FLEXIBLE AUTOMATION OF KITTING PROCESS AT ARLA

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ABSTRACT

As getting low skilled workers is getting increasingly harder, the demand for automation is on the rise.

Dairy company Arla has a distribution center located in Hobro where they fulfil customer orders on a daily basis by kitting different products in a single packaging unit before being dispatched. Currently the distribution center mainly utilizes manual operations with many heavy lifts and there are inefficiencies stemming from manual transportation of goods between locations.



Arla is looking to make an analysis of their current setup and develop new solutions in terms of kitting and storing their products, potentially reducing the errors, increasing efficiency, and improving the work environment. After the detailed preliminary analysis of the distribution center, the goal is to introduce solutions related to warehouse digitalization, automation and flow-flexibility, which can be implemented right now, or in the future.

First task is making an As-is analysis of the setup and the order flow to get a better understanding of the processes. Looking into different manual operations and deciding which ones are candidates for automation, which will be followed by a deep dive in the required technology and implementation. One of the proposed solutions by Arla is the deployment of AMRs (Autonomous mobile robots), which will enable Arla to shift the flow towards zone-based picking (rather than order-based). While Arla is interested in the AMR technology, they are not limited by it, and want different viewpoints to the problem.

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