



Big Dutchman®



Enhanced **Welfare** Products

for sows, piglets and finishing pigs

BD welfare products for future pig management

Modern pig production must be economically viable but also needs to take account of consumer demand for animal-friendly

production systems. Big Dutchman strives to keep abreast of new trends and to develop products which enhance production

systems whilst at the same time satisfying customer preferences.

Enrichment toys enhance pig welfare for pigs of all ages

Pigs need to be occupied! Sows kept in groups, piglets in the rearing house and pigs during the finishing stages 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, Big Dutchman offers a wide variety of enrichment toys.

These include playing chains with a range of chewable attachments and access to organic material which can be chewed and rooted.



Foraging tower

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



Swing with different playing chains

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



Playing rotor

The playing rotor can be filled e.g. with wood chips. Small amounts of the organic material drop out of the rotor when a pig uses its snout to turn the wheel at the bottom. This animates the pigs to keep turning the wheel.



Service and dry sow housing with group pens or free-access stalls

The service house is the starting point for the production system. The housing needs plenty of light with as much natural daylight as possible. Both service and dry sow areas need to be designed to minimise any aggression and to ensure that individual

animals receive their feed allocation, whilst having ample freedom of movement.

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.



Group pen with ample freedom of movement for the sows



Good stimulation is the key for a successful insemination

The free-access stalls »BD« and »Easy Lock« developed by Big Dutchman provide sows with the advantages of animal-friendly housing in groups and ample freedom of movement. They can be used in the service area and in waiting areas.

Feed is supplied in stalls. This provides every sow with her own feeding place where she can eat without being disturbed.

This has the following advantages:

- ✓ all sows can eat simultaneously → no stress during feeding;

- ✓ protection against more aggressive sows → the stall acts as safe retreat for individual sows;
- ✓ easy insemination thanks to the insemination door integrated into the stall.



Free-access stall »BD« – the sows decide when to stay in the stall and when to move around in the group



Integrated insemination door – easy access to the sow

Waiting area

Modern housing systems for pregnant sows

Group housing of pregnant sows improves their well-being as well as their constitution.

The most important factor is that the selected system fits your farm's individual requirements.

The system can be equipped with a range of feeding options.

1. Group pens – a simple and economic solution



Simple trough feeding systems in small groups, ideally with shoulder divisions. These can be fed by liquid or dry feeding systems.

Advantages

- ✓ all sows eat at the same time;
- ✓ the farm manager can easily supervise his stock while the sows are feeding;
- ✓ the sows do not need a training phase;
- ✓ forming sow groups with an identical constitution is very simple;
- ✓ feeding space width of 45 to 55 cm per pig;
- ✓ simple pen arrangement;
- ✓ cost-effective solution.

2. Group housing with free-access stalls »BD« and »Easy Lock«

The »BD« stall is entirely free access with the sow locking herself in and releasing herself from the stall at any time. The rear gate can be locked briefly for cleaning out or for insemination. The stall has a specially developed optional rear gate to make insemination easy.



Free-access stall »BD« open – the sow enters the stall and closes it by herself; stall »BD« closed – the sow has easy access to the trough

Advantages of the free-access stall »BD«

- ✓ the front and door elements operate as an up-and-over door;
- ✓ integrated insemination door → simple insemination and pregnancy check;
- ✓ open design of the stall → good overview for the farm staff;
- ✓ rubber noise absorbers for quiet opening and closing of the stall → low noise level;
- ✓ rugged design;
- ✓ available in two different widths (inner width: 650 and 700 mm).



Free-access stall »Easy Lock« with straw bedding

Advantages of »Easy Lock«

This stall enables the sow to be locked in for a short period for feeding so each animal is able to receive its own ration without interference from its penmates. At other times, the rear gates are kept open, allowing the sow to move in and out of the stall at will.

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

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

Call-Inn^{pro} and **CallMatic^{pro}** are systems to accurately and individually feed sows whilst they are protected from other animals in the group. Every animal is identified via a unique eartag; the feed

supplied can be precisely adjusted to the individual sow's body condition. The equipment is designed to ensure that only one animal enters the feeding station at one time. Systems need to be carefully

designed when installed into existing housing. Our experts will be glad to provide you with detailed information.



Call-Inn^{pro} – computer-controlled sow feeding

Advantages of Call-Inn^{pro}

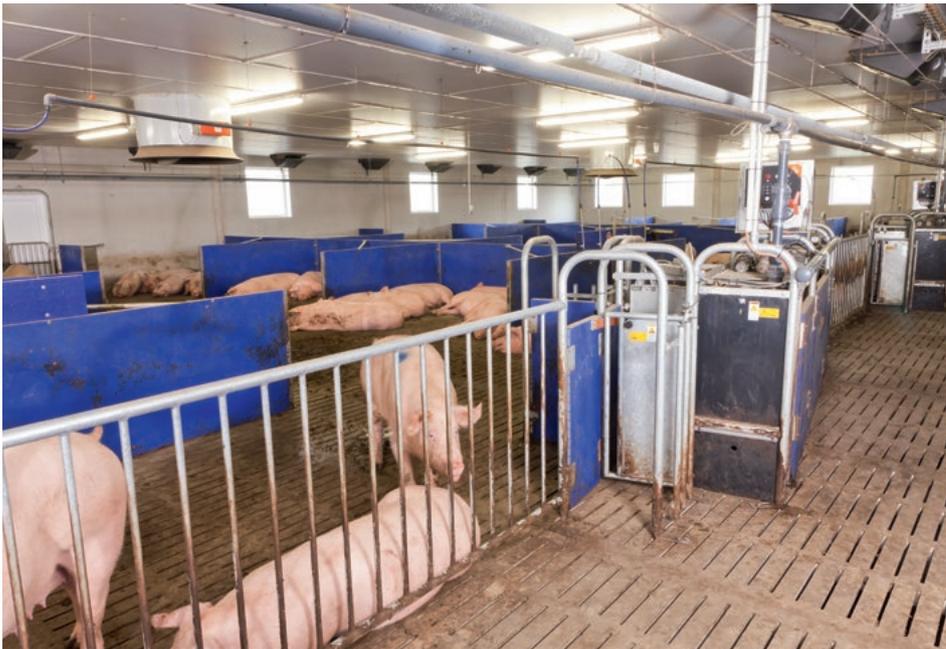
- ✓ group housing of a maximum to 64 sows per station;
- ✓ designed as dry feeding system with one feed type;
- ✓ very precise feed metering;
- ✓ complete trough unit made of stainless steel;
- ✓ colour marking (1 colour, optional);
- ✓ entrance door and trough flap open and close pneumatically;
- ✓ use of sound-absorbing materials → low noise level inside and around the station;
- ✓ reliable BigFarmNet control.

The station computer has a clearly 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. Another advantage is the fact that the station computer no longer has to be installed at the ESF station but can also be installed in the aisle. This

makes for better accessibility (animal-free area) so that adjustments are easily possible.

CallMatic^{pro} station computer in the aisle





View of a waiting area equipped with the computer-controlled ESF station CallMaticpro

Advantages of CallMaticpro

- ✓ group housing of a maximum of 64 sows per station;
- ✓ can be used in combination with a dry or liquid feeding system;
- ✓ station computer for every station;
- ✓ automatic selection (optional);
- ✓ heat detection (optional);
- ✓ Bluetooth antenna as mobile management support (optional);
- ✓ freely programmable feed curves are visualised at the PC;
- ✓ sow manager;
- ✓ colour marking (optional);
- ✓ practical BigFarmNet control.

Farrowing area

Free movement for the sow, comfortable, easy-to-clean flooring and heated lying area for the piglets

The Big Dutchman free-movement pen is designed to improve the welfare both of the sow and the piglets. The farrowing frame can be fixed in the open position prior to farrowing. The sow can move freely and, when the BD playing rotor is used, perform nest building behaviour with small amounts of materials such as chopped straw in the period before farrowing. Just prior to the due date, the farrowing frame can be re-fixed in the (variable) closed position, comfortably confining the sow during and for the first few days after farrowing, thus protecting the litter from overlying whilst the

piglets find their feet. After perhaps three days, the frame can be re-positioned, allowing the sow free movement for the remainder of lactation. The penning system is tough and flexible and can be used to create a variety of pen sizes. The plastic flooring ensures good manure penetration and a range of flooring surfaces and materials is available: for example "open" plastic, "semi-solid" plastic, "open" cast iron and "semi-solid" cast iron. A range of heating plates can be integrated into the floor system and/or a covered creep area providing a warm microclimate for the piglets.

Important features

- ✓ minimum pen dimensions 2 x 2.6 m → 2,5 m² net space for the sow;
- ✓ open 4-foot farrowing frame → animal-friendly;
- ✓ specially designed farrowing frame sides help protect the piglets from overlying;
- ✓ specially designed rear gate to the farrowing frame provides easy access to assist the sow during farrowing.



The farrowing frame is closed



BD free-movement pen with opened farrowing frame → more freedom of movement for the sow

Piglet rearing and finishing

Modern and animal-friendly management and feeding systems



Piglet rearing house with much daylight and playing chains

Big Dutchman piglet rearing pens are equipped either completely or partially with our animal-friendly and anti-slip plastic flooring system. Rounded edges protect the piglets against injuries. The optimum solid-to-void ratio ensures good manure penetration, thus keeping the floor clean and promoting healthy piglets. The slats are available in two different sizes and can also be delivered with a slatted area of only ten percent. The penning system consists of flexibly usable, dimension-independent plastic partitions. BD penning is both durable and easy to clean. Steelwork which comes into contact with the floor is all stainless.



TriSort^{pro} – much freedom of movement and many resting spaces in a house brightly lit by daylight

The automatic sorting scale TriSort^{pro} by Big Dutchman provides an animal-friendly management and feeding concept which ensures optimum housing conditions for the animals during meat formation. Large groups ensure much freedom of movement and allow for pigs lower in the hierarchy to avoid contact with the more dominant ones. The feeding area can be reached at any time and a sufficient number of nipple drinkers with water circulation and playing chains are available as well. Each pig has to pass through a sorting scale before it can eat. The computer records its weight, thus enabling a weight-adjusted feeding.

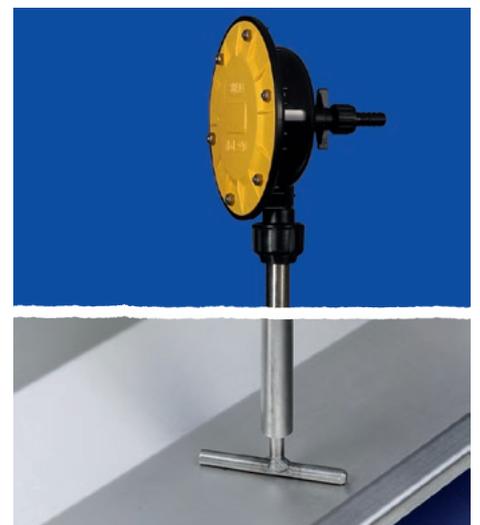
Clean drinking water

Needed for healthy pigs of all ages

The provision of fresh and clean drinking water is extremely important to ensure the health of your livestock. Thus, a sufficient amount of clean water within easy reach of the pigs is essential. Big Dutchman satisfies these requirements for an animal-friendly keeping of pigs in an ideal manner by offering a wide range of different drinking systems. Our product range includes nipple drinkers and drinking bowls for sows, piglets and finishing pigs.



Drinking bowl for suckling piglets and finishing pigs



Vacuum trough flooder

Pig house with open run for healthy sows, piglets and finishing pigs

Offering pigs an open run is another step towards increased animal welfare and more comfortable pigs. The open run contributes to a clear distinction between the different areas of the house: lying, eating and activity area. At the same time, the pigs are offered additional incentives to move and play. Furthermore, the open run creates a new climate area which differs from the warm house and thus improves the pigs' health and well-being.



Finishing house with open run



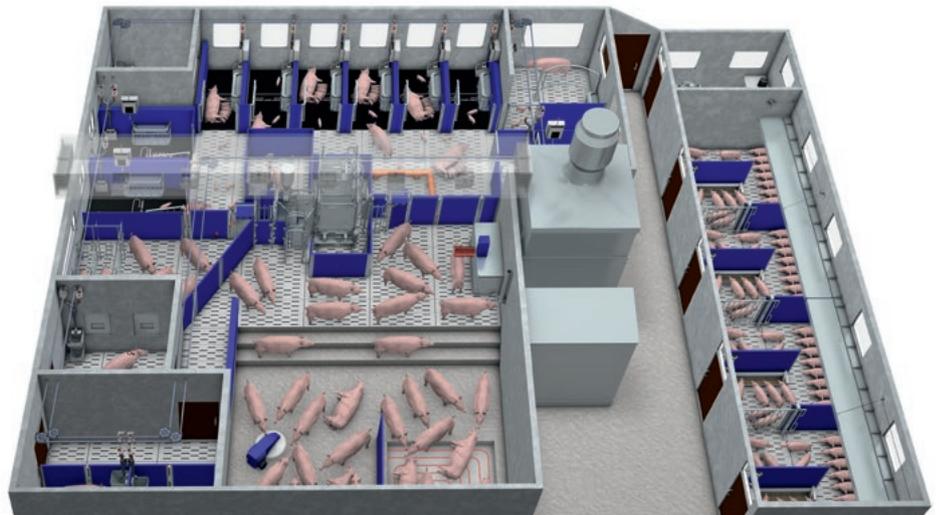
Eating and activity area

Pig Production 2030 The Big Dutchman concept study to meet future challenges

Big Dutchman is committed to meeting the challenges facing pig production in the future. We have a pioneering spirit and are dedicated to developing and improving equipment and systems on behalf of the pig industry. We have set the highest standards over the last 75 years and have had a major influence on pig production with new and practical developments during that time. Numerous awards have been won proving our ability to identify needs and provide innovative solutions. Improving pig welfare and animal health have been the main drivers in developing the concept study Pig Production 2030 which has attracted a great deal of interest from the industry. This Pig House of the Future provides a real practical

basis for discussion and development – proving that we are courageous enough to

push forward with further innovations into the future.



Concept Study »Pig Production 2030«



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