5TH GAZELLE ACCELERATOR ONLINE PROGRAMME EVENT

END-USERS DIRECTORY

MAY > JULY 2022

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INDEX

GAZELLE ACCELERATOR 3
PROJECT PARTNERS 4-6
GAZELLE ACCELERATOR IN A NUTSHELL 7
TIMELINE 27

END-USERS DIRECTORY

A RECURRING CHALLENGE 9
MATRA ELECTRONIQUE. 10-11
AIRBUS DEFENCE AND SPACE 12-13
CGI. 14
CONTINENTAL 15
INTERSURGICAL 16
ENI S.P.A 17
AERNNOVA. 18-20
COLLINS AEROSPACE 21
BOD LENSES 22-23
GARDNER AEROSPACE. 24-25
PACKAGING EMIGRATION BY GEROVÉ 26

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Gazelle Accelerator was born from a simple analysis : European technology based companies have a high-growth potential but their expansion is often hindered by the industrial fragmentation and by their lack of visibility on the European market.

Therefore, Gazelle Accelerator, business acceleration activity of EIT Manufacturing, aims at supporting existing technology-based companies, SMEs and start-ups ; by accelerating their international business and innovation capacities. Gazelle Accelerator will provide SMEs and start-ups with the network and support they need to expand and become the future European Gazelles.

Uses cases identified are challenges in manufacturing companies in the Industry 4.0 topic.

The aim of this brochure is to provide a business profile overview of the End-Users interested by innovative SMEs and start-ups that will participate to our 5th Gazelle Accelerator matchmaking event, planned in May > Juy 2022.

Enjoy the reading!

PROJECT PARTNERS

GAZELLE ACCELERATOR'S TEAM IS MADE UP OF INDUSTRIAL, RESEARCH AND ACADEMIC PARTNERS.

COMPLEMENTARY EXPERTISE WILL BE USED TO GRADE UP AND ACCELERATE 50 PROMISING START-UPS OR SMES THROUGH OUR AMBITIOUS SUPPORT PROGRAMME.

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Aerospace Valley

Aerospace Valley is world's first aerospace cluster, dedicated to the strategic sectors of Aeronautics, Space and Drones, in France. With its 5 excellency ecosystems – Embedded and Communicating Systems, Structures and Mechanical Systems, Propulsion and Embedded Energy, Data and Artificial Intelligence, Products and Services for the Industry, Aerospace Valley drives a supportive, competitive and attractive community, aimed at fostering innovation in view of growth. Ranking among the top three clusters for the performance of its cooperative R&T projects (among which 580 have already been financed), Aerospace Valley is in charge of animating a dynamic network of international reputation, composed of 850 members (companies, research and training centres, universities and schools, local authorities). Aerospace Valley has as a mission to support the development of the aerospace sector and to increase its competitiveness. To achieve this a critical task is to promote introduction of advanced manufacturing technologies which will improve the competitiveness of the European industry.

LINPRA

LINPRA - Engineering Industries Association of Lithuania. LINPRA is an independent business organisation, representing Lithuanian engineering industry, interests of companies, working in metal, machinery and equipment, electromechanics and electronics, plastics and rubber industry on international and national level.

KTU

Kaunas University of Technology (KTU) is the oldest technological university in Lithuania, established in 1922. KTU known for its linkages with business, leadership in scientific research, flexible interdisciplinary study programmes and unforgettable study experience. KTU's Startup Space (27 startups in 3 recent years) fosters young businesses, providing much sought-after support and knowledge needed by new enterprises.KTU is having a specialised Technology Entrepreneurship module applying Silicon Valley teaching methodologies, practically demonstrating the transformation of research and ideas into real-world businesses.

LMS

The Laboratory for Manufacturing Systems & Automation (LMS) is oriented on research and development in cutting edge scientific and technological fields. LMS is involved in a number of research projects funded by the CEU and European industrial partners. Particular emphasis is given to the co-operation with the European industry as well as with a number of "hi-tech" firms. LMS is organized in three different groups : 1) Manufacturing Processes Modelling and Energy Efficiency, 2) Robots, Automation and Virtual Reality in Manufacturing, 3) Manufacturing Systems and it has a fully equipped machine shop that contains high payload industrial robots, collaborative robots and machine tools.

RoboValley

RoboValley is a centre for robotics, headquartered in Delft, Netherlands. RoboValley is powered by the Robotics Institute of Delft University of Technology. RoboValley aims to facilitate collaboration between researchers, governments and enterprises. Currently, RoboValley is looking to attract robotics companies and researchers in the field of robotics in order to facilitate this collaboration.

TUDelft

Top education and research are at the heart of the oldest and largest technical university in the Netherlands. Our 8 faculties offer 16 bachelor's and more than 30 master's programmes. Our more than 25,000 students and 6,000 employees share a fascination for science, design and technology. Our common mission : impact for a better society.

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Atos

Atos is the global leader in secure and decarbonized digital with a range of market-leading digital solutions along with consultancy services, digital security and decarbonization offerings; an end-to-end partnership approach. A net-zero pioneer in decarbonization services and products, our commitment to the future extends to carbon-neutrality for our organization as well as our clients and partners. Together, we're a force pushing the boundaries of scientific and technological excellence to ensure that everyone can live, work and thrive sustainably in a secure information space. Supported by the talent and diversity of 107,000 employees in 71 countries, we generate an annual revenue of €11 billion.

Fondazione Giacomo Brodolini

Fondazione Giacomo Brodolini is a group that includes Fondazione Giacomo Brodolini, a non-profit organisation that deals with cultural and research activities on the subject of work and social inclusion, and Fondazione Giacomo Brodolini Srl SB (Benefit Corporation) that carries out projects and studies and offers consultancy and advanced training services. FGB's work is deeply rooted in the values of social inclusion, local cohesion, sustainability, and digital innovation for economic growth, equal opportunities, and access to the job market through skills development, gender equality, and cultural diversity advocacy, civic participation for local development.

Fasttrack Action

Fasttrack Action is a subsidiary company of Fasttrack Ventures, an early-stage investment fund that invest in early-stage digital & deep-tech companies. FTA is dedicated to providing support to startups launching and growing their business, including:
1 - Finding the most appropriate funding scheme (private, public or a combination)
2 - Developing strategic business plans and innovation strategies
3 - Mentoring, coaching, networking events and portfolio management.

European manufacturing accelerator

Gazelle Accelerator in a nutshell

82

SMEs and start-ups integrated into the programme in 2020

18

Countries covered in Europe

110+

Qualified business or finance analysis delivered

30+

Uses cases & challenges identified with industrial corporates

120+

Connections made between SME's and corporates and/or investors

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BUSINESS PROFILES OF END-USERS INTERESTED BY INNOVATIVE SMES AND STARTUPS AND THEIR CHALLENGES

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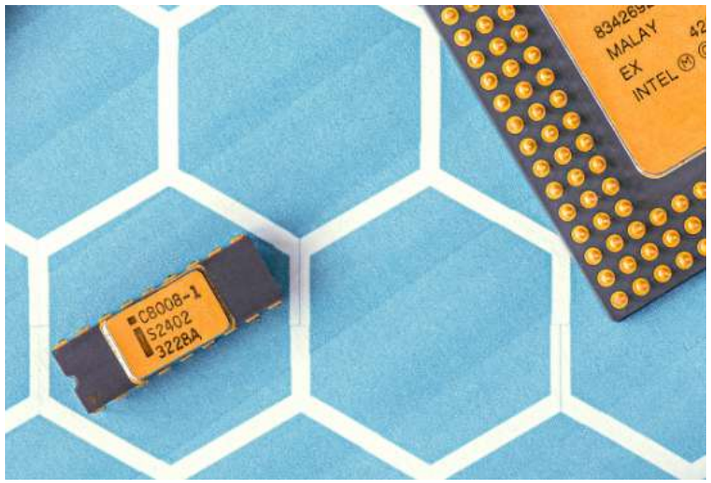
A RECURRING CHALLENGE

APPLYING SERIAL NUMBERS



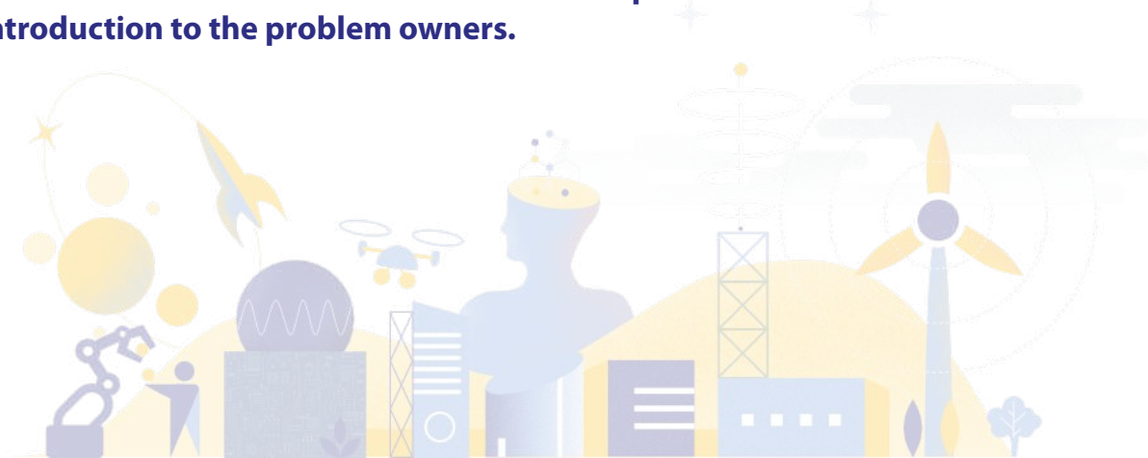
Description of the challenge

Multiple European manufacturers ranging from medical equipment to bike manufacturers are facing issues in applying serial numbers on their products during a manufacturing process. This consortium is eager to meet solutions of different techniques in applying serial numbers.

What are the competencies / solutions needed ?

What are the competencies / solutions needed?
Serial numbers are applied on round or oval object ranging in size from a ⌀ 4cm part to a tube of a bike frame. Materials vary from plastics to light weight metals. Biggest challenges is consistent positioning and readability during the whole production process.

We will share your solutions with the consortium of industrial partners in order to create a valuable introduction to the problem owners.



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Matra Électronique
SOLUTIONS PROVIDER

MATRA ELECTRONIQUE

Company identification

Name : Matra Electronique
Website : www.matra-electronique.com

Company history

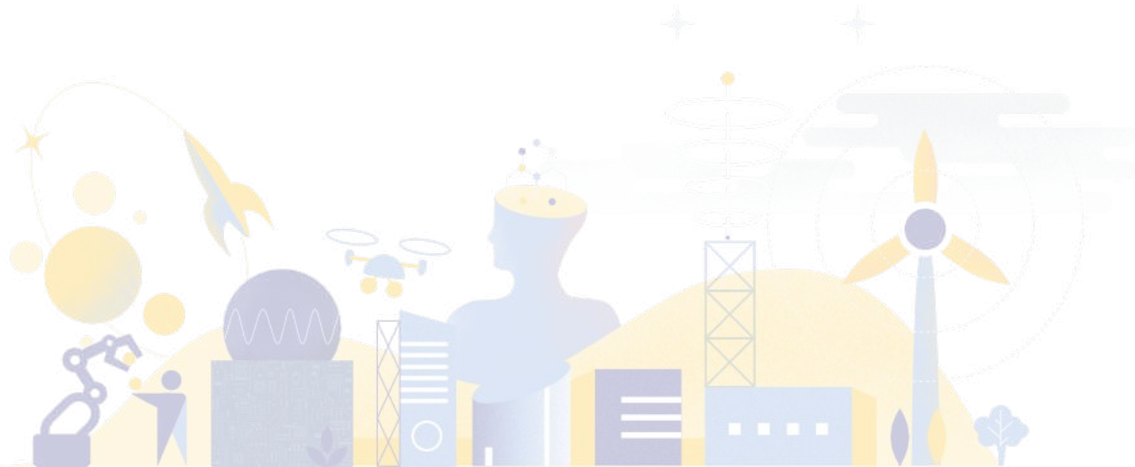
Year founded : 1954
Employees' number : 420
Locations : France
Turnover 2020 : 3,6 billions €

Company presentation

Matra Electronique is a French provider of mission-critical electronics. Matra Electronique is a subsidiary of the European MBDA Group with over 40 years' solid experience in the design and manufacture of high-tech electronic assemblies.

Company interests for the Gazelle Accelerator programme

They are curious to meet and discover new innovative companies especially in AI, data analytics, IoT, virtual reality, augmented reality, robotics and agile manufacturing.



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Matra Électronique
SOLUTIONS PROVIDER

CHALLENGE

TO BE ABLE TO PRINT AND MANUFACTURE SMALL CAPS WITH FLEXIBLE MATERIAL

Interested to meet start-ups/SMEs in the following areas:

- Analytics and AI
- Additive manufacturing
- Simulation, augmented and virtual reality
- Collaborative and mobile industrial robots

Description of the challenge

We are currently looking for a new machine which allow us to print small caps with flexible DES material TPU 85A. Our project is located in France close to Compiègne (north of Paris).

What are the competencies / solutions needed?

Professional machine, repeatable process, to be able to print caps from 0,5 to 1 mm thick

What are the expected outcomes and period of time?

Our objective is to implement our new machine as soon as possible (July 2022 maximum)

Partners already identified?

Not yet but already tried OMNI 3D machine with no results

AIRBUS DEFENCE AND SPACE

Company identification

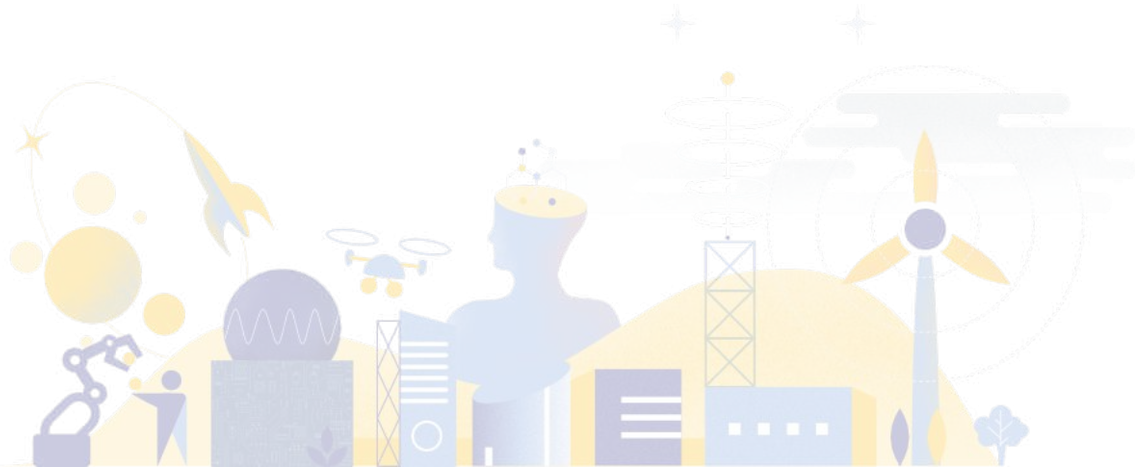
Name : Airbus Defence and Space
Website : https://www.airbus.com/en

Company history

Year founded : 2014
Employees' number : 40 000
Locations : 35 countries
Turnover 2020 : 10.8 billion

Company presentation

Airbus Defence and Space is a division of Airbus responsible for defence and aerospace products and services. The division was formed in January 2014 during the corporate restructuring of European Aeronautic Defence and Space (EADS), and comprises the former Airbus Military, Astrium, and Cassidian divisions.[5] It is the world's second-largest space company after Boeing and one of the top ten defence companies in the world.



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AIRBUS
DEFENCE AND SPACE

CHALLENGE

WIRELESS VIBRATIONS SENSORS

Company interests for the Gazelle Accelerator programme

- Analytics and AI
- Internet of Things platforms
- Location and tracking technologies
- Additive manufacturing
- Collaborative and mobile industrial robots
- Contactless measurement
- Perception and detection technologies

Description of the challenge

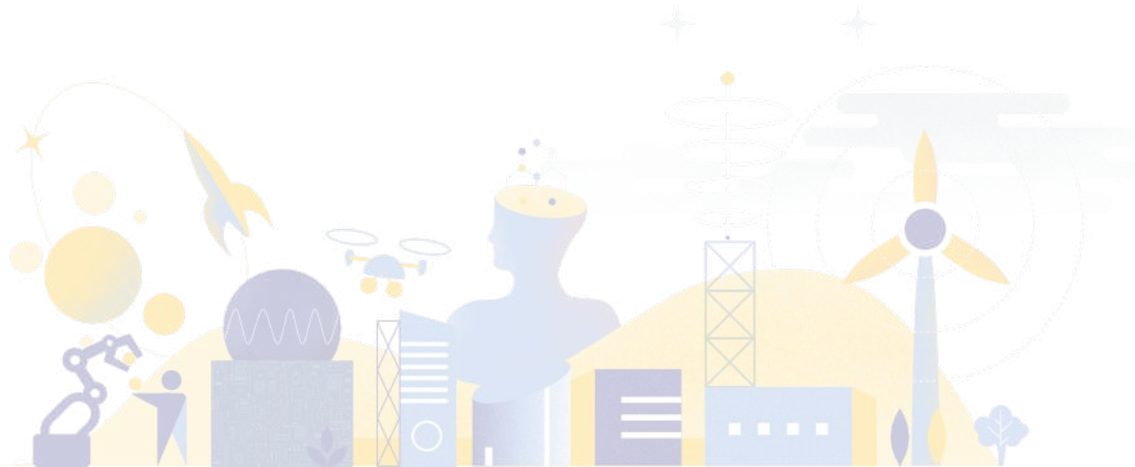
The need is to acquire more than 100 channels with a minimum sampling rate of 2kHz

Do you have a defined budget?

No budget defined yet

Technology Readiness Level:

TRL 6 at least for first prototyping



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CGI

Company identification

Name : CGI
Website : www.cgi.com

Company history

Year founded : 1976
Employees' number : 77 500
Locations : 28 countries
Turnover 2020 : 16 billions €

Company presentation

CGI a Canadian company among the largest IT and business consulting services firms in the world. Their mission is to help accelerate returns on IT and business investments.

Company interests for the Gazelle Accelerator programme

They are curious to meet and discover new innovative companies especially in monitoring solutions, data continuity, digital twins, automatisation (as RPA), assembly machines, cybersecurity, robotics, IoT and computer vision

- Analytics and AI
- Internet of Things platforms
- Location and tracking technologies
- Software for business (ERP, MES)
- Additive manufacturing
- Cybersecurity
- Simulation, augmented and virtual reality
- Collaborative and mobile industrial robots
- Perception and detection technologies
- Other topics in manufacturing & Industry 4.0

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CONTINENTAL

Company identification

Name : Continental
Website : www.continental.com/en/

Company history

Year founded : 1871
Employees' number : 233 000
Locations : 60 countries worldwide
Turnover 2020 : 37,7 billions €

Company presentation

Continental is a German multinational automotive parts manufacturing company specializing in brake systems, interior electronics, automotive safety, powertrain and chassis components, tachographs, tires and other parts for the automotive and transportation industries.

Company interests for the Gazelle Accelerator programme

- Analytics and AI
- Location and tracking technologies
- Additive manufacturing
- Simulation, augmented and virtual reality
- Collaborative and mobile industrial robots
- Perception and detection technologies (Camera 3D)
- Other topics in manufacturing & Industry 4.0

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INTERSURGICAL

Company identification

Name : Intersurgical UAB
Website : www.intersurgical.com/

Company history

Year founded : 1980
Employees' number : 865
Locations : All over Europe
Turnover : 213.2 million €

Company presentation

Intersurgical is a **global designer, manufacturer and supplier of a wide range of medical devices for respiratory support**. We provide flexible patient solutions for airway management, anaesthesia, critical care, and oxygen & aerosol therapy for use within emergency care, hospitals and also in the home.

Company interests for the Gazelle Accelerator programme

- Analytics and AI
- Internet of Things platforms
- Location and tracking technologies
- Software for business (ERP, MES)
- Additive manufacturing
- Cybersecurity
- Simulation, augmented and virtual reality
- Collaborative and mobile industrial robots
- Perception and detection technologies
- …Other topics in manufacturing & Industry 4.0

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ENI S.P.A

Company identification

Name : ENI S.p.A
Website : www.eni.com

Company history

Year founded : 1953
Employees' number : 30 775
Locations : 68 countries worldwide
Turnover : 44 billion €

Company presentation

Eni is a global energy company, active at every stage of the value chain: from natural gas and oil to co-generated electricity and renewables, including both traditional and bio refining and chemicals. They operate at all levels of the market, right down to the end user. By 2050, all our products and processes will be fully decarbonized, thanks in part to CO_2 capture and storage initiatives as well as forest conservation projects.

Company interests for the Gazelle Accelerator programme

- Analytics and AI
- Internet of Things platforms
- Location and tracking technologies
- Software for business (ERP, MES)
- Additive manufacturing
- Cybersecurity
- Simulation, augmented and virtual reality
- Collaborative and mobile industrial robots
- Perception and detection technologies
- …Other topics in manufacturing & Industry 4.0

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AERNNOVA

Company identification

Name : Aernnova
Website : www.aernnova.com/en/

Company history

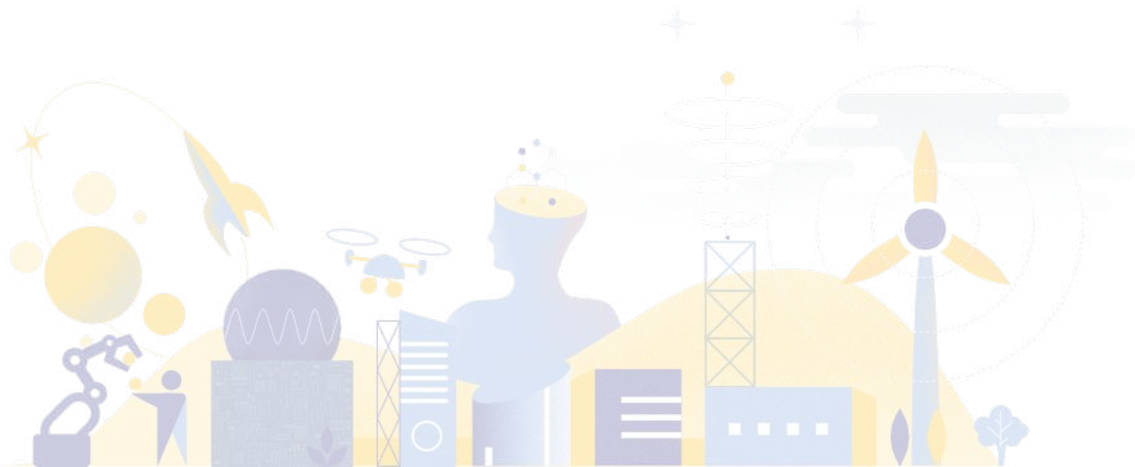
Year founded : 1986
Employees' number : 4535
Locations : Spain, UK, China, Bulgaria, Brazil, Mexico and USA
Turnover 2020 : 700 millions €

Company presentation

Aernnova is a Leading Aerostructures Company specialized in the design and manufacturing of aerostructures and components such as wings, empennages and fuselage sections.

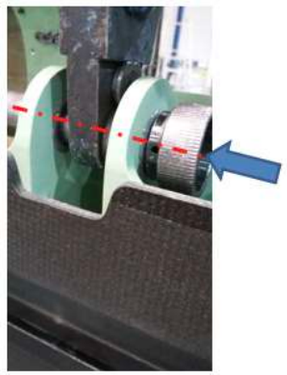
Company interests for the Gazelle Accelerator programme

They look for solutions for an automatic and fast control of the shape of raw products between 100mm and 3000mm long. The solution should be fast and should not require tools or fixed positions for the products.
Looking for solutions with TRL8 or TRL9



CHALLENGE 1

SMART SENSORS EMBODIED IN ASSEMBLY TOOLING SUPPORTS



Description of the challenge

Aerospace Assembly of complex structures requires high demanding tolerance for some features. The current tooling design is based on stiff mechanical devices and several verifications must be performed during the assembly process.
The challenge is to include smart sensors without reducing the mechanical fixation of the part-tooling while the data is recording, compared and controlled within the tolerance. In case of deviation out of tolerance, the system warns the operator to stop and to look for the root case.
We can list some features and tolerance for sensor capabilities :

- aerodynamic profile (typically +/- 0,8mm),
- hinge coaxiallity (0,050mm),
- flatness (0,050mm)

EIT Manufacturing Flagship:

Smart recording of Key Characteristics.

Technology Readiness Level

TRL 8&9

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CHALLENGE 2

AERONAUTICAL CONFINED SPACES SMART INSPECTION

Description of the challenge

Aerospace complex structure such as Wing, Centra Wing Box and movable surfaces have to be visually inspected guaranteeing that there is no damage on the external and internal surfaces. The last one is usually a confined space, where sometimes a borescope is used. Wherever humans can go inside of, there are risks of creating surface damage. The challenge is to develop a robotic system that can travel inside the confined space without damaging the internal surface and detecting defects, typically :

- Scratch,
- Marks,
- Foreign objects,
- Hardware installation,
- Sealings,
- Others…

EIT Manufacturing Flagship:

Confined Space Smart Inspection.

Technology Readiness Level

TRL 8&9

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COLLINS AEROSPACE

Company identification

Name : COLLINS AEROSPACE
Website : www.collinsaerospace.com/

Company history

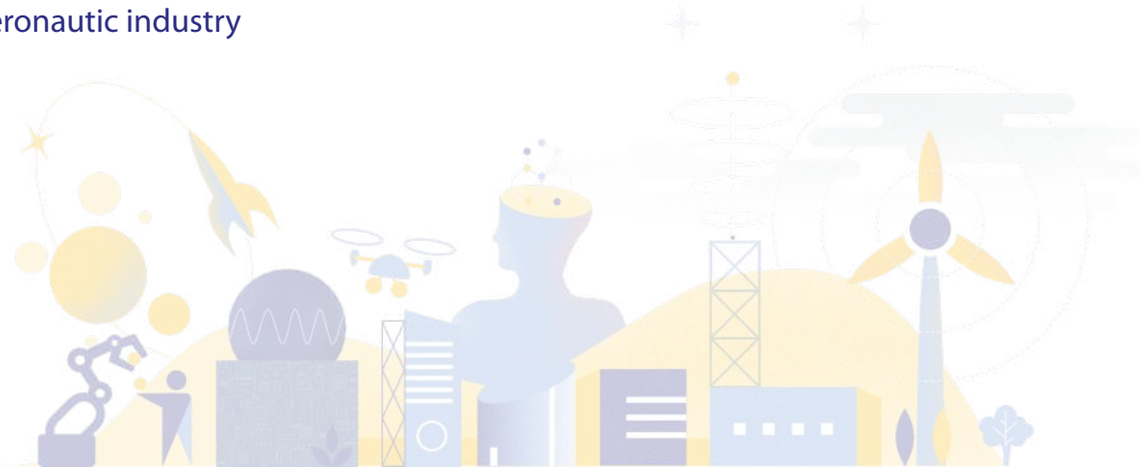
Year founded : 2018
Employees' number : 68 000
Locations : 300 countries
Turnover : 1.47 billion

Company presentation

From the smallest details to the highest pursuits, Collins Aerospace is dedicated to redefining aerospace. With their customers, they relentlessly tackle the toughest challenges in their industry. And, every day, they imagine ways to make the skies and the spaces we touch smarter, safer and more amazing than ever. Together, they chart new journeys and reunite families. They protect nations and save lives.

Interested to meet start-ups/SMEs in the following areas

- Green factory,
- Energy saving,
- Next energy source generation for industry,
- Climate risk for aeronautic industry



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BOD LENSES

Company identification

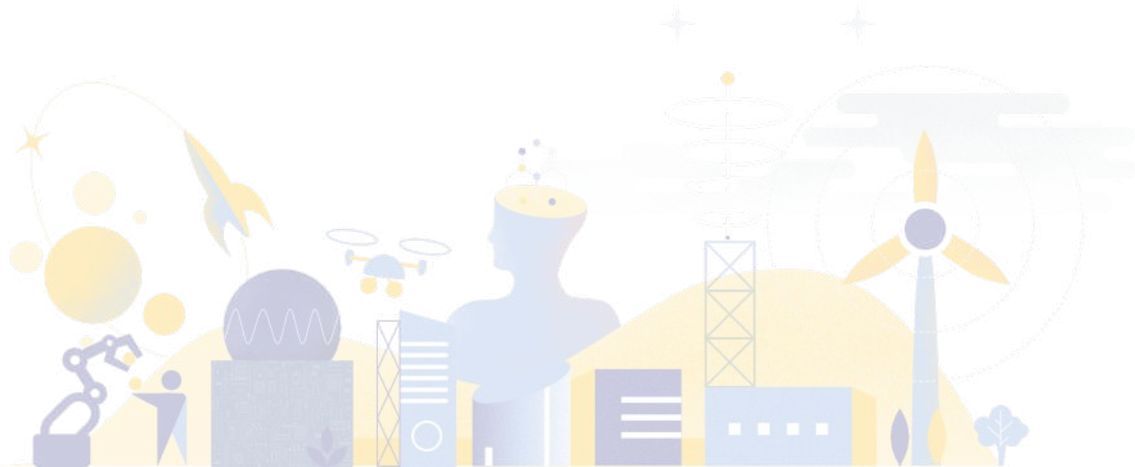
Name : BOD LENSES
Website : www.bodlenses.com/

Company history

Year founded : 2014
Employees' number : 79
Locations : Europe
Turnover : 5.4 million

Company presentation

Bod Lenses is one of the leading personalised optical lenses laboratories in Northern Europe. Bod Lenses manufactures ophthalmic lenses employing artificial intelligence systems, state-of-the-art Schneider MODULO lines & advanced robotics solutions.



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Bod Lenses

CHALLENGE 1

SOFTWARE FOR LENS DESIGN

Do you have a defined budget ?

Not Yet

Technology Readiness Level

Tested solution

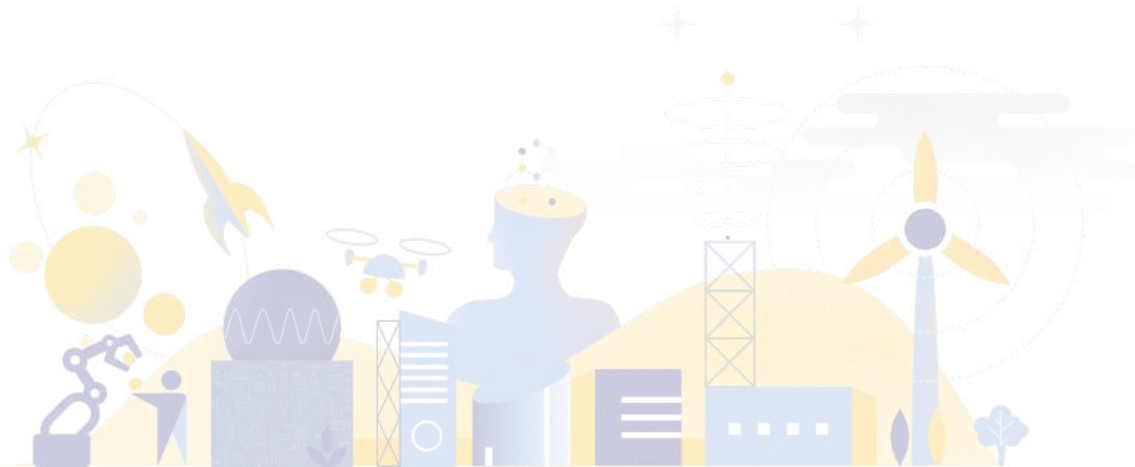
Description of the challenge

There is a need of the software for lens design, that would help to design lens with different diopters. There is a software already available in the market, but as it is possessed by the company with a dominant position in the market it costs too much for the smaller ones (paying the yearly license).

What are the competencies / solutions needed?
Good theoretical and practical knowledge of physics and IT.

What are the expected outcomes and period of time?
To have a usable software and reduce company's expenditures for license

Partners already identified?
Some partners from Vilnius university working on this.



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GARDNER AEROSPACE

Company identification

Name : GARDNER AEROSPACE
Website : www.gardner-aerospace.com

Company history

Year founded : 2017
Employees' number : 1 550
Locations : 13 countries
Turnover : 166 million

Company presentation

Gardner Aerospace is an international manufacturer of aerospace finished components. It offers finished machined and sheet metal detailed parts supplied as individual items or in kits, sub-assemblies and assemblies, complex tooling and ceramic cores, and small and large scale speed shop services. The company serves aerospace OEMs and Tier 1 suppliers.

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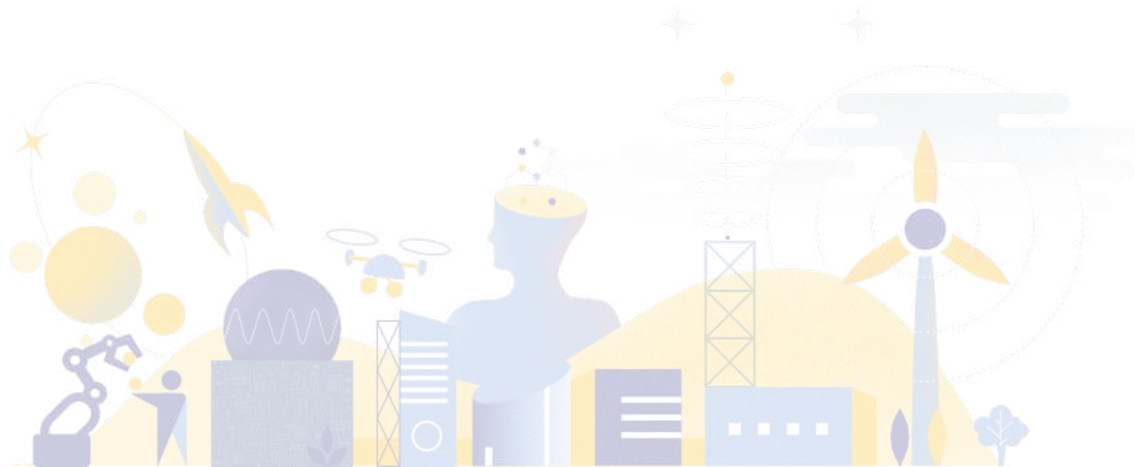

CHALLENGE 1

ASSEMBLY LINE WITH AUTOMATION SERVICE OF MEANS AND COMPONENTS

AS IS

TO BE

AGILINE 4.0
AUTOMATION SERVICE

Description of the challenge

Currently the equipment of the aircraft parts are assembled by operators in a dedicated aera of the shop floor. Each operator have a work bench where the parts are assembled but some means (tools, machines..) and components (standard parts, consumables..) are common, he must move a lot during the operation, spend time to look these components, with risk of mistake (inversion, wrong choice ..)

To be efficient and competitive we need a solution to minimize (ideally eliminate) the movements of the operator beyond is work bench using automation system of sharing the common means and disposal of components directly on the work bench for the work order in progress. Have guidance to the operator once material is on the bench so that there is no risk to choose the wrong one.
Period to put in place this system : 2022/2023

Do you have a defined budget?

Yes : 0,5M€

Technology Readiness Level:

4.0 ; Automation ; Robotic ; Synchronized ; Real-Time ; Connected ; Flexible

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PACKAGING EMIGRATION BY GEROVÉ

Company identification

Name : Packaging Emigration by Gerovė
Websites :
www.packagingemigration.com/en
Packaging Emigration

Company history

Year founded : Gerovė - 1991
Packaging Emigration - 2012
Employees' number : 55
Locations : Lithuania
Turnover 2020 : 4,4 millions €

Company presentation

Packaging Emigration is one of the largest polyethylene products producer, recycler and wholesale operator in the Baltic States. Their products portfolio includes carrier bags, sleeves and garbage bags. They are an official European Union importer of polyethylene waste for recycling.

Company interests for the Gazelle Accelerator programme

They look for solutions for 2 specific challenges :
For the robotization of the production of plastic garbage bags
For the integration of a connection between the personnel program and production program for data exchange
Looking for solutions with TRL6 or TRL7

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Gazelle Accelerator 5th edition Timeline

10.06
Deadline for A2M & A2F video pitch recording

31.05
Investment Workshop 2H

24.05 > 27.05
Mentorship Part.2
Action Plan

16.05 > 20.05
Mentorship Part.1
Self-Assessment

30.05
Innovation Workshop 2h

30.05 > 03.06
Coaching Sessions A2M + A2F

COMMUNITY BOOSTER CAMP DAYS
16/05 > 10/06

B2B meetings
MARKET AND INDUSTRIALS DAYS
FROM 14/06 TO 08/07

B2F meetings
INVESTORS AND FINANCE DAYS
14/06 > 08/07

Collaboration meetings
VALUE CHAIN DEVELOPMENT DAYS
FROM 14/06 TO 08/07

FOLLOW-UP
09/07 > 30/09

- > Start-ups and SMEs
- > Industrials
- > Investors
- > Contracts signatures (offers, sales, NDA...)

gazelle accelerator
Matching manufacturing challenges with innovative solutions.

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THANK YOU FOR YOUR ATTENTION :)

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