

November 14th, 2025

SMARTHANDLE showcases Intelligent Handling Innovation at ManuDays 2025



The SMARTHANDLE project was proudly represented at the Manufacturing Partnership Days 2025 (ManuDays25), held from 20 to 22 October 2025 at the Event Lounge in Brussels. Organised by EFFRA (European Factories of the Future Research Association), ManuDays brought together leading EU-funded initiatives, industry experts, and innovators to explore the future of European manufacturing across key themes like AI, sustainability, and human-centric production.

As part of the programme, **Dionisis Andronas**, Senior Researcher and Project Manager at the **Laboratory for Manufacturing Systems and Automation (LMS)**, took the stage on **22 October** with a presentation titled: **“Resilient Manufacturing Lines Through Intelligent Handling Systems: The SMARTHANDLE Approach.”**

In his talk, Mr. Andronas introduced SMARTHANDLE’s vision for enhancing flexibility, productivity, and sustainability in manufacturing through intelligent handling systems. The project focuses on developing smart tools, adaptive robotics, and AI-based planning mechanisms to automate complex handling operations, particularly in highly variable industrial scenarios.



One key use case highlighted during the session was **the automated packaging of multivariant aluminium profiles**, addressing the challenges of manual handling, repetitive operations, and workers’ cognitive workload during bin stacking or packaging of personalized orders. The presentation also showcased a pilot demonstrator featuring



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bi-manual robotic systems with perception-driven gripping, planning algorithms, and pallet loading optimisation—delivering results such as:

- Over 90% automation of repetitive tasks
- Reduction in physical and cognitive workload
- Seamless handling of multiple product variants
- AI-enhanced decision-making for stacking and scheduling

In addition to the project session, **SMARTHANDLE** had two dedicated booths shared with its sister project **AgileHand**, **HARTU** and **MASTERLY** where visitors had the opportunity to learn more about the projects' vision and technologies. Project partners from **TECNALIA**, **Teaching Factory Competence Center (TFCC)** and **Netcompany-INTRASOFT** were also present, actively engaging with attendees, sharing insights, and strengthening connections with other EU-funded initiatives and industrial stakeholders.



SMARTHANDLE's participation at ManuDays reinforced its commitment to building **resilient, inclusive, and future-ready manufacturing environments**, in line with the Made in Europe industrial strategy.

About SMARTHANDLE

SMARTHANDLE is a Horizon Europe Research and Innovation Action focused on creating intelligent robotic handling systems for diverse and complex production environments. Its solutions are being tested across three industrial use cases: delicate contact lens manipulation (MENICON), aluminium profile packaging (ALUMIL), and battery disassembly (ABEE).

🔗 Learn more about the project at: www.smarthandle-project.eu



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