



DINAMINE

DIGITAL AND INNOVATIVE MINE OF THE FUTURE



dinamine-project.eu

PROJECT AIM

DINAMINE is developing a suite of digital mine management tools that support increased productivity, sustainability, and safety. The DINAMINE approach distinguishes itself from other mine management products through its holistic approach, near-real time updateability, and modularity.

The technologies are tailored to the needs of small to medium-sized mining operations and provide an attainable mine management solution to operators that currently do not benefit from advanced digital services.

The project is currently demonstrating its unique approach at two European pilot sites.

RESULTS BEYOND THE STATE OF THE ART

DINAMINE aims to set a new benchmark for emerging technologies and digitalisation in the mining industry by developing:

- a modular mine management system enabling digitalisation and automation through real-time sensor data feeds (site geology, input feed, machinery)
- geophysical exploration methods for deposits that present challenges for exploration
- improved recovery rates through more selective mining and optimisation
- improved safety using real-time monitoring
- site-specific environmental footprint

DINAMINE will support small-medium mine operators to take advantage of poor resources with low grade ores by making the mining more economically feasible, while fostering the attraction of further investments and reshaping current practices, technologies, and approaches used in mining operations. This is achieved through improved productivity of mines and more selective mining. The DINAMINE approach will therefore also make currently active mines more resilient to market fluctuations.

DINAMINE also embeds circularity and sustainability aspects of the raw materials supply chain through waste and tailings monitoring and studying their valorisation potential.

PROJECT TEAM

The project is brought forward by a multi-disciplinary consortium comprised of mining businesses and geology experts, environmental scientists, data analysts, sensor and integrated solutions experts, all crucial to digitalising and modernising the small-medium mine value chain.

Geologists and mining engineers are mapping and planning mine development. Equipment specialists are retrieving data while drilling, and automating operations to enhance safety and efficiency. Sensor experts are collecting real-time data from the mines and processing plants, which are crucial to tracking and optimising operations. The mining waste stream is being monitored, and the environmental impact is being assessed.

The project team aims to bring the DINAMINE technologies to market as new products and services to benefit the mining sector and society.



STAY IN TOUCH



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Co-funded by
the European Union

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement N° 101091541.