Newsletter #6

Quest for zeros and origins
On September 11th and 12th, the partnership met for the 6th Technical and Steering Committee meetings. During these meetings several tests of some vital integration steps were executed. This proved to be a major step forward in the move towards a flexible and universal solution for integration of 3D-printing and post processing.

As stated in earlier newsletters, integration of 3D metal printing and post processing proved to be a software interfacing challenge. With each process step having its unique set of requirements, origins and offsets, defining a flexible and universal solution soon became the quest for zero's and origins.

Tangible results
Data integration from various software packages for CAD, CAM, scanners and CNC-mills is considered to be key in speeding up the post-processing procedures. Thus, the partnership has lately been focused on coding a generic solution to align all available data from the various sources, and automatically create a specific machine code, NC-code. This NC-code is designed to be relatively universal, so it can be used on most CNC-mills to process 3D-printed objects to their net shape.

The solution programmed compares the scanned data from a clamped printed object with its CAD

information. It is able to determine the scanned orientation with respect to the clamp, as well as the optimal fit to mill the net shape object with the required tolerance. The CAM NC-code is adjusted accordingly, resulting in the specific NC-code which enables the clamped object to be machined into its net shape.

This integrated use of data will increase yield, as well as reduce costs and production time. The partnership will proudly present the details of this breakthrough achievement during the upcoming Prototype fair.

Prototype 2018

The 3D&FPP project consortium will be present at the Prototype 2018 trade fair, booth 613. During the Prototype conference, Mr. J. Lengkeek will present the partnership, the project and recent results in the quest for an affordable and generic solution for integrating 3D metal printing and post processing. Specific attention will be paid to the recent developments in generating the NC-codes, the specific machine code allowing the object to be post-processed by any CNC-milling machine. Visit us at the trade fair, get your free tickets by contacting us.

Upcoming Events

- 7 & 8 November, Prototype Expo, Kortrijk, Belgium
- November 8th, 1200 hrs. Inspiring Talk at Prototype Seminar by mr. J. Lengkeek
- November 9th, Technical Meeting, Kortrijk, Belgium