# Misconceptions About Combi Systems



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#### 5 Misconceptions About Combi Systems

Many producers looking to transition from caged to cage-free egg production have considered investing in combi systems, which are also referred to as combination or convertible systems. These are often touted as an ideal solution for poultry houses due to a few key selling points, such as higher bird densities and lower cost of installation when compared with other systems. In fact, that is exactly why they were developed — to improve upon the alternatives of floor systems and aviaries. Unfortunately, some misconceptions exist, which could lead to eventual buyer's remorse for producers. Below are five common beliefs about combi systems and reasons for doubt about each of them:

# **Misconception 1 - Less Bird Training Is Required**

One of the biggest reasons for the development of combi systems was to reduce the importance of pullet training. Training is critical to the success of multitier aviaries because birds must begin learning from day one how to move between various levels of the house. This training helps ensure birds find water and nests positioned on the mid-level of the aviary so that floor eggs are minimized.

By contrast, the idea behind combi systems is to place water and nests on every level, theoretically eliminating the need to train birds to move from level to level. However, experience has shown that, without training, birds tend to congregate on just one level of the house, resulting in a variety of issues, including overcrowding, lower egg quality and stressful bird behaviors, such as feather pecking.

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### Misconception 2 - The Ability to Close the Doors on a Combi System Is Better

Many combi systems include doors that can be closed. Producers often view this as a benefit, opting to close birds in for the first weeks after a flock is introduced to a layer house to help ease the transition from the pullet house. However, birds tend to get lazy when closed in for extended periods of time, since they are unable to move around, jump and perform natural bird behaviors. A level of atrophy may also develop, resulting in lower bird performance.

Additionally, by the time the doors are eventually opened, birds can forget much of their training and are now less prepared for life in the layer house. They will likely congregate on one level of the house and cause many of the same problems associated with poorly trained birds.

### **Misconception 3 - The Amount of Labor Is Reduced**

Combi systems are often thought to require less management, thanks to having water and nests on every level. Nonetheless, birds in a combi system often congregate on one level, especially if they were not well trained as pullets. Having a disproportionate number of birds on the same level overwhelms those nests



with eggs. In fact, producers can experience twice the number of desired eggs on that level, and this can result in a higher rate of low-quality eggs. The higher bird density can also lead to other issues, such as hot spots and increased bird mortality.

The only way to correct these problems is with more hands-on management to manually distribute birds throughout the house. Not only does this added labor cost more money, it can also be difficult finding employees willing to do these types of tasks.

The complexity of combi systems adds another layer of management needs. For instance, having nests on every level requires more egg belts, along with more places where dirt, dust and other contaminant can accumulate. Consequently, more labor is required to clean combi systems when compared with multi-tier aviaries.

### Misconception 4 - Combi Systems Provide the Best Return on Investment

On the surface, combi systems appear to provide a superior return on investment. They offer higher stocking densities than is possible with floor systems or aviaries. The cost of installation is less than multi-tier aviaries. However, by actually running the



numbers, producers will find that the long-term return on

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investment is not as strong as with multi-tier aviaries.

The increased labor requirements of combi systems greatly hinder return on investment, and this has especially become a major struggle for large producers that have installed these systems. An even bigger disadvantage is the lower percentage of Grade A eggs. The egg belt design of combi systems, as well as having too many top-level eggs, results in dirtier eggs, more cracked eggs and, in general, reduced egg quality than one would obtain with the typical multi-tier aviary.

Despite higher stocking densities, the lower bird performance and the lower percentage of Grade A eggs from combi systems impedes return on investment and long-term profitability. Multi-tier aviaries have proven to be a better investment over time, thanks to lower labor costs, more Grade A eggs per bird and overall higher bird performance. Some producers that have converted from combi systems to multi-tier aviaries have paid the investment back in a single flock.



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## Misconception 5 - Combi Systems Are the Future of Cage-Free Egg Production

As commercial egg production continues to trend toward a cage-free future, some producers initially favor the concept of combi systems. These systems tend to resemble cage systems, which many are comfortable using. The doors also allow the option of reverting back to a caged system in the event that the cage-free trend reverses.

In reality, combi systems have an uncertain future, making an investment in these systems a gamble. Because they resemble cages, combi systems are at high risk of scrutiny. In fact, the industry has already seen pushback from some retailers not accepting eggs produced in a combi system as "cage free." And the idea of food suppliers switching favor back to caged eggs is not likely in the foreseeable future.

After considering the common misconceptions, the advantages of lower installation costs and higher bird stocking densities may not outweigh the disadvantages of combi systems. What is most important is that producers understand the true return on investment for each housing option, allowing them to make the best possible decision targeting the long-term success of their operations.



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