ROIMA

LOGIA WMS

Using warehouse strategies

Warehouse strategies
Warehouse management tool for efficient workflows

Correct placing and handling of items is one of the prerequisites for inventory efficiency.

It requires a strong managerial focus to ensure that all items are handled correctly throughout the warehouse. In particular, the continuous adjustment of the storage location of items and handling of the goods when product range, demand, or inventory structures change can seem an immense task.

A WMS system that can both manage rules and procedures for goods and support the ongoing adjustments can facilitate this task.

LOGIA's warehouse strategies

LOGIA's warehouse strategies provide warehouse managers with a simple tool to define a number of overall inventory strategies and to ensure that they are reflected in the day-to-day execution of the warehouse tasks.

The strategies include rules for placement, replenishment, and picking and answer questions such as:

· Where to place newly arrived goods?
· When should picking locations be replenished?
· From where should picking locations be replenished?
· What is the best picking location for each
· customer order?

In this guide, you will be introduced to some of the options offered by LOGIA's warehouse strategies. You will gain insight into how strategies can be approached and what considerations should be taken when defining inventory strategies.
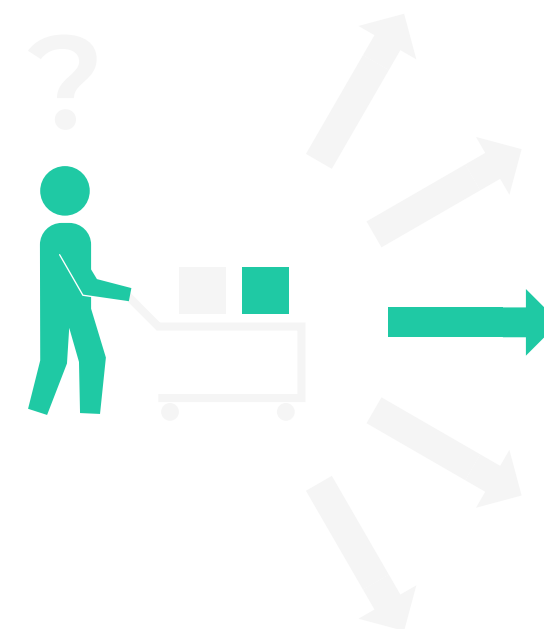
The strategies must ensure that all items are handled correctly throughout the warehouse

A simple tool to define the overall warehouse strategies

Warehouse workers are guided to handle the items most efficiently

Defining strategies

The master strategy

LOGIA's inventory strategies make it possible to group the rules of an item or item group in one strategy — a master strategy.

The master strategy includes storage location, replenishment, and picking strategies. Each strategy consists of a set of rules for how each item or item group should be handled throughout the warehouse.

Depending on the needs of the warehouse, you typically work with 2-10 master strategies. Each item is linked to the master strategy that is going to govern it. This ensures that the movement of the goods in the warehouse is carried out as expediently as possible.

The use of warehouse strategies means that the focus can be more on strategic considerations than issues related to the individual item or order.

Defining strategy

When defining master strategies, the starting point is how the items are handled most efficiently throughout the warehouse. This includes both the physical warehouse layout and the fact that the defined strategies must cover all variations of the goods such as volume, fragility, durability, and picking frequency.
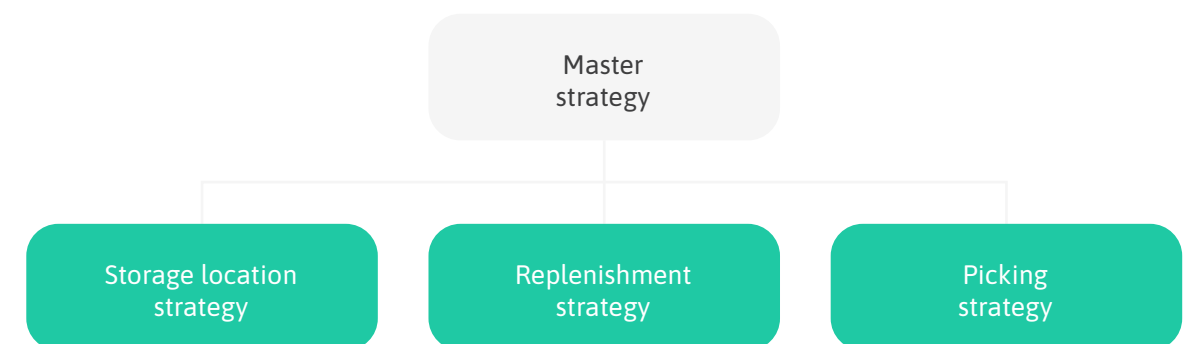
Working with a few well-defined strategies creates an overview and simple workflows in the warehouse.

Assigning a strategy to new items
When registering new items, it is easy to assign a strategy that fits the items.
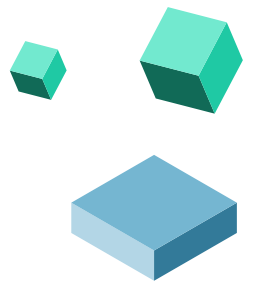
Ongoing adjustments

When product range, demand, or inventory structures change, it is easy to adjust the master strategy for the entire item group or change strategy. It is simple and manageable.

Master strategy

| Storage location strategy | Replenishment strategy | Picking strategy |

Optimal goods placement
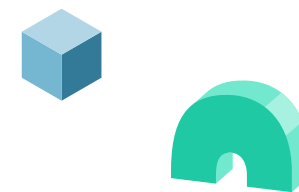
Storage location strategy

LOGIA's storage location strategy ensures that incoming items are sent to well-chosen warehouse locations.

To achieve the best conditions for efficient replenishment and picking, the correct decision about where the individual item should be placed must be made already when an item enters the warehouse.
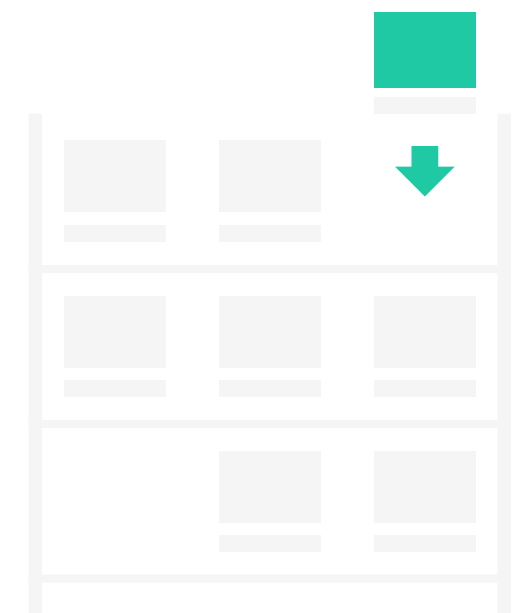
In particular, in situations where the same item is stored in several locations in the warehouse, it is important to have defined a strategy for how to handle the item.

LOGIA controls how many items are in a box, on a pallet, and so on. The storage strategy then defines where boxes and pallets are to be stored. This avoids inexpedient splits of lots and ensures "clean" warehouse locations.

For example, if the received order is a combination of pallets, boxes, and single-piece items, LOGIA can automatically split the order into multiple storage operations that can be stored serially or in parallel.

The storage strategy defines in which warehouses and locations the goods are to be stored

Incoming items are sent to well-chosen warehouse locations

On-time and correct quantity

Replenishment strategy

Replenishment is about ensuring that picking locations are replenished on time and with an appropriate quantity.

The replenishment strategy contains one or more replenishment locations that picking locations are replenished from. It is possible to prioritize these replenishment locations over each other, so that, for example, replenishment is first initiated from the replenishment locations closest to the picking location. This minimizes internal transport.

The replenishment strategy also contains principles that describe the minimum and maximum inventory of the individual item, as well as how the replenishment should be carried out.

There are three different principles, each of which takes account of the characteristics of the individual item. It is common to all principles that replenishment is automatically initiated when inventory in the picking location reaches its minimum.
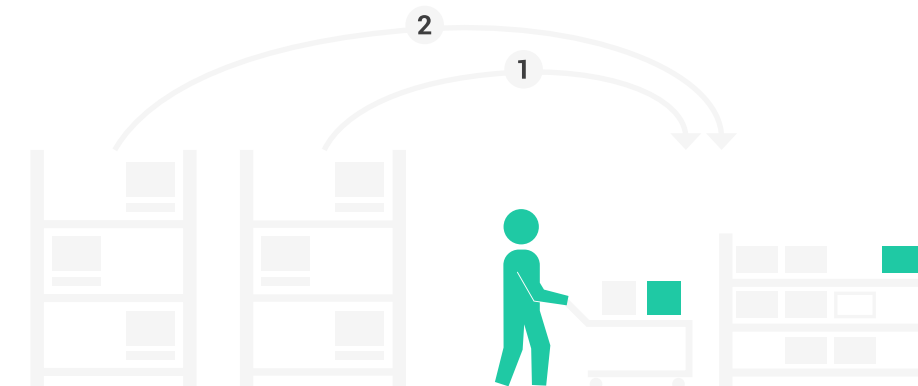
1. Up to max. inventory

Here a replenishment is initiated that replenishes up to maximum inventory without considering whether there will be any picking from the location. This is particularly used where there is no room for more than max. inventory at the picking location.

2. A whole number of load carriers

Here a replenishment is initiated that replenishes up to maximum inventory while taking into account the dimensions of each load carrier such as a be a full number of boxes or an entire pallet. This simplifies the replenishment task for the warehouse operator.
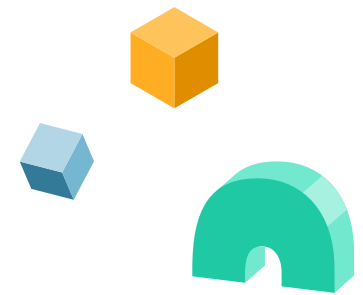
3. Today's needs

A more advanced principle is to replenish a quantity that corresponds to today's needs. The aim is to replenish only once a day. The quantity corresponds to the total daily picking requirement for each item. LOGIA uses information from all orders in the system to calculate a varying quantity. This principle is appropriate if the demand for each item varies and you want continuous adjustment of the quantity at the picking locations.

LOGIA ensures that replenishment orders are initiated automatically

Efficient order handling

Picking strategy

The picking strategy ensures that orders are picked from the right warehouse areas. This can be crucial for efficiency.

It is inexpedient to pick low quantity orders from a pallet warehouse and, conversely, problematic to pick large quantity orders from a shelf warehouse. LOGIA's picking strategy ensures that orders are picked from the right warehouses.
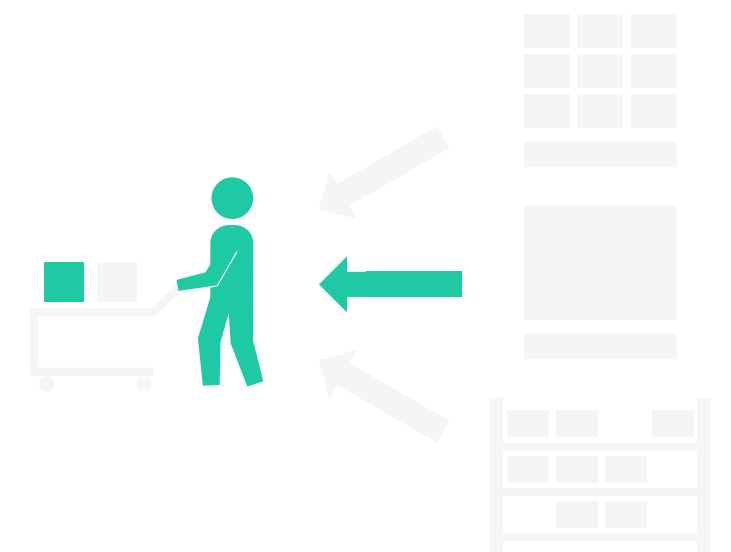
When you define how many items are in a box, on a layer, and on a pallet, you can choose a picking strategy that binds order size and picking location together. This ensures that the warehouse employee is directed to the pallet warehouse when the order size corresponds to a pallet and the shelf warehouse when the order size is less than a pallet.

If the order size is a combination of pallets, boxes, and single-piece items, LOGIA can, for example, automatically split the order into several picking operations that can be picked serially or in parallel.

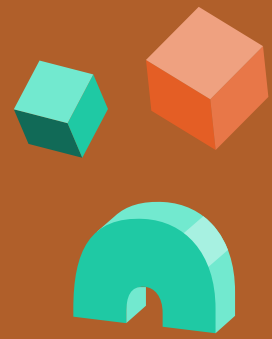**Special control when picking large orders**
Choosing to have the same item placed in a suitable picking location with few quantities and then replenish from a pallet location with large quantities is a useful warehouse strategy that increases the efficiency of picking. However, it can come under pressure if orders come with a large number of units, almost leaves the picking locations empty.

In LOGIA, it is possible to define a threshold for the quantities that can be picked at the picking locations before the order is directed to a pallet location instead. A threshold is specified for the maximum inventory count of each item, and if an order size exceeds this, the order is routed to the pallet warehouse instead of the shelf warehouse.

The picking strategy binds order size and picking location together

An inventory strategy increases the efficiency of picking

The all-in-one warehouse platform

LOGIA is the all-in-one warehouse platform. The platform comprises everything for warehouse and logistics management and optimization, including warehouse management/ WMS, warehouse automation/WCS, production logistics, and distribution management.

LOGIA's control modules can be used individually or as a complete solution. Control modules can be added as needed, and, regardless of the scope, there is always only one integration to the ERP system.

LOGIA is developed and supported by the software and service company Roima. We are specialists in software solutions for production, logistics and supply chain.

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