



-ARCO



Packing mushrooms

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Table of contents

1. Packing mushrooms	03
2. Lots of staff, low efficiency	04
High workload	05
Inefficient movement of operators and products	05
3. Automating processes with ARCO	06
Automating packaging	07
Automating labelling	07
Automating box building	08
Automating box feed and extraction	08
Automating palletizing	09
4. The operator as a supervisor of a streamlined production process	10 - 12

Packing mushrooms: An introduction

Once mushrooms have been harvested, operators ensure that small punnets or trays are filled with the right amount. But these trays and punnets are not ready for transportation right away. First, the mushrooms need to go through the packaging process, which isn't always the same – mushrooms can be packaged with a stretch-wrap machine, a top-seal machine, or a capping machine.

The key to making the mushroom packing process as smooth as possible is automation. And the packaging of mushrooms is a process that really lends itself to this. By automating processes, the role of the operator is restricted primarily to keeping machines up and running.

To ensure proper routing, it is important that the packing process is connected to the weighing line. ARCO assesses the most efficient routing for each organisation and helps to set up a production line that facilitates optimal mushroom processing.



Lots of staff, low efficiency

High workload

It is not always easy for mushroom growers to find enough staff. Staff shortages can cause a lot of stress and strain on the work floor. Sometimes, a grower may have a lot of employees, but they are only available some of the time. The grower then needs to have a lot of employees to make sure all shifts are covered; if everyone worked full days, fewer staff would be needed. This situation also puts pressure on the organization.

Inefficient movement of operators and products

It makes sense that having more employees means that more work gets done. But, in reality, this is not always the case. In many production environments, unnecessary operations are carried out because production lines are inefficiently set up or because too many people work in the same area and end up holding each other up. When weighing and packing mushrooms, less is more when it comes to operators.

In many cases, operators are only effectively weighing and packing mushrooms half the time. The remaining time is spent dealing with peripheral issues such as supplying new mushrooms, removing empty containers, labelling, and extracting finished products. And the more operators there are walking around, the greater the chance that they will get in each other's way and slow down progress.

This is often compensated by adding even more operators, which only increases inefficiency.

Automating processes with ARCO

Automating packaging

The packaging of mushrooms is a process that really lends itself to automation. Operators no longer need to package the mushrooms themselves; instead, they supervise the machines that do all the packaging work for them. Most mushroom packers already have a packing machine. Common packing machines in the mushroom industry include the stretch-wrap machine, the top-seal machine, and the capping machine. Companies choose the machine that suits their preferred method of packaging.

Automating packaging

Labelling can be automated for very little investment, so it no longer has to be done by hand. There are several methods for labelling, depending on the chosen packaging and regulations:

- Label on top

- Label on the underside
- Label on top and on the underside
- Label as part of the top seal
- Code on existing packaging

A labeller can take over the work of an operator completely, which means that this operator can be deployed elsewhere in the process.



Automating box building

Boxes and containers for the finished product can be built fully automatically. Special box-building machines automatically fold and glue the boxes, so operators need only focus on monitoring the machine, and feeding the machine with pre-cut boxes. Boxes can then be automatically transported away to be filled with punnets.

Automating box feed and extraction

Boxes for finished products can be fed in fully automatically using conveyor belts. This reduces inefficient operator movements in the warehouse. Empty containers (supplying boxes) and full ones (boxes containing punnets) can therefore be transported fed in and extracted automatically.



Automate palletizing



Palletizing is the process of stacking boxes on pallets before they are shipped. This can be fully automated by using an automatic palletizer, which stacks boxes on the pallet in a desired pattern. Once the pallet is full, it is taken out of the palletizer and put back into refrigeration until it is picked up by a truck. There are also systems that automatically unstack boxes.

The operator as a supervisor of a streamlined production process

Same or higher productivity with **fewer employees**

Almost all aspects of mushroom packaging can be automated. It all starts with the arrival of the punnets/trays filled with mushrooms. A conveyor belt transports them to the packaging machine, where they are packaged in the preferred way (with a stretch wrap, with a top seal, or with a lid). The packed punnets can then be sent to a labeller, which automatically puts the right label in the right place. Since the boxes are already prepared by another machine, the only thing that needs to be done is to put the punnets in the boxes.



New role for the operator

In the past, operators shaped the entire packaging process; in an automated packaging line, they mainly have a monitoring role. Operators no longer have to seal the punnets, affix the labels, or fold the boxes themselves – all of this is now done by machines. Instead, operators keep an eye on things and check that all the machines are running properly.

An optimized production process

ARCO's automated packing process ensures that the production process is as efficient as possible. The machines are arranged in the room in such a way that the number of operator actions is kept to a minimum. This reduces the amount of time wasted on extra steps, for example because a machine is located too far away or is not well connected to the next phase in the process.

Need help with a technical issue?



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