MAGICIAN – AUTONOMOUS DEFECTS DETECTION AND REPAIR IN MANUFACTURING

Are you a European start-up or SME?

Are you ready to digitalize your products, get into new markets and expand your market-share?

MAGICIAN can support your development of smart products!

Open call for Application Use Case (AUC): MAGICIAN offers grants of up to **€200k** as well as technical support for the development of smart applications in new promising sectors.

IF YOU ARE:

- ✓ Developing innovative robotic or automation solutions in manufacturing environments.
- ✓ Enhancing production process efficiency by integrating advanced technologies like AI, robotics, and sensor systems to address quality control
- ✓ Interested in using premium resources and competencies to speed up solutions development.
- ✓ Wishing to access a unique european ecosystem composed of leading industrial companies, world-class research organizations, innovation accelerators.

MAGICIAN OFFERS YOU:

- ✓ the opportunities and resources to develop an innovative application/software in domains of advanced robotics, AI-driven defect detection, tactile sensing technologies, vision-based defect detection systems and human-robot collaboration.
- ✓ Access to advanced industrial platforms for defect detection and rework automation, leveraging cutting-edge robotics, AI, and sensor integration technologies.
- ✓ Up to € 200k in funding – representing 70% of your project's declared

budget in case you are a SME and 100% in case you are a Startups.

- ✓ Added value to your product, through high-level technical expertise pooled from research centres across Europe.
- ✓ Support for visibility and networking by providing targeted information to multiple audiences.

Proposals must be submitted by startups or SMEs in Europe, and based in EU member states or countries associated with Horizon Europe, as described in Annex B of the 2021-2022 Work Programme General Annexes.[1]

If you have a promising innovative idea, we will help you to integrate it within the MAGICIAN ecosystem in tight collaboration with MAGICIAN partners **– do not miss this opportunity and apply to the open call to realize your innovative solution!**

Visit Open calls | MAGICIAN and contact the info mail OpenCall@magician-project.eu for promptly assistance you in proposal development.

Call deadline: 2ndMarch 2026, 5:00pm (Brussels Time)
Notification to Applicants: 30th April 2026
Call identifier: MAGICIAN02 Call(OC2_AUC2)
Proposal language: English
Open calls | MAGICIAN (full call text/proposal guidelines/standard agreement):
For further information please contact: OpenCall@magician-project.eu

Important MAGICIAN process guidance, rules, offered technologies and platforms can be found at Resources & Findings | MAGICIAN in our Guide for Applicants document (see section 3.)

2nd Open Call SCOPE:

The Second Open Call of the MAGICIAN project seeks to apply and validate MAGICIAN's capabilities across new use cases, working closely with project

[1] https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes_horizon-2021-2022_en.pdf

partners. The call will fund five projects that extend and demonstrate MAGICIAN's capabilities adaptability in new real-time production environments beyond the automotive sector. **This open call is open to proposals that aim to extend magician's capabilities, limited to the following fields:**

• ***AEROSPACE***	• ***MARITIME & SHIPBUILDING***
• ***ELECTRONICS***	• ***PUBLIC TRANSPORTS***
• ***HEAVY INDUSTRY & ENERGY***	• ***INTERMEDIATE COMPONENTS BASED ON GLASS, PLASTIC, TEXTILE***
• ***INTERIOR DESIGN COMPONENTS***	• ***WHITE GOODS***

The MAGICIAN framework integrates collaborative robotic platforms with advanced visual and tactile sensing, AI-based perception and learning systems, and control and motion mechanisms to repair defects safely and efficiently. It includes optimization and validation tools, validated datasets, and algorithms for reliable AI training, while embedding human-robot interaction principles to ensure usability, safety, and acceptance in diverse manufacturing contexts.

The following capabilities have been extracted from the MAGICIAN framework and indicate the technological areas that the consortium expects participants to further develop and adapt to the fields mentioned above:

CAPABILITY	DESCRIPTION
(C1.1) Sensors for accurate defect detection and classification	A vision-based defect detection system capable of identify and classify surface imperfections in real-time.
(C1.2) Polarized camera system	Detects defects using polarized imaging

(C1.3) Increase defect removal and rework abilities	CR's ability to handle material defects through modular and specialised tools.
(C1.4) Annotation Tools for Multi-modal Data	Annotating datasets tool for training defect models
(C1.5) Innovative approaches and architectures for improved defect detection and classification	Defect localisation and characterization through advanced algorithms and architectures
(C2.1) Human Observation	Modelling human defect correction skills for robots.
(C2.2) Human Interface and Interaction	Flexible interfaces for human-robot collaboration

THROUGH OPEN CALLS, MAGICIAN PROVIDES:

- ✓ A unique opportunities to collaborate and engage with major experts in AI, robotics, smart manufacturing (…)
- ✓ Assistance in terms of expertise, know-how, coaching and technologies transfer from our partners through a live/recorded webinar
- ✓ Access to advanced technologies and industrial platforms developed by MAGICIAN consortium, with which proposed solutions need to be compatible (see section 3.7 Guide For Applcants)

THROUGH MAGICIAN APPLICANTS WILL HAVE THE OPPORTUNITY TO COLLABORATE WITH LEADING-EDGE TECHNOLOGIES AND INNOVATION MANAGEMENT EXPERTS

- *UNIVERSITY OF TRENTO, ITALY*
- *ALTINAI, TURKEY*
- *FORTH-ICS, AUSTRIA*
- *HWH, GERMANY*
- *IIT, ITALY*
- *ZABALA INNOVATION CONSULTING, BELGIUM*
- *STEINBEIS INNOVATION (SIG), GERMANY*

- *LUND UNIVERSITY, SWEDEN*
- *CENTRO RICERCHE FIAT (CRF), ITALY*
- *PIPPLE, NETHERLANDS*
- *TOFAS, TURKEY*

Application Use Case can run up to **12 months**. The expected outcome of your Application Use Case is a demonstrator prototype with a high technology readiness level (TRL). The prototype may also be used as a first-generation product.

MAGICIAN targets 'small' companies (start-ups, small/medium enterprises), including organisations with both, low and high digital maturity.

Interested start-ups, SMEs from EU member states and Horizon Europe associated countries are encouraged to review the offered platforms, technologies and testbeds at Home | MAGICIAN and contact our project members to gather further details. Additionally, a webinar will be organized to present the Open Call, with the recording made available on the MAGICIAN website. A weekly live helpdesk will also be accessible throughout the entire duration of the Open Call.