



Extra productivity and efficiency for manufacturing companies with flexible logistics

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How can digital technologies and platforms and digitally driven AMRs be implemented faster to achieve (more) flexibility and efficiency gains in production? How can added value be created with this in practice, also for SMEs? The new COOCK project FlexIn²Log tries to find answers to these questions in cooperation with manufacturing companies and their logistics and ICT partners.

The demand for customer-specific production (smaller batches) with short lead times is on the rise and most companies look for a solution in the production processes and not in the upstream supply chain and internal logistics. This means that solutions are not always ideal.

On the one hand, we need supply and internal logistics to become more flexible and transparent, taking material transport and transfer away from production operators. On the other hand, we need more automation to safeguard internal logistics from too much manual work and planning and inspection errors. Specific warehouse logistics and supply chains for the parts, materials and packaging will result additional efficiency gains.

The COOCK project 'FlexIn²Log', Sirris and VIL (the innovation platform for the logistics sector in Flanders and Spearhead cluster Logistics) strives to provide the manufacturing industry with additional practical experience in making the supply chain to the production floor more flexible and efficient.

Opportunities

Some significant opportunities for industrial SMEs are already being revealed:

- Accelerating and aligning the logistics supply chain to facilitate production changes.
- Reducing internal delivery quantities (reducing inventory in production).
- Increasing the predictability of logistics movements.
- Relieve operators of non-production tasks.
- Drastically reducing the number of errors (such as missing or wrong components in production).
- Increasing productivity and competitiveness through automation and enhancement of logistics processes on the production floor, the preceding warehouse logistics, and the supply chain of materials and parts.

Concrete approach

The implementation of this two-year project rests with the VIL team, in collaboration with Sirris for AMR integration.

- We draw up an overview of state-of-the art technologies for the digitalization of the flow of goods between warehouse and production, digitalisation and monitoring inbound logistics via existing management systems and automation of internal transport towards the production floor.
- We make PoCs for automated transport between warehouse and production with AMRs.
- We make PoCs on digitalisation of order picking in function of production and set up a logistics concept for digital planning and control of inbound and internal logistics tasks linked to existing WMS/ERP/MES.
- We set up demonstrators using generic use cases.
- We develop a toolbox to evolve from the current to the ideal future situation: determining ROI, do's and don'ts, a working method to allocate tasks to operators and AMRs.

Get involved!

Do you belong to the target group - manufacturing companies and their logistics departments, logistics service providers, consulting companies specialised in warehouse optimisation and supply chain management, providers of warehouse management system (WMS) and business management applications (ERP) and integrators of warehouse automation - and would you like to participate in the project? Become a member of the support group and enjoy some important benefits!

- You will co-direct the use cases developed in the project and learn in workshops from experts in the field how to implement the overall approach in your company.
- You can apply a specific case and help develop it in a demonstrator.
- You will be the first to access the results.
- You can network with experts and other participating companies

The project started on 1 September 2022 and will run until the end of August 2024. The kick-off meeting with the companies from the support group is scheduled on 22 September 2022.

Want to know more? Read more about the project [here](#), or [contact](#) us!



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