

OBJECTIVES

The main objective of LIFE REAMINE is to develop and validate an integrated, innovative, simple, economical, sustainable and replicable technology for the collection and recovery of NMOVC emissions from the cold-box coremaking process for European foundries.

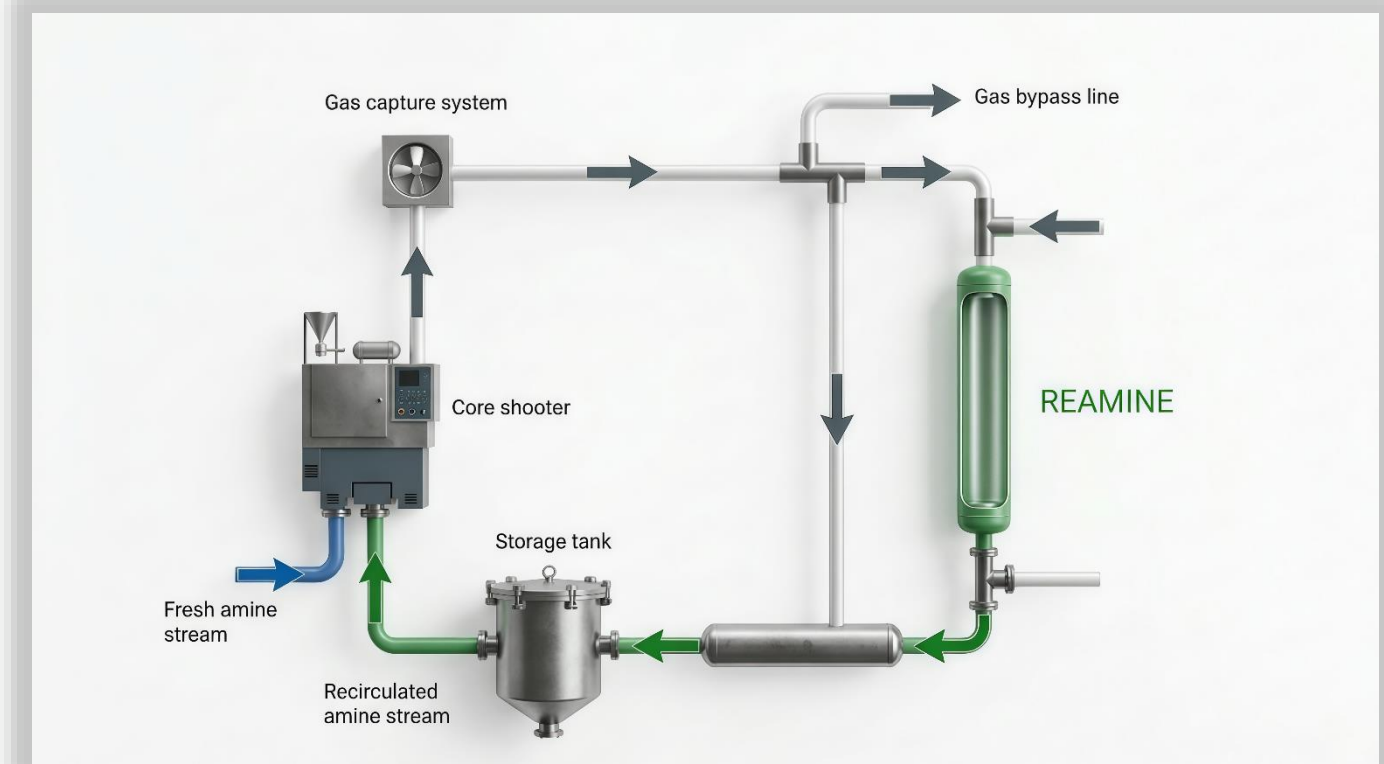
Its goal is to provide validated, replicable solutions that can be adopted across Europe.

Key Performance Indicators

> 90%
RECOVERY RATE

> 95%
PURITY

100%
REUSABILITY



Scheme of the REAMINE Solution to be developed to recover amines in liquid state

ACTIONS

- Design and construct REAMINE prototype.
- **Demonstrate** the technical, environmental and economic feasibility of the REAMINE integrated concept.
- **Monitor and evaluate** the impact of the technology at an industrial scale and in different configuration.
- **Pilot implementation** under real production conditions in foundry.
- **Disseminate and communicate** the results to users, customers, regional stakeholders, and the general public.

EXPECTED RESULTS

- Reduction of amine emissions into the air, 9,000 kg/yr.
- Obtain high quality of secondary amine, with >95% of purity
- Increased the reuse of foundry materials.
- Enhance the quality of the working environment and protect the health of 400 employees
- Lower environmental impact of ferrous foundry; 40.5 tCO₂/yr. avoided.

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HYBRID TECHNOLOGY

The REAMINE solution consists of a hybrid system that integrates adsorption and membrane technologies, creating an energy-efficient treatment system.

An average foundry emits more than 10,000 kg of amines per year. For this reason, reducing amine emissions and promoting their reuse within the process is a key and innovative objective in the development of more sustainable foundry industries. The new Smitheries and Foundries BREF, sets an emission limit eight times lower than the previous standard (2.5 mg/Nm³).



CONSORTIUM

Coordinator



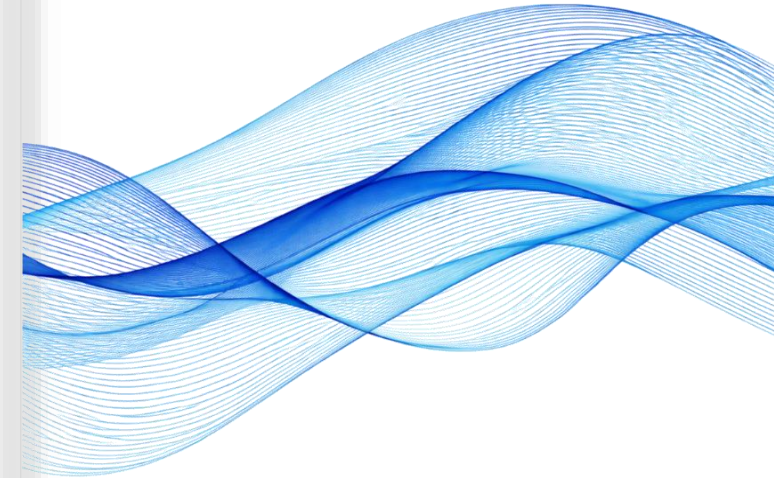
Partners



Visit our website:

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REAMINE



**Sustainable solutions for
NMVOC emission reduction in
foundries through advanced
amine recovery**

Duration

06/2025-05/2029



**Co-funded by
the European Union**

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