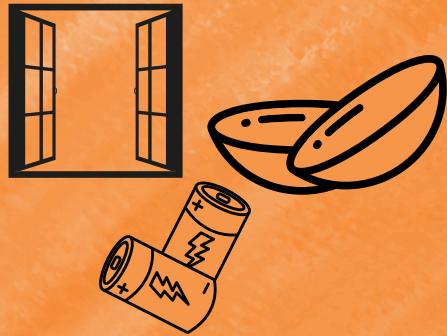
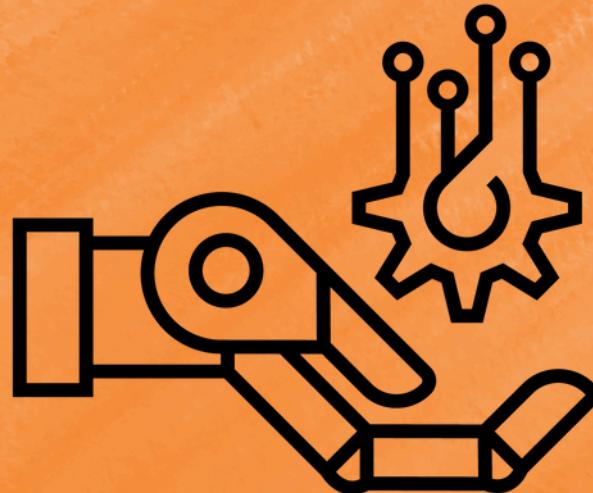


SMARTHANDLE demonstrates its cutting-edge robotic and AI-powered solutions through three industrial pilot cases, each addressing distinct sectoral needs: metal manufacturing, consumer goods and battery recycling. These pilots showcase the project's ability to tackle real-world challenges by developing intelligent, flexible, and human-centric automation systems.



In the consumer goods sector, a dual-arm robotic cell automates the packaging of large, variably shaped parts. In metal manufacturing, advanced grippers and robotic arms enable the delicate handling of soft and deformable components. Finally, in the battery recycling pilot, smart automation supports safe and efficient disassembly, promoting sustainable end-of-life processing. Together, these pilots validate SMARTHANDLE's potential to transform modern manufacturing through smarter, adaptable, and safer production systems.

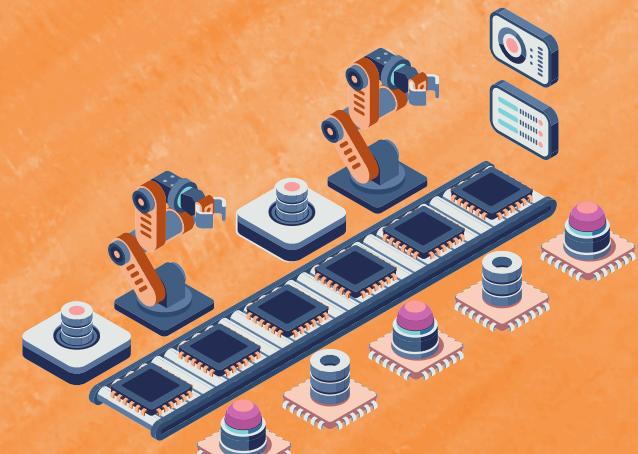


SMART HANDLE



SMARTHANDLE Pilots

Real-World Applications of Smart Handling Innovation



Find more about SMARTHANDLE:

www.smarthandle-project.eu

info@smarthandle-project.eu

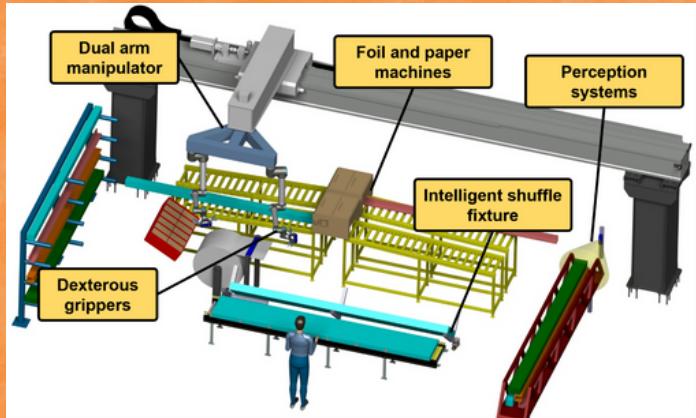


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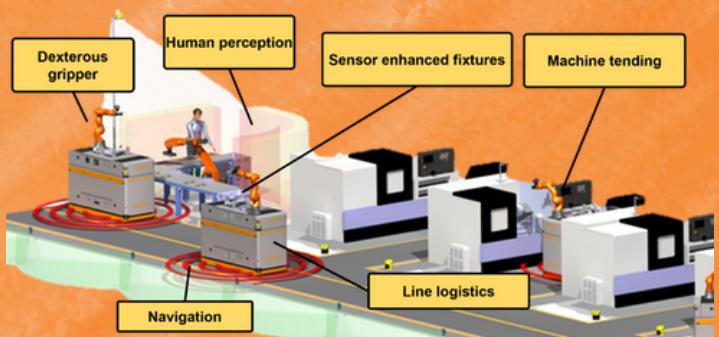


Pilot 1- Metal production pilot case

Partners involved



This pilot focuses on packaging large, variably shaped parts into cardboard boxes using a robotic cell with a dual-arm system. The cell autonomously identifies the best packaging strategy by detecting the parts' orientation and position, optimizing the use of available space. This contributes to increased efficiency and reduced human involvement in repetitive packaging tasks.

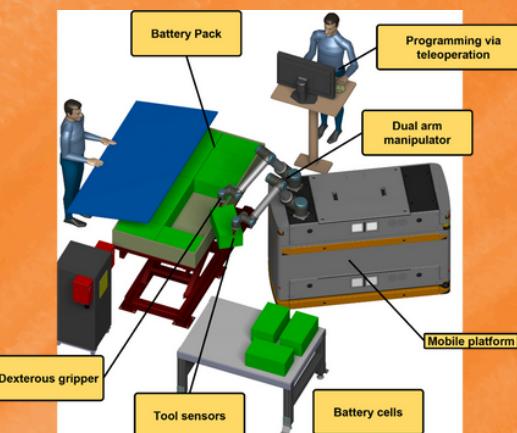


Pilot 2- Consumer goods production pilot case

Partners involved



Aimed at improving flexibility in handling soft or deformable components, this pilot uses smart grippers and AI-based robotic systems to perform tasks like pick-and-place or assembly of parts that require gentle manipulation. The pilot demonstrates advanced dexterity and control in robotic handling for metal manufacturing.



Pilot 3- Battery disassembly production pilot case

Partners involved



This pilot targets the dismantling and recycling of batteries through the use of robotics and AI. It incorporates object detection, sorting, and precise disassembly techniques to manage hazardous components safely while maximizing material recovery. It showcases a sustainable approach to end-of-life battery management.