INOCO4E

Intelligent Motion Control under Industry4.E

Concept & Objective

IMOCO4.E mission is to provide distributed edge-to-cloud motion control intelligence for a wide range of Human-in-the-Loop Cyber-Physical Systems involving actively controlled moving elements.

IMOCO4.E will deliver a reference **platform consisting of AI and digital twin toolchains** and a set of mating building blocks for resilient manufacturing applications. The optimal energy efficient performance and easy configurability, traceability and cyberPilot 1: 3D printing

Pilot 2:

Semiconductor

production

Pilot 5: Mining

security are crucial.

The **IMOCO4.E platform's benefits** will be directly verified in applications for **semiconductor**, **packaging**, **industrial robotics and healthcare**. Additionally, the project will demonstrate the results in other generic "motion-control-centred" domains affecting the entire value chain of the production automation and application markets.

Our Mission

IMOCO4.E improves Industry 4.0 manufacturing productivity by:

Combining and exploiting novel sensory information, model-based approaches and Industrial IoT philosophies to make mechatronic systems smarter, more configurable, more reliable and faster while simultaneously pushing their performance toward physical limits
 Assessing the demands placed on future smart manufacturing in Europe from a mechatronics and service-oriented point of view
 Establishing joint action of Industry 4.E and other relevant Lighthouse projects towards the identification and development of best practices and methods enhancing the European R&D ecosystem



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FINLAND

Acronym: IMOCO4.E Full name: Intelligent Motion Control under Industry4.E Coordinator: Sioux Technologies B.V. GA No.: 101007311 - H2020-ECSEL-2020-RIA Start date: 1st September 2021 Duration: 36 months Consortium: 45 Partners from 13 countries



ECSEL Joint Undertaking

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