

Newsletter #1

In July 2016 an Interreg 2Seas subsidy was granted for the Integrating 3D Metal Printing & Flexible Post Processing project, 3D&FPP. In this project the expertise of seven partners will be combined, like the clamping, mapping and polishing of the printed parts, and Computer Aided Design and Computer Aided Manufacturing (CAD/CAM). The project aims at the reduction of production time and costs by developing a flexible and affordable post processing solution.

The period from July until December 2016 was marked by the completion of the mandatory documents to the Interreg Joint Secretariat, the first meetings and final definition of the project. The partners got to know each other and appointments were made. By January 2017 all duties were completed and the focus shifted from the administrative to the substantive work of the project.

Roadmap

The project consists of four main elements to be integrated: clamping, scanning, polishing and CAD/CAM-systems. It comprises three dedicated work packages (design, development & pilot user cases), divided over three consecutive years. The four elements will be integrated and validated by the use of user cases stemming from different disciplines: aviation, maritime and the semiconductor industry. Also other disciplines are researched for involvement.

In the design phase of the project, the requirements are set, the state of the art is studied and user cases are defined. A feasibility study will then prepare the prototyping phase, after which the components will be integrated and validated by means of the user cases.

User cases

Our observer partners will present the user cases. So far we are working on a hinge, gearbox and cooling core. Also a general setup was made to test the overall specs of the system. A startling number of 24 observer partners is supporting this project, for example through the provision of actual user cases. Nonetheless, we invite all organisations to come up with challenging user cases to validate the intended setup for post processing.

2nd Steering Committee Meeting

On March 29th the project partners got together for their 2nd Steering Committee meeting, including the technical kick-off by 3T and site visit to the production facilities of 3T. In this meeting the project partners discuss the regular project management items and project progress. Besides the regular project management items, discussions were held on the challenges the project encounters. Although it might seem as a rather straightforward project, the level of integration to be achieved and the way the quality measurements should be performed, complicate integrating the separate post processing steps. The project also has to account for the rapid developments in the field of additive manufacturing. These and other technical items were discussed in a separate Technical Meeting, held on April 12th in Rotterdam.

