



Industrial living labs in Flanders

17 ways to boost manufacturing industry

1 COLLABORATIVE WORKCELL 4.0

What if your new colleague is a robot? This living lab demonstrates this, using a mobile work bench that combines a cobot, digital work instructions and light projections, with measurements of the physical and mental workload experienced by the employee.

Lead partner: Flanders Make
Partner: Imec

2 SMART CONNECTIVITY

Location and production data are a must in factories with cobots, AGVs and other mobile units. Learn how to obtain reliable data and localisation solutions in challenging situations, such as a factory hall with obstacles and personnel.

Lead partner: Imec
Partners: Flanders Make, EUKA

3 LIVING LAB 4.0 AGROFOOD

Food companies can optimise their processes with sensor technology and hyper-spectral cameras. They thereby improve the quality of their products and their position on the market.

Lead partner: Flanders' FOOD
Partner: ILVO

4 SMART MAINTENANCE

Affordable sensors facilitate the shift from periodic to conditional maintenance, which saves industrial companies a lot of money. This living lab shows how to lower maintenance costs and how to increase productivity.

Lead partner: Flanders Make
Partner: Imec

5 OPERATOR SUPPORT 4.0

Assembly processes are becoming extremely complex. Fortunately there are numerous solutions for maximum production flexibility without pushing employees to their limits. The fastest way to 'lot size 1'!

Lead partner: Sirris

6 CONDITION-BASED & PREDICTIVE MAINTENANCE

Production machines are home to a wealth of information. IoT sensors and cloud solutions pave the way for optimal maintenance and further digitisation.

Lead partner: LSEC/3IF.be

7 DIGITAL SERVICITISATION

How do you quickly assess the feasibility of a new, smart product with an associated digital earning model? This living lab provides the building blocks (sensors, connectivity, data-analyses, dashboards) you need!

Lead partner: Sirris

8 CSITE VISION

Virtual and augmented reality offer unprecedented possibilities for the construction industry. This living lab serves a range of tangible business ideas via demonstrations and inspiration sessions

Lead partner: WTCB
Partners: Howest, Sirris

9 MACHINE UPGRADING 4.0

By upgrading existing installations with sensors, actuators and computing power you give a new life to old machines.

Lead partner: KULeuven-Campus Bruges
Partners: Flanders Make, UGent

10 DRONES IN AGRICULTURAL & CONSTRUCTION INDUSTRY

From inspections and thermographic scans of roofs to autonomous spraying of crops: drones are revolutionising both construction and agriculture. At DronePort, the heart of the Flemish drone community, all the building blocks for an innovative drone project are within reach.

Lead partner: EUKA
Partners: Confederatie Bouw Limburg, WTCB, Proefcentrum Fruitteelt

11 SMART FARMING 4.0

Spectral image sensors allow the use of drones for screening crops for diseases. Two practical cases demonstrate the possibilities.

Lead partner: ILVO
Partners: Imec, Flanders Make, KULeuven, VITO, Proefcentrum Fruitteelt

12 AR/VR IN LAB AND PROCESS ENVIRONMENTS

In lab and process environments, you can support your employees with digital work instructions, augmented reality and digital twins. In this way, you can formulate answers to the increasing complexity.

Lead partner: UHasselt
Partners: Flanders Make, Howest, Flanders' FOOD, Bioville

13 T2 FOR INDUSTRY 4.0

The brand new, high tech T2 Campus assists companies and their employees with the necessary competence development for the transition to industry 4.0. For example, in the field of the Industrial Internet of Things, cobots, cloud applications and the link between production processes and web applications.

Lead partner: VDAB
Partners: Syntra, Flanders Make, Sirris, UC Leuven-Limburg

14 EDUCATE 4.0

Innovative digital learning methods help companies find and retain employees with the right competences and skills.

Lead partner: Catalisti
Partners: Acta, Imec, Karel de Grote-Hogeschool-Campus Hoboken

15 CYBERSECURITY 4.0

The tsunami of data causes risks at production level. This living lab offers an overview of solutions in the area of cyber security and helps putting them into practice.

Lead partner: Howest
Partner: UGent

16 MES4SME

SMEs need reliable and easily configurable Manufacturing Execution Software. Experts show the best solutions in this test environment.

Lead partner: UGent
Partners: Flanders Make, VUB

17 AMPLITUDE

Within twenty years, half of the manufacturing companies will be using 3D printing. Discover the possibilities for your company with the help of practical cases and independent matchmaking.

Lead partner: SIM-Flanders/Flam3D

Legend

- 1 Living lab
- Partner

Throughout Flanders, and with the support of the Flemish government, researchers and technicians make their expertise available in industrial living labs. By organising workshops, demonstrations and events, they help manufacturing companies transform towards industry 4.0.

www.industrie40vlaanderen.be