


# Industry 4.0 demonstrated @ Liège

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*On 14 February, I ?? Industrie du Futur, the yearly Industry 4.0 event organised by Digital Wallonia and partners will take place, and for the occasion Sirris will open the doors of its industrial labs in Liège. Six demonstrators will be briefly presented to the attendees.*

You will discover how the Industry 4.0 technologies can boost your business by improving your production processes with the use of augmented reality (AR), to **assist operators in complex manipulations**, with the addition of artificial intelligence (AI), to **detect defects and improve processes** based on the data, with the usage of robots, to **create free 3D forms**, and with enhanced machine connectivity, to **predict the quality of production**.

Sirris will organise a 1-hour tour, showing you six demonstrators:

*1. Digitalization of the injection moulding process*

This demonstrator shows you the possibilities of an (inter)connected machine, IoT sensors, how to improve traceability and the development of AI tools.

*2. Freeform 3D printing*

The demonstrator shows the development of a freeform 3D-printing unit equipped with a robotic arm, dedicated to the fast realisation of large parts with a high degree of freedom in geometry and access to a large range of materials, including custom formulations

*3. Induction welding in TP composite sectors*

This demonstrator shows the development of an induction welding process to repair or join thermoplastic (TP) composites. With this setup, including a robot, it is possible to join TP composite materials by remote energy transfer towards the welding interface.

*4. AR-assisted manufacturing in composite sectors*

This demonstrator shows the development of an augmented reality (AR) model to assist operators step-by-step in the composite draping process (in the context of the Interreg AACOMA project). It makes the potential of the AR technology more tangible for industrials.

*5. First-time-right in AM process monitoring*

This demonstrator shows the development of machine-learning tools to master the AM process Selective Laser Melting (related to the ARIAC project). This development makes it possible to generate consistent data related to additive manufacturing process, to create innovative algorithms to handle data in a human understandable way, to gain expertise to guide manufacturing industrials accordingly, ...

*6. First time right and consistent product quality*

In the context of the Manunet MULTI-AI project a multi-material and multi-defect detection system is being developed, to detect quality defects and predict anomalies in different kinds of discrete production. The project makes use of different innovative technologies to reach first-time-right and a consistent product quality.

The demonstrations will be short, giving you a clear introduction to the technologies and their potential. After the tour you will have the opportunity to ask questions to our experts.

Would you like to discover our demonstrators live? Check out our agenda!

The visit of the demonstrator is a part of the I Love Industrie du Futur programme, a yearly event by Digital Wallonia for manufacturing companies in Wallonia, 4.0 solution suppliers and digital players. It's a unique opportunity to visit the 38 partners and discover the latest technological trends in Industry 4.0, existing tools and equipment to make the industry more competitive and futureproof. The full programme can be found here.

## Authors



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