




TECNICAS REUNIDAS

Development of a sustainable process for EAFD treatment

Project Fiche



UNIÓN EUROPEA
Fondo Europeo de
Desarrollo Regional

Call	IDI 2021
Funding institution	CDTI, Funds FEDER
Duration	2021-2023
Budget	1.1 M€
Partners	 TECNICAS REUNIDAS

PROJECT SUMMARY

The electric arc furnace dust (EAFD) produced in the steel industry is a hazardous industrial waste because it contains heavy metals (lead, chromium, cadmium, zinc, etc.), being zinc its main component. Despite this, only 50% of the EAFD produced worldwide is recycled and valorized due to the high cost of current recycling processes. Currently, untreated EAFD is simply subjected to stabilization processes and stored in hazardous waste warehouses.

The R&D project DUST, awarded to Técnicas Reunidas, funded by the Center for Industrial Technology Development (CDTI) and with a duration of 2.5 years, aims to transform EAFD treatment into new raw materials by developing a flexible and compact technology with the main objective of extracting the contained zinc. This technology will be specifically suited to small-scale EAFD volumes, where there is a clear market need that is not satisfied by current technologies.

TR CONTRIBUTION

The objectives of Técnicas Reunidas are the following:

- Develop a flexible and compact EAFD treatment process oriented to small-scale waste volumes
- Study and apply process intensification technologies to optimize recovery performance
- Validate the techno-economic viability of the process with the support of pilot tests, which will integrate all the process units in continuous regime