

Development of a Production Logistics Concept for Körber Pharma Packaging AG

Student



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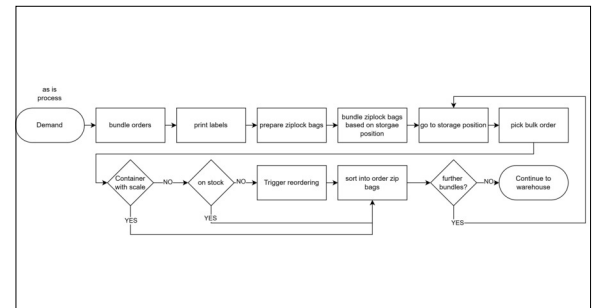
Objective: When constructing a new production building to replace an existing facility, current layouts and processes cannot be transferred unchanged. At the same time, logistical structures must be adapted to modified spatial and organizational conditions. The current situation at Körber Pharma Packaging AG is characterized by discontinuous material movements between two floors. In addition, up to 40 assembly interruptions per day occur due to missing fastening elements. For the planned new building, no coordinated logistics concept has yet been defined. The objective of this project is therefore to develop a decision-supporting basis for the logistics layout of the new building and to design an improved supply concept for fastening elements. The aim is to enable an efficient and interruption-free material supply within the future production environment.

Approach: The methodology comprises a material flow analysis based on 230,808 postings and 2.1 million individual parts using data from SAP S/4HANA, as well as a detailed analysis of the existing supply process for fastening elements. Based on the identified inefficiencies, the process was redesigned using proven lean methods. This included the development of concepts with smart storage containers, integrated weighing systems, pick-by-light functions, and a milkrun system. In addition, an area analysis of the existing logistics layout was conducted. Based on these results, several layout options for the new building were developed and subsequently evaluated using a utility analysis.

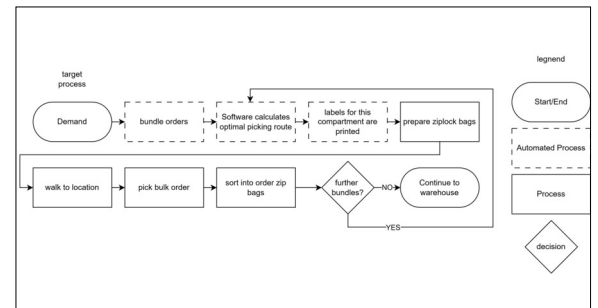
Result: The concept shows a reduction in manual process steps within the fastening element supply process from eleven to eight steps. Three of these steps additionally exhibit potential for automation. The developed milkrun system eliminates assembly

interruptions caused by missing small parts. Another key outcome is a clearly structured logistics layout with defined areas for goods receipt, intermediate buffering, and the small-parts area, which serves as a foundation for further detailed planning of the new production building.

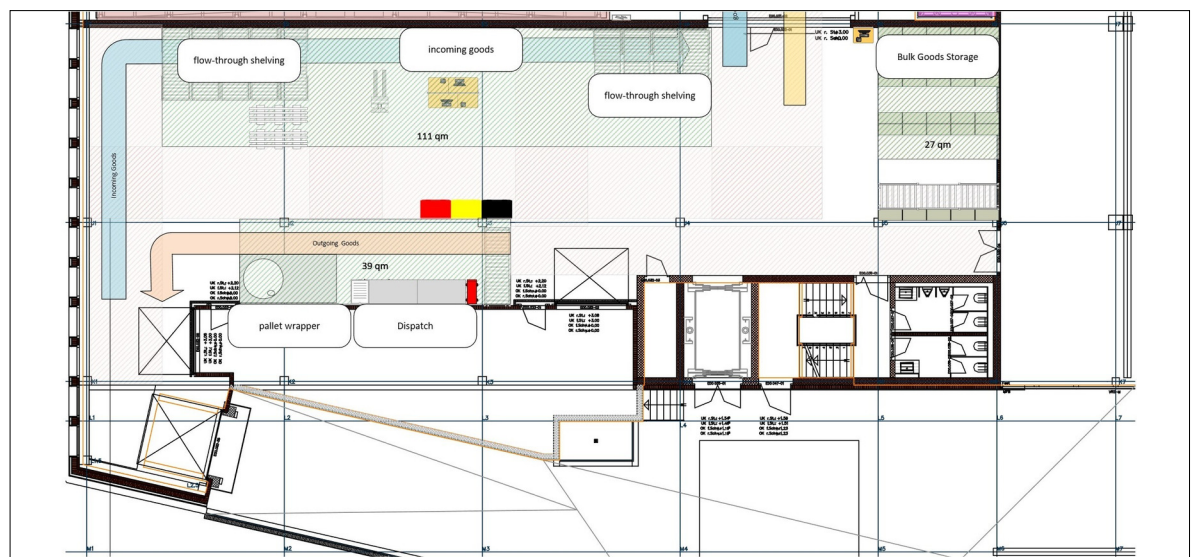
As-is Process Own presentation



Target Process Own presentation



Logistics Layout Körber Pharma Packaging AG (2025)



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