



Big Dutchman®



Pure Line

The sustainable, animal-friendly and environmentally sound product line for your pig house

Pure Line

Animal-friendly, low emission and well tested products for your pigs

PureLine is Big Dutchman's answer when you want to keep your pigs in an especially animal-friendly and environmentally sound way. Big Dutchman focuses on health, vitality and well-being of your animals and strives to create solutions that are ready for practical

use. Our innovations therefore meet your requests for more animal welfare, advancing professional pig production with accrued knowledge. Big Dutchman has always been a major influence on the agricultural world with revolutionary solutions. Numerous awards

prove that we are an ideal partner: we find and develop those trends that will be important for your future.

Do not hesitate to get in touch with one of our experts for a detailed consultation.



Pig housing with open-air run for finishers

Animal-friendly management systems, a good climate in the barn, emission reduction and labour efficiency are the requirements of today and tomorrow. The Big Dutchman PureLine products stand for increased animal welfare; they are sustainable, easy on the

environment and make good economic sense. It does not matter whether you produce conventionally or for an animal welfare label, or whether you want to start organic production.

Use the modular Big Dutchman system to

realise your project: from managing sows in the insemination and gestation area all the way to farrowing, rearing and finishing.



Group housing of pregnant sows



Xaletto®: the new management concept for piglets



Finishing room with continuous solid floor and straw rack

Concepts for the insemination and gestation area

Keeping sows in groups during gestation not only increases their well-being but also improves their body condition. They are thus well-prepared for farrowing. Big Dutchman

can offer a wide range of excellent options for group housing. Managing sows in groups provides the animals with plenty freedom of movement at any time, whether individual

stalls are used or not. The most important factor is that the selected system fits your farm's individual requirements.

“My sows are doing very well! Lots of light, straw bedding and a good climate in the barn are perfect conditions for them.”



The insemination area is the starting point for every production system. The housing needs plenty of light with as much natural daylight as possible.

This is beneficial because:

- the entire musculoskeletal system recovers better and more quickly after farrowing;
- the sows can establish the required hierarchy very early on;

- sows kept in groups go into heat more easily;
- the sows can be stimulated more intensively.

EasyLock and BD sow stalls

The sow stalls Easy Lock and BD offer the sows all benefits of animal-friendly group housing. Feed is supplied in the stalls. Every sow therefore has her own feeding space where she can eat without being disturbed.

This means:

- all sows can eat simultaneously so there is no stress during feeding;
- insemination is made easy by the integrated insemination door;

- the stall can be used as a retreat, especially during the critical phase of follicle implantation.



Easy Lock sow stall

Advantages of Easy Lock

- ✓ the sow enters the stall through a swinging door;
- ✓ simple operation;
- ✓ only minimal mechanics;
- ✓ special insemination door (optional) for easy monitoring, e.g. pregnancy checks;
- ✓ adjustable width (600 mm to 700 mm);
- ✓ good price : performance ratio.



BD sow stall

Advantages of BD stall

- ✓ an integrated insemination door facilitates insemination and pregnancy monitoring;
- ✓ the open design of the stall allows a good overview for the farm staff;
- ✓ rubber noise absorbers for quiet opening and closing of the stall ensure a low noise level;
- ✓ rugged design;
- ✓ available in two different widths: 650 mm and 700 mm.

The BD stall has an up-and-over door. When the sow enters the open stall, the door locks behind her, simultaneously allowing her to eat. To leave the stall, the sow moves back against the door and thus opens it. The stall cannot be opened from the outside by other sows.



Easy Lock stall for outdoor management



BD stall with integrated insemination door

Sow arena with connected insemination and gestation area

In the sow arena, the animals have much room to satisfy their need for movement directly after weaning. This also has a positive effect on the start of the sows' next heat. Any ranking fights occur before gestation so injuries during pregnancy are

rare. Every sow has her own feeding space with partitions. The arena itself should be bright and airy with plenty daylight. Sufficient lighting can additionally be guaranteed with the FlexLED HO lamp. An energy-saving and cost-efficient

option for heating is the fin heater. The mostly continuous and solid floor is covered with straw bedding. A small area of slatted flooring drains urine.



The sow arena offers much room and ample freedom of movement

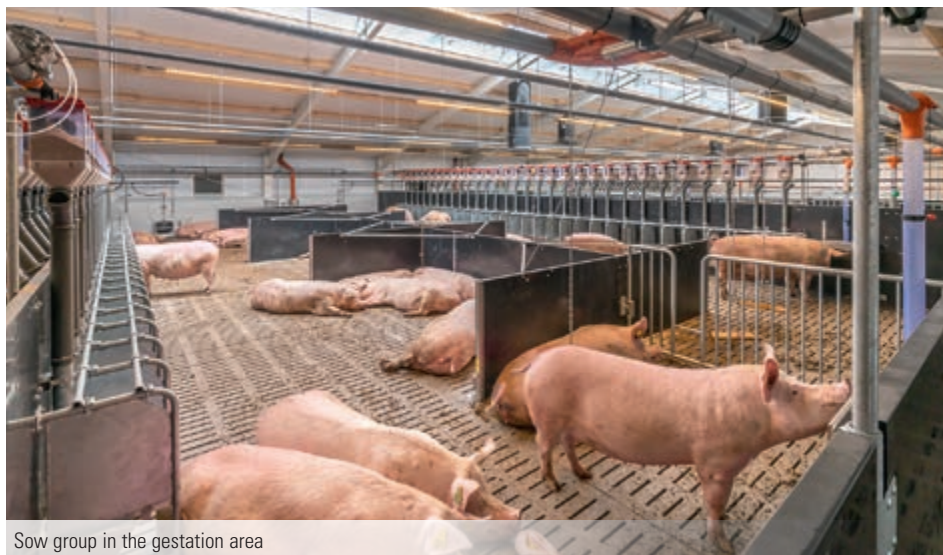
The service crates should be adjacent to the arena for easy heat checks and artificial insemination, keeping distances short and ensuring a good overview. Boars can help stimulate the sows in a boar aisle in front of the service crates to induce a heat that is as intensive as possible. During insemination, the sows can be restrained for a short period. The gestation area is located behind the boar pens, hospital pens and separation pens. The sows know one another after being kept in a group in the sow arena and in the service area, which reduces ranking fights.



Boar pens and service crates

Advantages

- ✓ all animals eat at the same time;
- ✓ the farm manager can easily supervise the stock while the sows are eating;
- ✓ the sows do not need any time to adapt to the system;
- ✓ feeding space widths between 45 cm and 55 cm per sow;
- ✓ simple pen arrangement;
- ✓ cost-efficient solution.



Sow group in the gestation area

CallBack^{pro}: the smart solution for individual sow feeding

The CallBack^{pro} feeding system unites the advantages of managing sows in free-access stalls with those of an electronic sow feeding (ESF) system. Similarly to an ESF system, the sows are identified by an RFID ear tag to

allow for individual feeding. All feeding data are logged automatically; deviations generate an alarm. The group size can easily be adjusted in steps of 20 by changing the number of feeding spaces. Sows are often

already accustomed to stalls and they can see the station's interior from outside, so they quickly learn how to use the system.



Individual feeding of every sow in a protected space

Advantages

- ✓ smart solution for individual sow feeding in a protected space;
- ✓ the sows quickly understand how the feeding system works because they know the up-and-over door;
- ✓ up to 20 sows share one station;
- ✓ retrofitting of conventional houses is no problem;
- ✓ the feeding stations are controlled centrally;
- ✓ the user-friendly 510^{pro} controller can be installed at any location;
- ✓ compatible with the BigFarmNet software.

CallMatic3pro: computer-controlled sow feeding

CallMatic3pro is an innovative feeding system for pregnant sows kept in groups. It ideally combines the advantages of animal-friendly housing and a feeding method specially adapted to the requirements of each

individual sow.

Individual, computer-controlled feeding means that the supplied feed and thus the nutrients are precisely adjusted to the sow's condition. This method of feeding saves resources and

is perfectly suited for new and renovated houses with partially slatted floors or with straw bedding.



View of a gestation area with CallMatic3pro



Open, well-lit trough area

Advantages of CallMatic3pro

- ✓ available for dry feeding and liquid feeding;
- ✓ suitable for both static and dynamic groups;
- ✓ optimised exit area with two gates: the sows cannot enter the station from the exit side;
- ✓ trough unit with or without trough flap;
- ✓ solid side partitions for undisturbed feed intake;
- ✓ use of sound-absorbing materials: low noise level inside and around the station;
- ✓ selection unit (optional);
- ✓ up to two colour markers (optional);
- ✓ two feed types and one separate mineral dosing device (optional);
- ✓ reliable BigFarmNet control.



Farm management finally made simple!

The 510pro station controller has a large, well-arranged display and shows important information such as the number of visits to the station, the quantity of feed consumed and the current status of the identified sow. The controller no longer needs to be installed at the ESF station but can also be mounted in the aisle: an important advantage, as this makes for better accessibility.

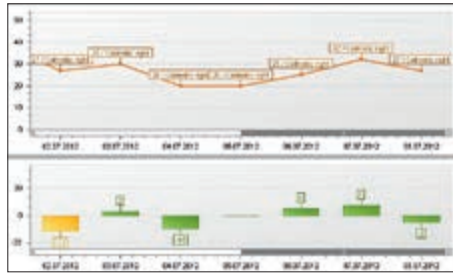


The station controller is easy to operate using the 10-inch touch screen

BigFarmNet software extension for health monitoring

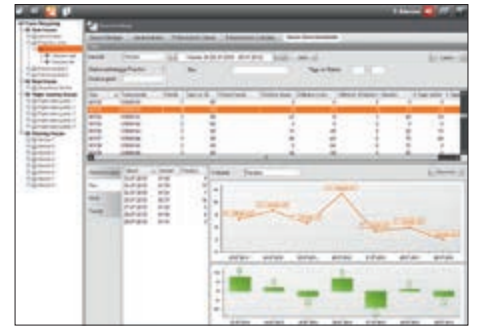
Health monitoring of sows kept in groups is important but not always easy to accomplish for the farm manager. Big Dutchman offers a software solution that helps monitor the health status of each sow so symptoms of disease can be detected and treated early on. The system is based on the daily recording of each sow's eating times and visit order over a longer period of time. These data are collected automatically by means of the ear tag and displayed at the PC in the form of graphs and lists.

If there are marked changes in the behaviour of the sow, the farm manager receives an alarm message indicating possible problems.



Visualisation of a sow's visit order

The respective sow can then be checked at an early stage and required measures taken.



Overview of possible selection criteria

Group housing of pregnant sows with open-air run

An outdoor area can be combined with any type of management and feeding system, as long as there are no structural or legal obstacles. The open-air run should have a

continuous solid floor with a slight gradient and may be filled with straw. This makes regular mucking out necessary. At the deepest place of the open-air run, a drain

channel with connection to the slurry pit should be planned.



Sows with the option of going outside



Open-air run in combination with CallMaticpro



Snout-operated door with integrated piglet access door

Sows use a snout-operated door to move from the barn to the outside and back. They can push open the door from the inside. The door closes after the sow has passed through due to its own weight. This prevents cold outside air and draughts from entering the barn. From the outside, the sows can open the door with their snout, which is the reason for the door's name. The sows move their snout behind a protruding metal sheet and turn their head to open the door. The door closes after they have walked through.

Snout-operated doors are also available for lactating sows. An integrated piglet access door allows the piglets to get outside as well. The piglets are not yet strong enough to use the snout-operated door.

Concepts for the farrowing area Ample room for piglets and sow during and after farrowing

During farrowing and in the following lactation period, sow and piglets are granted much more room with the Big Dutchman PureLine solutions. Piglets need a protected

space during this time, while the sow manager focuses on ease of use and a good overview.

Big Dutchman can offer different concepts,

from the variable-restraint pen and free-movement pen to free farrowing and group housing of pregnant sows.

“Lots of freedom of movement for the sow and a creep for the piglets – that’s what I call animal welfare!”



ActiWel: the variable-restraint pen with farrowing frame

With ActiWel, Big Dutchman has developed a variable-restraint pen that provides ideal conditions and plenty of room for the sow and her piglets in their first weeks of life. The pen consists of a farrowing frame, a heated resting area for the piglets, the

flooring and the pen partition. Arrangements either parallel to the aisle or straight, with the sow's head against the wall, are possible. The low partitions of both options permit a good overview of the room and easy access to the pen. There is also sufficient space to

feed the piglets outside their creep. During farrowing and the first days of life, the farrowing frame may remain closed.



ActiWel with open farrowing frame: plenty freedom of movement for the sow



ActiWel variable-restraint pen with closed farrowing frame

Advantages:

- ✓ **easy to open:** the farrowing frame is very easy to open and to close in just four steps and within five seconds. The staff do not have to enter the sow area, which makes handling even more comfortable;
- ✓ the specially designed door of the farrowing frame allows easy access so the staff can provide assistance during farrowing;
- ✓ the sow can use the side parts of the farrowing frame as support when lying down;
- ✓ high safety during work because the opening and locking points are located outside of the sow area.

Group housing of lactating sows

Under the name Agilo, Big Dutchman offers three new group housing systems for lactating sows:

- **Agilo HL**
- **Agilo FB**

In the service centre and gestation area, sows are already often kept in groups. But for lactating sows, group housing is not yet as common. This is mostly due to the fact that the requirements regarding animal management and monitoring of such concepts are higher.

These requirements are compensated for by the advantages, however: group housing fits much better with the natural behaviour of sows and piglets.

- ✓ the sows are already kept in the same group before farrowing
- ✓ for farrowing, each sow and her piglets remain together in farrowing pens
 - good maternal bonding and reduced risk of losses caused by overlying
- ✓ the farrowing pen is opened after some days
 - interaction between the sows and all piglets of the group
 - the piglets can act out their need for

➤ **Agilo RS**

An important feature of all three systems is the large amount of space they offer for sows and piglets.

movement and any ranking fights occur early on, reducing the piglets' risk of injury

→ the sows' ample freedom of movement boosts the metabolism and therefore increases feed intake, keeping the sows in a good condition.

It is, by the way, also possible to continue rearing the piglets in this system after weaning.



Group farrowing promotes early immunisation of the piglets

Agilo HL means a group housing concept where the farrowing frame remains open all the time after it is opened manually, i.e. it can only be closed manually by the staff. The sow's trough can be installed close to the

ground so the piglets learn from the sow how to feed from it. The drinker is also accessible to the sow and the piglets. Through a piglet access door, the young pigs can enter the group movement pen. Here,

additional drinkers, feeders and enrichment material or even a separate piglet area can be offered.

Agilo FB means a group housing concept where the sow can open and close the farrowing pen independently. She is thus able to eat and relax without being disturbed. A

centralised free-access function is also included, increasing comfort for the staff and reducing the time required for animal inspection. The flooring and feeding systems

in the group movement pen are identical to Agilo HL.



The free-access function makes sow inspection much easier

Agilo RS is a third system for the group housing of sows developed by Big Dutchman. Farrowing takes place in a separate area. After some days, three to eight sows with their piglets are moved into the group pen. Each pen has been designed with sufficient space for the sows and piglets. The piglets

can additionally use a separate piglet area. Generous openings provide the piglets with easy access to the sows. The sows, in contrast, cannot enter the piglets' heated creep.

A group of, for example, three sows with their piglets can be offered a 16.5 m² large sow

area and a 4.5 m² large, separate area for the piglets. This absolutely new concept offers much more room for sows and piglets and corresponds to the sows' natural behaviour of rearing their offspring in the group.



The piglets have access to a separate area which the sow cannot enter

NaturalCare: the free-movement pen that allows short-term restraining of the sow

In the NaturalCare free-movement pen from Big Dutchman, sows give birth without any restraints. Restraining for a short period of time, for example during veterinary

treatments, is possible. Piglet protection bars prevent losses caused by overlying. The creep can be heated to provide the necessary warmth for the piglets.



Free-movement pen with heated creep



The farrowing frame can be closed for a short period

Advantages

- ✓ the sow and her piglets can use nearly the entire pen at all times;
- ✓ the heated creep protects the piglets and functions as a retreat;
- ✓ short-term restraining of the sow for improved working conditions during treatment is possible.

Free farrowing without any restraining

Free farrowing means that the sow is not restrained by any farrowing frames. The pen consists of an open sow area and a separate creep as protected piglet nest. Wall gratings

reduce the risk of piglet losses due to overlying. An adjoined open-air run is also common.



Pen for free farrowing without option for restraining



Open-air run

Advantages

- ✓ ample freedom of movement for sow and piglets;
- ✓ specially designed gratings for the sow prevent losses caused by overlying;
- ✓ option to go outside.

Concepts for piglet rearing and finishing Animal-friendly, low-emission management and feeding systems

Big Dutchman has a large number of animal-friendly housing systems available for piglet rearing and pig finishing, including straw

systems that do not produce any slurry, management in large groups and open-air pig housing. Another important focus features

measures that reduce emissions, such as the immediate separation of faeces and urine or the use of straw on continuous solid floors.

“Xaletto is ideal for my piglets and for me. No slurry, no odours, perfect health.”





The future-oriented straw bedding concept for piglet rearing and pig finishing

Xaletto® is a new management system with proven profitability for animal-friendly and environmentally sound piglet rearing and pig finishing on straw. The basis of this method includes a special ventilation system, a

specifically developed feed type, and a compost activator. Xaletto® can be used for new houses as well as for renovated barns. Neither manure run-off nor slurry is produced. All manure can be composted.

Xaletto® is a collaboration of Big Dutchman, the feed producer Bröring and the inventor of the system, a hands-on professional.



Xaletto® room for piglet rearing

Thanks to a special straw management and a new type of climate control with the 310*pro* computer, moisture is constantly removed from the straw bedding. Adding an organic activator starts an aerobic decomposition process, i.e. cold composting below 40 °C. The depth of straw is therefore kept shallow with the amount of bedding required comparatively small. Nitrogen and ammonia are bound so they cannot enter the environment.

A clear structure of the pen is also very important. Feed and water are only available on a raised platform and the pigs receive a special feed type.



Intensive rooting as enrichment



Feed from the dry feeder



A special drinker prevents water loss

Advantages

- ✓ animal-friendly management system on straw that reduces emissions;
- ✓ excellent animal health;
- ✓ intensive rooting in the straw for enrichment stops aggressive behaviour among pigs;
- ✓ suitable for undocked pigs;
- ✓ absolutely no slurry, which reduces the building costs for new barns;
- ✓ no unpleasant odours in the barn, very few NH₃ emissions;
- ✓ 50 % less straw required compared with the recommendation of the German Association for Technology and Structures in Agriculture (KTBL);
- ✓ the decomposing manure can be composted after the batch, creating a high-quality, nutrient-rich and saleable compost.

The welfare barn with solid flooring: no slurry, low emissions and 100 % welfare based

Havito® stands for an animal-friendly pig production method that produces reduced emissions whilst maintaining profitability. The Havito® concept patented by Big Dutchman features a completely new pen layout with solid concrete flooring and a connected

system for manure removal called PigT. This concept has proved to allow profitable piglet rearing, pig finishing and wean-to-finish systems: in closed housing, in ventilated barns with stimulating fresh air or in true naturally ventilated open-air barns with outside run.

Havito® was developed through the close cooperation between Big Dutchman and feed producer Bröring.



Havito® barn: wean-to-finish system without slurry channels or slatted flooring

- 1 PigT with plastic belt and collecting pan for urine
- 2 Manure channel with scrapers
- 3 Aisle



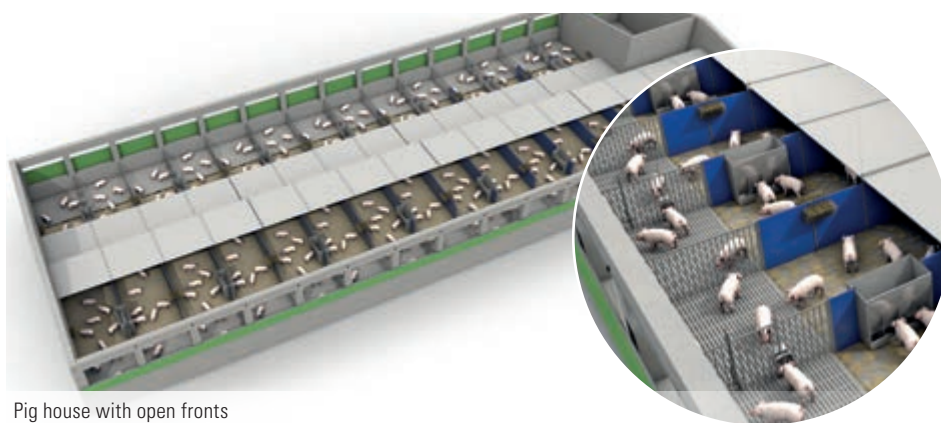
Cross section of a pen

Separation of faeces and urine

The clear structure of the pen animates the pigs to define functional areas as soon as they are moved in. The continuous solid flooring offers space for activities, eating and resting. The cover at one end of the pen creates a microclimate, resulting in an attractive resting area with minimal amounts of bedding. Organic manipulable material can be offered as bedding for rooting and eating, without negatively affecting manure removal. The pigs defecate and urinate on the PigT pig toilet. This pig toilet consists of a plastic belt on which both pigs and staff can walk. It fits neatly into the flooring surface. The solid components of the manure remain on the belt and are removed from the pen at adjustable intervals when the circular belt slowly transports the manure into the collection channel. One third of the solid manure should always remain in the pen so the pigs continue using PigT to defecate and urinate.

Piglet rearing and finishing in open-air pig housing and barns with outside run

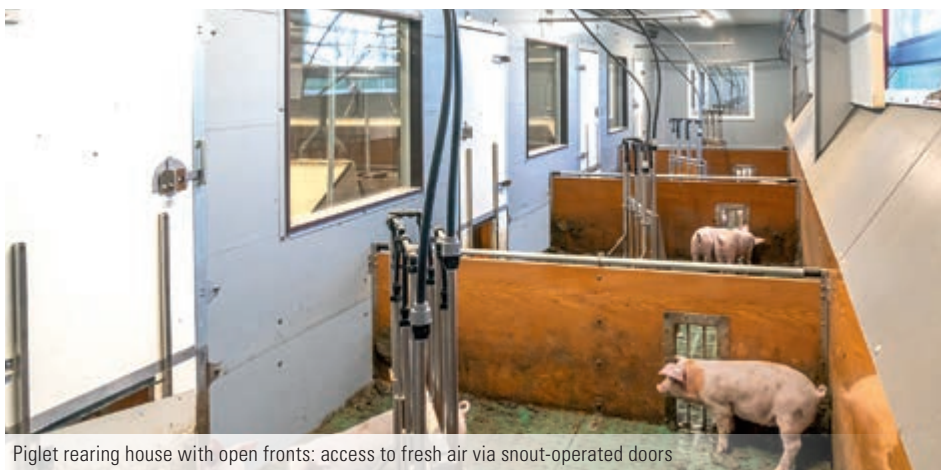
Pig houses with outside run or open fronts and open-air pig houses are another step towards more animal welfare. An open-air run contributes to a clear distinction between the different areas of the house: lying, eating and activity and an area for defecating. At the same time, the pigs are offered additional incentives to move and play, as well as more room. The open-air run creates a new climate area that differs from the closed house and thus improves the pigs' health and well-being.



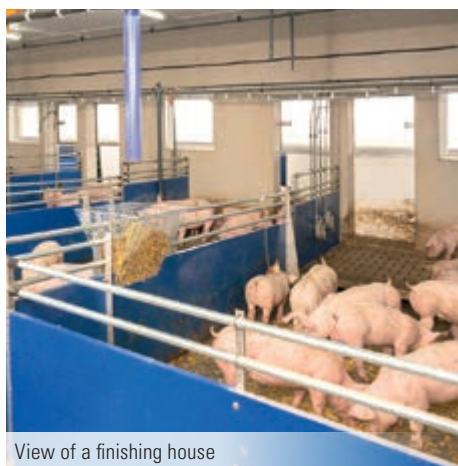
Pig house with open fronts



View of a room for piglet rearing



Piglet rearing house with open fronts: access to fresh air via snout-operated doors



View of a finishing house



Finishing house with open fronts: access to fresh air via snout-operated doors



View of a finishing house



Finishing pigs in an open-air pig house with constant access to the outside run

Management of large groups with the TriSort^{pro} sorting scale

The automatic sorting scale TriSort^{pro} provides an animal-friendly management and feeding concept that creates optimum housing conditions for the animals during finishing. Large groups ensure ample freedom

of movement and allow for pigs lower in the hierarchy to avoid contact with the more dominant ones. The pigs can reach the feeding area at any time. Bowl drinkers and toys of a sufficient number can be placed in

ideal positions in the large activity area. An important component is the computer-controlled straw dispenser. At regular intervals, it dispenses chopped straw, which the pigs like to use for enrichment.



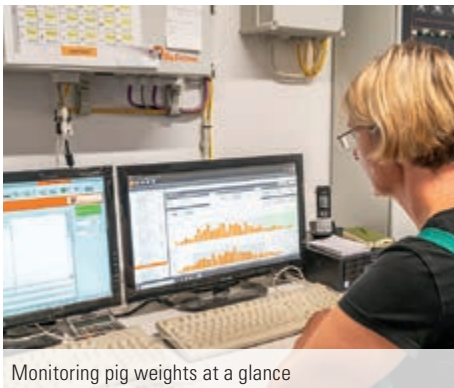
TriSort^{pro}: ample freedom of movement and sufficient resting spaces in a brightly-lit pig house



Straw is a popular enrichment material for pigs



Farm management finally made simple and easy to use!



Monitoring pig weights at a glance

Each pig has to pass through a sorting scale before it can eat. The 510^{pro} controller registers the pig's weight while it is inside the scale. The BigFarmNet software allows the constant collection of data as well as monitoring and controlling of all connected sorting scales.

Additionally, the office is equipped with a PC. Both computers communicate in real-time. As farm manager, you thus have all information about your stock available at all times:

- ✓ presentation of the weight distribution on the current and previous day;
- ✓ definition of sorting thresholds;
- ✓ display of the scale's visiting frequency;
- ✓ prediction of the date on which e.g. 100 pigs will reach a specific target weight.

Advantages

- ✓ groups have substantial space, which reduces aggression among the group members;
- ✓ structured pens with activity, feeding and resting areas;
- ✓ weight-adjusted feeding and use of different formulas;
- ✓ constant overview and monitoring of all pig weights with the BigFarmNet software;
- ✓ easy selection of ready-to-slaughter pigs before they are taken to the slaughterhouse;
- ✓ the large-group system can be adjusted to meet any existing barn's floor plan flexibly, making it ideal for use in older buildings.

Enrichment material for pigs of all ages

Pigs need to be occupied! They have to drink, feed and rest – but they also need to be active during the remaining time and search

for diversion and toys. In order to satisfy this need and to prevent behaviour problems, Big Dutchman offers different solutions so you

can deliver and offer mostly organic manipulable material to your pigs as easily as possible.

Dispenser for roughage



Dispenser to store and deliver roughage



Pneumatic valve dispensing straw for piglets



Pneumatic valves dispensing straw for finishers

Roughage has a positive influence on gut health and thus on your pigs' well-being. The Big Dutchman dispenser allows you to store straw in a very practicable way and to automate roughage provision. It can be

installed either in the feed kitchen or outside, in which case it has to be equipped with a lid. It comes with a mixing blade, a discharging auger and a transfer unit to the pipe conveyor. The mixing blade effectively prevents

material in the hopper from bridging. The discharging auger and the DR 1500 pipe conveying system transport the roughage into the barn, where it is distributed to the pigs.

Straw feeders and racks



Straw feeder: installation in partition or pen

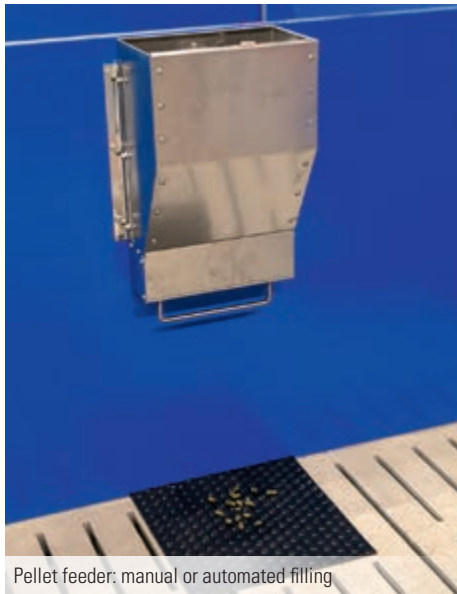


Stainless steel straw rack

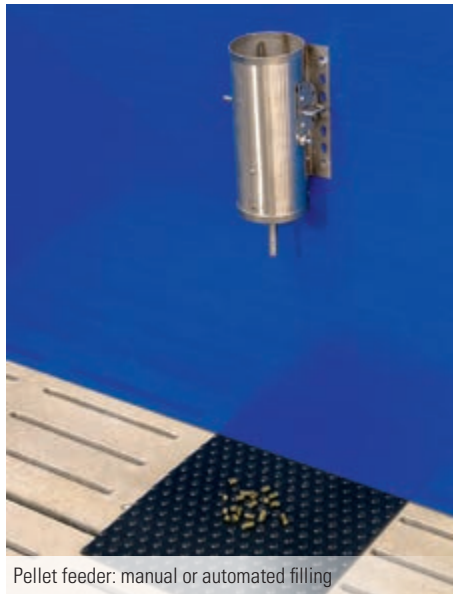


Straw rack

Pellet feeders and other enrichment material



Pellet feeder: manual or automated filling



Pellet feeder: manual or automated filling



Pellet feeder: manual or automated filling



Scratching post



Automatic dispensing of organic material



Holder for chewing sticks

Animal-friendly management systems, a good climate in the barn, emission reduction and labour efficiency are the requirements of today and tomorrow. For more information on the

new Big Dutchman PureLine products giving increased animal welfare with environmental friendliness, sustainability and profitability, check our website at www.bigdutchman.com.

Let the Big Dutchman experts advise you. In a detailed consultation, they will help you find the best solution for your requirements.



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