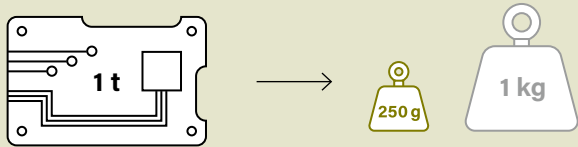
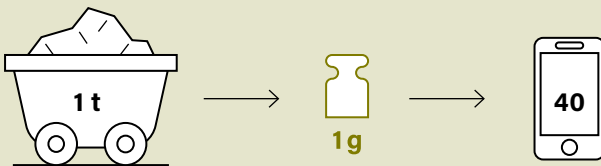


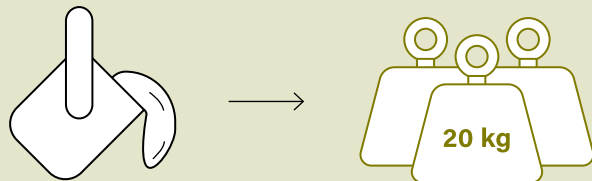
Hidden Resources



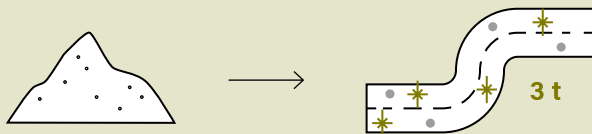
Year by year we end up with more than 40 Million tons of electronic trash, with **one ton of computer circuit boards alone containing up to 250 grams of gold and one kilogram of silver.**



The production of **40 mobile phones**, which have an average lifespan of just 2.5 years, requires around **one gram of gold**. About **one ton of gold ore needs to be mined** in order to extract the same amount of gold.



In the steel and metal industries, hundreds of millions of tons of dust, sludge or cinders containing precious metals are scrapped every year. Per ton, **metallurgic slags for example may contain up to 20 kilograms of gold as well as many other metals.**



Incinerator bottom ashes (IBA) partly serve as an asphalt ingredient for road building. In Germany, **up to 3 tons of gold** and incredible amounts of other metals **end up as road surfacing every year.**

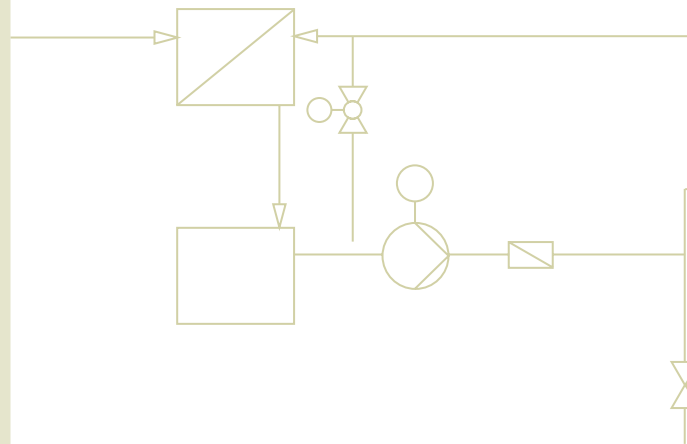
Contact

If you want to talk about possible business opportunities or find out more about the technology program please visit

www.brain-biotech.com/bioextractor

or send an Email to:
business@brain-biotech.com

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Biotechnology Research And Information Network AG

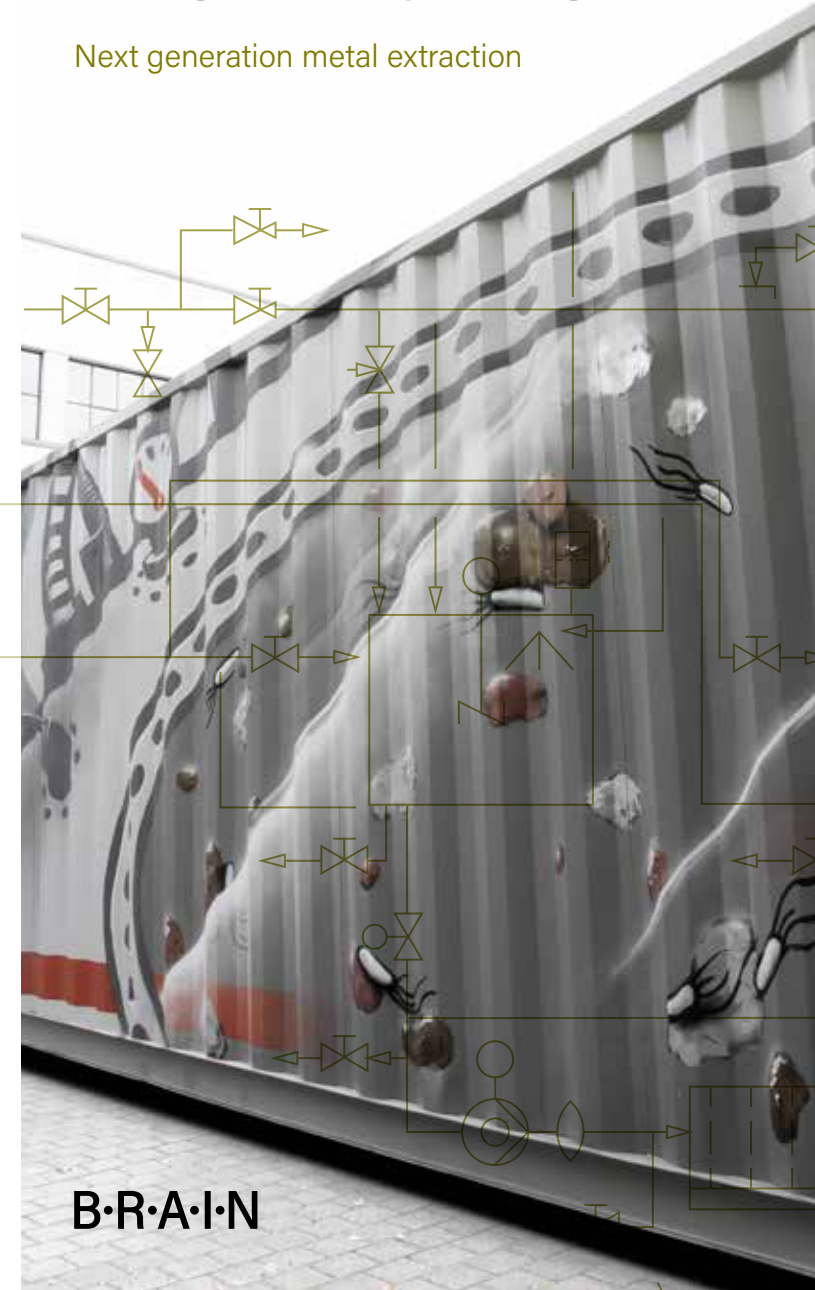
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BRAIN BioXtractor

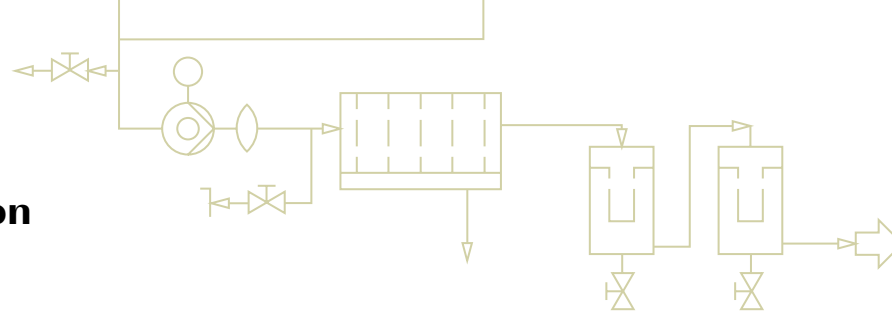
Next generation metal extraction



B·R·A·I·N

BRAIN BioXtractor

Next-generation metal extraction



Precious metals such as gold, silver, platinum or palladium are in greater demand than ever, as they are needed for many high-tech applications. However, ore yields are declining, and ore mining pollutes the environment. The recovery of used precious metals from waste, e.g. from electronic scrap, is therefore becoming increasingly important.

BRAIN AG, a German bioeconomy pioneer, has developed a biological solution for the extraction of valuable metals from secondary raw materials that is not only powerful but also mild and environmentally friendly.

The natural protagonists in this process are microorganisms — identified and optimized by us, they act on the secondary raw materials and extract precious metals with a yield of up to 100% depending on the source material and the type of metal.

BRAIN owns intellectual property rights for the bacteria and processes used and has successfully transferred the technology from laboratory to pilot scale.

The BRAIN BioXtractor

- is a mobile, fully equipped, self-contained plant on a pilot plant scale;
- contains pioneering technology for
- biobased and sustainable metal extraction;
- constitutes a powerful yet safe biological process solution for metal recovery from
- by-products, waste streams and primary resources;
- is suitable for on-site process demonstrations and can be adapted to specific plant requirements.

We're ready. Are you?

The BRAIN BioXtractor is ready for a test phase at our main site with companies

- who are interested in joint development and marketing;
- who would like to talk to us about licensing the microorganisms involved;
- who want to use the entire technology package at their production sites worldwide.

Are you interested in creating additional value from your resources — e.g. e-scrap, metal-containing filter and shredder dust, ashes, slags, process residues or catalysts — using sustainable technologies? Please contact us!

