

AMC NU

ADVANCED MANUFACTURING PROGRAM^(AMP)

Powered by: **Regio Deal Twente**

The Fraunhofer Innovation Platform for Advanced Manufacturing (FIP-AM), together with the regional government and partners, has developed the Advanced Manufacturing Program (AMP) to create a transition framework to Manufacturing 4.0 and to strengthen the industry in the east of the Netherlands.

The Advanced Manufacturing Program (AMP) provides subsidies through the RegioDeal, supported by the Province of Overijssel and the Dutch State. The aim is to stimulate the rapid development of Twente and other

regions in The Netherlands by creating an Advanced Manufacturing hub with an outward-looking, European image.

In this way, the AMP strengthens the reputation and climate of the region. Within the AMP, the Fraunhofer Innovation Platform is developing innovation projects in the field of production technology together with the University of Twente.

Each AMP project is built around a solid industrial collaboration. During the project, the companies will have access to relevant knowledge and

the latest technological and industrial methodologies. These can be shared with other high-tech manufacturing companies in the region via the hub.

The companies that are members of the AMP can solve their specific technological problems and answer market-oriented questions. This is done by developing and creating demonstrators with direct technological insight. FIP-AM then works through workshops and master classes on the dissemination of this newly acquired knowledge.

The Advanced Manufacturing Program (AMP) is a grant program that helps us businesses support your transformation to Industry 4.0. This is made possible by the RegioDeal, supported by the Province of Overijssel and the Dutch State.



Rijksoverheid



regio
Twente



THEME 01

PROJECT PARTNERS WANTED

For a research project on innovative industrial communication technologies

New means of communication, such as 5G, can significantly improve connectivity between people and machines, but also from machine to machine. This offers enormous advantages in the field of, for example, safety on the shop floor and quality control, through real-time data monitoring and control.

A possible application is the use of 5G in motion tracking devices in the production or logistics environment. The available real-time two-way communication makes human-robot collaboration significantly more effective. This is an interesting case for, for example, sheltered workshops or technology suppliers.

We are currently forming a consortium for a new AMP-funded project on this topic. Do you want to join or do you have a challenge in your production environment for which your current communication technology is not sufficient? Please contact us!

THEME 02

LOOKING BACK: WORKSHOP

Integration of AGVs and mobile robots in the manufacturing industry

It's been a while now, but we'd like to take a look back at the **workshop on the integration of AGVs and AMRs**, that we organised on Thursday, April 13 together with Novel-T!

With about **40 enthusiastic participants** we have learnt from the presentations of Twin-Tech Engineering about the software side of the integration of AGVs in the current processes, AMRobotics

took us through the (im)possibilities of the hardware and the general manager of metal company MCM told us about his practical experience with the integration of AGVs in his production process. He talked about the issues he ran and still runs into, and the advantages and disadvantages AGVs and AMRs brings him. We then split up into five round tables, in which each group worked out its own case under the guidance of an expert table host. The

aim was to inspire the participants, to transfer knowledge, and to provide insight into the advantages and disadvantages in practice. **Judging by the enthusiastic reactions, we can look back on a successful first event in our new building!**

Do you have an issue that you would like to attend an open and interactive knowledge session about? Let us know!

THEME 03

NEW PROJECT LAUNCHES

With the Advanced Manufacturing Program

A number of cool projects have recently started with help of the Advanced Manufacturing Program! The project **Heats** looks into adjustments in the product design of their hybrid heat pumps to be able to scale up production, **ToolICM** focuses on a predictive model to timely anticipate tool wear in the metal industry,

FRT stands for Feature Recognition Tool, which will be researched to have the input files automatically meeting to the requirements of the production software, **Vitals** is about monitoring machines using sensor technology for predictive maintenance in an accessible way, and in **TIMELY** an AI-based scheduler will

be developed, to solve parallel machine scheduling problems faced in the semiconductor industry.

More information about our projects? Please contact us. ■

