



MADE IN EUROPE 2026

ONLINE PITCHING

Presenter: Qian Xu, Roboris Srl, EU Funding Manager

23 June 2026

INTRODUCTION TO ROBROIS

- Founded in 2001 in Pisa, Italy by Mirko Sgarbi and Gianluca Bioli, who remain full-time owners and lead R&D operations.
- Specialized expertise in virtual machining and digital twins for CNC machines and robots, unified into our flagship product: **Eureka Virtual Machining**, offering advanced simulation, digital twin, and optimization tools for CNC machines and industrial robots.
- Core competency in transforming complex manufacturing processes into reliable digital twins, enabling simulation, verification, and optimization before production. We de-risk prototypes, reduces setup/waste, and accelerates exploitation.
- In-house development of all software solutions, enabling deep customization and integration at every level.



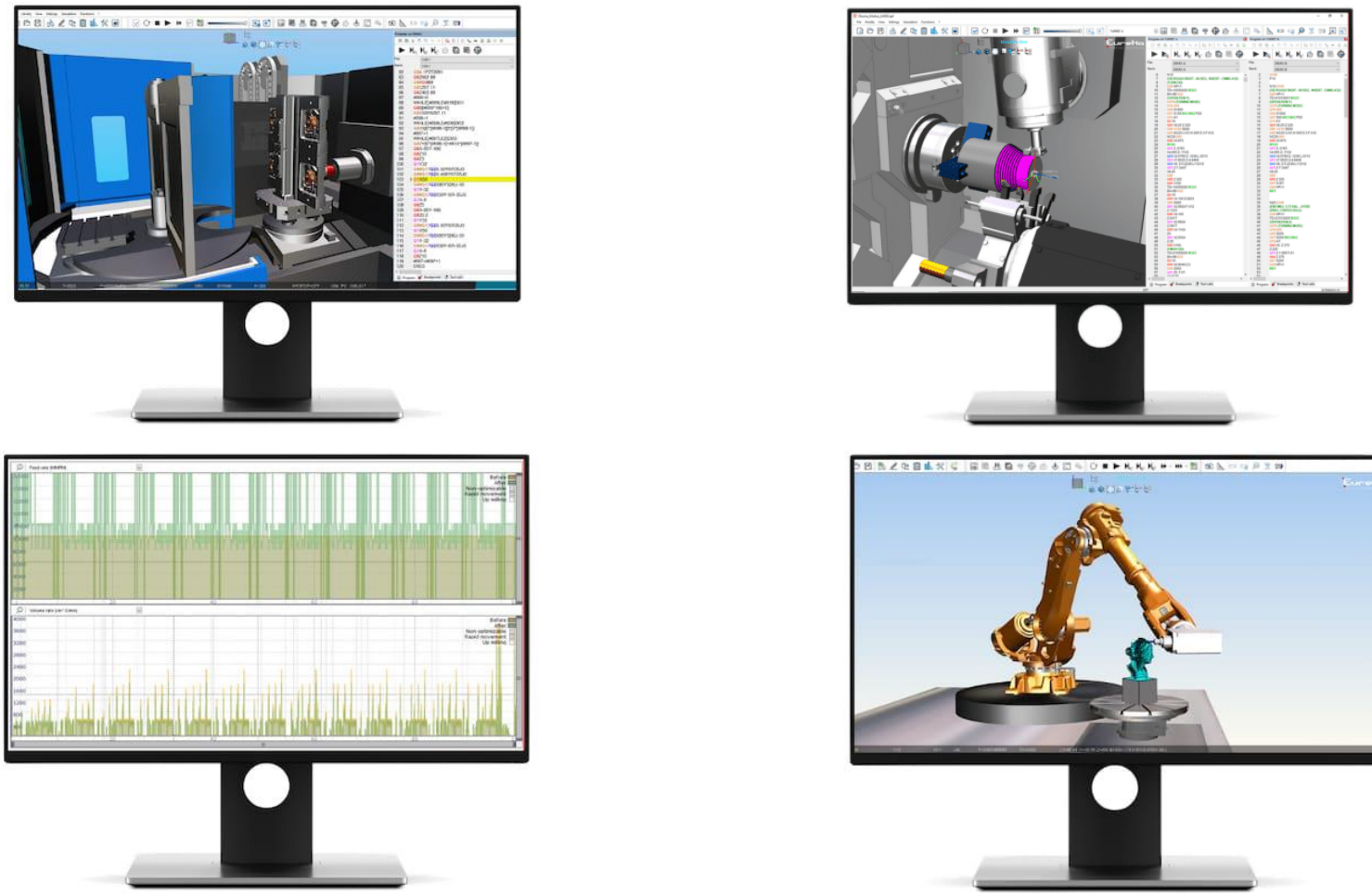
Simulation software
for CNC machines
and robots



OUR SOFTWARES



All Roboris software is designed and developed internally, allowing for in-depth customization at any level.



Roboris Software	Functionality
Eureka G-code	It simulates real NC/G-code on a digital replica of the CNC machines with full machine accuracy, preventing collisions, reducing set-up time.
Eureka NC Coder	It allows programming and simulation of Swiss-type and multi-channel mill-turn machines. It includes a built-in post-processor which transforms CAM toolpaths into machine-specific G-code, handles channel synchronization, and verifies code with a digital twin, facilitating Single Channel CAM to Program & Simulate.
Eureka Chronos	It focuses on optimizing G-code programs generated by CAM software (it optimizes the cutting conditions of the tools by modulating the feed rate), aiming to reduce machining time (10-15%) and extend tool life (2x).
Eureka Robot	It converts APT code generated by a CAM system into a program for a 6 or more axes robot cell using a dedicated post-processing module for milling, deburring, gluing, washing up to additive manufacturing application. Designed for all the industrial robots in the market: ABB, Kuka, Fanuc, Motoman, Kawasaki, Staubli, Comau.

The CAM-to-Eureka Interface tightly integrates the two software. The tools, fixtures, design models and stock material created in CAM system are seamlessly transferred into Eureka.

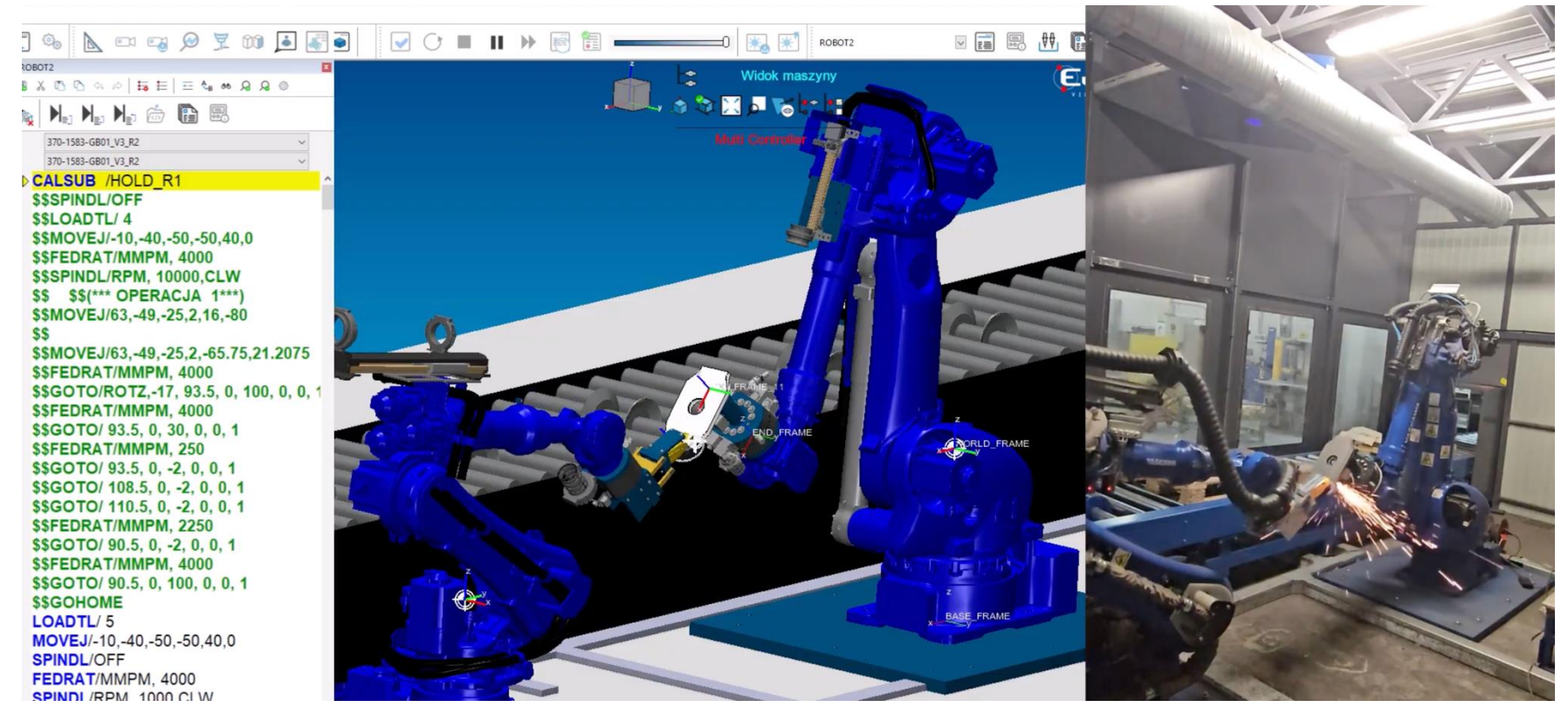
OUR USERS

Proven Industrial Applications and extensive client networks demonstrating robust adoption and market relevance for advanced research initiatives.



Trusted by multinationals across diverse sectors :

- Automotive
- Aerospace & Defense
- Hydraulics and valve component
- Precision mold manufacturing
- Packaging and large-part machining
- Swiss-type CNC machining



HORIZON-CL4-2027-01-MAT-PROD-02: Advanced manufacturing for key products (IA) (Made in Europe partnership) 1/2



Call dimensions	Requirement
Core objectives	<ul style="list-style-type: none">▪ Develop advanced manufacturing technologies and/or machinery.▪ Target the manufacturing of key, strategic, high-performance products or components that Europe risks losing.▪ Reuse secondary raw materials and reduce dependency on critical raw materials (CRMs) and imported materials from outside Europe.▪ New manufacturing capacity on the ground in Europe with working technology at TRL 7.
Examples of tech scope	<ul style="list-style-type: none">▪ Innovative additive manufacturing;▪ Hybrid manufacturing (additive, subtractive);▪ Photonics;▪ Advanced joining technologies;▪ Polymer composite manufacturing;▪ Advanced technologies for surface treatment and structuring, to tailor surface properties for specific applications;▪ Manufacturing of components with lightweight materials;▪ In-line testing.

HORIZON-CL4-2027-01-MAT-PROD-02: Advanced manufacturing for key products (IA) (Made in Europe partnership) 2/2



Core requirement	Roboris contribution as a tech (software) partner
<p>Advanced manufacturing technologies and/or machinery</p>	<ul style="list-style-type: none"> Hybrid manufacturing simulation, CNC/robot programming, virtual process validation; We program and test CNC machines and robots entirely in a virtual world, catching costly mistakes before a single physical button is pushed.
<p>Manufacturing of strategic, high-performance products/components</p>	<ul style="list-style-type: none"> Manufacturing orchestration and process verification across industrial applications; Whether building a lightweight aerospace component or a high-stress automotive part, we are able to coordinate every machine step to make sure the final product is flawless and verified.
<p>Reuse secondary raw materials & reduce CRM dependency</p>	<ul style="list-style-type: none"> Delivers precise material removal simulation and cutting condition optimization. Working with recycled metals or plastics is tough because the material is unpredictable. Our software simulates exact cutting paths to prevent over-machining. This saves energy, protects tools, and cuts down on expensive scrap material.
<p>In-line testing</p>	<ul style="list-style-type: none"> Integration of digital twin with in-line sensors and machine data to enable process monitoring, anomaly detection, virtual verification and closed-loop manufacturing control
<p>TRL 5 to TRL 7 Advancement</p>	<ul style="list-style-type: none"> Virtual commissioning, machine verification, accelerated industrial piloting We use virtual commissioning to test the entire process digitally, cutting down months of manual troubleshooting and safely launching your real-world industrial pilot.

OTHER CALLS:

HORIZON-CL4-2027-01-MAT-PROD-03

HORIZON-CL4-2027-01-MAT-PROD-06



Call ID	Core Objective	Roboris Contribution
HORIZON-CL4-2027-01-MAT-PROD-03: Factory processes and automation for de- and re-manufacturing (RIA)	<ul style="list-style-type: none">• Creating industrial factory processes and automation that enable products/components to be disassembled, recovered, repaired, refurbished, remanufactured, and put back into use at industrial scale.	<ul style="list-style-type: none">• Provide the underlying digital twin and collision-avoidance software to automate the delicate physical de/re-manufacturing processes. Simulate and orchestrate robotic de-manufacturing cells and multi-step process execution (robotic movements, toolpaths, and material removal/deposition);• Offline robot programming, collision-free robot execution, robotic path planning;• Digital twin for re-manufacturing: CNC/robot process programming for repair, re-machining and finishing• In-line testing and process verification.
HORIZON-CL4-2027-02-DIGITAL-EMERGING-52-two-stage: New approaches for Human/AI collaboration for the workforce of the future (Made in Europe and ADRA)	<ul style="list-style-type: none">• Designing and validating how humans and AI systems work together in industrial environments to improve productivity, adaptability, safety, knowledge transfer, and worker empowerment.	<ul style="list-style-type: none">• Roboris already develops AI-driven solutions like Eureka Chronos (AI-based G-code optimization) and modular virtual prototyping environments;• We can act as the software tech partner that translates complex AI-generated robotic pathing choices into a safe, visual, and interactive simulation tool for the human workforce.

KEY CAPABILITIES AND HORIZON EUROPE FIT



Roboris Role as a Technology Partner (SME)

<p>Digital Twins for CNC Machines</p>	<ul style="list-style-type: none"> ▪ Digital replicas capable of interpreting native CNC programming languages, simulating full machine behavior, and validating setups, machining programs, or new strategies.
<p>Subtractive and Additive Process Simulation</p>	<ul style="list-style-type: none"> ▪ Simulating both subtractive and additive manufacturing processes, enabling precise material removal analysis, verification of cutting conditions, and optimization of machining parameters.
<p>Robot Simulation and Offline Programming</p>	<ul style="list-style-type: none"> ▪ 20+ years of experience in robot simulation and offline programming for machining applications, supporting the creation of multi-axis robot cells for milling, cutting, deburring, gluing, coating, washing, and additive processes.
<p>AI-Driven Optimization and Efficiency</p>	<ul style="list-style-type: none"> ▪ Advanced capabilities in AI-driven tool path optimization, G-code analysis, cycle time reduction, and energy/resource-efficient machining operations.
<p>Modular & Easy-to-Integrate Architecture</p>	<ul style="list-style-type: none"> ▪ Modular and integrable systems easily connect to wider digital factory and industrial automation infrastructures.
<p>Proven Industrial Applications and Client Networks (end-user access)</p>	<ul style="list-style-type: none"> ▪ Extensive client base across automotive, aerospace, machinery, and general manufacturing sectors, enabling us to introduce relevant end users and demonstrate robust industrial adoption and market relevance.

THANK YOU

Contact: Qian Xu

Email: qian.xu@roboris.com

Tel: +32 470 26 57 10

Via Sterpulino 1G – 56121 Ospedaletto (Pisa) – Italy

Website: www.roboris.it

