

Sirris wins prestigious European RegioStars Award

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Peter ten Haaf

The Integration of 3D metal printing project has won the RegioStars Award in the category 'SMART Europe: enhancing the competitiveness of local companies in a digital world'. With this, the ERDF project was recognised as the best initiative in Europe to support SMEs in technological innovation.

Together with Syntra Limburg and with the support of the ERDF, Flanders and the Province of Limburg, Sirris created a demonstration room on its site in Diepenbeek where 3D metal printing technology is presented in an industrial context. In the set-up, the entire production chain from product design, 3D metal printing to post-processing is brought together in one room.

3D printing of metal allows the production of components with optimal performance (i.e. optimal shape for a given function, minimum quantity of materials, etc.), which offers manufacturers many possibilities for their customers. Printed components today, however, require finishing in order to be functional and it is quite a challenge for a machining supplier, often an SME, to finish such components efficiently. The project meets this need by proposing an accessible solution. This is always done within a realistic business context.

Recognisable product through pioneering technology

Peter ten Haaf, Program Manager Precision Manufacturing at Sirris, about the set-up of the project: "*We wanted to appeal to the widest possible audience through the manufacture of a recognisable*

product: a watch. For its production, we integrated the new production technology of 3D metal printing with the classic processing techniques of turning and milling. We implemented a 'design for post-processing' methodology, whereby the design for 3D printing is already tuned to a fully automated post-processing. This is done, for example, by printing references that are used during post-processing to automatically orient the component, thereby ensuring final accuracy on the one hand and avoiding time-consuming alignment on the other. In this way, we manage to demonstrate a complete production chain.

For SMEs, our support does not stop with the organising a demonstration. We are well aware of the need for knowledge, and therefore training, on the shop floor, which is why we have entered into cooperation with Syntra Limburg for the module 'Integration of 3D metal printing' in their training offer."

Low-threshold knowledge dissemination

Thanks to the cooperation, the accumulated technological expertise in 3D metal printing could be brought together in an accessible demonstration platform and the flow of new technology to industry was made possible through low-threshold training courses for a broad group of manufacturing companies, designers, developers and technicians.

Meanwhile, we were able to introduce 500 companies and 165 students to the integration of 3D metal printing. As many as 45 companies have already started working on their own application, 20 professionals have successfully completed the training.

To be continued ...

Moreover, the project is not an end point, but forms the basis for the 4.0-Made-Real initiative, in which Sirris digitises the entire chain, from order to shipment, within an Industry 4.0 concept. The first demonstrator was launched in 2019 and a successor is already in preparation. We will not only visualise data to get a transparent picture of production, but also use smart algorithms via artificial intelligence (AI) to guide production based on real-time data.

RegioStars Award

The RegioStars Awards are an annual competition organised by the European Commission's Directorate-General for Regional Policy and Urban Development. The awards highlight innovative projects that can inspire other European regions. The European Commission is looking for good practices that fit into one of the five categories that underpin European policy: Smart Europe, Green Europe, Fair Europe, Urban Europe and the variable category which this year is 'green mobility'. Within the SMART Europe category, the European Commission is looking for inspiring initiatives that can increase the competitiveness of local businesses through digital technology. A record number of 214 projects were submitted for 2021, from which five finalists per category were selected in September. From the five finalists for the SMART Europe category, Integration of 3D metal printing project emerged as the deserved winner.

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