



## **Hybrid high-temperature heating systems for the decarbonization of the iron and steel and cement industries.**

### **PROJECT DESCRIPTION**

TUBACEX INNOVACIÓN has played a key role in the DESGAS project, focused on the development of hybrid high-temperature heating systems to decarbonize the iron and steel industry. In line with the corporate objective of reducing CO<sub>2</sub> emissions, work has been carried out on solutions to reduce natural gas consumption in our furnaces, used in the production of stainless steel.

TUBACEX INNOVACIÓN's participation in the project has included the supply of various experimental materials for testing in induction furnaces, electric resistances, and natural gas, as well as laboratory analysis of these materials before and after heat treatments. The efficiency of the different heating methods has also been assessed, and numerical modeling using FEM of the induction heating processes has been carried out, thus contributing to the technological and sustainable progress of the sector.

### **CONSORTIUM**

#### **Coordinator:**

- TECNALIA

#### **Partners:**

- UPV/EHU – Escuela de Ingeniería de Bilbao
- MONDRAGON GOI ESKOLA POLITEKNIKO
- SIDENOR INVESTIGACIÓN Y DESARROLLO S.A.
- TUBACEX INNOVACIÓN S.L.
- CLÚSTER VASCO DE FUNDICIÓN Y FORJA

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- Duration: 2023 – 2024