

Press release

Austrian companies help develop AI-powered assistance system for the factory workforce of the future

Viewpointssystem and Fill are bringing Austrian know-how to the €6 million EU-funded project MANUFACTOR. Together with European partners, the project is developing and testing an intelligent assistance system designed to help production employees perform complex tasks more confidently and efficiently. The goal is to cut onboarding times by more than 35 percent and reduce manufacturing errors by 20 percent.

Vienna/Gurten, September 22, 2026. European manufacturing is facing major challenges: skilled workers and their know-how are becoming increasingly scarce, while production processes are growing more complex. New employees need to be quickly qualified for demanding tasks. At the same time, physical and mental strain must be reduced and manufacturing errors avoided.

MANUFACTOR aims to address these challenges with an intelligent assistance system that adapts its support to workers' situations in real time. It brings together technologies that, until now, have largely existed separately: wearable sensors, XR glasses, eye tracking, 3D vision sensors, AI agents and a human digital twin. Brought together, they provide information about an employee's physical and cognitive state and enable situation-specific assistance directly at the workplace. At the center of it all is the human being – and the question of how technology can best support them in their work.

The three-year research project is funded under the EU's Horizon Europe innovation program with a total budget of €6 million, and brings together [14 research and industry partners](#) from eight European countries. The technologies developed will be tested and further refined in real industrial environments over the course of the project.

Technology development in Vienna, real-world testing in Upper Austria

Two Austrian companies are involved in MANUFACTOR: Vienna-based deep-tech company Viewpointssystem as technology partner, and Upper Austrian machine and plant manufacturer Fill as industrial pilot partner.

Viewpointssystem is one of four core technology partners in the consortium. Building on its existing VPS Next glasses, the company is developing XR glasses with eye tracking to assess workers' attention and cognitive load during complex industrial tasks.

Eye-tracking and camera data from the glasses are combined with additional sensor data over the course of the project. This creates a real-time picture of the

employee's physical and cognitive state, a so-called "human digital twin". AI agents use this information to adapt their support to the situation, for example through audio instructions or information displayed directly in the XR glasses.

"Truly adaptive assistance starts with understanding the human behind the task. Eye tracking gives us insights into a worker's attention and cognitive load in real time," says Frank Linsenmaier, CTO of Viewpointssystem. "This understanding allows AI to adapt its support to the person and the situation, going beyond simply automating assistance."

At Fill, the MANUFACTOR technologies will be tested in the company's Next World Factory, an innovative training and learning center. There, apprentices and employees already in the workforce acquire new skills for technical professions that are changing rapidly through digitalization: mechanics, electronics and software are becoming more interconnected, while new technologies – from cloud-based AI applications to additive manufacturing – are gaining importance. The pilot will explore how adaptive, AI-powered assistance can accelerate skill development and support confident application in daily work.

"The shortage of skilled workers and the increasing complexity of technologies require new approaches to training and qualification," says Dr. Martin Muik, Research & Development at Fill. "In our Next World Factory, we impart technical and digital skills and enable a view beyond individual disciplines. With MANUFACTOR, we want to explore how AI-powered assistance can make learning more personalized, efficient and motivating, and help people develop their full potential."

Shorter training, fewer errors, less strain

MANUFACTOR targets a **reduction in onboarding times of more than 35 percent** and **20 percent fewer manufacturing errors**. It also aims to **improve workers' confidence in their own abilities by more than 20 percent**, while reducing physical and mental strain.

Alongside the pilot at FILL, the assistance system will also be tested and refined at Volkswagen Autoeuropa in Portugal and Hitachi Energy in Sweden. Two Learning Factories are complementing the industrial pilots. The goal by the end of the project is to produce a validated prototype of the assistance system that has been validated in relevant deployment environments (Technology Readiness Level 5–6). Development will take into account the requirements of the EU AI Act and the General Data Protection Regulation (GDPR).

Further information: <https://manufactor-project.eu/>

About Viewpointssystem

Viewpointssystem is a Vienna-based deep-tech company that develops and manufactures internationally acclaimed smart glasses with eye-tracking technology. The company's solutions enhance efficiency and quality in production, maintenance, and training and are used by businesses

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and organizations worldwide. With Digital Iris®, Viewpointssystem provides robust eye-tracking technology that can be integrated into wearables devices from other manufacturers, enabling more intuitive human-computer interaction. **Viewpointssystem.com**

About FILL

Fill is an internationally leading machine engineering company headquartered in Gurten, Upper Austria. With complex high-tech plant systems and customized solutions for the manufacturing industries in metal, plastic, and wood, Fill makes its customers the best in the field. The automotive, aerospace, sports and construction industries all benefit from Fill's expertise. Founded in 1966, the 100% family-owned company is known for its innovative strength, strong values and excellent workplaces. **fill.co.at**

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