SPOTLIGHT

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AMC NU

BOOSTING INDUSTRIAL GROWTH WITH EMERGING TECHNOLOGIES

ADVANCED
MANUFACTURING
CENTER

AMCNU

BOOSTING **INDUSTRIAL GROWTH** WITH **EMERGING TECHNOLOGIES**

Together with regional government and partners, the Fraunhofer Project Center (FPC) has developed the Advanced Manufacturing Program (AMP) to establish a transitional framework towards Manufacturing 4.0 and empowering manufacturing industries in the Eastern part of the Netherlands

The Advanced Manufacturing Program (AMP) provides subsidies through the RegioDeal supported by the Province of Overijssel and the Dutch state. It aims to encourage rapid development of Twente and other regions in the East Netherlands by forming an Advanced Manufacturing hub with an outward looking European image. With this the AMP greatly enhances the region's reputation and business climate.

Within the AMP, the Fraunhofer Project Center at the University of Twente develops innovation projects around manufacturing technology themes. Every AMP project is built around solid industrial collaboration, empowering companies with relevant knowledge and new technological and industrial methodologies, Through the hub, these can be shared with other high-tech manufacturing industries in the region.

Member companies' of the AMP can solve their specific technology problems and answer their market-oriented questions. This is achieved by developing and creating demonstrators that offer participating companies direct technological insight. FPC then utilises workshops and master classes to further disseminate this newly acquired knowledge.

> ***The Advanced Manufacturing Program (AMP) is a funding program that helps us support you in your transformation to manufacturing 4.0. IT is made possible through the RegioDeal supported by the Province of Overijssel and the Dutch state.***

Rijksoverheid
provincie Overijssel
regio Twente
Twente

AMBITION

How can I effectively implement Additive Manufacturing (AM) in my company? What products, services and processes would benefit from AM?

For many companies, doubts occur because it can be difficult integrating a new approach into an existing system. Additive Manufacturing's multi-faceted design and process methods enable companies to identify and enable customized AM-based solutions that work for them.

The AMBITION (project) aims to demonstrate the tangible benefits of additive manufacturing to our industrial partners, specifically tailored to their business needs. Fraunhofer Project Center works with AMBITION partners to build working models that demonstrate how AM technologies may enable efficiency in part design and production that can integrated into their systems.

Knowledge transfer plays a pivotal role in this project. At each developmental stage, we have created a stimulating, interactive knowledge transfer environment for our industrial partners, ensuring wide dissemination of insights gained and comprehensive uptake of lessons learned.

Participating companies:

TRICAS DEVELOPING NEXT GENERATION PRODUCTS

Tembo

TT ENGINEERING Maakt ontwikkeling mogelijk!

MechDes engineering

KORT

A common problem in steel-product manufacturing is the significantly high throughput time of steel products in comparison to the sum of their process times. Manufacturers have similar production methods which, upon investigation, are likely to yield improved time efficiency resulting in a higher relative touch time per product. To lower production times, it would be optimal to introduce production planning with higher levels of dynamicity, granularity and detail.

KORT is a project working towards developing a proof-of-concept solution that can reliably forecast turnaround times. This is achieved by influencing the waiting time of products through detailed production planning. The focus of this project will lie on determining the factors that influence throughput time and identifying opportunities to manipulate them. It will help to recognise and categorise the similarities our industry partners possess, based upon their physical and digital infrastructure.

This will form the backbone of a decision model which will steer the planning process more accurately. Historical and real-time ERP data is used to develop a modular framework which supports detailed and flexible production planning, resulting in a new, robust planning and control solution. We can then use this demonstrator as a new industrial standard, or an object lesson to guide steel-product manufacturers when adjusting and/or improving their production planning.

Participating companies:

GS METAAL

DISSELHORST METAAL

HOEKMAN Roestvaststaal

SUPLACON plaatbewerking