

Environmental declaration

Reach trucks Reflex family

This type II declaration is divided into three major segments.
Manufacturing — Usage — Scrapping

Manufacturing

Our manufacturing of trucks include several processes. For example, metal sheets are cut and bended to the right proportion. These sheets are later welded together using the latest available welding technology.

After parts have been welded and grinded they will receive a protective layer of paint. BT make use of the powder painting technology which is the best available technology today with respect to the environment.

Finally, all different parts should be assembled and this is performed in a clean workshop environment. In the table below we declare emissions and waste during our manufacturing processes.

The effects on the environment caused by transportation of raw materials to our plants and finished goods i.e. trucks to our customers has not been evaluated and hence is unaccounted for.

(All data is collected from BT's plant in Mjölby, Sweden and is calculated for the Reflex B1-B3 model)

Discharge to water

Substances	kg/truck
COD	0,07
BOD	0,02
Unpolar alifat, hydrocarbons	0,0002
Unpolar aromatic, hydrocarbons	Very small conc.
Phosphorous, P	
Zinc, Zn	
Nickel, Ni	
Copper, Cu	
Chromium, Cr	
Lead, Pb	

Waste recycled

Substances	kg/truck
Metal scrap	216,6
Wood	14,9
Other combustible mtrl	14,7
Cardboard, corrugated	10,9
Paper	1,9
Plastic	0,2

Hazardous waste

Substances	kg/truck
Alkaline cleaning bath	4,3
Waste from waste water treatment	3,1
Electronics scrap	2,4
Batteries	0,8
Waste oil/absorbents	0,4
Paint waste	0,3
Flourescent tubes	0,1

Emissions to air

Substances	kg/truck
Carbon dioxide, CO ₂	165,0
Nitrogen oxides, NO _x	0,2
Volatile organic compound, VOC	0,1
Sulphur dioxide, SO ₂	0,1





Usage

Here we review the truck's consumption of energy, oil and other consumables during its usage.

Battery charging and consumption:

Life of truck	10000 h
Battery size (average)	644 Ah
Operating hours/charge	5.5 h *
Mains power in kWh/charge	42,0 kWh
Mains elec. In kWh/ life of truck	76408 kWh

Oil change and other lubrication:

Gear box oil / life of truck	12.6 l
Hydraulic oil / life of truck	164 l
Grease and lubrication/ life of truck	2 l

Consumables:

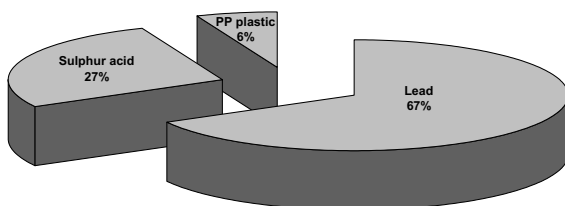
Drive wheels / life of truck	10
Support arm wheels / life of truck	3

* = Depending on load weight and application

Scrapping

The major content in the Reflex range is steel which is fully recyclable. In fact, over 91 weight % consists of steel. The batteries of the truck are taken care of by approved waste management firms and are recycled. The lead is melted down and reused, the acid is neutralized and the energy in the plastic is used for heating.

Content of truck battery, weight %



Unwanted substances in the Reflex B1-B3

Substances	g/truck
Brominated flame retardants ²⁾	1,50
Lead alloys ²⁾	0,20
Chromium (6+) compound ²⁾	0,03
TOTAL	1,73

The amount of unwanted substances included in the Reflex B1-B3 has been mapped out. The Reflex B1-B3 contains less than 2 g unwanted substances according to the specifications above.

1) "Black listed" substances

2) "Grey listed" substances

BT's "black list" — lists chemical substances which must not to be used in BT's production processes or occur in unchanged form in BT's products.

BT's "grey list" — lists chemical substances which use should be restricted in BT's production processes as well as their occurrence in unchanged form in BT's products.

The "black & grey" list was first defined by Volvo and BT has adopted this definition with the approval of Volvo.