



# Modern and efficient warehouse management

Efficient storage

More work done in less time
Faultless execution

Correct stock

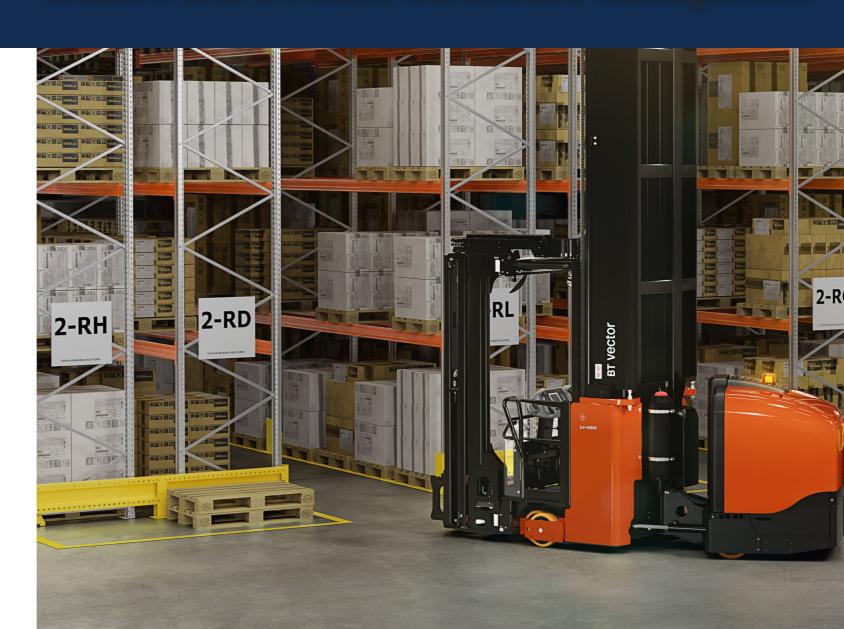
Controlled operation

Quality control

Traceability

Intuitive solutions











### WHO IS DASTRONIC

Dastronic NV, founded in 1979, consists of a team of logistics and IT experts and is located in Aarschot, Flemish Brabant. We have been optimizing the operation of warehouses and distribution centers for 40 years.

With our Optima WMS solution, we ensure that work on the warehouse floor is carried out faster, more correctly and more efficiently.

We also integrate those tools that are most suitable for your situation: barcode, voice picking, pick-to-light and automated systems.

### WHO ARE OUR CLIENTS

You will find our achievements in various industries: food, automotive, retail, medical, production, maintenance...

Each implementation provides a significant improvement in efficiency. Our strongest assets here are the quality and stability of the installed solutions.

- Our warehouse management system Optima WMS is scalable according to size, occupancy and complexity of the warehouse.
- We provide both simple applications for controlled inventory management and fully automated solutions for the entire floor.

The employee on the floor is important to us. Its role in the story is crucial.



### **OUR APPROACH**

**Expertise and experience** 

Warehouse management and WMS have been at the core of our activities for 25 years. It is and will remain our passion. Improving and optimizing the operation on a warehouse floor gives us great satisfaction.

We use a human and very accessible approach. No big words but an honest and clear process.

In our projects we involve the employees on the floor right from the start. These are our 'local heroes'. Their input into the story is crucial. It goes without saying that a realization is more supported when users feel involved.

Whether it concerns an SME taking its first steps in warehouse management or a larger company with extensive optimization, it is always about employees who do their daily job and perform tasks at their very best.

We want to support them in this. So that their work and especially the way in which it is done is as efficient as possible and contributes to the success of the company. The right tools help with this, but those tools aren't the goal. The result counts. Whatever others say.



## **OUR TEAM**

Our employees are experienced specialists who have indepth knowledge of both logistics and modern IT.

Each implementation is carried out by a project team. In this way, your project is also supported by several colleagues.

Moreover, this ensures that each proposal or issue is always discussed in a group, which leads to synergy.

## **OUR ACCENTS**

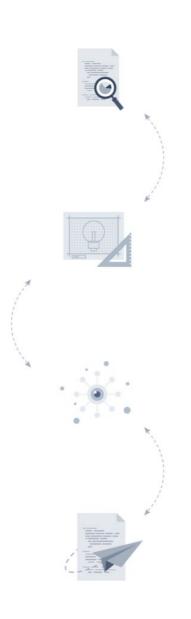
Flexibility

Involvement

Support



## THE PROCESS



#### STEP 1

Based on your current set-ups, operation and needs, we map out the flow of goods and look at how we can optimize them in terms of set-up and procedures.

#### STEP 2

Optima WMS contains a large number of standard functions. However, you may have specific wishes. These are added to the already existing standard functionality.

#### STEP 3

We then configure the warehouse in a test environment and thoroughly simulate the different scenarios. Also the data exchange is extensively tested.

#### STEP 4

Finally, everything is transferred to the live environment. During this start-up, we accompany your employees to assist them. Later on you can count on accurate aftercare.







## EFFICIENT WAREHOUSE MANAGEMENT

Every warehouse, regardless of its volume, benefits from efficient work that takes place there. The two most important things to get to that efficiency are the **warehouse layout** and the **tools** that support the work. We have specialized ourselves in this matter for the past 25 years.

We evaluate the layout in the warehouse, where and how products are stored and which flows of goods are present.

We then look at how that storage setup can be improved and which technology is best to perform the tasks correctly and quickly. Barcode scanning, Voice Picking, Pick to Light: each has its own specific advantages and disadvantages.

The final solution is equipped with our warehouse management system **Optima WMS** that distributes, monitors and controls the work to be performed. The result is a logical environment in which activities run smoothly and quickly.



### **Conductor in the warehouse**

In a logistic chain, the performance of the warehouse is crucial. Stored goods must be delivered to the customer quickly and without errors. Warehouse space is expensive and so the space should be used to the maximum. The quality of goods and services must be monitored in this respect. Moreover, it must be possible to reproduce the history in the event of a calamity.

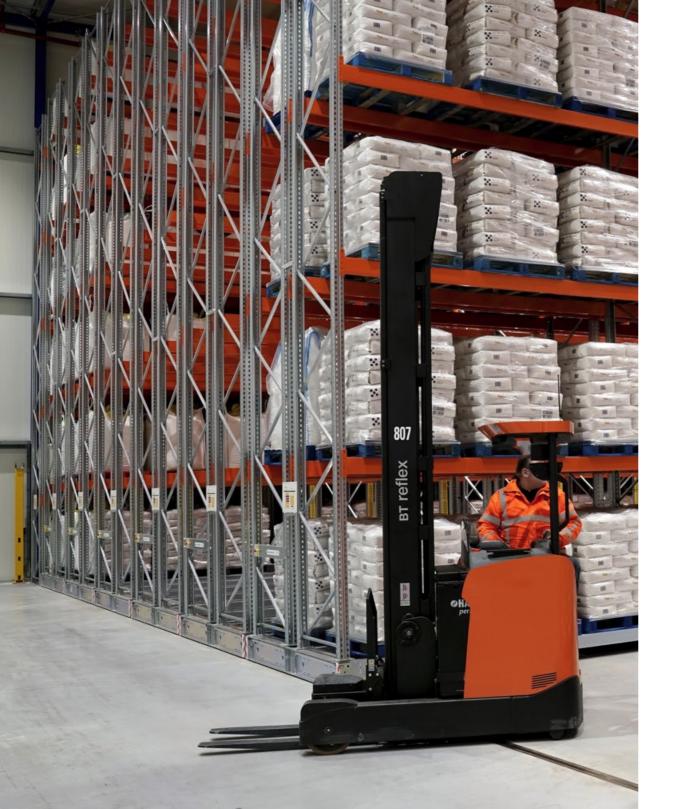
Countless movements are carried out in a warehouse every day.

Received goods must be stored, replenishments organized, customers must receive their ordered goods on time. Urgent matters must be given priority and problem situations must be dealt with quickly.

Dividing that work, assigning it to the workers, checking and monitoring its correct execution requires the use of a solution that controls the overall overview, but which can still intervene at a detailed level. Like a conductor leading his orchestra and watching over the right accents.

# **Optima WMS**

is designed to take on the role of the conductor. Starting from the received customer and supplier orders, Optima WMS takes care of the creation and coordination of all movements on the warehouse floor.



# **Objectives**

Multiple objectives are aimed at using Optima WMS. The existing situation and procedures, the type of warehouse and the stored products determine how big the profit will be on the various parts.

Although in specific situations additional objectives may be requested, the focus for Optima WMS generally is achievement of the goals described below.

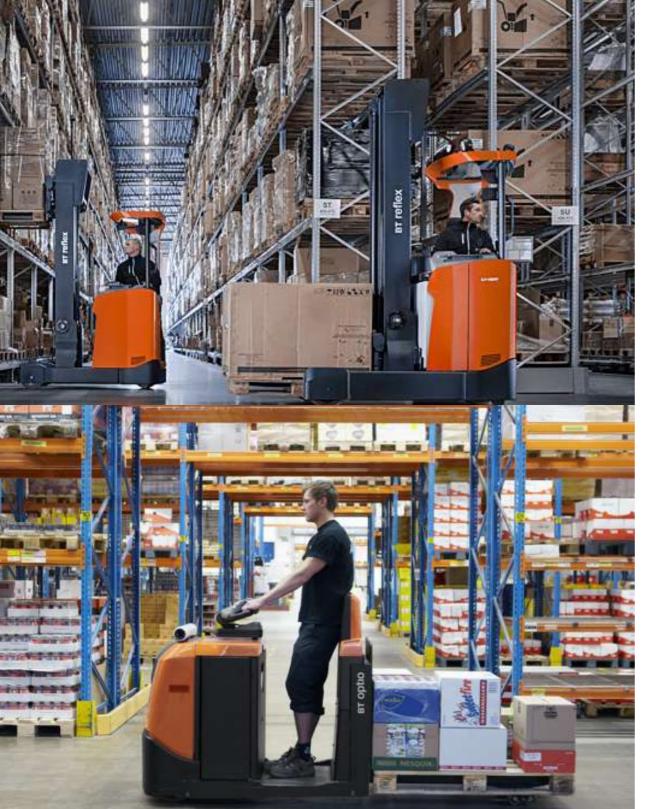
## 1. Efficient storage

Goods are temporarily stored in the warehouse. To do this as efficiently as possible, the system will focus on two things:

#### Maximum use of the available space

When choosing a free warehouse storage location for a carrier, the system takes into account the type of carrier and its stacking height. By coordinating location and carrier, less air is stored..

By using the "free location system", no locations are kept free for goods that are not in stock. This form of storage is more compact than storage in a "fixed location system", where a location is reserved for each type of item, even if the item is not in stock.



### **Minimizing distances**

An important part of the resources available in the warehouse is spent on moving goods from source to destination. It is very important to make the total distance to be covered as short as possible.

By stocking popular items closer to shipment, the walking or driving distance to those items is reduced. Since these articles are frequently requested, this limits the total distance to be covered. By assigning a rotation characteristic to both articles and locations, Optima WMS will automatically take this into account. In addition, this can be dynamically adjusted.

Often items from the same article group are needed at the same time. Optima WMS allows you to store the articles per article group. Zones are created, consisting of a group of locations. Articles that belong to the same article group are automatically stored in each other's vicinity.

### 2. More work in less time

Optima WMS is a real-time system and the assignment and execution of tasks is continuously evaluated. This is how the system calculates optimal walking and driving routes. Requested priorities are taken into account in the order of execution. Driving without load is avoided. All of this is aimed at doing as much work as possible in a minimum of time.

Optimizing and synchronizing tasks is done automatically. This avoids redundant communication between the employees and stress in the workplace.



### 3. Faultless execution

Incorrect deliveries cause reverse logistics. This is expensive and can adversely affect the relationship with the customer. But internal errors can also lead to an incorrect estimate of the stock, which in turn has an impact on the sales process.

Errors in the handling of goods must be avoided. Optima WMS supports several control systems:

- Barcodes
- Voice Picking
- Pick To Light
- Control of automatic systems

If desired, we can supply and install all equipment required for the realization: mobile terminals, printers, components...

### 4. Correct stock

Sales and purchases based on an incorrect stock lead to unpleasant situations. It is therefore crucial that the sales system has the correct information.

Optima WMS registers every increase or decrease of product at a location. The current stock of an item is the sum of all available stock at the various locations where that item is located. The stock is therefore, as it were, 'measured'.

When a deviation is detected at a location (eg due to a counting error), this is immediately corrected in the system thanks to the real-time connection.



## 5. Controlled operation

Optima WMS analyzes the received customer and supplier orders and translates them into tasks to be performed on the warehouse flour. In most cases, a job involves moving goods from a source location to a destination location.

The tasks to be performed can be divided into sub-tasks (eg when working with intermediate locations or when a means of transport has to be changed). In this way, a pool of tasks to be performed is created.

Depending on the available operators and tools, Optima WMS will assign the execution of a task to an operator. This involves looking at what rights the operator has (what type tasks he is allowed to perform), which truck or cart does the operator use (not every task can be performed by every truck / cart), in which zone the equipment may be used and which tasks have priority and must therefore be performed first.

An order can be converted into multiple tasks that are to be completed by different operators. Conversely, several orders can be taken together in one picking round and processed by one operator (eg batch picking). The execution of the sub-tasks is ordered in a logical way so that minimal movements are required.

The operator does not have to take the initiative himself, he is automatically offered the task he has to execute. Optima WMS acts as a conductor here: it distributes the tasks and monitors their correct execution. When the job is finished and there are still jobs available, the operator is offered a new job.

Optimizing and synchronizing these tasks is done automatically. It does not require communication between the employees. This avoids stress in the workplace.



## 6. Quality control

Different scenarios of quality control can be applied when using Optima WMS:

- Reception of goods: check on numbers, product characteristics, damage...
- Quarantine goods
- Checking and re-imposing of returns
- Post-check of collected goods

## 7. Traceability

Optima WMS records the details of every movement executed:

- Start and end time of the task execution
- Operator who performed the job
- Affected carrier
- Affected article
- Source location of the movement
- Destination location of the movement

This way, the history of the movements of each carrier can be reconstructed in the event of a calamity. In addition, the efficiency per operator, item, carrier... can be evaluated by bringing the total scenario together into a report.



### 8. Intuitive use

Learning time for an operator to work with Optima WMS is extremely low. The applications are intuitive to use. It is sufficient that the operator knows the basic layout of the locations in the warehouse in order to use the system. The screens and messages are constructed in such a way that they clarify themselves. Assignments are always provided with additional information. In this way, it is easy to work with temporary employees in the event of a seasonal peak or when replacement personnel are used.

The idea is that the software supports the physical job to be performed. The process in the application is divided into steps that are also physically executed, for example:

- step 1: go to location 20-AB-01-A-01
- step 2: scan the location upon arrival
- step 3: pick up the pallet at location and scan it
- step 4: drive the pallet towards location 30-AA-01-A-02
- step 5: scan the location upon arrival
- step 6: drop off the pallet at the indicated location

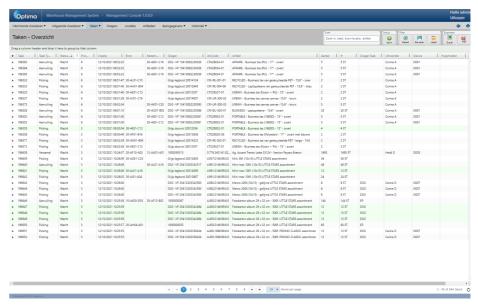
Only the next step is shown during the execution. The application therefore runs parallel to the action to be performed.



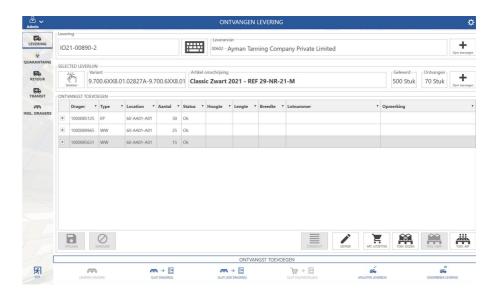
# **Modules in Optima WMS**



**Execution of Tasks** 



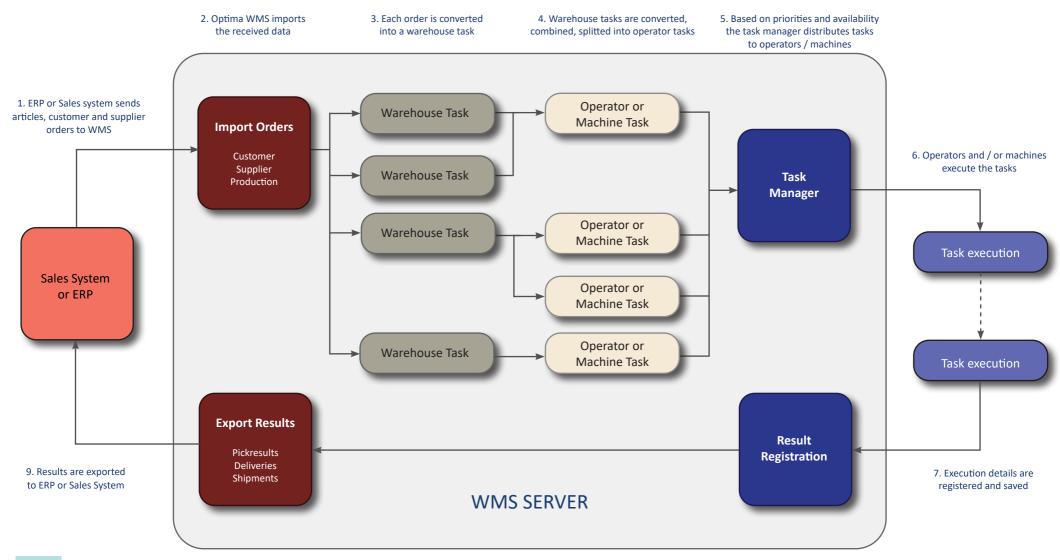
## **Configuration and Management**



**Reception of Goods** 

# **Process diagram**

The diagram below shows how Optima WMS works: orders are received via the import module, where they are converted into warehouse tasks. Warehouse tasks are then converted, combined or splitted into operator and/or machine tasks. Available operators and machines are assigned the tasks and execute them. The results are fed back to the host via the export module.





## Third Party Storage

More and more companies choose not to organize their distribution from their own warehouse. They prefer to store their goods at service providers. From there, deliveries are made to the customer.

Optima WMS can be used for this, especially when full detail picking is also required. For many of these third-party companies however, it is sufficient to drive in, store and drive out carriers at the request of their clients. Most of their actions involve full pallet movements.

OptiStock is a perfect alternative for this sector.

# **OptiStock**

OptiStock is a management tool for service providers who want to organize the storage and delivery of goods for third parties. OptiStock is easy to use and can be used independently.

A client delivers his goods to the warehouse of the service provider. after registration and identification the goods will be stored in the warehouse.

Later, the client will ask to collect (part of) the goods from the warehouse and prepare them for shipment. So, both an incoming and an outgoing flow of goods are present.

The incoming and outgoing orders are created in OptiStock. The associated tasks for driving in or out the carriers involved are also created by OptiStock.



### **Inbound**

The inbound process starts from the order received and proceeds in a number of simple steps that are completed and supported by OptiStock.

### **Step 1 - Create order**

To store goods, first an order is created.

### Step 2 - Registration of Delivery

Each carrier is identified and registered upon delivery. If not already present, a barcode label is applied to each carrier.

### **Step 3 - Storing carriers**

Each delivered carrier is then driven in and stored in an empty place in the warehouse.

### Step 4 - Registration of warehouse location

The chosen location is scanned with a terminal and saved.





### **Outbound**

Here too, the process from receiving the order to drop off at the shipping zone is organized and supported by Optistock.

### Step 1 - Create outbound order

To ship stored goods, an outbound order is first created.

#### Step 2 - Selection of carriers to be shipped

Based on client, item or lot number, the carriers to be shipped are selected.

### Step 3 - Creation of tasks

Picking tasks are automatically created in the background

#### **Step 4 - Execution of tasks**

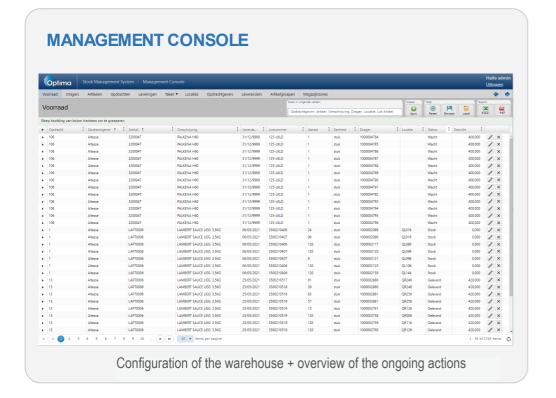
The floor workers will execute these tasks using their mobile terminal. To do this, they go to the specified warehouse location, confirm it, pick up the carrier, drive it to the shipping zone and confirm the drop-off location.

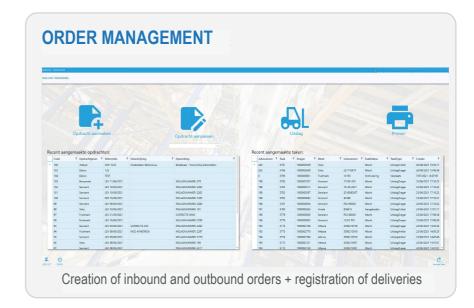




#### OptiStock consists of 3 applications

- Management console
- Order management module
- Task Execution module









## **Control via Pick To Light**

In an environment where very high pick numbers have to be achieved, Pick To Light systems are used. Each picking location is equipped with a display and push button with light.

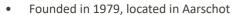
When it is necessary to pick from a certain location, the push button lights up and the display shows the number of pieces to be taken. The picker goes to that location, reads the number of pieces to be taken, puts them in the pick box and presses the button after which the light goes out. Subsequently, the next display is controlled where the picker will take the next article.

The color of the light in the push button can be freely controlled. This way you can have several pickers working simultaneously in the same zone. Each picker focuses on the color assigned to him: e.g. picker 1 - blue, picker 2 - purple, picker 3 - yellow, ...

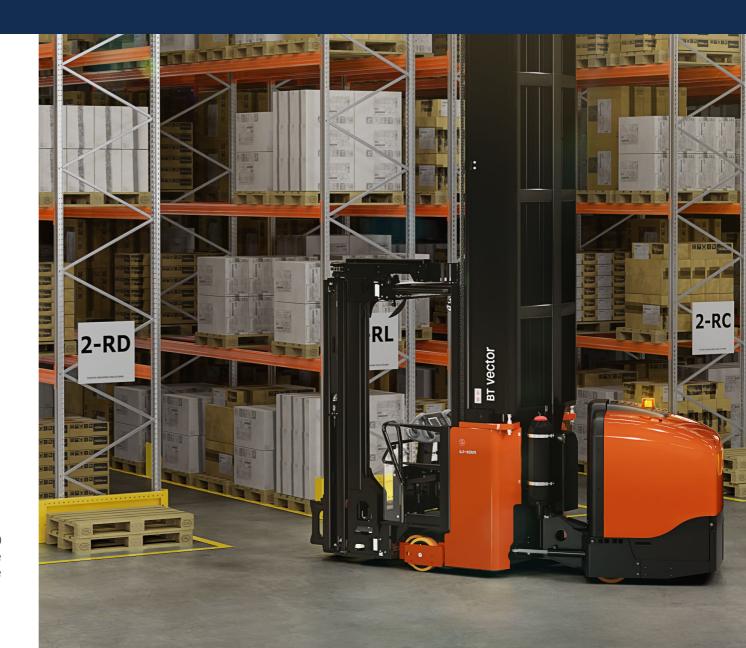
# **OptiLight**

OptiLight is the Optima WMS solution for integrating Pick To Light into your warehouse processes. A total package is provided, including the delivery and installation of the displays, cabling and peripheral equipment, plus the integration of control software.





- Over 40 years of experience in internal logistics
- 25 years active in warehouse management
- Warehouse solution Optima WMS
- Solutions for SME and larger companies
- Personal and flexible approach
- Implementation from analysis up to going live



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