

PRESS RELEASE

CLOSURE OF THE PROJECT

CELEBRATING THE SUCCESS OF THE INEVITABLE PROJECT

The INEVITABLE, an ambitious EU-supported project, reached its successful conclusion at the end of March. We are proud to announce the completion of this collaborative endeavor and reflect on the remarkable achievements made possible by the dedication and expertise of our project partners.

INEVITABLE project aimed to improve the performance indicators in the steel and nonferrous metals sectors by retrofitting existing production sites by digitalization and innovative control technologies. Traditional automation and process control systems have been upgraded by applying the functionalities of Digital Factories and Industry 4.0 concepts. The developed technologies were demonstrated and validated on the three selected use cases that cover several metallurgical processes.

Throughout the duration of the project, all planned activities were meticulously executed, resulting in a wealth of exciting discoveries and tangible outcomes. We are delighted to share that the technologies developed under the INEVITABLE project have showcased significant improvements in various industrial processes, including process performance, product quality, productivity, energy efficiency, yield, and equipment reliability. These advancements were implemented in real-world production environments, demonstrating their practical applicability and generating positive results

We are particularly proud to highlight the project's role in fostering the adoption of novel approaches and expertise. The INEVITABLE project played a key role in driving innovation by enabling the industries to adopt cutting-edge solutions. Furthermore, six distinct innovations with immense potential for exploitation have been identified, promising significant contributions to the industry. An overview of most important project results is given also within the <u>final brochure</u>.

The INEVITABLE project stands as a testament to Europe's commitment to sustainability and resource efficiency. By enhancing material and energy efficiency, we actively contribute to the achievement of the region's ambitious sustainability goals. The project's findings and outcomes provide valuable insights that can be utilized beyond the scope of our initiative, benefiting industries across diverse sectors.

"The successful closure of the INEVITABLE project marks a significant milestone in our collective pursuit of technological advancements and sustainability. We are proud of the accomplishments and the long-lasting impact this collaboration will have on industries and communities"

1.4.2023

INEVITABLE PROJECT RESULTS

During the development of enabling technologies aimed at optimizing selected pilot processes, the INEVITABLE project has garnered invaluable lessons that extend beyond its immediate applications. These insights provide valuable guidance for digitalization and process retrofitting in various industries.

The project's approach revolves around three **key enabling technological areas**: (i) data collection & sensor technologies, (ii) tools for data analysis, control, and optimization, and (iii) digitalization infrastructure. By focusing on these core pillars, we have laid a solid foundation for driving innovation and efficiency across the industrial landscape.

The practical implementation of our work was successfully demonstrated through several predefined **use cases**, with our technical solutions deployed in live production environments. Our collaborative efforts with SIJ Acroni, Sidenor, voestalpine, and EIPC have yielded concrete results, validating the usefulness and impact of our developed solutions on global objectives.

The project's achievements have culminated in the identification of **six distinct innovations** with high potential for exploitation, revolutionizing various industrial processes. These innovations include: (I1) EAF refining monitor – a software tool for operator support, (I2) Cold rolling mill assistant, (I3) The advisory tool for predicting nozzle clogging and improving castability, (I4) Camerabased stirring monitoring and decision support, (I5) Vibration-based online monitoring system of stirring energy in a gas-stirred ladle, and (I6) Smart lean management system for integration in the manufacturing industry.





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