



Big Dutchman®



NATURA-Rearing

The modern aviary for rearing
of healthy pullets

NATURA-Rearing – the professional aviary perfected for the rearing of healthy

For rearing of pullets, Big Dutchman offers you the three tier NATURA aviary system. This system offers you the best possible pre-requisites for a smooth transition of the pullets from the rearing to the laying aviary. Uniform and healthy pullets and a good start into the laying phase are the main goal that we want to help you achieve.

Pullets which will later on be moved into aviaries should be reared in similar systems. **"Intensive training"**, (being the key phrase), from the first day onwards allows the birds to easily adapt to the laying aviary later on.

The lower and the central level of the NATURA aviary are equipped with feeding and drinker lines. The upper level is designed as a resting area, as the pullets are naturally drawn to use the highest place at night. This behaviour is encouraged by a sunset simulation, which means the lights in the lower and central level are switched off sooner than the lights in the top level.

Big Dutchman offers you a rearing system ideally customised to your individual requirements. Let our experts advise you!

Moving the chicks into the start tier – preferably the central level



The day-old chicks are moved into the aviary and stay preferably on the central level for approximately the first 21 days. This way they will have feed and water at their immediate disposal. To allow for more freedom of movement, 50 % of the birds can be transferred to the lower



level after approx. 10 days. **Advantage:** it is easier to maintain an even temperature level, during the first 10 days, if all birds are housed on the central level; optimal climate conditions make for a uniform distribution of the chicks, thus providing a good start for all chicks alike.



The cage fronts close off the central and / or bottom level. 2 different variants are available: The folding cage front which is simply hooked in above the tier. **Advantage:** easy-to-handle.



Or a sliding cage front (option). The upper half of the sliding cage front can easily be opened for monitoring purposes.

Advantage: provides easy access for the supervisor and easy bird control.

y, vigorous and uniform pullets under optimised working conditions

Opening the start tier – the pullets learn to move around on all levels



Perches which can be automatically folded up or down ensure that the pullets can easily reach the different levels during the day. During the night, the perches are folded down so that the pullets rest inside the installation right from the beginning.

- => efficient use of the house surface
- => high stocking densities
- => better monitoring during inspection rounds
- => **no manure accumulation beneath the perches; less ammonia emissions, better hygiene inside the house**



Approximately in the fourth week – depending on the individual conditions – the start tier is opened. The pullets are now able to move around the entire house and can thus learn how to jump and fly. Especially in the early morning hours, they have to leave the resting area and move to the two lower levels in order to eat. The foldable perches make it easier for the birds to reach the different tiers.

Due to having to move around between the different levels, the pullets are encouraged to express a uniform behaviour. By the time the pullets are transferred to the laying aviary, in week 16, they are well trained and are immediately comfortable using the different areas, (feeding, scratching and resting).

Advantage: only little additional training time is required.



Special bridges and ramps ensure that the chicks can easily reach the lower and the central level during the first weeks, after opening the installation.

Technical detail solutions with important advantages for the producer

A tube above the drinker line and the trough protects them from soiling. The tube can additionally be used as a perch. The drinker line is adjusted in height corresponding to the birds' age. As an optional feature it is also possible to install a height-adjustable tube above the trough in order to prevent the chicks from climbing into the trough => **improved hygiene and thus better animal health.**



The special approach rail (patent no. 299 19 443.4) – also available in stainless steel – ensures that the pullets perch facing the aisle.

=> **up to 70 % less manure in the aisle area**

=> **reduced ammonia in the house, better house climate**



The bottom wire on all levels is made of Galfan-coated wire – giving 3 to 4 times better corrosion protection, as compared to finally galvanized wire.

- upper tier: steel slat size 1" x 1.5"

=> **for good self-cleaning properties**

- start tier: steel slat size 3/4" x 3/4"

=> **secure foothold for the chicks**

- bottom tier: steel slat size 1" x 1"



The NATURA aviary is available with or without air duct. An air duct has the following advantages:

=> optimal drying of manure

=> even less ammonia emission

=> more constant climate conditions

=> **additional oxygen supply to the day-old chicks**

(especially during minimum ventilation in the winter time)



On the first and second tier, a closed partition can be installed after every section (2.41 m). The partitions separate the birds into smaller groups.

This is especially important when birds are moved

in, moved out, or during vaccination. It is optionally also possible to install a partition with folding grid (every 1.20 m).

Another option is to install a cage front grid in the upper level, which can be opened and closed centrally by means of a hand winch.

=> **simplified catching and vaccinating of the pullets**



The sliding cage fronts can be opened individually manually, or they can be folded up centrally by means of a hand winch.

=> **convenient solution to reduce labour**



Optionally, we offer a cleaning screw for the manure belt idler unit. The screw removes dust and feathers, which might get onto the returning manure belt during manure removal.

Ideal lighting of house and aviary

Correct lighting is an important factor, not only for layer management but also in pullet rearing. The **aisle area** can, for example, be equipped with dimmable HF-fluorescent lights (HF = high frequency), or it can be equipped with height-adjustable incandescent lamps. For the **aviary**, (lower and central level), different

options are available: HF-lamps 6 watts, LED strip lights or standard incandescent lamps 40 watts. All lamps can be dimmed.

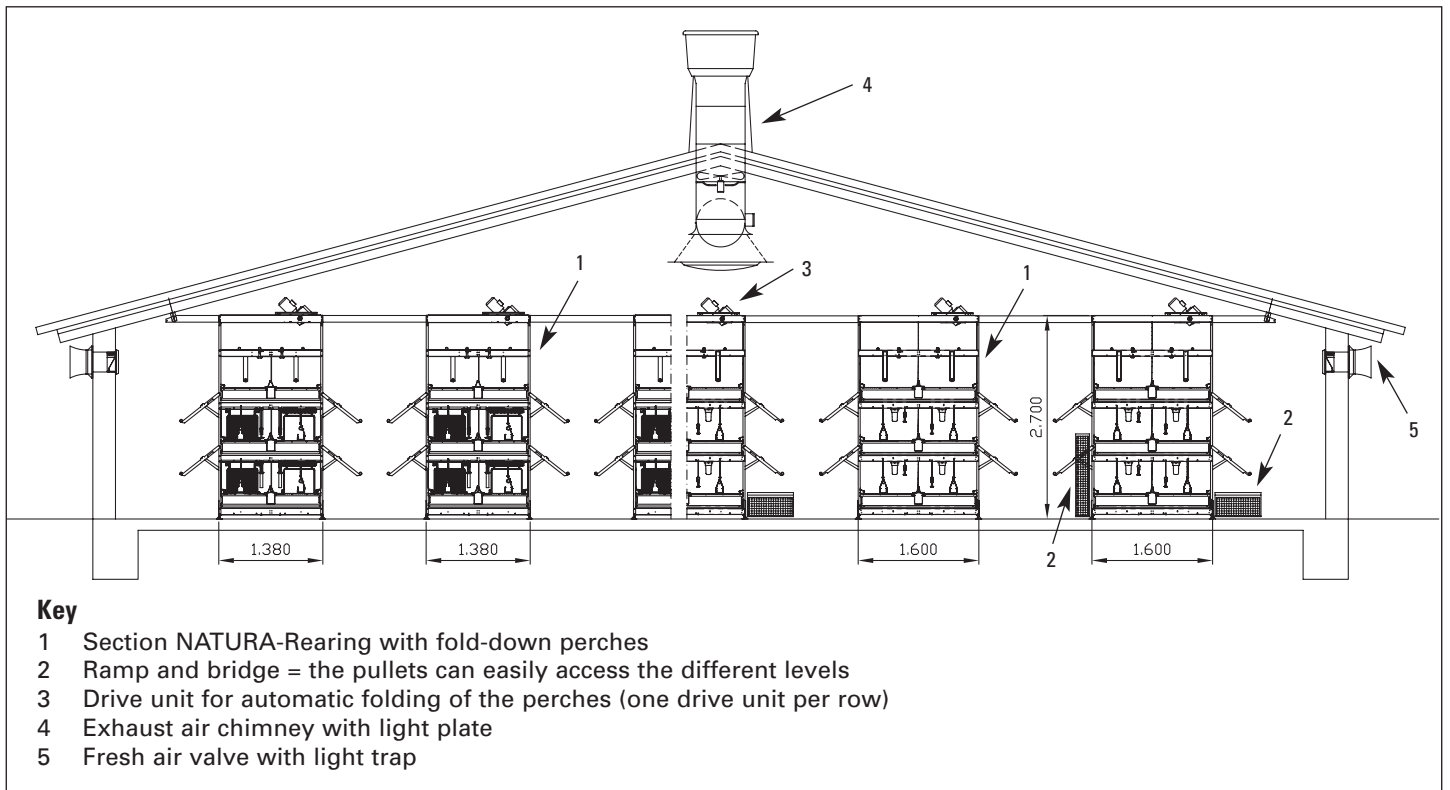
In order to ensure an optimum light supply, the lighting programmes used during rearing and the laying period should be adapted to each other.



Planning aids for the use of the NATURA rearing system

House width (m)	7 to 9 m		10 to 12 m		13 to 16 m		8 to 10 m		11 to 13 m		14 to 16 m		
Section width (mm)	1380		1380		1380		1600		1600		1600		
No. of rows	2		3		4		2		3		4		
Aisle width (m)*	1.41 - 2.08		1.47 - 1.97		1.50 - 2.10		1.60 - 2.27		1.55 - 2.05		1.52 - 1.92		
Rearing up to week	16.	17.	16.	17.	16.	17.	16.	17.	16.	17.	16.	17.	
No. of birds in	20	14472	13507	21708	20260	28944	27014	16787	15630	25181	23444	33575	31259
	30	21708	20260	32562	30391	43416	40521	25181	23444	37772	35167	50362	46889
	40	28944	27014	43416	40521	57888	54028	33575	31259	50362	46889	67150	62519
	50 sect.	36180	33768	54270	50652	72360	67536	41969	39074	62953	58611	83937	78149

Sections**	bird area (m)	end-set MPF + aisle (m)	end-set MB + aisle (m)	total length without service room (m)	
20	48.24	2.60	2.60	53.44	* all aisles are of the same width ** length of a section: 2412 mm Section width 1380 mm: for rearing up to week 16 allow 150 birds/running metre of installation; for rearing up to week 17 allow 140 birds/running metre of installation. Section width 1600 mm: for rearing up to week 16 allow 174 birds/running metre of installation; for rearing up to week 17 allow 162 birds/running metre of installation.
30	72.36	2.60	2.60	77.56	
40	96.48	2.60	2.60	101.68	
50	120.60	2.60	2.60	125.80	



We recommend:

The better the individual elements of a rearing system are adapted to each other – NATURA rearing sections, house climate, manure drying – the better the overall

results will be. Let our experts advise you on the different options Big Dutchman can offer you for successful pullet rearing.



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