



Big Dutchman®



EUROVENT EU

The enriched colony system for layers

EUROVENT EU – reliable, animal friendly and hygienic egg production

With the **EUROVENT EU colony system Big Dutchman** provides you with everything you need for efficient egg production complying with animal welfare laws. EUROVENT EU provides maximum hygiene and optimum product safety. The enriched colony system fully complies with the **EU directive 1999/74** of 19 July 1999*. This means the system meets the following requirements:

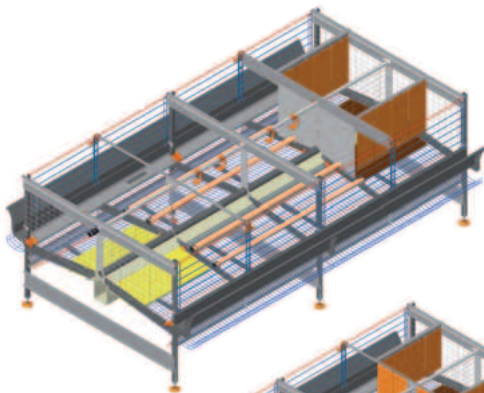
- at least 750 cm² colony surface/hen, with 600 cm² usable area;
- the total colony surface must be at least 2000 cm²;
- colony height at least 45 cm;
- at least 12 cm trough space/hen;
- every hen must have access to at least 2 nipple drinkers;
- nest and litter bath must be available;
- 15 cm perch/hen;
- each colony compartment has to be equipped with a claw-shortening device;
- the floor slope must not exceed 14 % or 8°;
- passage width between the colony rows must be at least 90 cm;
- at least 35 cm distance between the house floor and the bottom tier.

* Possible variations regarding additional country-specific regulations for laying hen management have to be observed.

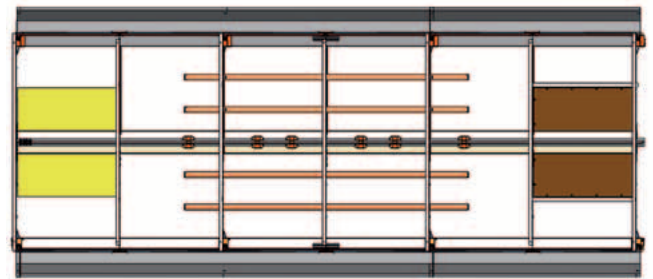
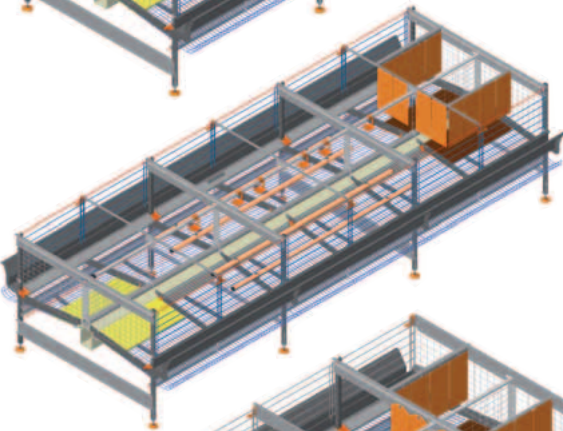
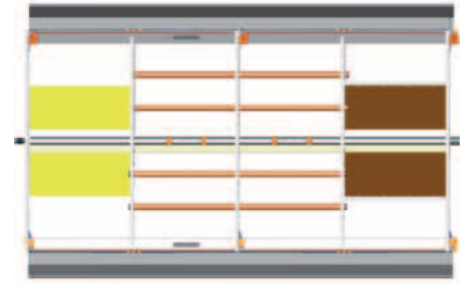
Different group sizes – can easily be realized with EUROVENT EU

EUROVENT EU is available for different group sizes of 20, 40 or 60 hens. All 3 variants provide the hens with ideal conditions and enough freedom of move-

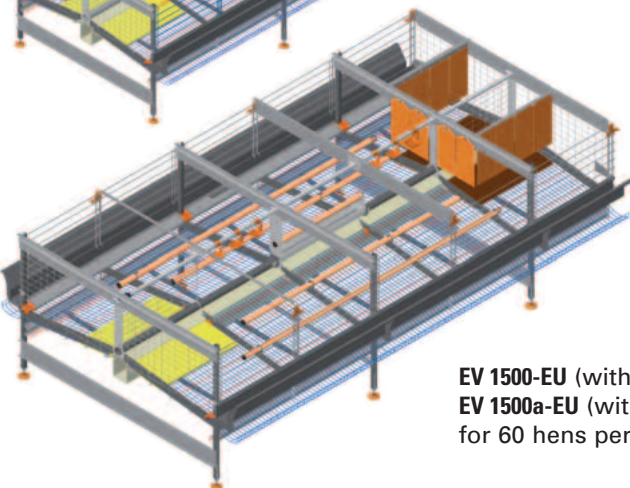
ment thus enabling the hens to act out their natural behaviour. Let our experts advise you on the best solution for your individual requirements!



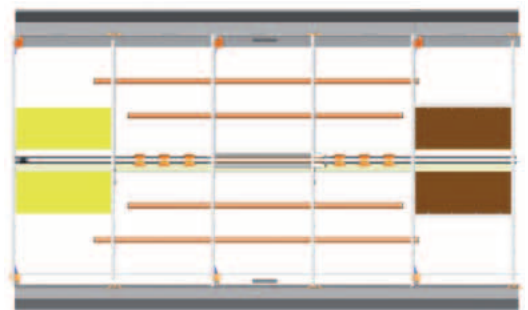
EV 1250-EU (without air duct) and **EV 1250a-EU** (with small air duct) for 40 hens per compartment. A partition in the centre can be used to split the group in two groups of 20 hens each.



EV 1250-EU (without air duct) and **EV 1250a-EU** (with small air duct) for 60 hens per compartment.



EV 1500-EU (without air duct) and **EV 1500a-EU** (with small air duct) for 60 hens per compartment.



- litter mat
- nest mat
- nest curtain
- perches

The advantages at a glance:

- the well-researched and proven EUROVENT colony system is the perfect basis for profitable, high-quality egg production:
 - => **sophisticated technology**
 - => **high laying performance and clean eggs**
 - => **very low percentage of cracked & hairline-cracked eggs**
 - => **healthy hens, low mortality**
 - => **very good feed conversion**
- high functional reliability of all supply and removal systems (feed, water, egg belts, litter, manure belt ventilation, manure removal);
- trouble-free assembly from 3 to 12 tiers;
- the entire colony front consists of sliding doors which can easily be opened to move the hens in and out in an animal-friendly way;
- Galfan coated grates ensure high resistance to corrosion;
- the bottom grate has a mesh size of 1" x 1.5" and an incline of only 12 % or 7° and is placed on tension wires thus ensuring excellent egg quality;
- manure belt ventilation makes for optimum drying of manure for low ammonia emissions inside the barn and dry, spreadable and storage-stabilized manure.



Perch area in a EUROVENT 1250a-EU



EV 1500a-EU for 60 hens per compartment with additional feed trough

Feed supply – reliable and uniform with CHAMPION feed chain

The Big Dutchman chain feeding system has established itself worldwide as an extremely reliable and very cost-effective feeding system. The chain feeding system transports the feed smoothly to the hens without separating the individual ingredients. The deep feed trough has an inner rim which minimizes feed wastage. The **CHAMPION** feed chain can be driven with only one drive for up to 300 m of circuit length.

- direct actuation of feed chain;
- low maintenance;
- cascade-shaped feed column prevents feed bridging;
- small, completely galvanized feed column => space-saving, easy-to-clean, long service life.



Water supply – hygienic and sufficient supply of drinking water

Fresh drinking water is supplied over nipple drinkers. Each compartment is equipped with 4 or 6 stainless steel nipples to ensure that every hen has easy access to a water source at any time. Drip water cups prevent corrosion and help to keep the manure dry.



Nest with insert and curtain – for undisturbed egg laying

The nest is obscured by a flexible curtain to ensure that the hens are not disturbed when laying their eggs. The nest is situated in the back half of the colony which ensures birds have full access to the feed trough.

Compartments for 40 or 60 hens are equipped with an additional grating above the Augermatic tube to prevent hens from perching on the tube in this area thus keeping the nest inserts clean.

Perforations in the surface of the nest insert enhance its self-cleaning abilities.

To facilitate the cleaning process after each batch, the nest insert can easily be removed from the nest and inserted again as it is simply hooked into the bottom grate. The litter mat is fixed in the same manner.



EggSaver – for safe rolling of the eggs onto the longitudinal egg belt



Lowered EggSaver slows down the eggs

Big Dutchman's EggSaver slows down the eggs when they roll from the nest onto the longitudinal egg belt. This is accomplished by means of a thin wire installed parallel to the egg belt which is raised and lowered at intervals during the laying phase. Another advantage of the EggSaver is that the fresh, still moist eggs can dry off before they reach the egg belt which will minimize the amount of dust and feathers sticking to the eggs.



Raised EggSaver makes way for the eggs to roll on to the egg belt

WIN 4 – for safe transportation of the eggs on the longitudinal belt

The newly developed **WIN 4** computer from Big Dutchman ensures that the eggs do not pile up between the nest and the egg belt during the main laying phase. It therefore helps to maintain a certain quality standard.

This is accomplished by weighing the egg channel in front of the nest area at several locations in the barn. If a certain egg weight is reached, the load cell transmits a signal to the WIN 4 computer which then issues a command to pull forward all longitudinal belts therefore reducing the amount of cracked and hairline-cracked eggs.



Scratch area with litter mat – well-accepted by the hens

Unlike the nest insert, the litter mat is not perforated in the rear part thus ensuring that the litter remains on the mat longer. Litter is supplied automatically by means of the reliable Augermatic tube. Feed has proven itself as good litter material since it is readily available and can be taken in by the hens without problems. The tube is located in the centre of the colony, directly above the litter mat. In compartments without back wall for 40 or 60 hens, the Augermatic tube also serves as perch outside of the nest and litter area.

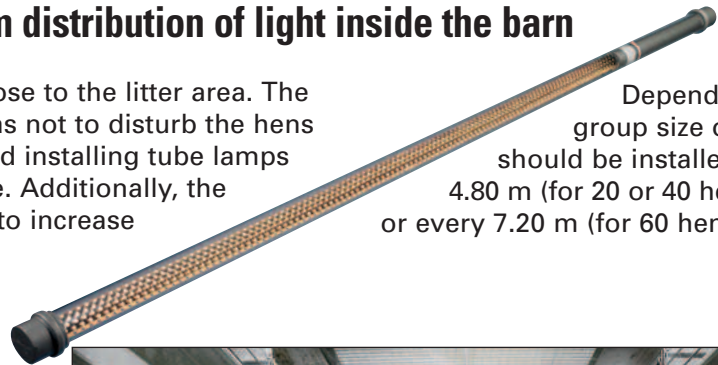


Scratch area with litter mat

Correct illumination for optimum distribution of light inside the barn

The lights should always be installed close to the litter area. The nest area should not be illuminated so as not to disturb the hens during the laying period. We recommend installing tube lamps that are suspended vertically in the aisle. Additionally, the lamps can be equipped with a reflector to increase efficiency.

Depending on the group size one lamp should be installed every 4.80 m (for 20 or 40 hens/group) or every 7.20 m (for 60 hens/group).



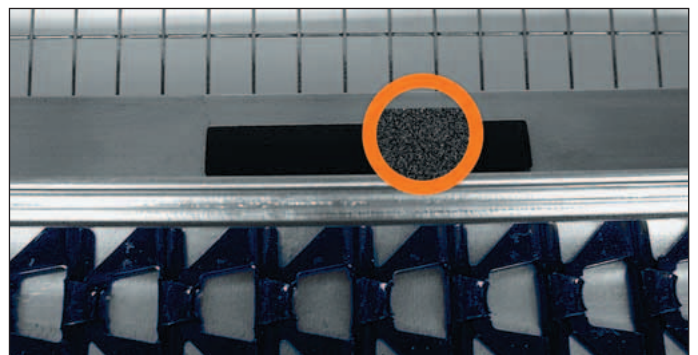
Galfan® – for increased corrosion protection

High product quality and reliability are an important part of our company philosophy. For this reason we only use Galfan-coated grates in our EUROVENT EU system. Galfan is a zinc-aluminium coating that achieves a much longer service life as compared to finally galvanized wire.



Extremely durable claw shorteners

This claw shortener is made of high-quality silicon carbide which ensures a long service life. It can be used for any type of laying system and can be retrofitted into existing systems without problems.



Manure drying and manure removal by means of manure belts – simple, clean and efficient

The ventilated EUROVENT EU system significantly reduces the ammonia concentration in the house. By means of the air duct, the manure is dried quickly and efficiently. That means:

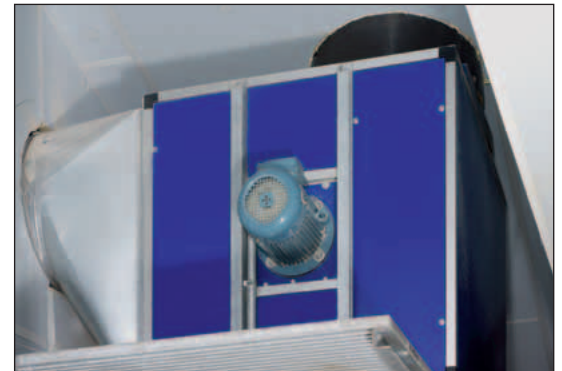
=> dry matter content of up to 60 %;
=> no problems with flies in the house.
In addition, the air duct supplies the hens with fresh air.

An air mixer helps to optimise minimum ventilation throughout the year. Depending on the temperature specifications, the ventilation can be accomplished with full fresh air supply, mixed ventilation or circulating ventilation. We recommend an air rate of approximately 0.7 m³/h/hen. The energy consumption lies at only 2 kWh/hen/year. For optimum manure drying results the system has to be installed in a well-insulated building with high stocking densities and



Manure removal end-set with manure chute

optimum ventilation conditions. Polypropylene manure belts beneath the bottom wires collect the manure. The manure may be stored on the belts for up to 7 days. During the removal, the manure from all tiers drops onto a cross belt from where it can either be transported to a manure storage facility or loaded directly onto a truck. Special scrapers clean the manure belts on every tier. The manure chute made of a plastic foil in front of the manure belt drive neatly closes the system in the area of manure removal.



Air mixer for cost-efficient heating of house air



Manure is loaded directly on trucks



Dry manure store

Technical data EUROVENT-EU

| Type | EV 1250-EU-20 | EV 1250-EU-40 | EV 1250-EU-60 | EV 1500-EU-60 | System dimensions | EV 1250-EU | EV 1500-EU |
|--|----------------|----------------|----------------|----------------|---------------------------|------------|------------|
| | EV 1250a-EU-20 | EV 1250a-EU-40 | EV 1250a-EU-60 | EV 1500a-EU-60 | | | |
| Colony dimensions | | | | | System height (mm) | | |
| Length (mm) | 2412 | 2412 | 3618 | 3015 | - 3 tiers | 2310 | 2355 |
| Depth (mm) | 625 | 1250 | 1250 | 1500 | - 4 tiers | 2990 | 3050 |
| Height (mm) | 450-525 | 450-525 | 450-525 | 450-560 | - 5 tiers | 3670 | 3745 |
| Colony surface (cm ²) | 15 075 | 30 150 | 45 225 | 45 225 | - 6 tiers | 4725 | 4815 |
| Hens/colony (750 cm ² /hen) | 20 | 40 | 60 | 60 | - 7 tiers | 5405 | 5510 |
| Trough length/hen (cm) | 12 | 12 | 12 | 12 | - 8 tiers | 6085 | 6205 |
| Perch length/hen (cm) | 15 | 15 | 15 | 15 | System width (mm) | | |
| | | | | | - without air duct | 1590 | 1840 |
| | | | | | - with small air duct | 1590 | 1840 |



Big Dutchman

Germany

Big Dutchman International GmbH
Postfach 1163 · 49360 Vechta · Germany
Tel. +49 (0) 4447-801-0
Fax +49 (0) 4447-801-237
E-Mail: big@bigdutchman.de

Asia

BD Agriculture (Malaysia) Sdn. Bhd.
No. 20, Lorong Keluli 1 B,
Kawasan Perindustrian Bukit Raja,
Seksyen 7, 40000 Shah Alam,
Selangor Darul Ehsan · Malaysia
Tel. +60-3-33 61 5555 · Fax +60-3-33 42 2866
e-mail: bdasia@bigdutchman.com

USA

Big Dutchman, Inc.
3900 John F. Donnelly Dr.
Holland, MI 49422 · USA
Tel. +1-616-392-5981 · Fax +1-616-392-6899
e-mail: bigd@bigdutchmanusa.com

