - 30	10 - 30
Polyvinylidene fluoride (PVdF)	%	10 - 30	10 - 30
Aluminium foil	%	2 - 10	2 - 10
Copper foil	%	2 - 10	2 - 10
Aluminium and inert materials	%	5 - 10	5 - 10
Others	lbs	2	2
Total recyclable material	lbs	9 442	10 895
Total weight of machine (MUC*)	lbs	9 890	11 462
Recyclability rate	%	96	96

* MUC = Most Usual Configuration

* Varies depending on equipment, e.g., tires and bucket.

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.

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.

Machine model

Delivery date

Machine's serial number

Engine's manufacturing number

Place for stamp

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