Pontenossa focuses on artificial intelligence to improve zinc recovery

Pontenossa Spa is carrying out an important technological innovation program aimed at making zinc recovery from steelmaking dust increasingly efficient. The company is investing in artificial intelligence, advanced data analysis, and new monitoring technologies to optimize the operation of its Waelz furnace.

At the heart of the project is the development of a digital model of the furnace, a sort of “digital twin” that can simulate plant behavior and predict the effects of different operating conditions. Thanks to this system, it will be possible to make faster decisions and continuously improve production performance.

The company is also developing tools capable of quickly analyzing the chemical composition of incoming dust, allowing the production process to be adjusted in real time and increasing zinc recovery. At the same time, the use of thermal cameras and advanced sensors makes it possible to constantly monitor the furnace’s condition, detecting potential issues before they can cause problems or production stoppages.

The benefits of digitalization are not limited to production. These new technologies are also being used to reduce energy consumption, improve plant maintenance, and support business management through real-time reports and dashboards.

Through these projects, Pontenossa Spa confirms its commitment to combining innovation, sustainability, and operational efficiency, further strengthening its role in the recovery and valorization of raw materials.

For more information about the technologies adopted, the project objectives, and the company’s future plans, please refer to the full article.