

# Battery return and recycling

The HOPPECKE smelter

"We are committed to being excellent stewards  
of the resources entrusted to us  
– people, capital, time, environment and raw materials –  
taking into account social aspects  
and promoting environmentally-friendly  
processes, technologies and products."

Extract from the HOPPECKE corporate principles, valid since 1987



## Environmental protection from the outset

For a sustainable future

---

We share the conviction that it is only by finding new, greener ways of thinking and acting that we will be able to create a sustainable future for coming generations. At HOPPECKE we are aware of our responsibility towards the environment and society. Efficient resource management has been an integral part of HOPPECKE's corporate principles for decades. We feel responsible for the careful management of the resources entrusted to us – people, the environment and resources.

The HOPPECKE return and recycling system for lead-acid batteries makes a substantial contribution towards protecting natural resources. We have been operating our own company smelter for more than 55 years, and this ultra-modern, state-of-the-art facility is continuously being expanded. Furthermore, we are actively in drawing up recycling directives and standards. However, HOPPECKE does not only set standards in relation to recycling. Sustainability starts for us at the product development stage. Our products and services also make an important contribution towards achieving climate change objectives.

We are actively helping to shape the energy policy turnaround!

- **Environmentally-friendly Product Development**

Our products are specifically developed for a long and reliable life and may also be recycled.

- **Energy-efficient Products and Service Solutions**

The goal of our products has always been to reduce energy consumption.

- **Waste Prevention and Recovery**

In our main factory in Brilon, waste materials are almost completely recycled. The primary goal of HOPPECKE is, however, the prevention of waste of all kinds from the outset.

- **Recovery and Recycling**

of used batteries in our own waste management company.

## Your partner for battery return and recycling

Closed economic and recycling loop

Nature has shown us the way - we are the only European manufacturer of industrial batteries to put a closed economic and recycling loop into practice. Pursuing this ambitious goal, however, requires more than an ultra-modern production plant. Our standards go beyond legal requirements: More than 55 years of experience as an authorised special waste disposal company enable us to achieve our objectives.

### Are you looking for a way to properly dispose of your used batteries?

You are obliged by law to entrust your used batteries to an authorised special waste disposal company and provide proof of their proper disposal and recycling. HOPPECKE Service takes care of the safe removal of your used batteries.



## Put your trust in us

We are there for you

As a battery manufacturer, we not only see it as our task to dispose of used batteries properly and recycle them, but also to focus on your individual requirements. At HOPPECKE we understand your needs and are happy to advise and actively support you during the entire product life cycle.

In the HOPPECKE smelter, the recovered metallic lead is refined, alloyed and cast into ingots, which are then fed back into the production process. In this way we ensure careful handling of a scarce raw material, nearly 100% of which is utilised in an environmentally compatible economic cycle.

## Our service offer for you

### ■ Advice

We are there to provide you with advice on the appropriate removal and temporary storage of used batteries.

### ■ Planning and Collection

We organise the collection of your used batteries directly from your premises, regardless of the manufacturer and design, and ensure that all packaging and transport regulations are observed.

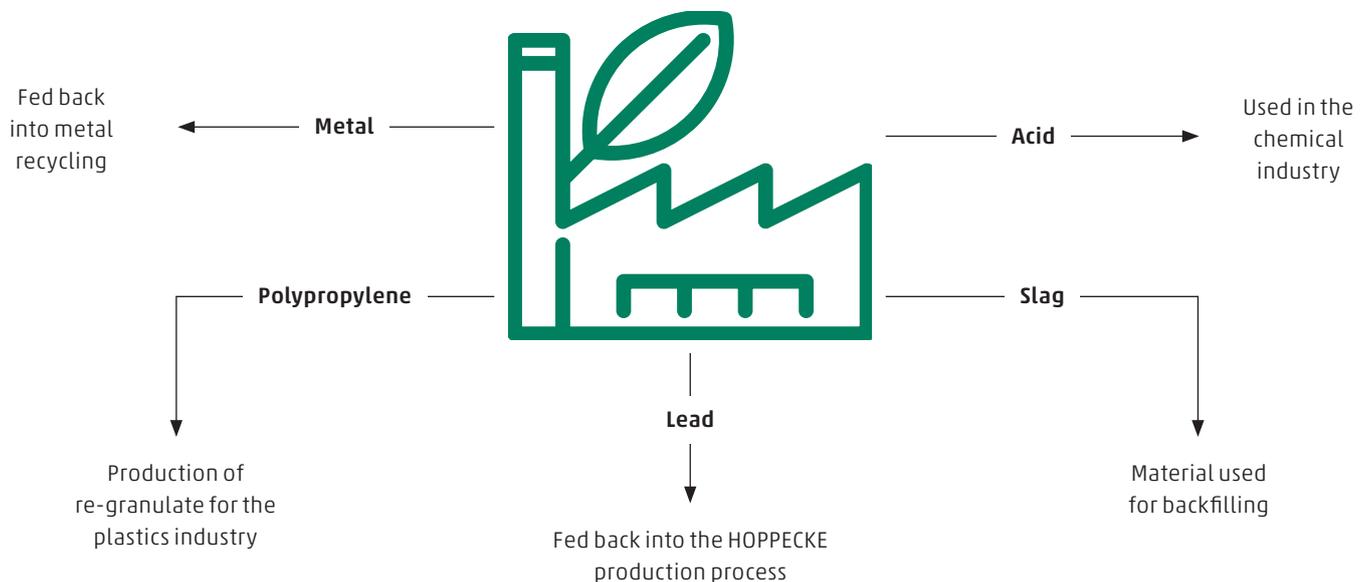
### ■ Proper Verification Procedure

You can be absolutely certain that lead batteries subject to waste disposal regulations are treated properly.

### ■ Directly on Site

We have comprehensive reverse logistics at our disposal in Germany and Europe.

## And what happens with the components?





## Certified Disposal Service

Our standards go beyond legal requirements

Working together with environment agencies and associations, we are constantly optimising our production methods. We use the latest technologies to recover lead, polypropylene and sulphuric acid.

Our smelter is an approved recycling plant for lead-acid batteries. It is an authorised special waste disposal operation under the relevant German legislation (the German Federal Emission Control Act (BIm-SchG)) and is certified in accordance with ISO – 9001/2000, ISO 14001, ISO 5001 and OHSAS 18001. The recycling efficiency levels required under German battery legislation are met in full and we even achieve a substantially higher recycling rate.

For us, environmental protection is a matter of course as well as a daily challenge to become better. We not only contribute to protecting the environment, but also strengthen Germany's position as a business location. HOPPECKE stands for sustainable energy solutions – from product development to professional disposal!

## Thinking new ways and thinking green

Examples of environmental protection measures at the HOPPECKE smelter

### ■ Waste Avoidance and Reuse

The recycling rate of the lead in batteries is nearly 100%.

### ■ Prevention of Water Pollution

Multiple circulation of the process water required for battery recycling. The excess process water is cleaned in our own waste water treatment plant using modern, multi-stage cleaning processes.

### ■ High-level Emission Protection

The HOPPECKE smelter includes a modern exhaust air plant fully equipped with a flue gas scrubber and textile dust filter system. All important emission values are continually and automatically measured and documented.



Metallhütte HOPPECKE GmbH & Co. KG  
Bontkirchener Straße 1  
D-59929 Brilon-Hoppecke  
Phone: +49 (0) 2963 61-0  
Fax: +49 (0) 2963 61-449

A HOPPECKE Group company  
Accumulatorenwerke HOPPECKE  
Carl Zoellner & Sohn GmbH

