

VLAANDEREN INDUSTRIE 4.0

LIVING LAB SMART CONNECTIVITY MATERIALS, MACHINERY & PRODUCT FLOW MANAGEMENT

CONTEXT

In order to remain competitive, Industry 4.0 innovations require far-reaching process insights, process optimization and flexibility. This project demonstrates & combines new ICT solutions that are crucial to always have an accurate and up-to-date information of the location and status of raw materials, products, machinery and personnel at the various stages of a production line.



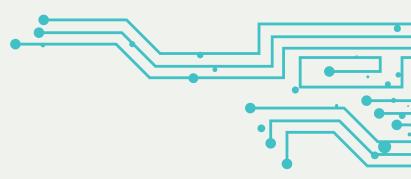














TECHNOLOGY INNOVATIONS

- 1. Continuous wireless connectivity: with both static and mobile goods (AGV's, drones, robot arms, products, goods, etc.)
- 2. Continuous location awareness: cm-accuracy ultra wideband (UWB) localization & sensor fusion
- 3. Object recognition: camera based spatial orientation and inventory management

USE CASES AND DEMONSTRATORS

Target use cases: inventory management, automated process & product quality inspections, automated guided vehicles & drones, wireless control loops, autonomous robots and machinery, internal logistics, ... Main demonstrator: automated drone for warehouse inventory management and process inspection.





OFFERING

- Demonstration rooms (Ghent & Leuven)
- Local technology demonstrations (in-situ set-up in realistic conditions)
- Masterclasses (in-depth technology discussions)
- Feasibility studies (valorization & technology)
- Consultancy (design of custom solutions)
- Business plans & valorization studies

met steun van

AGENTSCHAP INNOVEREN & ONDERNEMEN



CONTACT

imec, Flanders Make & EUKA Eli.depoorter@imec.be