How to influence the behaviour of cage-free laying hens

From feeding and drinking, to burning calories and laying eggs. Laying hens behave differently in many ways when they are out of the cage. This means that egg producers need to set up their processes differently in order to achieve optimal results. In particular, ventilation, nest control and egg counting require a different approach in cage-free houses.

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In this article, Hotraco Agri shares lessons learned from more than 20 years of experience in controlling and automating cage-free layer houses, and in optimising egg production.

This article explains how cage-free egg producers can:

- Manage their layers' daily routine using feed, water, light and nest control.
- Control feed, water, lighting, nests, climate, weighing and egg counting with one single control system.
- Optimise egg production and egg flow control in cage-free houses.

Manage your chickens' daily routine by controlling feed, water, lighting and nests

If you want to maximise laying performance in cage-free houses you need to influence the daily routines of layers. Control systems, such as Hotraco's Fortica system, enable you as an egg producer to train your layers through smart feeding, watering and lighting regimes.

With the Fortica system, you can control feed chains in multiple groups. This is particularly useful for sending the layers to the right floor and getting them back into the systems on time in cage-free houses. You can influence the behaviour of your chickens even more precisely if you also use linked light timers.

The nests are controlled in two groups. By dimming different lights in a certain order, the chickens are sent to the right place in the system. In this way, the layers are influenced to go to the right floor and the right nest – at exactly the right time.

All-in-one control system for cage-free layer houses

You want your laying hens to perform optimally. For that, it is of the utmost importance that you create the optimal living conditions for your animals. With the Fortica control system you can monitor, control and automate all your layer house processes, such as climate, feed, water, lighting, egg flow and animal weighing.

For example, it gives you insight into body weight, indication of animal health, flock uniformity and allows you to optimise planning and improve results through management data. With the app and the innovative Farm Management software, you are always aware of what is happening in your layer houses – and you can act within

seconds, from your computer, tablet or smartphone.

Fortica helps you create the optimal living environment, resulting in healthier animals, better animal performance, less use of medication and therefore better results and profits.

Optimising egg production

Hotraco's Egg Flow Control is designed to reduce labour costs and egg breakage. It is a unique system that ensures a smooth egg flow from the layer house to the packing area. The system automatically adjusts the speed of each egg belt so that the amount of eggs on the collection belt always perfectly matches the packing capacity. With this user-friendly control system, the egg flow rarely needs to stop, resulting in less shell damage.

Thanks to the continuous exchange of information, you can react faster to changing conditions in the layer house. This system can regulate different variations. You can run the Egg Flow Control system by gathering all layer houses simultaneously or in batches or per barn. With the Egg Flow Control system, you get better quality eggs while also reducing collection time. This helps to save on packing costs because less employees are needed at the egg packer.

Egg counters with real-time communication system

In 2021, Hotraco developed EggXact; an egg counter with a new shape and communication system for extreme reliability and durability. With EggXact egg counters you always have real-time insight into the egg production of your layers per belt – per day, per hour, and per minute.

Thanks to the real-time and continuous exchange of information, egg producers can react faster to changing conditions in the house and regulate the egg flow more quickly. ■