



# Big Dutchman®



## **AviMax** transit

The multi-tier system for hygienic,  
efficient and successful broiler growing

# AviMax transit

## Successful broiler production and automatic bird transport

AviMax transit is an innovative manure belt system developed by Big Dutchman for broiler growing. It has been designed for hygienic management conditions and maximum profitability. This means:

- ✓ healthy and uniform birds, increased growth rate, high feed conversion, up to one batch more per year;
- ✓ two to four times higher stocking densities compared to production on the floor, leading to a significantly improved utilisation of the house surface area and to reduced energy costs for heating and/or cooling;
- ✓ simple cleaning and disinfection after the batch;
- ✓ automatic transport of the ready-for-slaughter broilers out of the house to save time and reduce costs and to ensure optimum conditions for loading of containers for the slaughterhouse.

Let our experts advise you on the solutions Big Dutchman has in store for you.



### The advantages at a glance

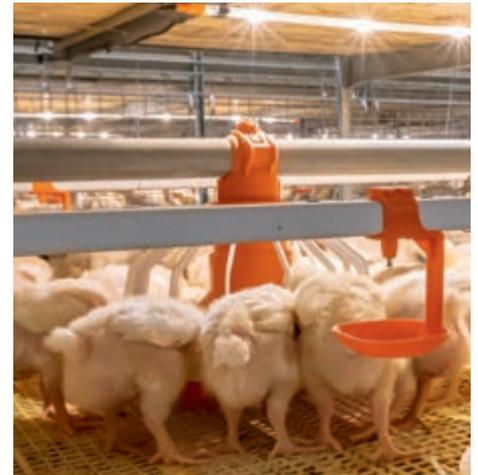
- ✓ low system height thanks to patented and innovative pivoting floors;
- ✓ flexible and soft plastic flooring keeps the birds' feet clean and creates ideal hygienic conditions;
- ✓ the entire folding front can be opened very simply so the bird area is easily accessible for inspection purposes and for quick and easy moving-in and -out;
- ✓ ideal, dimmable lighting of all compartments thanks to the use of energy-saving FlexLED lamps;
- ✓ 500 mm height in the bird area and the side grilles provide optimal air exchange throughout the entire barn;
- ✓ zinc-aluminium coating of all wire parts for good corrosion protection and a long service life;
- ✓ easy-to-operate pivoting floors for quick and efficient moving-out of the broilers;
- ✓ daily manure removal to reduce ammonia emissions in the barn to a minimum;
- ✓ simple cleaning and disinfection of the entire system, i.e. no costs for litter, reduced labour requirements.

## Feed supply – reliable and adapted to the birds' needs at any age

A FlexVey spiral transports the feed from the silo through the continuous weigher FW99 and into the house. Here, the feed is dispensed into feed pans by feed valves in every tier. Every compartment is equipped with two of our well-proven FLUXX feed pans, which satisfy the needs of both day-old chicks and of heavy broilers in the final growing phase.

After the day-old chicks are moved in and during the first days, the 360° flooding mechanism provides a high feed level in the pan, without additional labour requirements. As long as the pan sits on the floor, the flooding mechanism is automatically active. Additional chick paper for feeding in the first days is therefore not necessary. As the birds

grow, the pans are raised, the flooding mechanism closes and the feed level drops, thus preventing feed wastage. The height of the feed lines can be adjusted centrally with minimum effort for an adaptation to the birds' size.



## Water supply – hygienic and with simple height adjustment

Water is supplied by two drinker lines with a total of twelve nipples per compartment. The orange Top nipple provides plenty of drinking water, especially on days with high temperatures.

The drinker lines can be adjusted in height centrally and can thus be adapted to the birds' size with minimum effort.

A scale makes it easy to find the correct height for any bird age.



## FlexLED – optimal illumination of every compartment

FlexLED is an innovative LED tube lamp which can be used very flexibly. The lamp is wired without plugs, i.e. only one continuous main cable is required. The LED tube can thus be installed easily even where there is little space. FlexLED has the following advantages:

- ✓ low power consumption;
- ✓ resistant against high-pressure cleaning;
- ✓ 0 to 100 % dimmable;
- ✓ use of brand LEDs (Osram);
- ✓ even distribution of light thanks to the special profile of the housing;
- ✓ zero flickering even at low light intensities;
- ✓ 48 V DC safety extra-low voltage;
- ✓ certified by the German Agricultural Society (DLG, test report 6816);
- ✓ good price / performance ratio.



## Inspection cart – easy monitoring of the birds

The Big Dutchman inspection cart ensures optimal monitoring of the flock and makes it easy to move broilers in and out, especially in the top tiers. The height of the inspection cart can be adjusted as required. A rail guides the cart, which runs on the floor, safely along the system. The cart can be locked in place in any position by means of a brake.



## High corrosion protection

Excellent product quality and reliability are part of the Big Dutchman philosophy. For this reason, all grilles installed in the AviMax transit system are treated with a zinc-aluminium coating. This is a special alloy which provides excellent protection against corrosion.



## Pivoting floor with plastic net – hygienic and flexible

Big Dutchman's innovative pivoting floors optimise management conditions during the growing period and permit easy moving-out of the ready-for-slaughter broilers.

The pivoting floors are covered with a flexible,

soft plastic net and provide excellent manure penetration. This means:

- ✓ clean and sanitary surfaces: reduced infection risk and healthy birds;
- ✓ no litter required: clean plumage and feet;

- ✓ soft and flexible floor: no breast blisters, minimised risk of skin and foot lesions.



## Manure removal with manure belts – simple, efficient and clean

The manure drops onto polypropylene (PP) manure belts underneath the system. After moving in the day-old chicks, manure should be removed by running the manure belts for the first time no later than one week after the moving-in date. In weeks 2 and 3, the manure should be removed every other day, and from week 4 onwards, the belts should run daily.

This ensures a relatively low ammonia content in the house air and prevents fly problems. The end set is galvanized and thus protected against corrosion. The stainless steel manure belt scrapers are equipped with a special U-shaped profile made of polyurethane. They thoroughly clean the manure belts in every tier.

The manure chutes are made of a plastic fabric and neatly close the system in the manure removal area.

Over the entire course of the batch, the lift cross conveyor remains at the top of the system in the so-called parking position, therefore providing free access to the rows.



Scrapers made of stainless steel ensure that the belt is cleaned



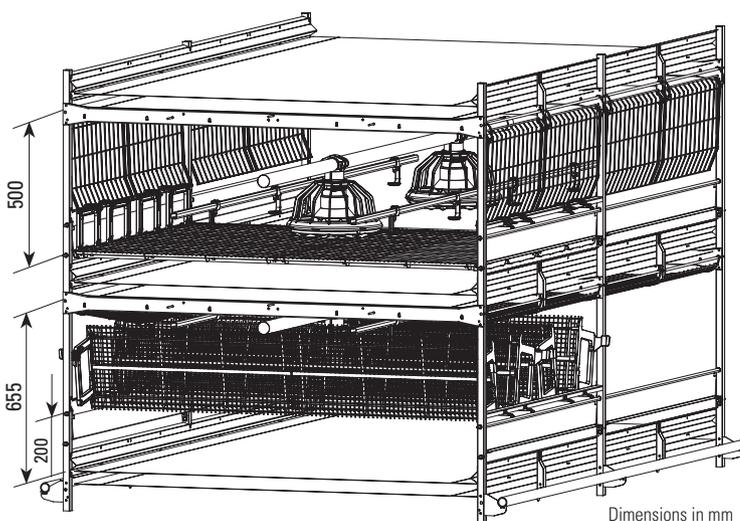
Lift cross conveyor in parking position

## Low system height thanks to patented pivoting floors

The AviMax transit broiler system does not require extra headroom for the sole purpose of moving out the broilers. This is made possible

by a completely new moving-out method. The unique pivoting floor technology permits a tier distance of just 655 mm. This means that a

three-tier system has a height of only 2.28 m, and a four-tier system of only 2.93 m!



Dimensions in mm



View into the system during moving-out

## Easy moving-out of ready-for-slaughter broilers

For the moving-out procedure, the pivoting floors are simply opened upwards, with little effort, so that the broilers slide onto the manure belt from a very low height of just a few centimetres. While this work is done, the barn lights are dimmed (lights out). Since the floor is opened upwards into the cage area, there is sufficient headroom above the manure belt for the transport of the broilers. Thanks to

this innovative moving-out method, AviMax transit requires significantly less building height than other systems. In many cases, this makes it possible to install an additional tier in already existing buildings, increasing the stocking density. Before the broilers are moved out, the feed and drinker lines have to be raised to their highest position. Additionally, the manure belts of the respective tier must be

cleaned to prepare for transporting the broilers towards the lift cross conveyor. Two workers are needed per row to operate the pivoting floors. They work in unison. Once the system's fronts are open, the floors have to be swung upwards, starting at the manure belt drive.



## Lift cross conveyor – automatic transport of birds to the level conveyor

During the moving-out procedure, the manure belt transports the broilers to the end of the system where they are transferred onto the lift cross conveyor. The connection is at the same level as the lift, ensuring a smooth transfer of the birds. In order to speed up the moving-out process, birds from the same tiers of two or three rows can be moved out simultaneously.

The lift cross conveyor transports the broilers to the level conveyor, which is simply hooked into the cross conveyor and does therefore not require any additional height adjustment.

At the end, the level conveyor transfers the birds for example onto a rotating table. Such a table provides sufficient space for workers to receive the broilers and to load them into transport boxes to be transported to the slaughterhouse. Depending on the transport requirements, it is also possible to install a direct container loading system.



Lights should be dimmed during moving-out to keep the birds calm



Level conveyor



Rotating table with loading into transport boxes

# ViperTouch climate and production computer – secure, comfortable, easy to use



ViperTouch is the basis for reliable and secure climate and production control in your barn!  
The computer's outstanding features include:

- ✓ **Coloured 7-inch or 10-inch touch screen:** Functions you use on a daily basis are immediately available in the menu. Relevant curve trends are displayed as graphs.
- ✓ **Customisable user interface:** You can design the display just as you require and prefer.
- ✓ **Modular hardware:** Easy to extend whenever you need new functions.

- ✓ **Software updates:** Easy to implement when necessary.
- ✓ **Full integration with BigFarmNet:** With BigFarmNet Manager, you can remote-control the computers on your farm while sitting comfortably at home.
- ✓ **High operational reliability:** ViperTouch continues working without errors, even when not connected to the network.

In larger houses, especially in new barns, we recommend installing a control cabinet. This control cabinet contains all fuses, residual-current devices, motor protection switches, contactors, control lamps, alarm devices, etc. for all system parts installed in the house. Such a cabinet can contain the 7-inch or 10-inch version of ViperTouch. The control cabinet is planned and manufactured individually for each project, based on the equipment in the barn. Each cabinet's wiring is ready for connection upon supply, i.e. the electrician just has to connect the consumers (motors, etc.). In case of defects, error diagnosis is much easier, since the control cabinet comes with detailed plans.



Modern control cabinet: good structure, simple operation, high degree of protection, clean look



## UNITES ALL MANAGEMENT TASKS OF YOUR FARM COMPLEX IN ONE SOFTWARE

In the barn  
with ViperTouch

In the office  
with BigFarmNet Manager

Anywhere you are  
with the BigFarmNet app



# Technical data and planning instructions

AviMax transit is available with different dimensions:

✓ Compartment length: 2412 mm

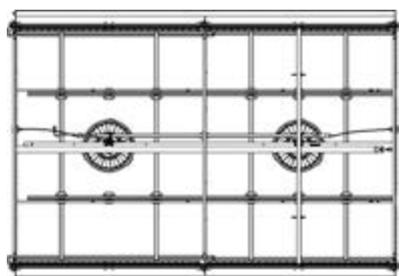
✓ Compartment width: 150 or 180 mm

✓ Tier distance: 655 or 775 mm

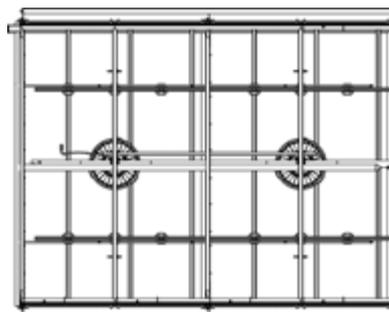
These dimensions result in a number of system

types that can be supplied as per your requirements.

## Compartment dimensions

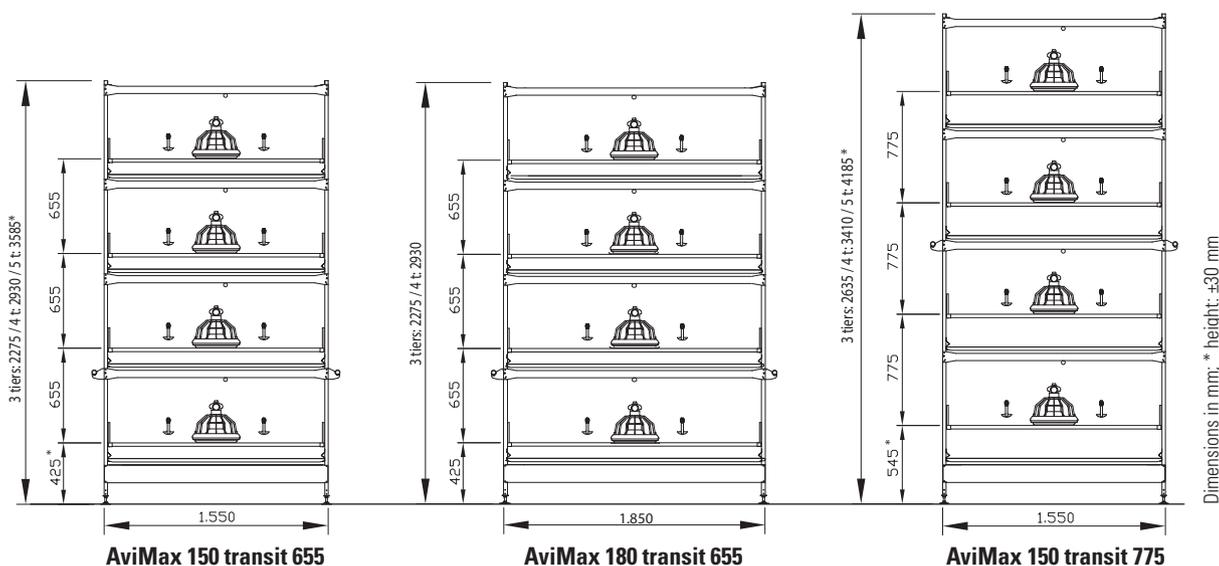


**AviMax 150 transit – 2412**  
Width x Length = 150 x 2412 mm



**AviMax 180 transit – 2412**  
Width x Length = 180 x 2412 mm

## Tier distance



## Recommended number of birds per compartment depending on broiler weights

Final weight (g)	Number of birds per compartment		Number of birds per nipple		Number of birds per feed pan	
	AMX 150	AMX 180	AMX 150	AMX 180	AMX 150	AMX 180
1500	120	144	10,0	12,0	60	72
1800	100	120	8,3	10,0	50	60
2250	80	95	6,7	7,9	40	47,5
2500	72	87	6,0	7,3	36	43,5

We recommend a stocking density of 50 kg/m<sup>2</sup>.



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