



METAL ADDITIVE MANUFACTURING CONFERENCE

13 june 2019 ■ ORONA-IDEO (Hernani, SPAIN)

ORGANIZED BY





GENERAL INFORMATION

After four years of work in the field of metal additive manufacturing, the international projects ADDISPACE and TRANSFRON3D organize together the final event in which the results achieved in both projects will be presented.

The central axis of these projects is the collaboration of technology centers, large companies, SMEs and industry associations from different regions of southern Europe, in order to advance in the manufacture of high added value products, thanks to the advantages offered by Metal Additive Manufacturing processes. The knowledge in the different existing technologies and the contribution of each partner have been key to obtain innovative pieces for sectors such as aeronautics or automotive. Prototypes of these pieces as well as the lessons learned to produce them, will be shown in this final conference, which will bring together the additive

manufacturing community of Spain, France and Portugal. The conference will also feature special guests who will present their strategies for the implementation of additive manufacturing technologies in their organizations. Finally, attendees will have the opportunity to hold B2B meetings in an exclusive space that will be enabled for these meetings.

Do not miss it! We will be waiting for you on June 13.



ADDISPACE

ADDISPACE provides an answer to the limited adoption of AM technologies used to manufacture metal parts in the aerospace sector. Such an approach responds to the following challenges:

- Not enough information about existing AM technologies, the potential benefits of their adoption in the aerospace sector and about the possible technology transfer solutions that can facilitate their adoption.
- High investment costs for the acquisition of additive manufacturing equipment and its implementation in the existing manufacturing chains and lines of metal part manufacturing companies and SMEs.
- Insufficient reliability of manufactured products, due to the absence of solid

manufacturing process control and monitoring mechanisms.

- Regulations currently under development and not known by users (defectology, quality, verification), and absence of design criteria and rules.

- Absence of skilled staff for the transition towards the use of this type of technology, due to the absence of specialised, skilled and trained labour.

After four years of development, the project supported by the INTERREG SUDOE program comes to an end, and presents results such as a catalog of the existing offer in France, Spain and Portugal, 4 demonstrators of the aerospace sector manufactured by various Metallic additive manufacturing techniques, a series of courses and training material and a permanent cooperation platform between the agents involved.

ADDISPACE PARTNERS





Interreg
POCTEFA



TRANSFRON3D

The main technical challenge of the TRANSFRON3D project is to evaluate additive manufacturing processes to manufacture metallic components with a high added value compared to traditional processes.

In addition, one of the first limitations of additive manufacturing processes is the lack of knowledge of mechanical properties of the pieces produced by this technology; so the TRANSFRON3D project has also faced this challenge, characterizing materials and processes, as well as testing the prototypes for validation. Specifically, the project has developed a prototype for the competition motorcycle sector and three for the aeronautical sector that have been redesigned

and topologically optimized. Also, this project has studied the simulation, optimization and comparison with their respective manufacturing processes. Finally, the prototypes have been validated through different tests in working conditions.

The project has been developed for three years and has been funded by the cross-border POCTEFA program.

TRANSFRON3D PARTNERS





PROGRAMME

08:30	Registration
09:00	Keynote 1: Automation in software and hardware to achieve scalability and complexity in wire-based Directed Energy Deposition Filomeno Martina - CRANFIELD UNIVERSITY
09:30	<p>Presentation of the main results of the ADDISPACE project</p> <ul style="list-style-type: none">• Study of opportunities in the field of Metal Additive Manufacturing for the aeronautical sector• Lessons learned in the application of technology to four pilot parts• MAM offer and online catalog• Training offer in metallic additive manufacturing• Recommendations for the aerospace sector
10:30	Keynote 2 Philippe Vannerot - AddUp Solutions / AFPR
11:00	Coffee Break
11:30	<p>Presentation of the main results of the TRANSFRON3D project</p> <ul style="list-style-type: none">• Simulation of the SLM and LMD processes and topological optimization applied to the WAAM process• Development of racing engine pistons• Comparison of the SLM, LMD and WAAM processes applied to the manufacture of an aeronautical component• Optimization of the WAAM process for the manufacture of an aeronautical component
12:30	Keynote 3: State of the art of Additive Manufacturing at Dassault Aviation Jean-Pierre Argenton - DASSAULT
13:00	Lunch
14:30	B2B Meetings
16:00	Closing

More information

ADDISPACE

www.addispace.eu

TRANSFRON3D

www.transfron3d.eu

