



MADE IN EUROPE 2026

ONLINE PITCHING



LET'S SHAPE THE FUTURE OF
MANUFACTURING TOGETHER!

23 June 2026

INTRODUCTION TO PITCHER'S ORGANISATION



The main technology centre in Catalonia and one of the largest private research organisations in southern Europe.



>100

European-funded projects (2021-2026)

16

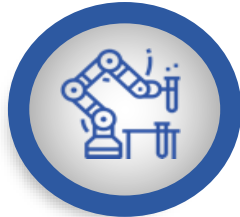
Coordinated Horizon Europe projects (2021-2026)



INTRODUCTION TO PITCHER'S ORGANISATION



Interdisciplinary integration



Industrial Area

- 1. Advanced materials and new manufacturing processes
- 2. Functional printing and embedded devices
- 3. Collaborative and cognitive robotics
- 4. Functional textiles
- 5. Chemicals
- 6. Modelling and multiphysics simulation
- 7. Product innovation



Digital Area

- 1. Sensor systems and IoT
- 2. Quantum computing
- 3. Data science and analytics
- 4. Artificial intelligence
- 5. Cybersecurity
- 6. Multimedia technologies
- 7. Digital Health



Biotechnology Area

- 1. Nutrition and health
- 2. Omic sciences



Sustainability Area

- 1. Water
- 2. Soil
- 3. Air
- 4. Energy
- 5. Waste
- 6. Environmental impact
- 7. Batteries
- 8. Climate change



Our standout value:

Our interdisciplinary capabilities enable us to address complex challenges.

INTRODUCTION TO PITCHER'S ORGANISATION



Applied research, technological development and innovation with market impact



Quite a challenge! ...
which opens up great opportunities





Made in Europe topics

HORIZON-CL4-2027-01-MAT-PROD-02: Advanced manufacturing for key products



Printed electronics technical unit

- Composite parts manufacturing
- Functional printing
- Electronic custom design
- Mold design and manufacturing
- Mechanical testing, NDT, Physico-chemical-electrical characterization

Pilot Plant



We have ideas for the topic and we're open to coordinate a project and also to team up with existing consortia with these capacities.

PCB/ electronics manufacturer

Vitrimer/Inks suppliers

Lamination-prepreg and multilayer partners

SMD/FlexIC/bonding experts

IN-Line inspectors/control providers

End-users

HORIZON-CL4-2027-01-MAT-PROD-02: Advanced manufacturing for key products



Artificial Intelligence Unit (AAI)

Cross-cutting technologies

- surrogate models
- reinforcement learning
- digital twins
- autonomous optimisation
- process adaptation



Robotics unit

- embodied AI manufacturing cells
- hybrid manufacturing
- precision joining
- surface treatment
- lightweight handling
- in-line testing
- adaptive manufacturing



HORIZON-CL4-2027-01-MAT-PROD-02: Advanced manufacturing for key products



Advanced Manufacturing Systems (AMS) technical units

Digital Manufacturing:

1. High-Efficiency Polymer Hybrid Platform (LFAM (Large Format Additive Manufacturing) + CNC)
2. Lightweight Metallic Forming & Reinforcement Cell (ISF (Incremental Sheet Forming) + DED (Direct Energy Deposition))
3. Transversal Reinforcement & Functionalization Platform (Structural Fiber Impregnation Processes))
4. Hybrid Multi-Process Platform for Structural 3D Electronics Integrated (3DP + CNC + DIW (Direct-Ink-Write) + P&P (Pick&Place))
5. Low-Cost Desktop ISF System for Personalized Biocompatible Implants (ISF (Incremental Sheet Forming))

Photonics & Vision:

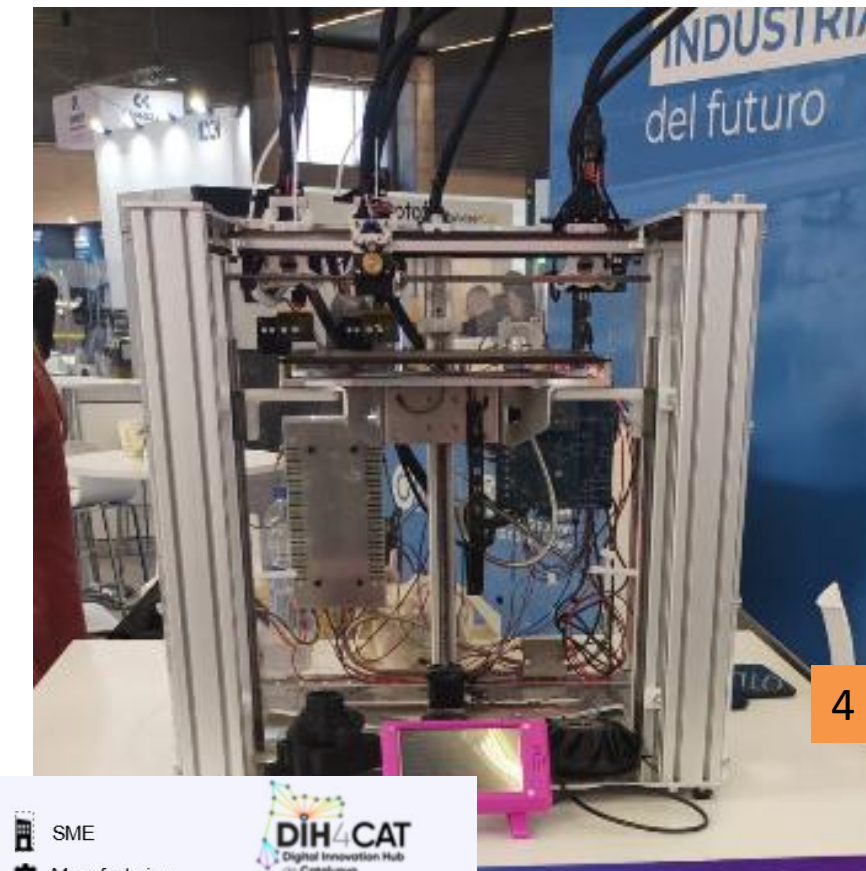
1. Photonics-enabled AI control for advanced manufacturing of industrial components (PHOTO MANUFACTURING-AI)
2. Visible-SWIR multispectral inspection and AI-based digital twin control for advanced Manufacturing (SWIR-FACTORY)
3. Photonics-enabled AI control for advanced manufacturing of high-value industrial components (PHOTO MANUFACTURING-AI)

Prototype development:

1. Advanced monitoring and retrofitting for composite tape manufacturing.
2. Filament winding system for advanced composite manufacturing.
3. Data analysis system for intelligent tools (DASIT) in plastic injection molding

Patented Technology – ARACNE (spinoff):

1. Photonics, advanced vision and AI applied to textile manufacturing with zero defects.



HORIZON-CL4-2027-01-MAT-PROD-03: Factory processes and automation for de- and re-manufacturing



Mobes technical unit

- De- and re-manufacturing methodologies applied to Li-ion batteries.
- Automated multi-criteria tool for decision-making after end of 1st Life:
 - Interoperability with DPP (Digital Product Passport).
 - Fast diagnosis through Digital Twins for EoL (end of Life) batteries and subcomponents.
 - Integrated module for safety and reliability validation at component and system level to enhance efficiency and test optimization.
 - Technologies for battery re-manufacturing up to Module and Cell Level.
 - Methodology for RUL (remaining useful life) evaluation for re-manufacturing applications.



HORIZON-CL4-2027-01-MAT-PROD-03: Factory processes and automation for de- and re-manufacturing



Advanced Manufacturing Systems (AMS) technical unit

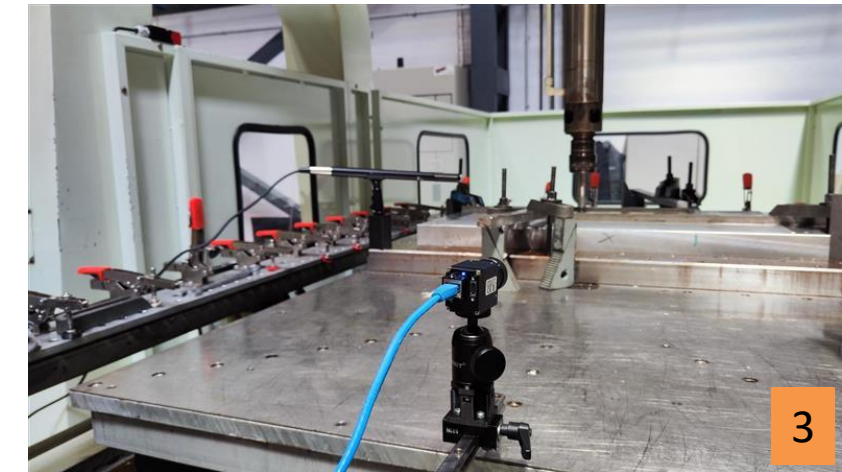
Digital Manufacturing :

1. Adaptive ISF (Incremental Sheet Forming) + DED (Direct Energy Deposition) Robotic Cell for Automotive and Consumer Goods Remanufacturing.



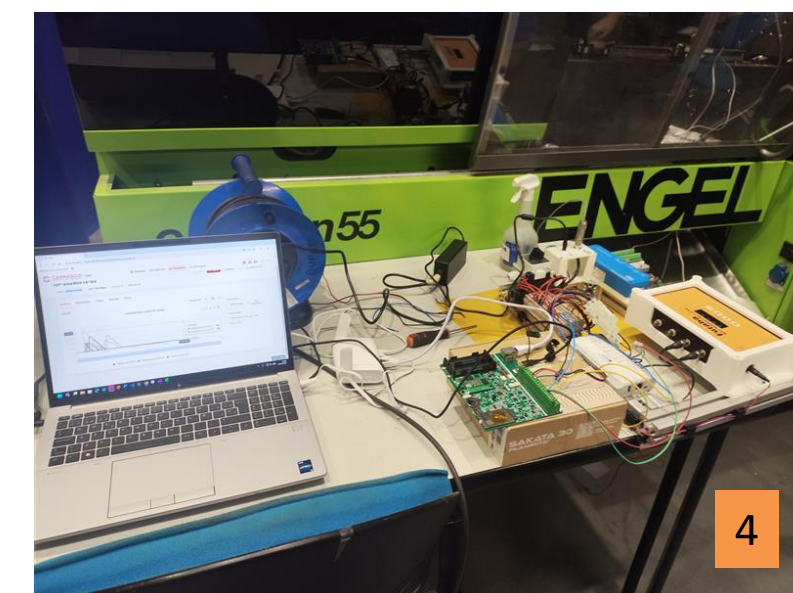
Photonics & Vision:

1. Multimodal photonic inspection, AI decision-making and digital twin control for automated de- and re-manufacturing of high-value industrial components (REMANU-SENSE)
2. Automated inspection, repair and remanufacturing of high-value aerospace, wind energy and maritime components (CIRCULAR-AERO/WIND)
3. Robotic de-manufacturing, AI-based sorting and digital twin planning for circular industrial products



Prototype development:

1. Automated disassembly of Anode and Cathode in lithium-ion pouch cells
2. Real-time monitoring and data acquisition in circular knitting machines
3. Multisensor monitoring and AI-Driven prediction in ISF (ECOSAI platform + ISF (Incremental Sheet Forming))
4. Data analysis system for intelligent tools (DASIT) in plastic injection molding

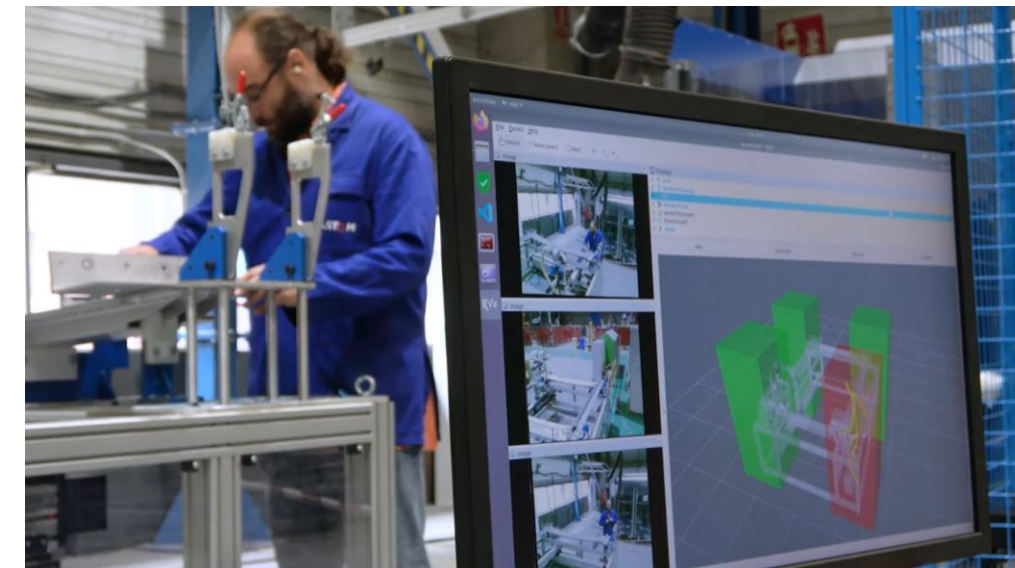
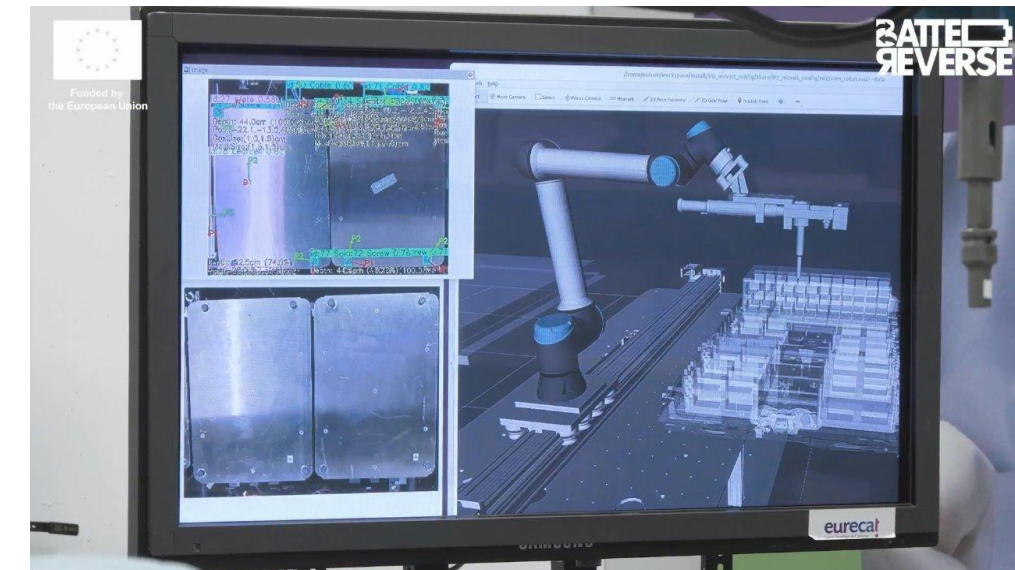


HORIZON-CL4-2027-01-MAT-PROD-03: Factory processes and automation for de- and re-manufacturing



Robotics technical unit

- AI- and robotic-assisted factory cells for de-manufacturing and remanufacturing.
- Automated diagnosis, disassembly, sorting, repair, component recovery and reassembly.
- Multimodal sensing (vision, tactile, force and acoustic) for condition assessment.
- AI-supported predictive maintenance and decision-making.
- Adaptive process planning based on actual product condition.
- Human-Robot Collaboration (HRC) with explainable and safe operation.
- Digital twins connecting condition data, process traces and quality outcomes.
- Rapid robot skill acquisition from demonstrations and teleoperation.
- Support for local repair and remanufacturing of high-value components.



FREE4LIB

share
work

GRAIL

HORIZON-CL4-2027-01-MAT-PROD-06: Circular innovative advanced materials: facilitating the transition from design to markets (RIA)



Polymeric and Composites Processes (PCP) technical unit.

- Integration of sensors in Fiber Reinforced Polymer (FRP) reinforcement for structural health monitoring (SHM) and Predictive Maintenance
- Manufacturing of pultruded FRP profiles (thermoset, vitrimer)
- Recyclable, self-healing and bonding/debonding capabilities of the manufactured composite materials.
- Mechanical and thermal characterization



Open to coordinate a consortia. Partners needed:

Research & Technology Organisations / Universities

- Development of “new innovative advanced materials (IAMs)”

Industrial Material Producers (SMEs and Large Industry)

- Process development, scale-up and validation

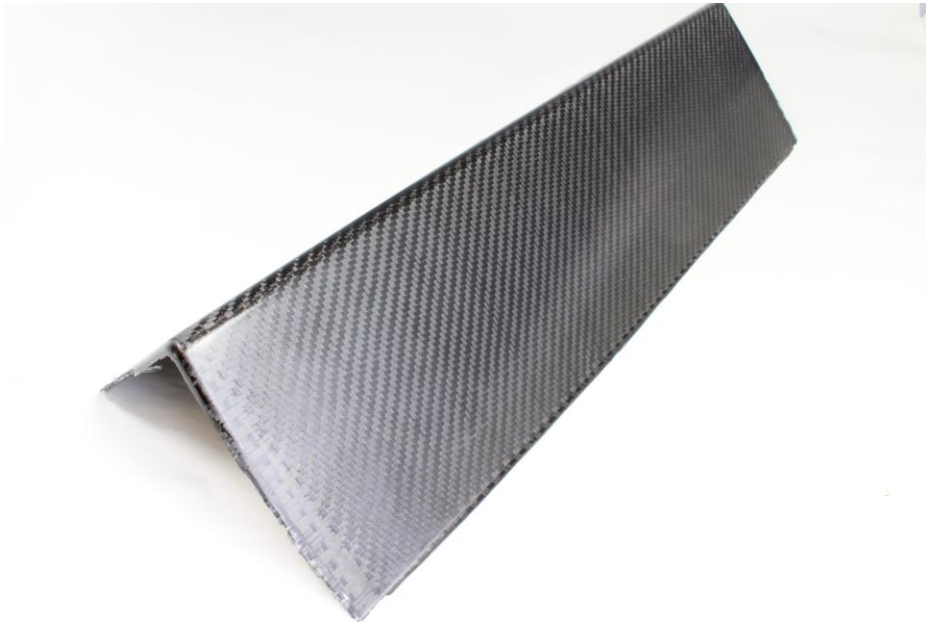
End-User Industries

- Industrial use cases and demonstrators

Recycling / Recovery / Circular Economy Actors

- “Scalable recovery, recycling and valorisation at end of life”

Business & Market Actors



THANK YOU

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Interest in other topics from CL2, CL3, CL4, CL5, CL6, Missions and EIC.

Let's team up!