



# Big Dutchman®



## **Milling and mixing systems**

for the production of feed mixes

# Drum cleaners, hammer mills, filters, dry mixers, silos and

The trend toward using home-grown cereals for the production of mixed feed is increasing. The farmer is able to produce individual feed mixes of known quality, saves transport costs and increases flexibility.

Big Dutchman can offer you the necessary technology:

- ✓ drum cleaners to clean any type of crop before milling;

- ✓ hammer mills with a high capacity;
- ✓ filters which reduce moisture and dust;
- ✓ different dry mixers (diagonal, horizontal);
- ✓ silos for indoor and outdoor use in different sizes for grain storage, storage of additional ingredients and of the finished mixed feed;
- ✓ containers for premixes and micro ingredients.

Project planning of such systems is always based on a thorough review of needs. Every customer receives a custom-designed solution adapted to the individual requirements on the farm.

## Drum cleaners Effective cleaning of crops

Big Dutchman offers two different drum cleaners for crop cleaning prior to milling:

**Drum cleaner T1** consists of an inlet for uncleaned crops, two outlets for sand and larger particles, and an outlet for cleaned grain. The drum cleaner is a simple construction which provides high-quality cleaning.

It also comprises an outer screen for sand cleaning and an inner screen that sieves out larger particles.

drum cleaner T1 and drum cleaner T80/100. The drum cleaners remove stones, sand and

larger foreign particles from the crop material.



Drum cleaner T1 mounted in a milling plant

**Drum cleaner T80/100** has been developed according to the same principles as drum cleaner T1, with an inner and an outer screen. An air separator is mounted in the inlet and removes dust and other light particles. Drum cleaner T80/100 has a high capacity of up to 80 t/h barley and 100 t/h wheat.

The cleaner is mobile and can easily be moved between silos and used in the milling plant after harvest.



Inner and outer screen

### Advantages

- ✓ high efficiency;
- ✓ high cleaning effect for better animal health;
- ✓ simple design with few movable parts and therefore low maintenance costs;
- ✓ good adjustability;
- ✓ option for replacement of the screen and many available screen sizes for easy adaptation to different crops.

### Advantages

- ✓ mobile drum cleaner with many options for application;
- ✓ simple design with few movable parts and therefore low maintenance costs;
- ✓ high cleaning effect for better animal health;
- ✓ high efficiency and capacity of up to 80 t/h barley and 100 t/h wheat;
- ✓ option for replacement of the screen and many available screen sizes for easy adaptation to different crops.



Drum cleaner T80/100

# other machinery for on-farm feed production: custom-made s

## Hammer mills

### Uniform structure of the feed

The Big Dutchman hammer mills operate with a driving power of 11 to 45 kW. Depending on the requirements, for example fine milling or feed with more structure, different mills and screens are used.

The special milling control system ensures that the dosing auger correctly supplies the mill with the type of material that is to be milled. This means that the delivery rate is

automatically adapted to the type of material conveyed.

The type of mill installed (single, double or parallel mill) depends on the throughput requirements.

The milled meal can be transported by means of different conveyor elements (bucket or chain elevators or trough augers).



Double mill with drum cleaner T1 and DustBuster XXL filter



Hammer mill

### Advantages

- ✓ high capacity, also for fine milling;
- ✓ uniform feed structure;
- ✓ milling takes place in both directions: even wear of the screens;
- ✓ screen cleaner and metal collector for a high performance and longer service life of the mill;
- ✓ rugged design;
- ✓ dust filter for better hygiene;
- ✓ easy maintenance and a long service life of screen and hammers;
- ✓ all parts of the mill are mounted onto a frame, minimising the installation requirements on site;
- ✓ cooling of the milled feed.

## Filters

### Reduction of moisture and dust in milling plants

Big Dutchman offers three different filter systems:

- ✓ dust filter 30/80
- ✓ DustBuster Easy
- ✓ DustBuster XXL

The custom-made filters ensure an effective separation of the dust particles, which occur

as a result of the milling process. The filter bags are made of a coated synthetic glass-fibre material and provide maximum air penetration while capturing the dust particles in the filter.

Our filter systems are available in many sizes and can be adapted to any milling plant.



DustBuster XXL V

### Advantages

- ✓ improved capacity of the mill and cleaner work environment;
- ✓ effective separation of dust particles and moisture reduction in the milling plant;
- ✓ multiple systems and sizes available for adaptation to any plant or machine;
- ✓ maximum air penetration;
- ✓ suitable for existing and new plants.



From left to right: dust filter 30/80, DustBuster Easy and DustBuster XXL P

# Solutions for small and large operations

## MicrosDry

### Dosing of dry ingredients

MicrosDry is the ideal solution for dosing of very small amounts. Every container is equipped with an agitator. This enables efficient handling even of slow-flowing raw materials.



### Advantages

- ✓ containers with 1 to 4 compartments with a capacity of 25 L each;
- ✓ agitator in all containers;
- ✓ measuring with an accuracy of 10 grams;
- ✓ weighing container with a capacity of 25 L;
- ✓ easy to clean and to service;
- ✓ great flexibility in terms of location.

## Dry mixers

### High mixing accuracy, versatile use

The diagonal and horizontal mixers offered by Big Dutchman can be used to mix

different ingredients such as cereals, soya, dry minerals, vitamins and fats to produce

high-quality feed mixes.

The **horizontal mixer** is available in two sizes: 2000 L and 4000 L. The mixing capacity can be increased by installing additional bins before or after the mixer (modular design). Load cells ensure accurate weighing. The mixer can be emptied without residues remaining through an automatically or manually operated bottom opening.

### Advantages of the horizontal mixer

- ✓ double, counter-rotating steel auger along the entire length of the mixer;
- ✓ high mixing accuracy (1:100 000);
- ✓ very good mixing quality, including small amounts;
- ✓ low wear;
- ✓ short mixing times;
- ✓ maintenance-friendly cleaning opening for better hygiene;
- ✓ residue-free emptying;
- ✓ double-alloy shaft for a long service life of the auger.



Horizontal mixer with double, counter-rotating auger



Horizontal mixer with preliminary holding bin

The **diagonal mixer** is made of heavy-duty aluminium zinc plates and has a capacity of up to 2000 L. In combination with an electronic weighing system, ingredient intake and quantity can be controlled and feed mixing optimised. The diagonal mixer also allows manual filling via hatch.



Diagonal mixer

### Advantages of the diagonal mixer

- ✓ simple system, suitable for small milling plants that produce no more than 1 t/h;
- ✓ easy access through a hatch;
- ✓ easy mounting on load cells for optimised feed mixes;
- ✓ option for manual filling.

# Silos for indoor and outdoor use

## Storage of primary ingredients and finished feed mixes

Big Dutchman can offer its customers a variety of silos made from different materials and in different sizes for safe

storage of ingredients and finished feed mixes. The number and size of the silos are planned according to the individual

requirements on a farm. For slow-flowing materials there are special auger silos available.



Indoor silos for storage of completed mixes



Outdoor silos for storage of ingredients

# Hoppers for minerals and premixes

## Ideal storage of small amounts

Different types of hoppers are available for premixes and other additives.

- ✓ hopper T 100 for 0.5 m<sup>3</sup>
- ✓ hopper T 150 for 0.65 m<sup>3</sup>
- ✓ hopper with agitator for 0.45 m<sup>3</sup> for

slow-flowing premixes. Other sizes are available on request. Augers (102 mm diameter) or spirals (75 mm diameter) transport the additives from the hopper to the mixer. If a hopper with

agitator is used, the material is always transported by means of augers (102 mm diameter).



Hopper for minerals in BigBags



Hoppers, each with a capacity for up to 2 t minerals

# Control of milling plants with BigFarmNet

## Simple and effective process control

**BigFarmNet** unites all applications of your farm in one software and one database. This includes the control and monitoring of your milling and mixing system and has the following advantages:

### Always up to date: keep track of everything

Use any of your computers or your smart-phone to make inputs – directly in the barn, while you are relaxing at home, or even from different farms. All **BigFarmNet** components update and synchronise automatically, and in real time.

### More security

Your entire production is recorded in one single software, which also means that all systems are backed up automatically and all alarms are managed centrally. Centralised data input and uniform user interfaces reduce the risk of incorrect inputs.

### Optimised production results and reduced costs

Improve your production results by using efficient analytical tools, and save time and avoid errors thanks to optimised processes.

### Reliable and future-proof

Benefit from the fact that all **BigFarmNet** applications are thoroughly tested in the field and continuously further developed by Big Dutchman.

### Only buy what you need

It does not matter whether you have a large farm complex or a smaller, family-owned farm: **BigFarmNet** meets any requirement and grows with your needs.

## In the feed kitchen

### with our controllers

- Control your systems directly in the feed kitchen



## At the office PC

### with BigFarmNet Manager

- Control, manage and analyse, with graphs and tables
- Create new formulas
- Trace batches



## Anywhere you are

### with the BigFarmNet app

- Confirm alarms
- View current data using Remote Access



### We recommend ...

In addition to the milling and mixing systems described in this brochure, Big Dutchman also offers a variety of products that complete an installation. This includes, for example,

conveyor spirals, bucket and chain elevators, tube and trough augers. Let our experts advise you on the different possibilities Big Dutchman can provide for the

successful production of home-grown feed, including on-farm grain treatment and storage.



**Big Dutchman.**

**Europe, Middle East & Africa:**  
**Big Dutchman International GmbH**  
P.O. Box 1163 - 49360 Vechta, Germany  
Tel. +49(0)4447 801-0 · Fax -237  
big@bigdutchman.de  
www.bigdutchman.de

**USA: Big Dutchman, Inc.**  
Tel. +1 616 392 5981 · bigd@bigdutchmanusa.com  
www.bigdutchmanusa.com

**Brazil: Big Dutchman (Brasil) Ltda.**  
Tel. +55 16 2108 5310 · bdbrazil@bigdutchman.com.br  
www.bigdutchman.com.br

**Russia: 000 "Big Dutchman"**  
Tel. +7 495 229 5161 · big@bigdutchman.ru · www.bigdutchman.ru

**Asia/Pacific: BD Agriculture (Malaysia) Sdn. Bhd.**  
Tel. +60 33 34 83 555 · bdasia@bigdutchman.com · www.bigdutchman.com

**China: Big Dutchman (Tianjin) Livestock Equipment Co., Ltd.**  
Tel. +86 10 6476 1888 · bdcnsales@bigdutchman.com  
www.bigdutchman.org.cn

**Big Dutchman (Scandinavia) A/S**  
Vestermarksvej 12 · DK-6600 Vejen  
Tel. +45 70 23 28 70  
E-mail: post@bigdutchman.dk  
www.bigdutchman.dk