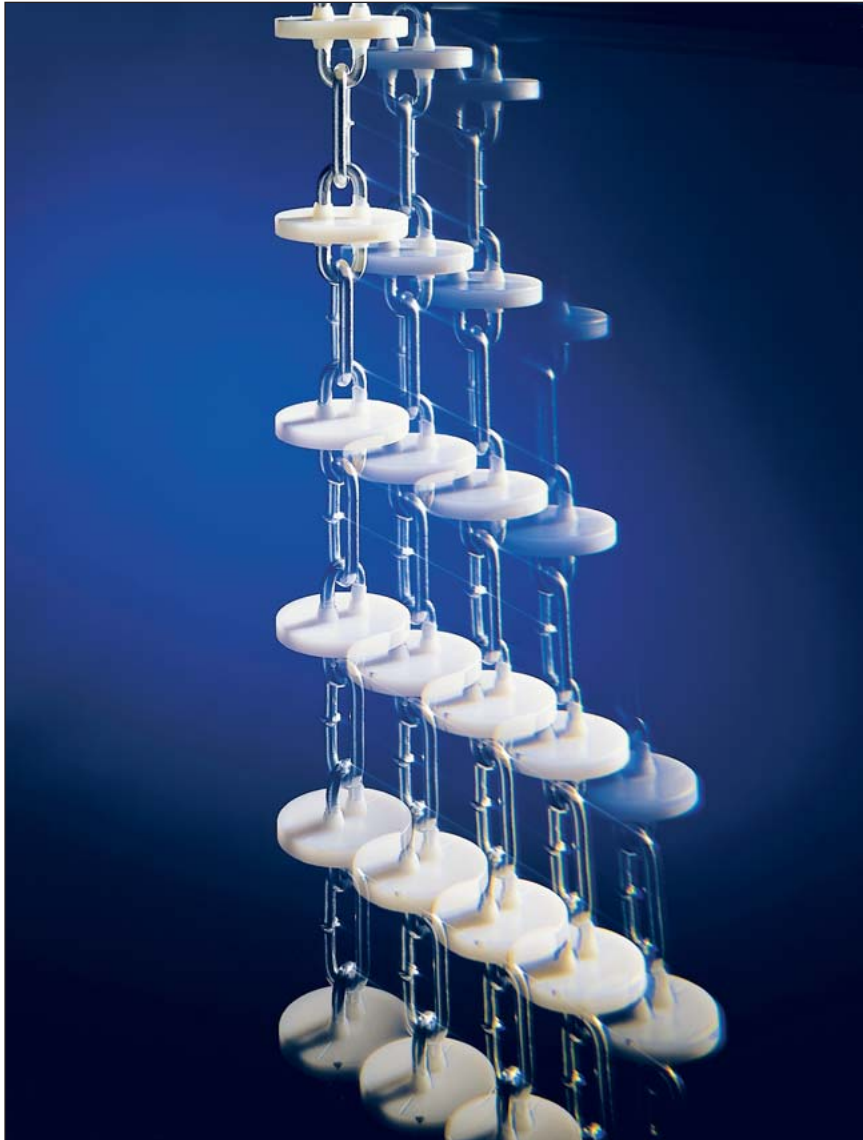




# Big Dutchman®



## **Dry** Rapid

The versatile dry feed conveying system

# DR 850 and DR 1500 – efficient pipe conveying systems for

Wherever dry feed in form of meal, crumbs or pellets has to be transported and distributed on a pig farm, Big Dutchman's DryRapid is the ideal feed transport system,

from the silo discharge to the feed trough. This efficient pipe conveying system is available as DR 850 with a conveying capacity of approx. 850 kg/h or as DR 1500

with a capacity of approx. 1500 kg/h. DryRapid is designed in modular units and can therefore be used in all areas of pig production.

## Versatile possibilities of DryRapid

### For sow production:

- ✓ individual sow feeding with volume dispensers
- ✓ supplies the ESF system CallMatic 2 for pregnant sows in group management

### For piglet rearing:

- ✓ supplies all types of self-feeders
- ✓ supplies the computer-controlled dry feeding systems (EcoMatic*pro*, DryExact*pro*)

### For finishing pigs:

- ✓ supplies all types of self-feeders
- ✓ supplies the computer-controlled dry feeding systems (EcoMatic*pro*, DryExact*pro*)



Use of volume dispensers for individual feeding of sows in stalls



CallMatic 2 for pregnant sows in group management



Supply of PigNic-Jumbo feeders by means of DryExact*pro* for piglet rearing



Supply of PigNic feeders in a finishing pen

## Advantages

- ✓ Thanks to its modular design, DryRapid can be installed as many different variants and is therefore ideally suited for the modernization of old pig houses;
- ✓ Feed is taken directly from the silo, an additional feed auger is therefore not necessary;
- ✓ The filling level at all feeders can be separately adjusted by means of a telescopic drop pipe;
- ✓ Ready for extension to a computer-controlled feeding system;
- ✓ High transport capacity;
- ✓ Smooth feed transport with minimum feed wastage;
- ✓ Low maintenance requirements, long service life.

# or dry feed allowing versatile use for feeding of sows, piglets

## Main components of the DryRapid conveying system

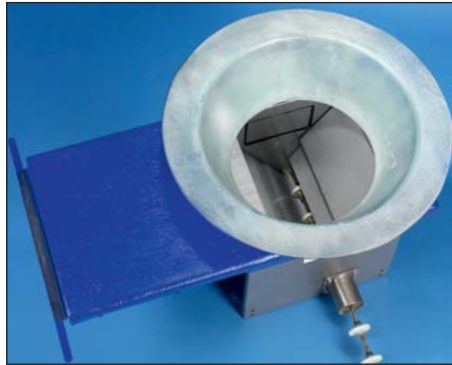
### Drive unit

- ✓ compact design, can be installed either inside or outside the house;
- ✓ stainless steel casing;
- ✓ can be equipped with a tensioning device (optional);
- ✓ drive unit XXL available for longer transport distances;
- ✓ weather guard for outside installation.



### Feed hopper

- ✓ made of stainless steel, installed in the house or directly beneath the silo;
- ✓ conveying capacity can be steplessly adjusted by means of a shut-off;
- ✓ available as one or two-track hopper if two circuits are to be supplied;



- ✓ available with mechanical or motor-driven forced feed and forced return for uniform filling of the feed pipe, preventing a system overflow.

### 90° corner

- ✓ the corner housing is available in stainless steel or plastic; a transparent cover is also available;
- ✓ all corners are corrosion-proof and therefore well-suited for outside installation;
- ✓ ball-bearing corner wheel made of glass fibre reinforced plastic or cast steel for reduced friction.



### Conveyor pipe with conveying chain

- ✓ pipe made of 1.25 / 1.5 mm galvanized steel with an outside diameter of 45 / 60 mm, also available in stainless steel;
- ✓ chain made of specially-hardened steel;
- ✓ the driving plates are made of high-grade plastic available with the following diameters: 30 and 35 mm, 42 and 49 mm;
- ✓ applied to the chain with a distance of 51 / 71 mm so that the chain links remain free and only very small quantities of feed are entrained.



### Sensor

- ✓ switches the DryRapid off when the last volume dispenser is completed or feeder is filled.



### DryRapid EasyControl

- ✓ On/Off control of dry feeding system; optional timer available.



### DryRapid Controller

- ✓ controls additional functions such as the soaking system, lighting, the proportioner for small quantities and release of the volume dispensers.



# and finishing pigs

## Outlet with shut-off

- ✓ for supply of all types of self-feeders;
- ✓ made of plastic, with shut-off, available in two colours for easy distinction between two feed circuits;
- ✓ available with rigid or telescopic drop-pipe, also available as transparent version.



## Medicine proportioners

- ✓ for precise addition of pulverized feed additives into the dry feed;
- ✓ for immediate, cost-effective treatment of sick pigs;
- ✓ can easily be retrofitted in existing pipe feeding systems.



### 1. MediPut

- ✓ large dosing range from 0.25 to 10 kg additive per ton of feed;
- ✓ precise dosing even in cases of fluctuating flow rates;
- ✓ no dosing in case of an empty silo or feed bridging.

## Volume dispenser release

- ✓ manual release by means of winch with crank handle;
- ✓ automatic release station for up to 100 volume dispensers.



## SiloCheck

- ✓ PC program registers and monitors the content of up to 60 silos;
- ✓ alarm if filling level falls below the set minimum;
- ✓ display of the total consumption per silo;
- ✓ maximum network range: 1000 m with cable or 2000 m wireless;
- ✓ linking of the electronic weigh bars of the individual silos which can stand in different locations.

## Volume dispenser

- ✓ stepless adjustment for individual feeding of sows;
- ✓ transparent hopper with a capacity of 6 or 8 litres;
- ✓ minimum quantity less than 1 litre;
- ✓ easy-to-read adjustment scale in litres and kilograms;
- ✓ large lateral openings for easy addition of feed additives and easy cleaning;
- ✓ clip for data sheet → important information about the sow is immediately available.



### 2. Proportioner for small quantities

- ✓ the metering capacity ranges from 400 to 8000 g/h → time-dependent dosing.



## Technical specifications of DryRapid

	DryRapid 850	DryRapid 1500
Drive capacity	1.5 kW	1.5 kW
Chain speed	27 m/min	27 m/min
Conveying capacity*	870 kg/h**	1580 kg/h**
Max. conveying length with 4 corners	300 m (standard) 500 m (drive unit XXL)	300 m (standard) 500 m (drive unit XXL)

\* at a filling level of 66 % and a feed density of 650 kg/m<sup>3</sup>

\*\* in case of forced in-feed, the capacity may vary depending on the feed characteristics

## The modern control and management system

BigFarmNet is a completely new developed control and management system from Big Dutchman for any type of pig production. The software is very user-friendly and has the same user-interface for all applications, no matter whether it concerns production management, climate control or data analysis. This means in future you will only need one single software to control, for example, your dry feeding system, the house climate and analyze production results. BigFarmNet allows you to link all computers on your farm. This way, all data is always accessible no matter which computer is used to enter data or make changes, be it in the farm office or in the barn.



The innovative control and management system has the following advantages:

- ✓ data has to be entered on one computer only → data on all other linked computers is automatically synchronized;
- ✓ several PCs can be used parallel, for example in the barn and in the farm manager's home office;
- ✓ if the farm consists of several production locations, they can conveniently be managed and monitored from the farm manager's home office;
- ✓ alarm messages are displayed on all linked computers on the farm, which allows the farm manager to react immediately;
- ✓ concise and identical user interface on all PCs for easy handling;
- ✓ graphic images of all buildings and installed equipment provide a better overview.

## Computer-controlled dry feeding with BigFarmNet

With **EcoMatic<sup>pro</sup>** and **DryExact<sup>pro</sup>**, Big Dutchman offers you two computer-controlled dry feeding systems, which ideally comply with the requirements of modern pig feeding.

Both systems allow you to supply feed at the individual valves either by volume or weight.

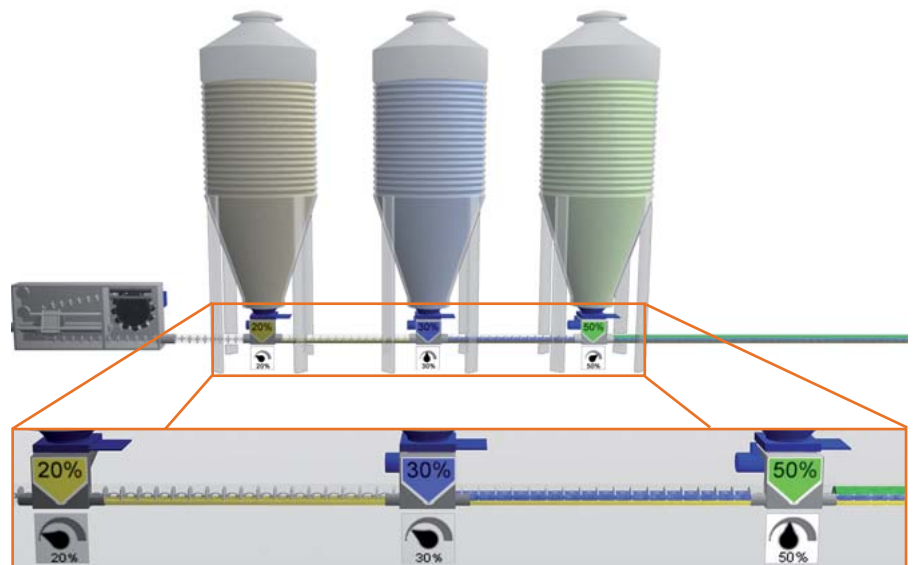
The pneumatic feed valve ensures that every feeder receives the right feed quantity. The feed valve is available with central or local control.



## EcoMatic<sup>pro</sup> – volume-based feed proportioning

**EcoMatic<sup>pro</sup>** supplies the individual feed components based on volume quantities, which means that no mixer is required.

The feed hoppers beneath the silos are equipped with a frequency-controlled auger, which measures the set quantity of the individual ingredients into the transport pipe of the DryRapid. The individual components then mix inside the transport pipe so that the correct recipe is supplied to the feed valves. This computer-controlled dry feeding system operates without a distribution unit and without a feed kitchen and is therefore simple and economic. The individual components have to be metered only once.



# DryExact<sup>pro</sup> – weight-based feed dosing

The DryExact<sup>pro</sup> system works with a weighed mixer that has a volume of 70 litres. This makes it possible to supply an individual feed mix to every valve with a very high mixing quality and accuracy.

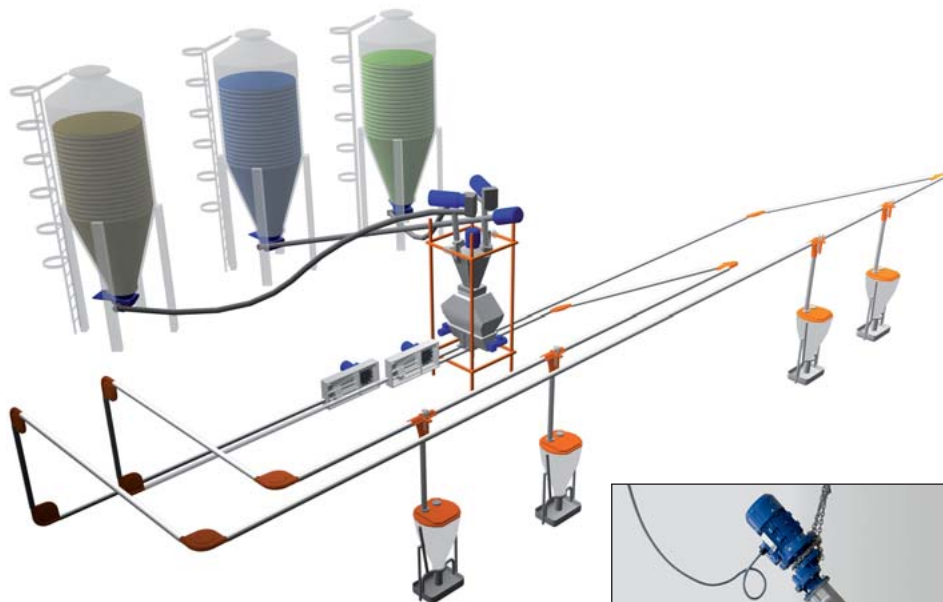
Of course, the system also permits to carry out phase feeding at the individual valves.

The DryExact<sup>pro</sup> can also be upgraded to operate as sensor-controlled feeding

system. In this case, each hopper is equipped with a sensor which informs the computer of an empty hopper when the feeding starts.

## Mode of operation

Upon start-up of the feeding, the weighed mixer is filled with different ingredients (up to 14 different ingredients are possible). The finished mix drops into a hopper with funnel or, in case of a two-line circuit, into a hopper (tilting box) which supplies both circuits alternately with feed. The DR 1500 transports the mix to the respective feed valve while the next recipe is being prepared. A sensor inside the feed hopper verifies that the hopper is empty to prevent an intermixing of the individual feed recipes. These process steps are repeated until all valves have been supplied with feed.



Operational diagram of a DryExact<sup>pro</sup> with two feed circuits



DryExact<sup>pro</sup> feed kitchen: 2 systems with one feed circuit each



DryExact<sup>pro</sup> with 2 feed circuits



# Big Dutchman®

**Big Dutchman Pig Equipment GmbH**

Postfach 1163 • 49360 Vechta • Germany

Tel. +49(0)4447-801-0 • Fax +49(0)4447-801-237

www.bigdutchman.de • E-Mail: big@bigdutchman.de