



FIVE STEPS TO A NEW WASTE MANAGEMENT SOLUTION AT YOUR WAREHOUSE OR LOGISTICS CENTER

Guide for warehouse and distribution center managers, who want to streamline their waste management, increase productivity and generate recycling revenue.



HOW YOU PLAN AND IMPLEMENT AN OPTIMAL SOLUTION FOR WASTE MANAGEMENT

Warehouses and distribution centers are often very large, consisting of several floors and sometimes even several buildings. The waste handling and transportation can be a real challenge in this type of environment.

In the case of new construction or extension of existing warehouse space, it is important to organize waste management strategically and effectively, so that the end result turns out as well as possible. Unfortunately, it happens that waste management is forgotten or down-prioritized at the planning stage, which can result in unnecessarily expensive and ineffective solutions.

The reason why waste management often gets down-prioritized in building projects is that the primary focus lies on the inbound and outbound delivery of goods - optimal logistics flows - which of course is fundamental to a well-functioning warehouse or logistics center. It can therefore be good to bring in experts on waste solutions right from the start in the process.

Early planning for waste management will ensure that the waste is disposed of quickly and that valuable floor space is released. Warehouse employees minimize time spent on waste management and can instead focus on other more productive tasks.

”It can be very expensive to make mistakes when it comes to waste management. It is wise to remember that waste always costs money.

However, it is possible to save a lot with the right solution.”



DO NOT FORGET THE WASTE SOLUTION WHEN PLANNING NEW OR REBUILDING WAREHOUSES OR LOGISTICS CENTERS!

We at Orwak have expertise in optimizing warehouse waste solutions and we have put together this guide for you, who are project managers for building a new or rebuilding an existing warehouse or logistics center. The guide is also valuable for you, who want to increase your understanding of how waste management at the warehouse can be optimized and thus save resources such as time, space and money.

We have gathered our own and our customers' experiences, learnings and advice and hope that the guide will help you make the right decisions, so that no sudden or unforeseen problems emerge when the operations start. Here are five steps that summarize what you need to consider when planning a waste management solution.

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STEP 1

START PLANNING IN TIME

When rebuilding or building a new warehouse or logistics center, it is essential to include waste management in the plan at an early stage. If the planning starts too late in the process, mistakes are often made, or worse - no decision, which can lead to expensive, ineffective solutions that also affect the working environment in the warehouse. Most fundamental is to think about how all waste will be handled and where it should go.

By asking the expertise and get inspiration from other warehouse solutions already in the planning and drawing stage, a better waste solution - optimized for your particular warehouse - will be implemented.

Compare this to the scenario that the waste solution instead needs to be squeezed in and adapted to the available space on site and other limiting conditions, which cannot be changed at this later stage.

Poorly planned waste management can, in addition to lost working hours, lead to a less favorable and in some cases even uncertain working environment for the warehouse staff.

With an undersized waste solution, you may even see warehouse staff push down the waste by hand or with a stick to force it into the baler or compactor. It will not be sustainable in the long run to spend that amount of time on manual work and on waiting for the machine to get ready for the next load of waste.

It is important to choose waste handling equipment with the right capacity. The staff should be able to fast and effortlessly drop the waste into the machine and then just walk away and forget about the waste!

"It is very common that the layout for the entire warehouse is drawn up before anyone starts looking at waste solutions. It can have costly consequences and result in a less efficient storage."

STEP 2

ANALYZE THE CURRENT SITUATION

”We spent a lot of time, equivalent to 1-2 full-time jobs, walking back and forth with packaging waste to a centrally located compactor. This triggered us to evaluate the situation, listen and take into account the wishes and insights of colleagues at the warehouse. We then contacted various suppliers and asked for help to reduce the working hours that we spent on waste handling.”

Joakim Berggren, Facility Manager at DAGAB's distribution center for Axfood in the Stockholm area in Sweden.

Start by looking at the current waste handling and compare with what it would look like with a new type of solution.

It is recommendable to make a feasibility study and set up a ROI calculation to achieve the best possible solution with maximum return on investment. This applies to all types of waste equipment; such as balers and compactors, but also supporting equipment for transporting and handling the waste at the warehouse. It can be trucks, conveyor belts, bin lifters or more extensive solutions in the form of IT systems for automated waste management.

Based on that, you get a clear picture of what savings you can make with a better waste solution - a solution that requires planning already at the drawing stage. Obviously, it is also good to continuously evaluate and question an existing solution to see what can be improved.

By doing a proper analysis before you decide which waste solution is right for you, you avoid the consequences of undersized solutions. That is, machines that have insufficient capacity for the amount of waste at hand or that come with too small loading apertures to match the actual size of the waste.

The consequence of having an undersized solution is that the warehouse staff must spend a lot of time on something that should go quickly and smoothly.



STEP 2 (CONTINUES)

A PRELIMINARY STUDY FOR BUILDING OR REBUILDING A WAREHOUSE

For an optimized waste solution, it is important to get insights and understand how everything will be organized and what it will look like when the warehouse is ready. There are a number of significant questions to consider:

- The inbound logistics; what will the delivery of goods be like?
I. e. what type of goods are delivered and in what quantities?
- What type of packaging is involved and in what quantities?
- Where are the sources of waste and how will the waste be transported internally at the warehouse / the distribution center?
- Waste management solution: centralized, decentralized or perhaps a combination?

It might not be easy to know for sure, but make an approximate estimation of the waste types and the volumes thereof. Only then you can start thinking about solutions and look at similar warehouses to see how they have solved their waste management challenges. An experienced supplier often has many case studies and examples of good solutions in similar environments to share. It can give you inspiration and some ideas what to look for!





STEP 3

SORT THE WASTE AT SOURCE

Sorting all waste directly at the warehouse or distribution center is by far the cheapest and best way to handle it. The most common waste types in this environment are usually cardboard and plastic foil. The optimal solution often involves one baler per waste type or a multi-chamber system with one chamber per waste fraction, but it also depends on the amount of waste of each type. It can for example be efficient to mainly use a baler for cardboard, collect a small fraction of plastic foil in big bags and bale the plastic when the next cardboard bale is ejected and the baler. With the optimal solution you minimize the number of transports, which saves money and is better for the environment.

Disposing of all the recyclables and waste in the same container or compactor may seem easier, but with the right solution in place, it does not take more time to sort it instead. If it is sorted at source, you reduce the time spent on handling the waste.

In addition to the cost-saving thanks to fewer transports, you do not have to pay a treatment fee to the WMC (waste management company), if you sort properly from the beginning. Thus, there are several savings to be made, both in time and money.

As waste management is increasingly becoming more digitized and automated, the process of waste sorting is simplified. In some environments where AGV (Automated Guided Vehicles) forklifts bring the waste from the picking station to the compactors,

the warehouse staff only needs to put the right type of waste into the right bin at the picking station, the rest is handled automatically.

”If it is difficult to sort waste on site, you will miss out on both cost savings and possible profit. Sorted material is much cheaper to handle and you can get an income from selling clean fractions of recyclables that are not mixed with other things.”

STEP 4

CENTRALIZED OR DECENTRALIZED WASTE MANAGEMENT DEPENDS ON SPACE AND DISTANCE

The goal when a new waste solution is planned for a warehouse or logistics center is primarily to save as much time, and thus money, as possible. It is also important to free valuable floor space, so that the regular operations can run smoothly without any disturbance.

Therefore, in addition to the waste itself, it is significant to look at the conditions on site. The entire waste stream needs to be optimized: from packaging waste being generated when unpacking goods, the internal waste transports, compaction of the waste in a baler, briquette press or compactor to the final collection and transport of the rest material to a recycling station.

Look at how far the waste has to be transported to a central waste station on the premises. If it is a long or complex way, it is preferable to place balers or briquette presses - provided that there is room for them indoors - at the picking stations to avoid unnecessary walks or drives back and forth with the waste.

If the waste is compacted at source at the warehouse, there will be significantly fewer internal transports, when bringing the dense bales or briquettes to the central waste station or to the collection point for the waste management company.

"We went from a centralized to a decentralized waste management solution, tailored for us to maximize the use of the machines and to minimize the waste collections and transports. It saves us both time and money."

Facility Manager at DAGAB's distribution center for Axford in Stockholm, Sweden.



STEP 5**MANAGE YOUR WAREHOUSE WASTE –
A CONSTANT DEVELOPMENT PROJECT**

The work is not done just because your new waste management solution is in place and in use. It is important to not just lean back and become complacent.

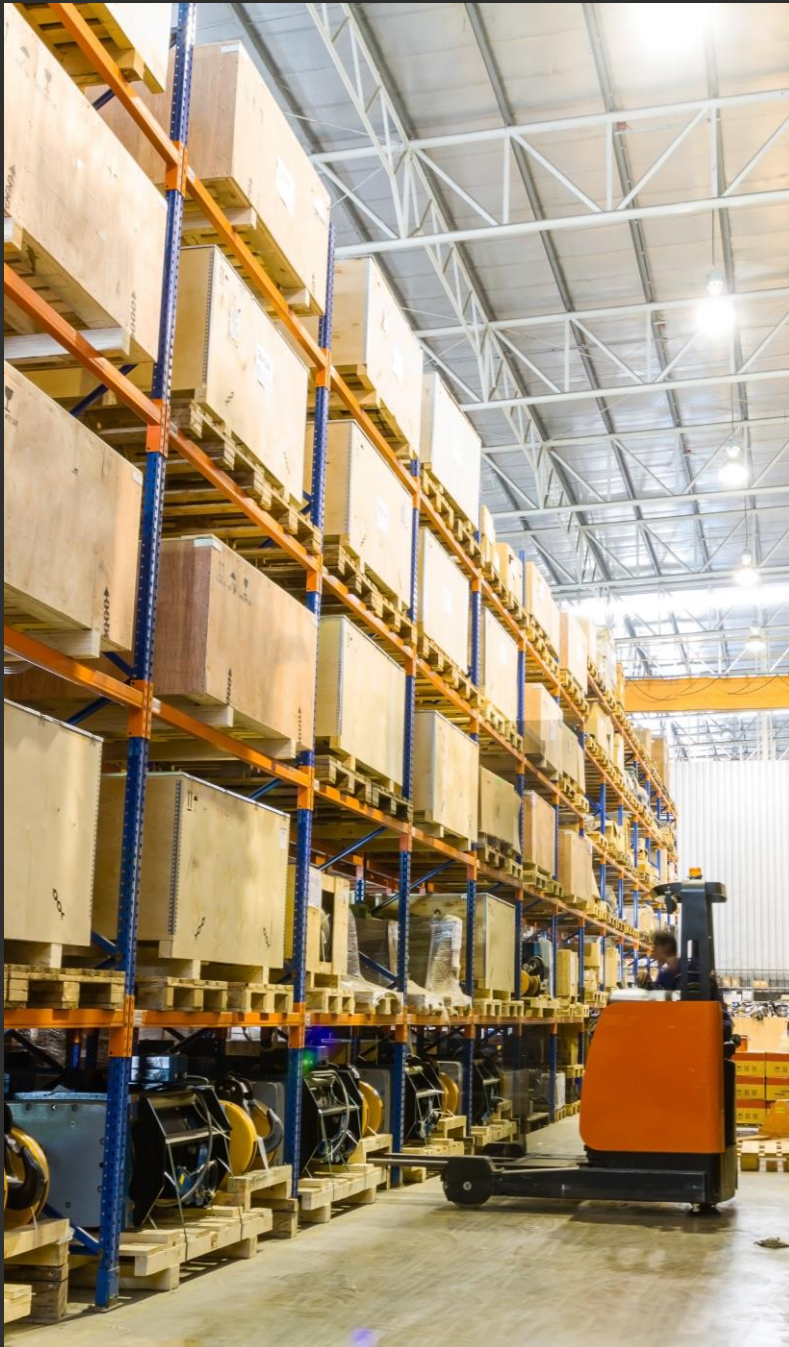
The waste equipment needs to be cleaned regularly and serviced at least once a year to ensure that they are functional and safe. Also continuously monitor the operations and the waste streams in your business to adapt the waste management to possible changes in waste volume and type of material.

With relatively simple means and routines you can extend the service life of your waste compactors and balers. With common sense and regular maintenance you will go quite far!

After your new waste management solution is implemented, it is important that you follow up and evaluate the results of your new solution.

Over time, the amount of waste and the type of waste you manage will most likely change and that requires a corresponding adjustment of your waste disposal strategy and possibly an upgrade of the waste management solution.

“Treat the machines like you treat your car. Wash, clean and try to keep the balers clean and orderly. Then they will last for a long time.”



SMART AND COST-EFFICIENT WASTE MANAGEMENT!

Orwak provides a variety of balers, briquette presses, and compactors and is well-established in the industry. Our products are manufactured in-house, which means you can always get spare parts quickly and benefit from our expertise in our products.

We help you choose the best individual solution for your warehouse or logistics center based on the waste streams, the type and volume of waste in your business and the available space on your premises.

There are many opportunities to attain a more effective and profitable waste management solution and to save time, space and money.

Contact us to find out more about how to turn your waste costs into revenue!

ORWAK AB

E-mail: info@orwak.com

www.orwak.com

Orwak is a world-leading provider of at-source compaction and baling solutions.

We develop solutions for the sorting and compaction of recyclable materials, thereby helping to increase efficiency, look after the environment, and provide a more enjoyable workplace, as well as offering the most economical by-product management possible.

We offer an innovative range of products that enable at-source sorting and make waste management more profitable. We help our customers from the first point of contact, through the sales process and for many years of support from our service department.

Orwak – Turning Waste Into Value