

“Reindustrialisation through technological innovation”

21 December 2023, 10:46

Laurent Voets
Olivier Rigo

Four central topics and testimonies at the Advanced Manufacturing event

The “Advanced Manufacturing in Wallonia” event held at A6K, a multidisciplinary center located in Charleroi, on 7 December 2023, was the occasion for many small and large size enterprises to discover the situation and future of advanced manufacturing in Wallonia.

The federating theme of the day could be summarised in the slogan cited by Jean-François Delaigle, Regional Manager Wallonia at Sirris: “reindustrialisation through technological innovation.” “Innovation is the process of turning ideas into manufacturable and marketable form.” This quote from Watts Humphrey, an American software engineering pioneer, sums up the reality of our enterprises confronted with innovation: the need for concrete exploitable solutions.

The 4 topics of MadeInWal

The content of the day's presentations supported this message, especially with the official presentation to enterprises by the MadeInWal IIS (strategic innovation initiative). Let's not forget MadeInWal, led by Sirris, is based on four major areas supported by structuring projects and on feedback from industry: the **digital world**, **materials**, **innovative processes** and **training**.

MadeInWal is an inclusive initiative aimed at federating the main actors in the field: research, training, economic operators, public operators, manufacturers and industry representatives. Moreover, the event was closed with the presentation of the project's official logo, in the presence of Minister Willy Borsus, Vice-President of Wallonia, and Minister of Economy, Foreign Trade, Spatial Planning and Agriculture

The day's programme was based on the four topics mentioned above.

Importance of training

Continuing to develop training is essential for the goal of reindustrialisation. Technifutur and Technocampus, two essential Walloon skills centres in this sector, presented their training offer for Advanced Manufacturing, not without showing and demonstrating how research translates into training for industry, students and job seekers (e.g., the Fab+ project).

Materials and innovative processes

These two key aspects were fully developed with many talks giving the results and perspectives of recent and ongoing research projects, like ERDF projects Iawatha Exiathas or Tera4all. New processes of production and the use of innovative materials, new applications (e.g., additive manufacturing in electrification or aeronautics), new approach to the design of materials, … uses of AI and/or simulation in process optimisation, etc.

Transfer to manufacturing

The importance of making these results accessible to enterprises was well highlighted. Platforms, such as Walhub (EDIH) which was presented once again, bring digital technologies closer to SMEs and provide services direct to companies allowing them to test and evaluate digital tools (AI, HPC, Cybersecurity, etc.).

The demonstrator 4.0 project, initiated by Sirris, will be inaugurated in 2024 within A6K. Sirris presented a flavour of this tool: "having your head in the stars and keeping your feet on the ground… imagining a desirable and achievable future," said Jean-François Delaigle. The goal of this new tool is to inspire companies, to let them define their Industry 4.0 strategy and above all to define a roadmap suited to their specific situation. The project is ambitious and encourages ideas: an Industry 4.0 video wall, hybrid VR simulation, serious game and a 4.0 physical demonstrator based on flexible AM production… To be continued in 2024! Multitel, associated with the demonstrator through the Tera4All project, will include its integral control system, Terahertz, for checking polymers.

The final section of the event returned to the topic of reindustrialisation, especially with reference to MadeInWal, but this time, with the vision of our political decision-makers (with messages from Minister-President Elio Di Rupo, Secretary of State Thomas Dermine and Minister Willy Borsus).

Testimonies from the sector

The day could not be ended without hearing from the manufacturers and enterprises with three testimonies representing the potential and opportunities of reindustrialisation:

Hygi Panel, specialised in the development, manufacture and use of complete solutions for wall and ceiling cladding: "*… support from Wallonia for accelerating the marketing of new products while guaranteeing economic aspects, well-being of personnel, respect for the environment and quality*."

I-care, specialised in predictive and prescriptive maintenance with its AI- and data-based solutions: "*or how to guarantee, thanks to the support of Wallonia, the sovereignty of the company by reindustrialising the products and reintegrating the production of electronic components while controlling assembly, quality and costs in an all-new sensor production unit in Mons*."

Desimone, designer and manufacturer of special machines, specialised in innovating automation, robotics, pneumatics, electricity and mechanics: "*the reindustrialisation of enterprises in the Walloon region must involve new production methods of new or existing products. Well-thought-out and innovative automation is required to achieve the ambitious goals of the relaunch plan for the Walloon manufacturing industry*."

At the end of this day, A6K invited all the participants to attend its grand end-of-year event: "Winter Market Technologies". A convivial moment, where it was possible to take part in interactive VR, AR, XR, Immersion, and 3D workshops, and other surprises!

Authors



Laurent Voets



Olivier Rigo