



Big Dutchman®



Drinking systems

for a hygienic water supply for sows,
piglets and finishing pigs

Drinking systems: for a reliable water supply

Providing your pigs with fresh and clean drinking water is essential for their well-being and health, and necessary for optimal performance. Drinking water must therefore be:

- ✓ available in sufficient quantities,
- ✓ free from contamination and

- ✓ within easy reach of the pigs.
- Big Dutchman meets these requirements in an ideal way with a wide range of drinking systems and important accessories for sow management, piglet rearing and pig finishing. The extensive product range includes:
- nipple drinkers

- drinking bowls
- water connection units
- medicators
- SonicClean
- fixed soaking/cleaning systems

Nipple drinkers

Hygienic supply of drinking water for your animals

Nipple drinkers are a cost-efficient solution for clean drinking water and reduce contamination. The correct height is important to minimise water losses. When drinking, the pig's head

should be inclined upwards so that the water flows directly into its mouth. It therefore makes sense to offer nipples at different heights in rearing and finishing pens. To meet

different market demands, Big Dutchman provides a variety of nipple drinkers and the corresponding pipes. This includes:

- trough sprayers for sows;
- vacuum trough flooders;
- high-pressure and low-pressure nipples for piglets;
- high-pressure and low-pressure nipples for the growing and finishing period.

All nipple drinkers as well as the drinker pipes are made from stainless steel and therefore have a long service life.



Trough sprayer for sows (high pressure)



Nipple drinker for sows with bite ball



Vacuum trough flooder with T-shaped agitator for longitudinal troughs (high pressure)



Vacuum trough flooder with J-shaped agitator for longitudinal troughs ...

Trough flooders work by applying vacuum to a rubber membrane: the water flow stops as soon as the trough is full. The pigs move the integrated T-shaped or J-shaped agitator, thus preventing blockage.

The vacuum trough flooder is most often used for stalls with longitudinal troughs. The longer the row of troughs (max. 15 m per trough flooder), the more economic is this type of drinking system. Another area of application is drinking bowls in farrowing pens. Recently weaned piglets quickly learn how to drink due to the constant water flow.

- ✓ each trough flooder can be deactivated separately;
- ✓ constant water level;
- ✓ minimised wastage;
- ✓ better water intake;
- ✓ easy cleaning.



... as well as for drinking bowls



Nipple drinker for piglets (high and low pressure)
– easy to use from the very beginning



Nipple drinker with bite ball for sows and finishing pigs (high and low pressure), minimal water losses because the animals need to take the entire nipple into their mouths



Nipple drinker for finishing pigs (high and low pressure)
– with two nipples at different heights
– for the growing and finishing period

Various drinker pipe options for different applications

A drinker set consists of not only nipples, but also the corresponding pipes. Big Dutchman offers a wide range of options:

- ✓ drinker pipe to supply water to two pens with a total of four nipples (two per pen);
- ✓ drinker pipe with guard bow, which is either integrated from the start or can be retrofitted. The guard bow prevents injuries caused by the nipple, for example

during ranking fights or when moving out ready-for-slaughter pigs;

- ✓ drinker pipe for water circulation to prevent vitamins or minerals from accumulating in the pipe; all lines can easily be flushed after administering medication; circulation pipes are also available for drinking bowls;
- ✓ adjustable drinker pipe for flexible

adjustment of the drinker's height;

- ✓ suspended drinker with chain;
- ✓ piglet and finisher drinkers with multiple nipples at different heights.



Drinker pipe for simultaneous water supply to two pens with a total of four nipples



Drinker pipe with integrated guard bow; a retrofit guard is also available



Drinker pipe for water circulation, prevents deposits of medication, additionally acts as guard bow

Various drinker pipe options for different applications



Piglet drinker with multiple nipples and guard bow; also available without guard



Drinker for finishing pigs with multiple nipples and guard bow; also available without guard



Drinker for finishing pigs with multiple nipples and a drinking bowl



Suspended drinker with chain, height-adjustable



Height-adjustable drinker for the pen partition

Drinking bowls

Minimal water loss, easy to use for the pigs

Drinking bowls are accepted very well by the animals. When they are drinking, their head disappears into the bowl due to the lateral collar. This significantly reduces water losses. Drinking bowls are especially appropriate for piglets, as they can see the water and therefore readily accept this drinker. When placed low enough in the farrowing pen, special drinking bowls can be used by both sow and piglets.

- ✓ drinking bowl made from stainless steel for suckling pigs;
- ✓ drinking bowl made from stainless steel for piglet rearing;
- ✓ drinking bowl made from stainless steel for finishing pigs;
- ✓ drinking bowl made from enamelled cast iron for both sow and piglets in the farrowing pen.

The drinking bowls offered by Big Dutchman

have all been designed for improved animal welfare and are thus well-suited for high welfare standards such as the German "Initiative Tierwohl". This initiative states, among other things: "It is crucial that drinking water is offered in and taken from open bowl or basin drinkers. The drinkers can be equipped with aqua-level systems, nipples or other filling mechanisms."



Drinking bowl for suckling pigs



Drinking bowl for piglets of up to 35 kg with water circulation



Drinking bowl for finishing pigs with water circulation



Eco drinking bowl for sows, piglets and finishing pigs; no water circulation



Drinking bowl with valve protection or trough flooder for farrowing pens



The special drinker for the Xaletto straw bedding concept is equipped with a water level sensor. This prevents unnecessary water losses and keeps the straw bedding dry.

Water connection unit

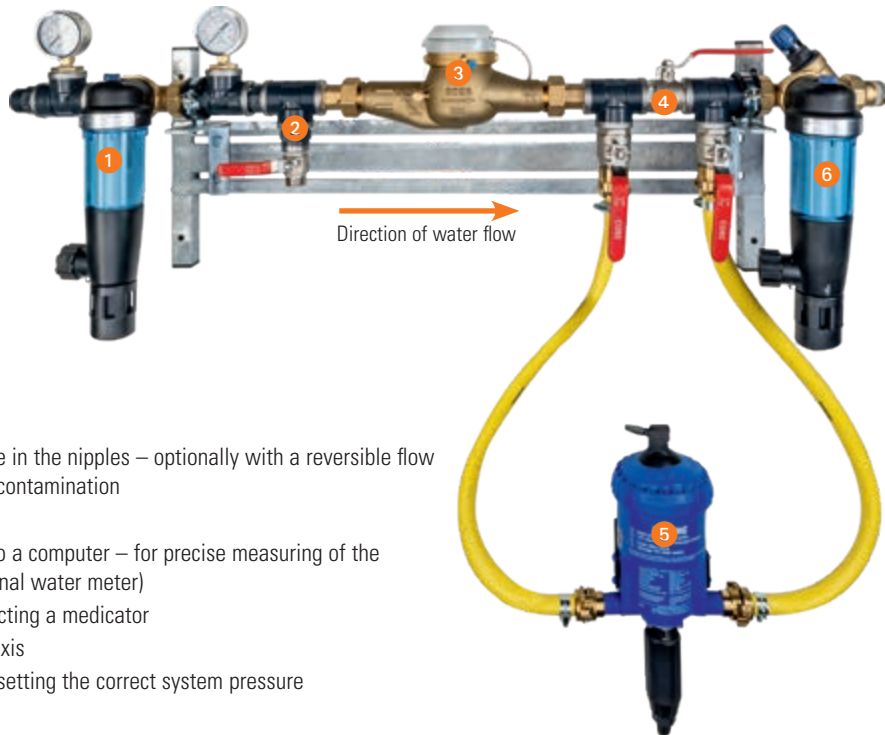
Very flexible and designed according to your needs

A complete drinking system includes not only the drinker itself but also the water connection unit. This unit is installed between the main water line and the house water line and has the following advantages:

- ✓ compact design for a problem-free installation even in small service rooms or feed preparation areas;
- ✓ available for nominal sizes of 1", 1¼" and 2";
- ✓ easy to install and to extend.

The water connection unit can consist of different modules to be combined according to your needs.

- 1 Filter with manometer to avoid blockage in the nipples – optionally with a reversible flow filter in case of a high degree of water contamination
- 2 Valve for drawing off water separately
- 3 Electronic water meter for connection to a computer – for precise measuring of the water consumption (optional: conventional water meter)
- 4 Bypass with three ball valves for connecting a medicator
- 5 Medicator for easy and secure prophylaxis
- 6 Pressure reducer/filter combination for setting the correct system pressure



Medicator and medicine mixing tank

Precise metering of medicines via the drinking water

The medicator dispenses the correct amount of vitamins and medicines into the drinking water. The quantity to be dispensed can be adjusted very precisely as the medicants are fed into the drinking system in proportion to the actual water consumption. The medicant and the water are mixed at the homogeniser outlet so the motor does not get into contact with the medicant and does not get clogged. Liquid medicines are extracted directly from their original packaging. In case of pulverised or viscous substances, a medicine mixing tank with a rotary vane pump (60 L, 180 L or 210 L) is recommended. If the water supply inside

the house is designed as a circular system, it is possible to install a mixing tank with a circulation pump. Additives and water are

then mixed at the correct ratio in the water tank (750 L or 1000 L) and pumped directly into the house.

Advantages

- ✓ precise dispensing for all flow rates;
- ✓ large dosing range;
- ✓ high flow rates;
- ✓ long service life and high operational reliability due to high-quality materials (low sensitivity to a broad spectrum of chemicals) when cleaned regularly;
- ✓ selective spare parts kits for rapid replacement of wearing parts.



Service room with a small (60 L) and large (1000 L) stainless steel medicine mixing tank

Medicator type		1	2
Dosing range	%	0.2 - 2.0	1.0 - 5.0
Flow rate	L/h	10 - 2500	10 - 2500
Operating pressure	bar	0.3 - 6.0	0.3 - 6.0
Code no.		30-62-3540	30-62-3545

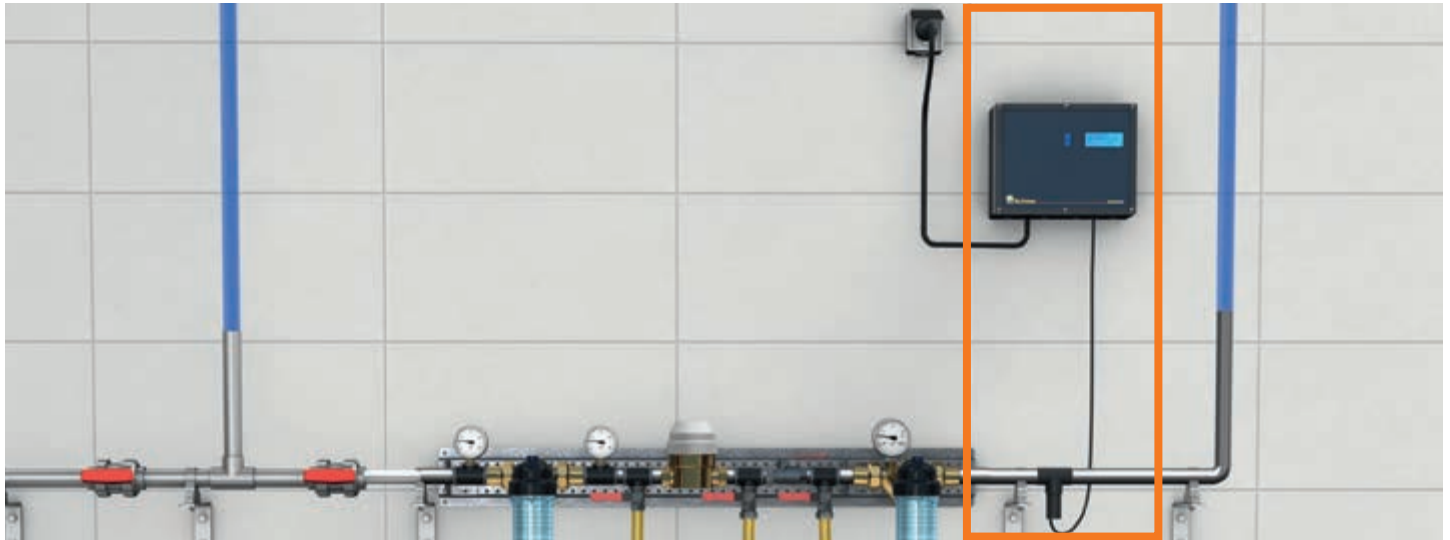
SonicClean

Clean drinker lines through ultrasound

SonicClean is a very efficient cleaning method for drinker lines, based on the proven ultrasound technology. An actuator that creates sonic waves is installed in the water pipe by means of a T-piece, ideally directly after the water connection unit. The sonic waves are transmitted by the water, reaching

every nook and cranny. Deposits become loosened and microorganisms are effectively prevented from adhering to the pipes. The ultrasound actuator remains active as long as there is water in the drinker line. It consumes very little power. One actuator cleans drinker lines with a length of up to 350 m.

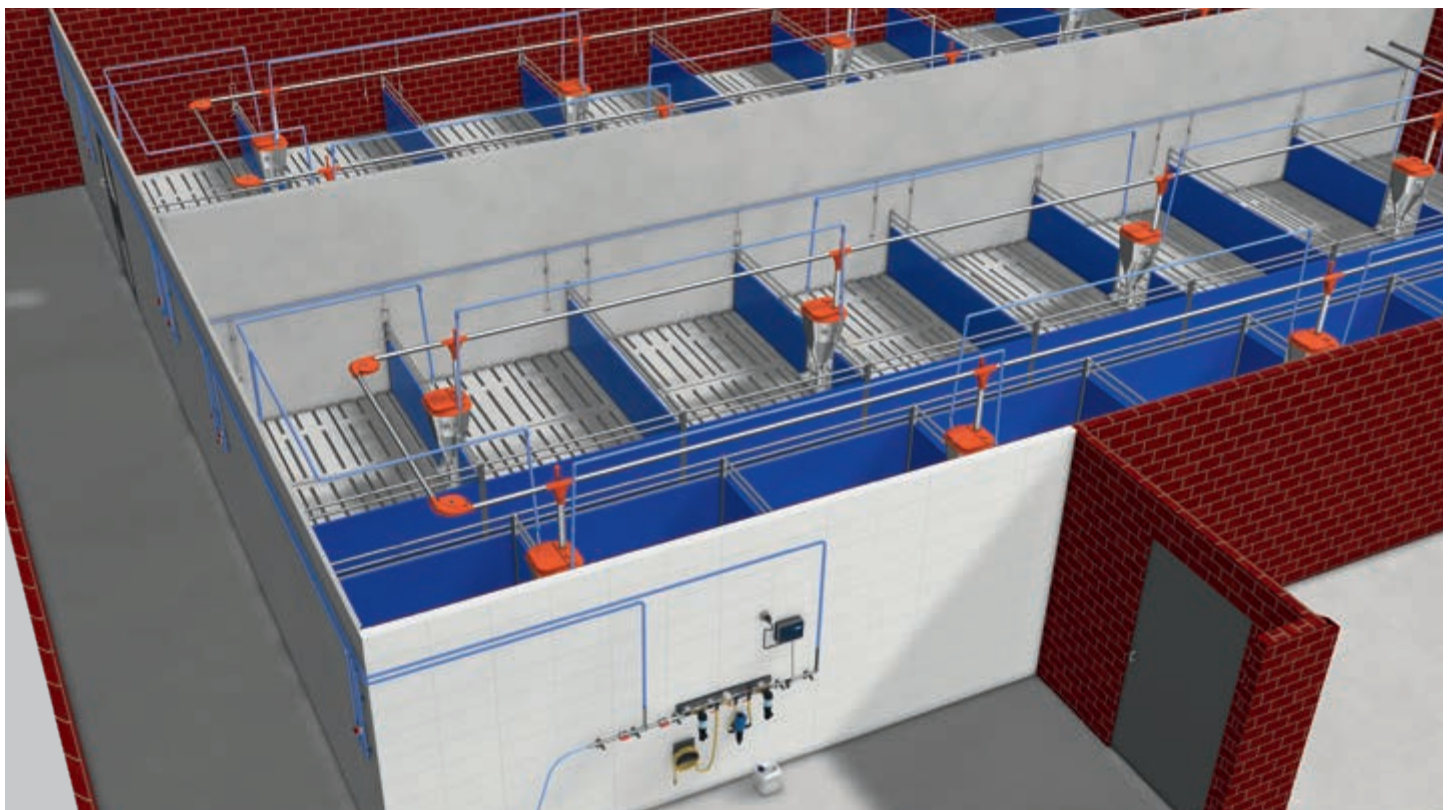
When connected to a controller, the system is immediately ready for use as a stand-alone solution.



Today, many points must be taken into account when considering the ideal water supply: the correct nipple or drinking bowl at

the correct height, the water connection unit with filters and pressure reducers, options for vitamin and medicine dispensing and the

cleaning of water lines. Big Dutchman experts will be happy to help you with any questions you may have.



View of the water supply system in a compartmentalised house for finishing pigs, including water connection unit, medicine supply system and SonicClean

Standard values, installation and planning aid

Type of animal and live weight	Water demand* (L/animal and day)	Height drinking bowl** (mm)	Height nipple drinker 45°*** (mm)	Flow rate**** (L/min)
Suckling pigs < 9 kg	0.7 - 1	80 - 105	150	0.4 - 0.5
Weaners < 29 kg	1 - 3	80 - 105	250 - 550	0.5 - 0.7
Finishing pigs				
• < 50 kg	3 - 6	250 - 300	450 - 600	0.6 - 1.0
• 50 - 80 kg	5 - 8.5	250 - 300	650 - 700	0.8 - 1.2
• 80 - 120 kg	8.5 - 11	250 - 300	650 - 700	1.5 - 1.8
Sows				
• empty/early pregnancy	8 - 12	350 - 400	900	1.5 - 1.8
• ready to farrow	10 - 15	350 - 400	900	1.5 - 1.8
• lactating	15 + 1.5/piglet		900	2.5 - 3.0
Boars	12 - 15	350 - 400	900	1.0 - 1.5

* These figures are standard values and may vary depending on the climate zone or the type of management.

** Upper rim of bowl

*** Lower edge of nipple

**** The flow rate of a drinker depends on the water pressure, the pipe cross section and the valve opening.

For some nipples, the flow rate can be adjusted, especially with high-pressure nipples. Please consult the user manual.

Fixed soaking/cleaning system

For professional house cleaning



Fixed soaking/cleaning system in a finishing room

The soaking aid with controller offered by Big Dutchman simplifies the cleaning process and reduces the cleaning time after each batch, thus saving time. Additionally, less water is required when high-pressure washing. Electric solenoid valves installed between main lines and sublines are used to define individual spray and pause intervals of the soaking system, depending on the degree of contamination. 360° nozzles and 180° nozzles are available. The soaking/cleaning system can be suspended very flexibly, preventing damage by the high-pressure washer's water jet. The entire system can easily be adapted to fit any house layout.



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