



SMARTHANDLE



Start date:	1-1-2023
Runtime:	36 months
End date:	31-12-2025
EC Funding:	HORIZON-IA
Coordinator:	Tecnalia
Demcon:	DISG

General information:

The manufacturing sector in the European Union plays a vital role, contributing to 2 million enterprises, 33 million jobs, and 60% of productivity growth. However, the sector has encountered significant challenges in recent years due to global occurrences such as economic crises and an unprecedented pandemic. As market demands shift towards products with shorter lifecycles, manufacturing businesses must adapt to remain sustainable by effectively balancing cost, quality, and productivity.

SMARTHANDLE recognizes the shortcomings that need to be addressed, including the high number of product variants requiring reconfigurable and flexible handling tools, the lack of advanced perception systems for efficient product and environment monitoring, the absence of adaptable control and planning schemes for handling a variety of workpieces and materials, and the immaturity of planning systems to keep up with market needs and custom orders.

The SMARTHANDLE research project aims to tackle these challenges head-on and provide vital support to the European manufacturing industry.

Vision and impact:

SMARTHANDLE is set to make a significant impact on the European manufacturing landscape, providing crucial solutions to the challenges faced by businesses. By reimagining handling operations, the project aims to unlock new levels of efficiency, agility, and adaptability, ensuring that European manufacturers remain competitive in a rapidly evolving market.

The SMARTHANDLE technological solutions will be applied in 3 industrial pilots derived from a variety of sectors, namely:

- Metal production
- Consumer goods production
- Battery disassembly

The consortium of SMARTHANDLE consists of 14 partners from 6 countries (Greece, Spain, Germany, Netherlands, Luxemburg, and Belgium) who will join forces to develop, deploy, validate, and promote smart and versatile manufacturing solutions within the 3 years duration of the project.

Project Website:

<https://www.smarthandle-project.eu/>



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