

PRESS RELEASE

CONVERGING pilots bring AI-enabled manufacturing solutions closer to industrial practice

As the Horizon Europe CONVERGING project approaches the completion of its 48-month journey, its four industrial pilots demonstrate how robotics, AI, data and digital technologies can respond to real manufacturing challenges.

Across automotive, aeronautics, white goods and additive manufacturing, CONVERGING has developed and validated smart and reconfigurable production solutions designed to support safer, more flexible and human-centric industrial environments.

In the **automotive pilot**, technologies for 3D scanning, automated trajectory planning and force-controlled robotic polishing have been deployed at Ford's facilities in Valencia.

The **aeronautics pilot** explores robot-assisted aircraft fuel-tank inspection and maintenance, including autonomous navigation, visual inspection, Foreign Object Debris removal and three-dimensional mapping in confined environments.

Within the **white goods pilot**, human-robot collaboration supports complex assembly tasks, combining robotic automation with human supervision, fine manipulation and decision-making.

The **additive manufacturing pilot** investigates collaborative robotic post-processing, automated handling and AI-based production planning for complex manufactured components.

 [CONVERGING Social Media](#)
 converging@lms.mech.upatras.gr



Co-funded by
the European Union

CONVERGING project is co-funded by the European Union, Research & Innovation Programme, under Grant N° 101058521.



Connecting these applications is a wider digital architecture integrating technologies such as real-time data pipelines, AI-enabled shopfloor orchestration and digital twins, supporting coordination between people, robots and manufacturing systems.

Together, the four pilots demonstrate CONVERGING's transition from technology development towards validation in industrially relevant environments, showing how intelligent automation can be adapted to different production needs while keeping people at the centre of manufacturing.



Co-funded by
the European Union

CONVERGING project is co-funded by the European Union, Research & Innovation Programme, under Grant N° 101058521.