

Newsletter #2

Since January 2017 the work on the 3DFPP project intensified and the first deliverables are finished. These deliverables act as waypoints on the way to the flexible post processing production line and are divided over the three main work packages: design, development and pilot user cases. Meanwhile, a second Technical Meeting has taken place, in which the major design questions were articulated and discussed.

Roadmap

In work package 1, the design phase of the project, the tools, algorithms, methods and software are to be designed, providing an interface for the post processing operations from part design and scanned data. This post processing consists of four steps: clamping, scanning, CAM and polishing. 3T has provided all partners with a printed specimen of the mirror object, the project-defined user case which combines all the contemporary challenges in 3D (metal) printing.

Mirror object illustration

TNO, Argon, Exeter and Hittech finished their research on the state of art for their expertise, respectively clamping, scanning, CAM products and polishing. Argon presented their first results on mapping the printed mirror object and Exeter on comparing the CAD model and scanned model.

Chicken and egg

The State of art research resulted in the definition of the requirements for the separate steps of post processing. In turn, these requirements provide a design and proposal for improvements for the integration of post processing and 3D metal printing. This proves however to be a chicken and egg situation, in which the chicken is the level of integration and the egg the perspective of integration. The challenge is now to define the approach of integration and tackle the related key problems and resulting requirements.

