



# ENGINE

ZERO-DEFECT MANUFACTURING FOR  
GREEN TRANSITION IN EUROPE

## **ENGINE - Zero-defect manufacturing for green transition in Europe**

### **PRESS RELEASE**

The overall goal of the ENGINE project is to reduce the environmental impact and improve competitiveness of metal product manufacturers by developing a novel metal product design and manufacturing system, which integrates life-cycle analysis and business decisions, reduces defects, waste, and shrinks product time-to-market.

The project will develop a first-time-right and zero-defect metal product design and manufacturing system, which will be applied on marine engine supply chain. More specifically, ENGINE will:

1. Create and demonstrate a novel metal product design and manufacturing system
2. Develop computational modelling toolbox for product and process design, non-destructive diagnostic tools for production monitoring, and data solution for seamless integration of the whole supply-chain
3. Research methodologies for first-time-right and zero-defect manufacturing
4. Investigate life-cycle analysis and life-cycle cost methods for design and business decisions
5. Present strategy for employee skills development
6. Transform innovations into promising business cases

The ENGINE system will be supported by digital technologies by creating product and process design software with workflow demonstrators and implementation workshops, developing automated production monitoring methods with AI-based defect recognition tool to enable rapid feedback, implementing industrial data-management and data-sharing between manufacturing sites.



Co-funded by  
the European Union

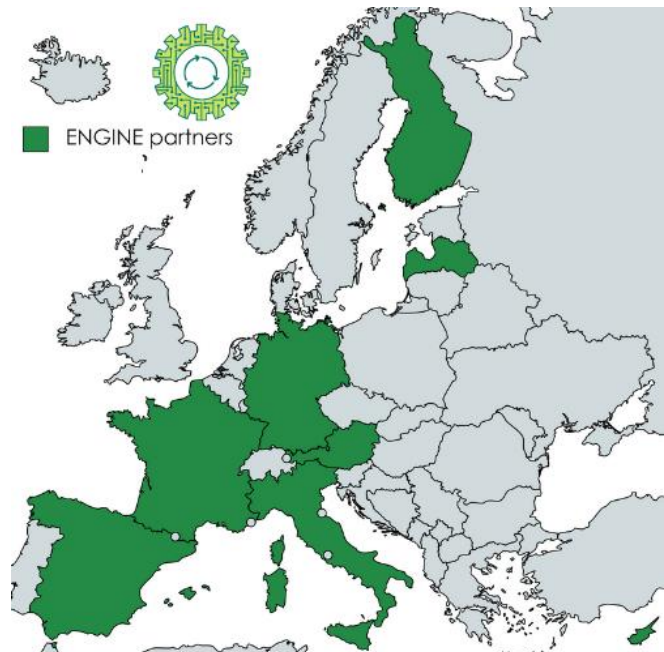


# ENGINE

ZERO-DEFECT MANUFACTURING FOR  
GREEN TRANSITION IN EUROPE

The main impact that ENGINE aspires to achieve is to increase the global competitiveness and reduce the environmental impact of European-made metal products by creating a novel, digital, zero-defect way of manufacturing.

The ENGINE consortium is an interdisciplinary and intersectoral team of professionals including research organisations, technology providers, manufacturing companies, standardization specialists and experts for skill development, communication, dissemination and exploitation.



ENGINE project started on 1<sup>st</sup> of June 2022 with a duration of 36 months.



Co-funded by  
the European Union