



- Call for tender –

## Requirements specification for "Non destructive Testing for Titanium part"

#### Call for tender reference: 21-ADMIN-CS-375

### I. Introduction

#### a) What is SoftDREAM?

SoftDREAM stands for "Software tools for hybrid robot based additive manufacturing for industrial applications".

The project has developed an Application Programming Interface unlocking the full potential of hybrid AM based on industrial robotics with integrated features such as process planning, simulation, communication with robots, real-time monitoring and process feedback.

SoftDREAM innovative input is to develop an all-inclusive, user friendly application capable of communicating with all brands of industrial robots.

The results will lead to improved agility and responsiveness by reducing lead times in production, prototyping and tool manufacturing, particularly in the European automotive, aerospace, construction and manufacturing industries.

This activity, started on the 01/01/2020, has received funding from European Institute of Innovation and Technology (EIT), a body of the European Union, under the Horizon 2020 and Horizon Europe, the EU framework Programme for Research and Innovation.

**Consortium:** RISE (Research Institutes of Sweden, project's coordinator), ESTIA Institute of Technology (France), TU Braunschweig (Germany), Volkswagen Group (Germany), Spectrum Technology (Sweden) and Aerospace Valley (France).

Website: <u>www.softdream-project.eu</u> Linkedin: SoftDREAM Twitter: @SoftDREAMPro

## b) About Aerospace Valley

Aerospace Valley is the first world competitiveness cluster for the aerospace sector, serving three strategic industries - Aeronautics, Space and Drones – and covering the Occitanie-Pyrénées-Méditerranée and Nouvelle-Aquitaine regions.





With its Ecosystems of Excellence – Embedded and Communicating Systems; Structures, Materials and Processes; Propulsion and Embedded Energy; Economy of Data and Artificial Intelligence; Solutions for the Industry of the future – Aerospace Valley drives a supportive, competitive and attractive community aimed at fostering innovation in order to serve growth.

Ranking in the top 3 world competitiveness clusters for the performance of its cooperative R&T projects (among which 619 have already been funded), Aerospace Valley is in charge of animating a dynamic network of international reputation, composed of 825 members (industries, research labs, training centers, universities and high schools, local authorities, structures for economic development) including 562 SMEs.

#### II. Context of the call

This document represents the specification requirements for a consultation to select a potential company expert in the following subject: **"Non destructive Testing for Titanium part".** The aim is to control certain areas of a part in Titanium printed during the first year of SoftDREAM.

# III. Description of the expected servicesa) Technical Requirements

In collaboration with Aerospace Valley, and the other members of the consortium, the company will have the following missions:

- To organise the pickup and the return of the part from the facilities at Addimadour (near l'ESTIA) (address below):

ADDIMADOUR 2 Rue Pierre Georges Latecoere 64100 Bayonne France

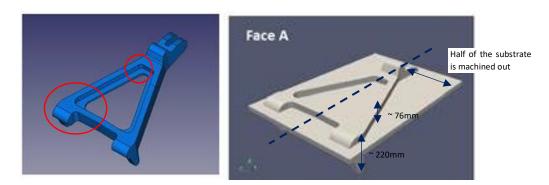
- To analyse some areas of the part and deliver a report on the part quality and defects found

The part to be analysed has the following technical characteristics:

- Material: Titanium TA6V
- <u>Dimensions:</u> (Lxlxh) 500mm x 700mm x 200mm
- <u>Weight:</u> max 60kg (the exact weight will be shared after the selection)
- <u>Thickness :</u> max 220mm, min 76mm
- <u>Geometry:</u> the part to be analyzed is represented below with only half of the substrate. The areas to be analyzed are encircled in red.
- <u>Defects:</u> > Ø 200  $\mu$ m, all kind of defects (porosities, internal or external cracks, gas, oxides, cavities linked to overlaps during the printing...)







#### b) Planning

The call for tender is opened from Monday 13/09/2021 to Friday 01/10/2021.

The selection will be done from the 04/10/2021 to the 08/10/2021.

The work of the company will have to be conducted between Monday 11/10/2021 and Monday 22/11/2021.

#### The deadline for the proposal submission is the 1rst of October 2021.

The selection of the company will be completed on the 11<sup>th</sup> of October 2021.

The proposition and price quotation will have to be sent per e-mail at the following e-mail address: <u>keroue@aerospace-valley.com</u>. A receipt confirmation will be sent to you to confirm the reception of your proposal.

By no means Aerospace Valley has the obligation to hire a company after this consultation.

#### Contact Aerospace Valley for this call of tender

Anne Keroué, Project Manager: <u>keroue@aerospace-valley.com</u>.