

# UrbanGold's HENRI Smelter

## Competence in Recycling & E-waste Processing



**UrbanGold**  
recycling for a green future

- ✓ Maximum flexibility in respect to raw materials and products **BENEFIT**
- ✓ Modular and customer tailored design
- ✓ From cost-effective MiniSmelter to highly optimised and patented next-generation unit



The primary smelting furnace within the pyrometallurgical facilities, the HENRI represents the centrepiece of the UrbanGold Flex recycling technology. The pyrometallurgical treatment carried out in this unit ensures an enrichment of valuable metals in a metallic phase and a separation of organic compounds and metallic impurities. The HENRI is designed to process up to 100% of e-waste fractions and therefore must meet the following requirements:

- ✓ Managing high volumes of organics and the corresponding energy input
- ✓ Managing the input of halogens, aluminium, and heavy metals
- ✓ Effective reduction to maximize valuable metal yield
- ✓ Maximum flexibility in respect to feed material composition
- ✓ High availability and cost-effective metallurgical processing

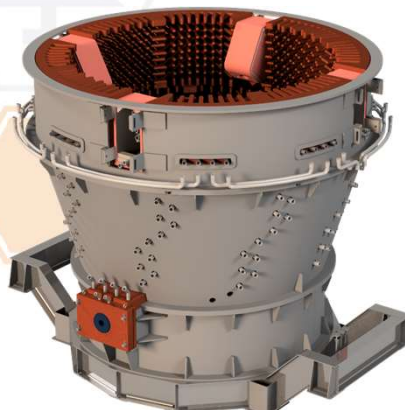
The HENRI is a highly specialized smelting furnace based on the bath smelting technology. The customisation range begins with a simplified and partly manually operated "HENRI MiniSmelter" for a few tonnes per charge and ends at an almost fully automated large-scale unit within an UrbanGold Flex plant for 100000 tonnes of raw material per year or even more.

Our services for implementing the HENRI Smelter are:

- ✓ **Project support:** We are your partner from the initial project idea – via all phases of project development and engineering – from construction, to start-up, operation, and optimisation
- ✓ **Market, feasibility, and concept studies:** We can carry out all type of studies within the feasibility and development phase to improve your business case as a basis for further project funding
- ✓ **Process engineering:** We provide detailed mass and energy balances, estimate the results of your facility operation, and prepare the basis for equipment design and infrastructure planning
- ✓ **Basic engineering:** The basic engineering is the fundamental design of the facility including auxiliary equipment; it usually provides enough information to start civil engineering and permitting procedures
- ✓ **Equipment supply:** Either as single contractor or as part of a consortium we supply your HENRI smelter
- ✓ **Knowhow transfer:** We provide training and workshops, as well as our software packages for facility operation

## SERVICES

*"... Circular economy  
– the next level ..."*



**UrbanGold GmbH**  
Peter-Tunner-Strasse 4  
8700 Leoben  
Austria  
[recycling@urbangold.at](mailto:recycling@urbangold.at)