

## **HOW TO IMPROVE PICKING IN THE WAREHOUSE**

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Order picking is a multi-stage process that starts with the order processing operations of the account manager and ends with placing the order in the shipping area. The competitiveness of a company depends to a large extent on the speed and quality of order picking. The main types of order picking: discrete picking, batch picking, zone picking, wave picking [1]. The number of errors in order picking is reduced when information systems and bar coding are introduced to facilitate order picking. Nevertheless, errors are inevitable in the first phase of implementation, and a system of bonuses and penalties needs to be developed. This requires gathering statistics and defining criteria for evaluating staff performance. Several picking stages can be optimized at once. These include the first phase of order processing, the exchange of information between the warehouse and the sales department, and the transfer of the selected order to the control area and its subsequent checking and packaging. However, the most time-consuming part of the process is the picking process itself: many errors occur at this stage, which also accounts for the majority of the time.

There are several ways of reducing order picking times: introducing a goods-to-person system; separating the picking and reserve stock; the use of integrated picking. It is recommended to reserve goods for customer orders automatically when planning the picking operation, according to the algorithm laid down in the warehouse management system. The fundamental rule in this algorithm is a predetermined order of goods in stock by batch or series:

1. FIFO (first-in, first-out) – “first in, first out” - goods are dispatched from the batch that arrives in the warehouse first.

2. LIFO (last in, first out) - last in, first out - goods from the earliest-to-receive inventory are given priority for shipment.

3. FEFO (first-ended, first-out) – “first-in, first-out”. As a rule, shelf life is used as the criterion for determining shipment priority: goods with less remaining shelf life are shipped first.

4. LEFO (last-ended, first-out) – “last-end-first-out” - goods with the highest remaining shelf life are shipped first [2].

Consideration should also be given to developing algorithms for picking routing. This issue is specific to each warehouse and depends not only on the parameters of the premises, but also on the parameters of the material flow being handled, which change over time. The functioning of a warehouse complex designed according to the characteristics of the goods and the specifics of the company will require fewer resources for cargo handling, provided that the stable and safe operation of the warehouse personnel is maintained. Properly chosen warehouse management system will allow a timely exchange of accurate and complete information between divisions of the company.

However, regardless of whether these tasks are solved by the company's employees or by engaging consultants for the technological design and automation of warehouses, it is necessary to take into account that it is a comprehensive approach that will produce tangible results for the enterprise as a whole.

## References

1. Logistics – planning and management of material flows /. Palagin Y.I. // – St. Petersburg : Polytechnika, 2012. – 286 p.

2. Options for optimizing order picking in the warehouse [Electronic resource]. – Mode of access: <https://logists.by/>. – Date of access: 10.04.2022.