



Big Dutchman®



NATURA60

The modern aviary for layers
in floor management

NATURA60 the 2-tier aviary – a design innovation

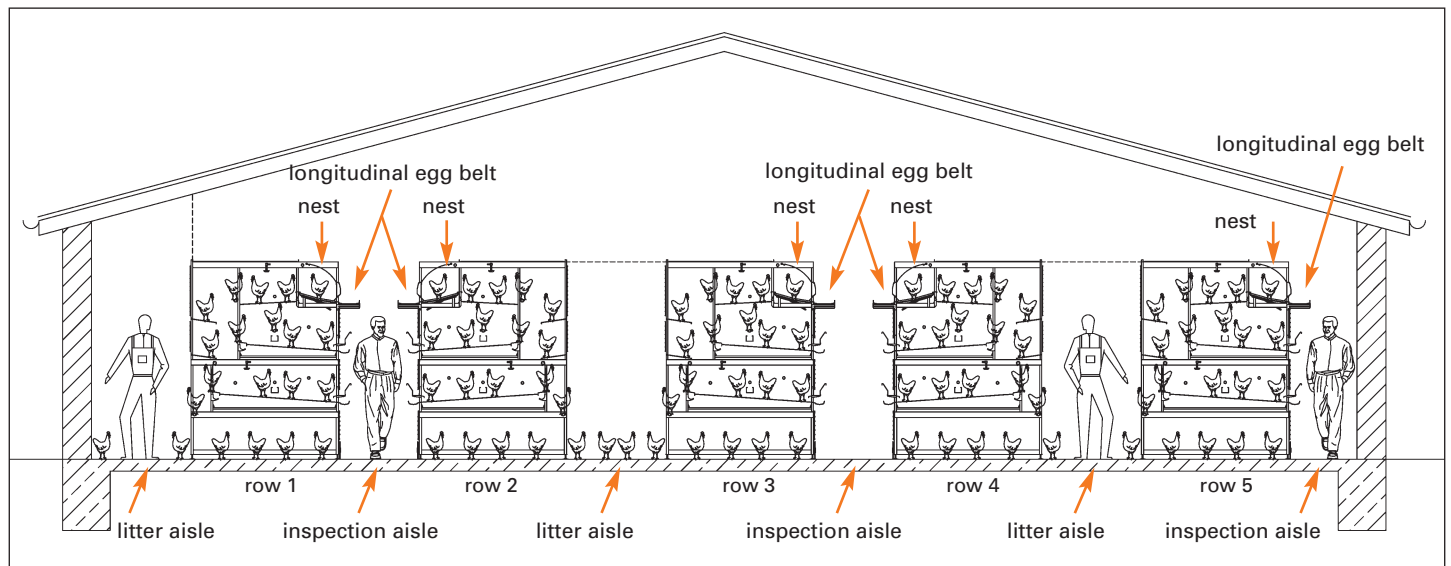
NATURA60 is Big Dutchman's newly developed type of aviary for layers. The design concept is based on the idea to reduce the management effort and at the same time increase reliable and efficient production.

NATURA60's unique characteristics provide the following advantages:

- alternating aisles between the rows remain free of hens, litter or any other obstacles like doors or cross partitions to serve as inspection aisles;
- these practical inspection aisles facilitate
 - => the moving in and out of birds
 - => daily supervision of birds
 - => the collection of system eggs;
- the nests and longitudinal egg belts are located

above the inspection aisles and are accessible from there;

- comfortable sliding doors on both sides of every row and on every level allow for easy access to the system;
- "stairways" provide access for the hens to the different levels, throughout the aviary;
- the hens reach the scratching area (underneath the system and litter area) through large openings along the entire length of the system;
- every row is completely functional; it is possible to install a system with only one row in the house.



top tier = resting area with perches at different heights and nipple drinkers for water supply

large sliding doors on all levels, which can easily be opened for inspection

stairway – the hens can easily access all levels

through these openings, the hens access the litter area





After the hens are moved in, the system remains closed for some time. This procedure allows the hens to get to know their new environment; (phase of familiarisation). Feed and water can easily be accessed and by using the stairways, the hens become accustomed to all levels.

A partition installed every 2.41 m (after every section) makes for manageable group sizes of 130 to 150 birds. This ensures that the nests are evenly used right from the start. The farm staff can easily supervise the flock from the inspection aisle. Even in cases of maximum stocking densities, **NATURA60** offers ample space to the hens thanks to the many surface areas.

Note: the pullets should already be reared in an aviary-type system. This is a main condition for a good start into the laying phase and reduces stress when the birds are moved in.



After the familiarisation phase is over, the system can be fully opened. The hens are now able to act out their natural behaviours, i.e. scratching, picking and dust bathing.



Since the longitudinal egg belts are installed on the upper level, all rows are freely accessible. The laying nest can be opened along its entire width, by means of a folding back wall.

Advantages

- ideal stocking densities – already at a building height of 2.40 m;
- the aviary remains locked for the familiarisation phase, this ensures simplified access to feed and water for a good start into the laying phase, and a minimised number of slat and floor eggs later on;
- the hens have access to all levels by means of the stairways;
- manageable group sizes thanks to partitions that are installed every 2.41 m;
- every second inspection aisle remains free of manure providing a very good working environment for the farm staff;
- simplified collection of system eggs;
- perfect access to the entire system;
- gentler egg transport as the longitudinal egg belts are located on one level only.

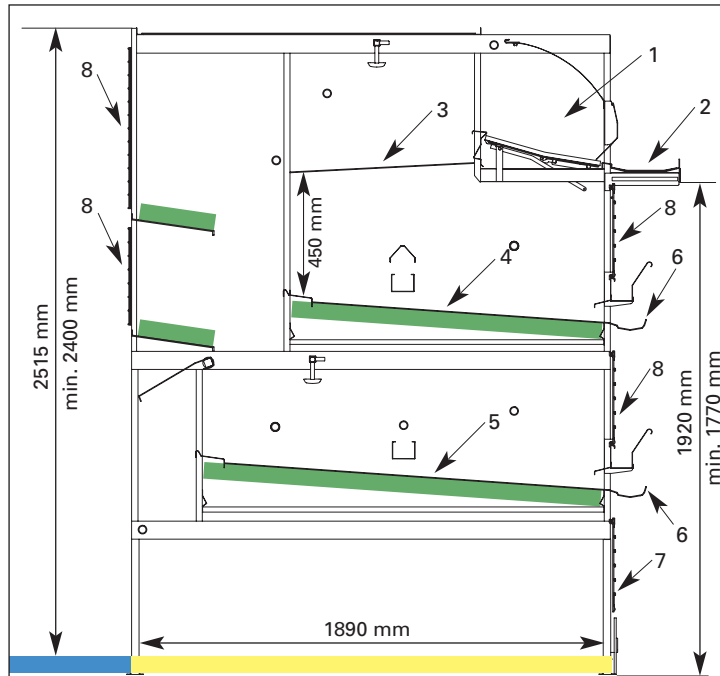


System eggs can easily be collected from the egg channel
Bottom: sliding door and separation from the scratching area

Technical specifications and planning aid

No two houses are alike: length, width and height are just some of the variables that need to be taken into consideration. However, the ideal stocking density can

be determined relatively simple with **NATURA60** as only the aisle width and usable area outside of the system are variable.



Calculation of hen places

usable area in m² per running metre...

system	3.56 m
beneath system	1.89 m
litter aisle (variable)	up to 1.22 m
total	up to 6.67 m

6.67 x 9 hens/m² usable area
=> max. 60 hens per running metre and row

legend

- 1 laying nest
- 2 longitudinal egg belt
- 3 floor in front of the nest
- 4 usable area with manure belt on 2nd level
- 5 usable area with manure belt on 1st level
- 6 egg channel for mislaid system eggs
- 7 sliding door and separation to scratching area
- 8 sliding door for simplified bird supervision

House width and number of rows for optimum utilisation of building*

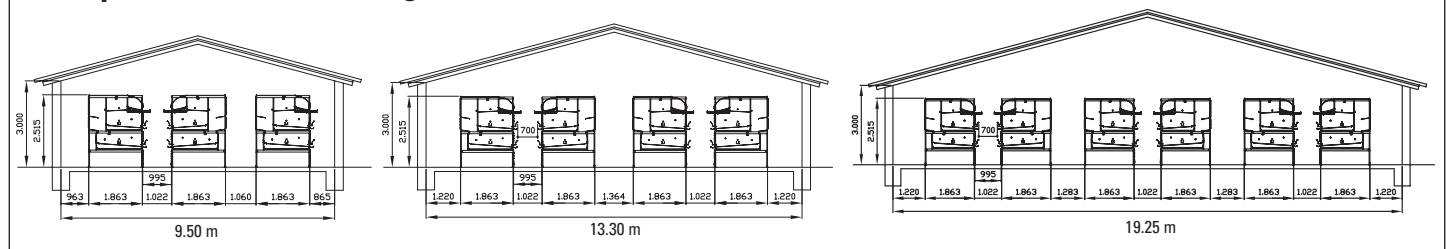
building width inside	number of rows	hens/m ² **
3.50 m	1	16.0
6.35 m	2	17.7
9.20 m	3	17.6
12.25 m	4	18.0
14.85 m	5	18.0
18.25 m	6	18.0
21.00 m	7	18.0
24.40 m	8	18.0

* aiming for 18 hens/m²

** building surface area between the end-sets

In order to be able to offer more flexibility for different building widths, the system is also available with a width of 1.61 m.

Examples of different building widths for NATURA60 installations



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