

Proud partner of Kipster – the revolutionary layer farm

Hendrix Genetics is a proud partner of the first Kipster farm. This is the most state-of-the-art layer farm in the world housing Dekalb White laying hens. The farm is located on the Wusterveld in the town of Venray, The Netherlands – an area intended for innovative agriculture, with an eye for animal welfare and the environment.

Many innovations on one farm

- A great deal of innovations are used on this farm.
 - This farm concept is designed around the instincts and needs of the chicken.
 - 1,100 solar panels make the farm energy-positive.
 - Fuel emissions are limited to an absolute minimum using energy systems not used in the agricultural sector before.
 - The facility includes an area for visitors and a centre for education and information.
 - The chickens eat newly developed feed made from surplus foodstuffs from the food industry, which minimises the environmental impact and does not compete with food for human consumption.

The eggs are currently being sold directly to Lidl, one of the major retailers in Europe. The meat of the male chicks is also sold by Lidl. Lidl is the first retailer in The Netherlands to do this.

Development of the Kipster farm concept

Kipster is an initiative of four entrepreneurs combining expertise in the fields of poultry, sustainability, farming and communication. Four years of development went into the design of the Kipster farm. This project is truly unique as it involved numerous parties including animal welfare and sustainability organisations in the design phase. The end result is a farm concept that is future proof, flexible and scalable.

Dekalb White: an essential part of the Kipster farm concept

Dekalb White laying hens are an important part of the Kipster farm concept. With the performance of the Dekalb White, it is possible to combine animal welfare and environmental friendliness in a financially feasible way. The Dekalb White is a perfect fit for innovative farms like Kipster.

24,000 laying hens make up the Kipster flock, reared and distributed

by Belgian distributor Vepymo. Dekalb White hens are docile in behaviour, making them highly suited to this new, innovative system. Furthermore, these hens produce large amounts of eggs with an excellent shell quality. The egg weight is very consistent with minimal increases by the end of the active laying period.



"We breed for balanced laying hens that produce top quality eggs – meaning stronger and happier laying hens with a prolonged life. This gives our customers, like Kipster and Lidl, a more sustainable production cycle in total."

> Frans van Sambeek, Director Research & Development at Hendrix Genetics

EGG INNOVATIONS

Machine Vision in the breeding program

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nnovations in the field of animal breeding do not only apply to the genetic methods and models that we use in our day-to-day genetic evaluations, but can also be implemented in the most essential part of running a breeding program: the collection of your data.

Accurate data collection is at the heart of our breeding program. Whether it is the traditional way of selection or whether it is genomic selection, you need to have data on an individual or family level in order to calculate (genomic) breeding values that will deliver enhanced performance traits for our customers.

This need for accurate data is the reason we are so excited to announce the upcoming implementation of our egg grading robot, known as the Eggxaminator. The Eggxaminator was created in collaboration with Hendrix Genetics Innovations and one of our tech partners from the Brainport Eindhoven region (home to companies such as Philips, ASML, and VDL). The Eggxaminator is able to automatically grade and inspect eggs with the focus on 10 different exterior egg quality traits.

Hendrix Genetics Innovations was created a few years ago in order to identify useful innovations that can be applied to the agricultural sector. To bring in a new perspective from outside industries, we searched in the Brainport Eindhoven region for potential partners and their know-how to collaborate on new





technologies that can be used in animal breeding. After working together with this partner, we decided to apply Machine Vision in the grading of the eggs derived from our laying hen breeding programs. Machine Vision refers to the technologies and methods used to provide imaging-based automatic inspection and analysis.

By adopting Machine Vision we are able to generate more accurate data on our exterior egg phenotypes, removing the possibility for human error and subjectivity. Each evaluation can now be completed with a high amount of measurable consistency.

The Eggxaminator was recently installed in our egg lab, and we plan to scale up the technology for full implementation in the layers breeding program. By selecting with even more accuracy for enhanced egg quality, our customers will reap the benefits of more first quality eggs during the bird's laying cycle, with extra focus towards the end of the cycle.

Stay tuned for future updates on this exciting new piece of technology.

