



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 our answer when you want to keep your pigs in an especially animal-friendly and environmentally sound way. We focus on health, vitality and welfare of your animals and strive 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. Our PureLine products stand for increased animal welfare; they are sustain-

able, 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 our modular 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 system for piglets



Finishing pen with continuous solid floor

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. 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.”



Insemination and gestation area Individual stalls or group pens

The insemination area is the starting point for every production system. The housing needs plenty of light with as much natural daylight as possible. Individual stalls or group pens provide the animals with great freedom of movement at any time.

This has the following advantages:

- ✓ 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.



"Easy Lock" sow stall with straw and great freedom of movement for the sows



"BD" sow stall

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 place where she can eat without being disturbed.

This has the following advantages:

- ✓ 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.



Group pen with ample freedom of movement for the sows and a large solid-floor percentage area



Insemination requires much experience

1. Sow stall “Easy Lock”



“Easy Lock” for outdoor management

Advantages of “Easy Lock”

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

2. “BD” sow stall



“BD” sow stall

Advantages of “BD”

- ✓ integrated insemination door facilitates insemination and pregnancy monitoring;
- ✓ 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 (inner width: 650 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.



The sow enters and closes the stall independently, giving her access to the trough without being disturbed

3. Call-Inn^{pro} and CallMatic^{pro} – electronic sow feeding (ESF) on demand

Call-Inn^{pro} and CallMatic^{pro} are innovative feeding systems for pregnant sows kept in groups. They ideally combine 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. Both ESF systems

are ideally suited for new houses as well as the renovation of existing ones, with partially-slatted floors or straw.



Farm management finally made simple!

The 510^{pro} station controller has a large, well-arranged display and shows important information such as the number of visits to the station, the amount 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.



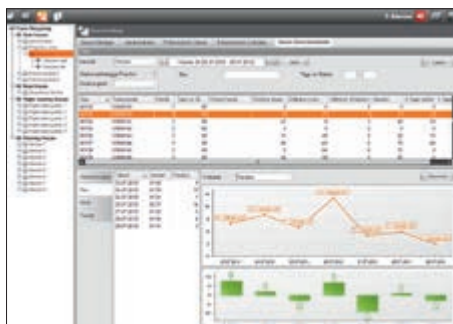
The station controller is easy to operate using the 10-inch touch screen

BigFarmNet software extension for health monitoring

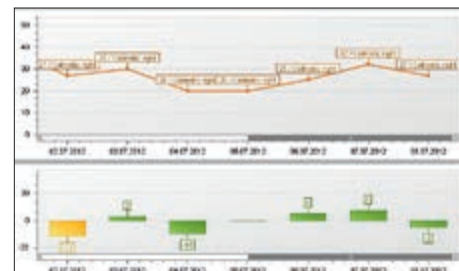
Health monitoring of sows kept in groups is extremely important and not always easy to accomplish for the farm manager. Big Dutchman now offers a unique software solution that helps farm managers monitor the health status of their sows and detect and treat symptoms of disease early on.

The system is based on the daily recording of eating times and the visit order of each sow measured 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. He or she can then check out the respective sow at an early stage and take the required measures.



Overview of possible selection criteria



Visualisation of a sow's visit order



Call-Innpro installed in the unheated outside area, separated from the lying area

Advantages of Call-Innpro

- ✓ designed as dry feeding system with one feed type;
- ✓ the entire trough unit is made of stainless steel;
- ✓ colour marking (1 colour, optional);
- ✓ entrance gate and trough flap open and close pneumatically;
- ✓ use of sound-absorbing materials ensures a low noise level inside and around the station;
- ✓ freely programmable feed curves are visualised at the PC;
- ✓ reliable BigFarmNet control.



View of a gestation area with the CallMaticpro ESF station and straw-bedded lying area

Advantages of CallMaticpro

- ✓ can be used with a dry or liquid feeding system;
- ✓ automatic selection (optional);
- ✓ heat detection (optional);
- ✓ freely programmable feed curves are visualised at the PC;
- ✓ sow administration;
- ✓ colour marking (optional);
- ✓ mobile app as management tool (optional);
- ✓ reliable BigFarmNet control.



An app for smartphones and tablets (Android and iOS) is optionally available as a mobile management tool. With our newly developed mobile reader, farm staff can read sow data during the inspection rounds. Changes, such as adjustments to the feed amount, can then be made quickly and easily in the app. All data are synchronised automatically and in real time for the entire farm.

Straw-bedded lying area connected to the ESF station

4. Group pens – a simple and economic solution



Small group housing: ideal for inspection and a good overview

Advantages

- ✓ all sows 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 and 55 cm per pig;
- ✓ simple pen arrangement;
- ✓ cost-efficient solution.

5. Group housing of pregnant sows with open-air run

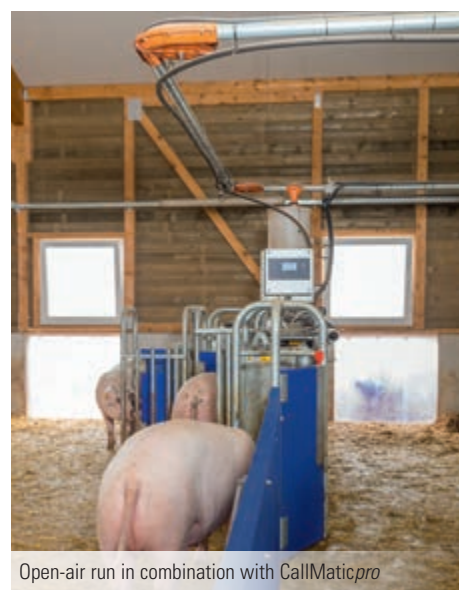
An outdoor area can be combined with any type of management and feeding system, as long as there are no structural or legal

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 these doors 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 our PureLine solutions. Piglets need a

protected space during this time, while the sow manager focuses on ease of use and a good overview. We can offer many different concepts,

from the variable-restraint pen and free-movement pen to free farrowing and group farrowing.

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



1. ActiWel – the variable-restraint pen with farrowing frame

With ActiWel, we have developed a special variable-restraint pen that provides ideal conditions for the sow and her piglets in their first weeks of life.

The pen consists of a farrowing frame, a heated resting area or piglet nest, the flooring and the pen partition. Arrangements either parallel to the aisle or straight, with the sow's head against the wall, are possible. Both versions only require very low partitions, thus

providing a good overview of the room and easy access to the pens. There is also sufficient space to feed the piglets outside of their creep. Recommended dimensions of the pen are 2.40 m x 2.80 m.

During farrowing and the first days of life, the farrowing frame may remain closed.



The farrowing frame is closed



Variable-restraint pen with open farrowing frame: great freedom of movement for the sow

Advantages

- ✓ **easy to open:** the farrowing frame is very easy to open and to close in just four steps. The staff do not have to enter the sow area, which makes handling even more comfortable;
- ✓ the specially designed door of the farrowing frame provides easy access to assist the sow during farrowing;
- ✓ the specially designed sides of the farrowing frame help protect the piglets from overlying.

2. NaturalCare – the free-movement pen that allows short-term restraining of the sow

Our free-movement pen allows only short-term restraining of the sow, for example for veterinary treatment. Piglet protection bars prevent losses caused by overlying. The creep

can be heated to provide the necessary warmth for the piglets. Minimum pen dimensions are 2.30 m x 2.80 m.



The farrowing frame is closed temporarily



Free-movement pen with heated creep

Advantages

- ✓ the sow and her piglets can use nearly the entire pen at all times;
- ✓ the heated piglet nest protects the piglets and functions as a retreat;
- ✓ the sow can be restrained for a short while to create good working conditions.

3. Free farrowing without any restraining options

With free farrowing, sow and piglets share the entire pen at all times. There are no options to restrain the sow. In many cases,

the animals can use a connected open-air run. The pen should have a surface of no less than 7.50 m².



Pen for free farrowing without restraining options



Open-air run

Advantages

- ✓ great freedom of movement for sow and piglets;
- ✓ specially designed piglet protection bars prevent overlying;
- ✓ option to go outside.

4. Group farrowing: each sow has her own farrowing pen



Group farrowing promotes early immunisation of the piglets

With this farrowing system, the sows remain in a group even during farrowing. The farrowing pens do not need to be quite as large, as the sows mainly use them as a retreat. The sows can leave and enter the pens at any time after the first two days. After the piglets have formed a bond with their mother, they may also leave the pen. In groups, the young pigs can then discover their new environment. This means that the piglets are immunised much earlier than is usual in other systems.

An essential prerequisite for successful group farrowing are synchronised births. Farrowing dates are then very close together.

Advantages

- ✓ greatest freedom of movement for sow and piglets;
- ✓ the piglets of the group get to know one another early on for early immunisation;
- ✓ good start into the rearing and finishing phase;
- ✓ large, uniform groups;
- ✓ open-air runs are easy to add if they can be accessed from the jointly-used group area.

Pure Line

Concepts for piglet rearing and finishing

Animal-friendly management and feeding systems that produce little emissions

We have 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 pig houses with open-air run. 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.”



A concept for piglet rearing and pig finishing on straw

Xaletto® is a new management system for animal-friendly and environmentally sound piglet rearing and pig finishing on straw in closed houses that has already proven its profitability.

The basis of this method are a special ventilation system, a specifically developed feed type, and a compost activator. Xaletto can be used for new houses as well as 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 307pro 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;
- ✓ perfect 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 to the recommendation of the German Association for Technology and Structures in Agriculture (KTBL);
- ✓ the composted material is of a high quality and rich in nutrients and can be sold afterwards.

2. Piglet rearing and finishing in pig houses with open-air run

The pig house with open-air run is another step towards increased animal welfare and more comfortable pigs. The 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.



Finishing pigs in a barn with open-air run



Pig house with open-air run and curtain as protection against the weather



View into the finishing house

3. PigT: the structured pen with "pig toilet"

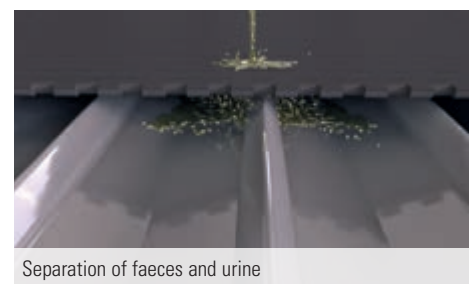
PigT is a product newly developed by Big Dutchman: part of the pen floor is designed as a plastic belt that immediately separates faeces and urine. This part of the floor is directly connected to the solid floor, which the pigs use for activity and lying: the solid floor increases welfare. The pigs can thus also be fed with roughage. The process that forms ammonia is prevented because faeces and

urine are immediately separated. This significantly reduces NH_3 emissions. 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. From here, a scraper removes the manure from the barn.

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



PigT can be part of rearing or finishing pens



Separation of faeces and urine

4. 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 great 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} – great freedom of movement and sufficient resting spaces in a brightly-lit 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. Our BigFarmNet software allows the constant collection of data as well as monitoring and controlling 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 limits;
- ✓ 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;
- ✓ permanent overview and monitoring of all pig weights with the BigFarmNet software;
- ✓ weight-adjusted feeding and use of different formulas;
- ✓ easy and stress-free 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 old 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 occupied during the remaining time and search for diversion and toys. In order to

satisfy this need and to prevent behavioural problems, Big Dutchman offers a wide variety of enrichment toys. These include playing chains with a range of chewable attachments

and access to straw that can be chewed or rooted.



Foraging tower



Playing chain tower

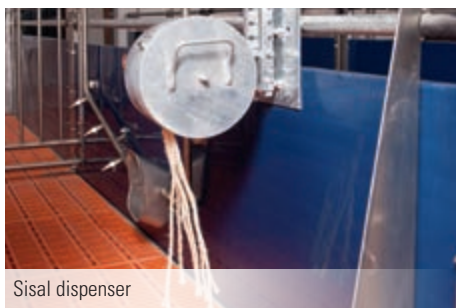


Holder for chewing sticks

The foraging tower can be filled with organic material, e.g. short straw. The pig nudges the material from a small, adjustable gap between the container and the plastic plate on which it is fixed. The tower can either be installed as stand-alone or integrated into the pen partition.

Another option to occupy the pigs is the playing chain tower which the pigs can rotate. The attached playing material is made of rubber, plastic or other materials. This wide range of possibilities ensures that the pigs remain interested in the toy.

The holder for chewing sticks is made of stainless steel. An opening at the front shows when the stick needs to be replaced. The pigs can move the material at any time, chew on it or even remove it in the case of the straw rack.



Sisal dispenser



Scratching post



Straw rack



Big Dutchman.

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