

Lead Battery Recycling

The importance of lead battery recycling:

For the Economy

Lead acid battery recycling represents a considerable source of lead metal. The global yearly production of lead is 6.8 million tonnes of which 3.8 million tonnes are produced through battery recycling.

Secondary lead from spent batteries is particularly interesting economically as energy savings of some 25% are made when compared to the production of primary lead. Batteries are to be found everywhere, their life span is predictable and the market for lead from recycling creates economies of scale. This is the reason why battery manufacturers depend heavily on secondary lead of which a major part comes from battery recycling.

Average weight of an automotive battery is 17kg

The 'recyclable' fractions of the battery are:

- 36% lead oxides
- 29% metallic lead
- 5% polypropylene
- 27.5% electrolyte
- **97.5% Total recyclable materials**

The non recyclable fraction being 2.5% is composed of inorganic separators

For the Environment

The above figures speak for themselves and underline the importance of recycling not only for the economy but also for the environment. An important fact to remember is that a lead acid battery dumped in the wild pollutes 1m³ of earth for over 100 years.

Dross Engineering

Dross Engineering has specialised in non-ferrous metal recycling equipment for over 40 years. After developing highly efficient techniques for secondary aluminium production, Dross Engineering now offers battery manufacturers and recycling specialists a concept that is efficient, economical and environmentally friendly for the separation, reduction and refining of metal rising from end-of-life lead acid batteries

The Process

- Electrolyte recovery
- Crushing
- Fraction separation
 - Oxides
 - Metallics
 - Polypropylene
 - Inorganic separators
- Oxide decantation
- System water treatment
- Oxide reduction
- Melting and refining
- Ingot casting