



## Low-level order picking trucks

This type II declaration is divided into three major segments.

Manufacturing — Usage — Scrapping

### Manufacturing

All data is collected from BT's plant in Mjölby, Sweden and is calculated for the BT Opus OSE250.

Our manufacturing of trucks includes 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 tables we declare emissions and waste during our manufacturing processes.

### Emission to air

Substance	kg/truck
Carbon dioxide, CO <sub>2</sub>	62,00
Nitrogen oxides, NO <sub>x</sub>	0,081
Volatile organic compound, VOC	0,052
Sulphur dioxide, SO <sub>2</sub>	0,025
Carbon oxide, CO	0,007

### Discharge to water

Substance	kg/truck
COD	0,03
BOD	0,06
Unpolar alifat.hydrocarbons	Very small concentrations
Unpolar aromatic hydrocarbons	
Phosphorous, P	
Zinc, Zn	
Nickel, Ni	
Copper, Cu	
Chromium, Cr	
Lead, Pb	

### Waste recycled

Substance	kg/truck
Metal scrap	81,24
Wood	5,58
Other combustible mtrl	5,51
Cardboard, corrugated	4,10
Paper	0,73
Plastic	0,08

### Hazardous waste

Substance	kg/truck
Alkaline cleaning bath	1,60
Waste from waste water treatment	1,17
Electronic scrap	0,91
Batteries	0,28
Waste oil / absorbents	0,15
Paint waste	0,10
Flourescent tubes	0,02

## Usage

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

### Battery charging and consumption:

Life of truck	6000 hours
Battery size (average)	450 Ah
Operating hours/charge	2 h *
Mains power in kWh/charge	14,7 kWh
Mains elec. In kWh/ life of truck	44047 kWh

\* Depending on load weight and application

### Oil change and other lubrication:

Gear box oil / life of truck	7,0 l
Hydraulic oil / life of truck	4,8 l
Grease and lubrication/ life of truck	0,3 kg

### Consumables:

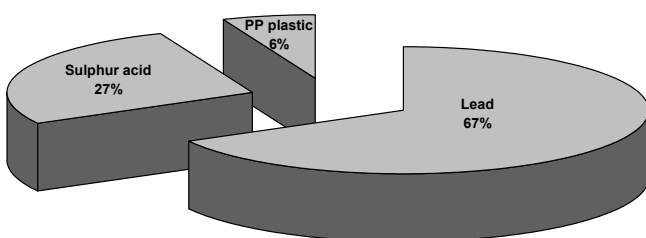
Drive wheels / life of truck	2
Support arm wheels / life of truck	4

All above are depending on application

## Scrapping

The major content in the Opus range is steel which is fully recyclable. The batteries of the truck are taken care of by approved waste management firms and are recycled. The lead (Pb, approved exemption for use in batteries) is melted down and reused, the acid is neutralized and the energy in the plastic is used for heating.

Content of truck battery, weight %



## Substances of concern in BT Opus

Substance	gr/truck
Brominated flame retardents <sup>2)</sup>	3,432
Lead alloys <sup>2)</sup>	2,860
Lead, Pb <sup>1)</sup>	0,259
Nickel <sup>2)</sup>	0,150
Chromium (6+) compound <sup>2)</sup>	0,142
Tiram (TMTD) <sup>2)</sup>	0,011
<b>TOTAL</b>	<b>6,854</b>

The amount of substances of concern (SOC) included in the BT Opus OSE250 has been mapped out. The BT Opus OSE250 contains less than 7 g of substance of concern according to the specification above.

<sup>1)</sup> 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.

<sup>2)</sup> 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.



TP - Technical Publications, Sweden — 749620-040, 0612