



Big Dutchman®



Feed storage and feed transport

hygienic, safe and efficient

Silos

Prerequisite for hygienic and safe feed storage

Big Dutchman offers high-quality silos for inside and outside use along with all the accessories required for hygienic feed storage. This includes:

- silos made from galvanised sheet steel
- silos made from glass-fibre reinforced plastic (GRP)

- systems for silo weighing
 - an electric discharge aid for silos
- Big Dutchman can help you to select the right silo from a wide range of different products. The silo size depends on daily feed consumption and required storage time.

All silos can be filled pneumatically or mechanically. Let the Big Dutchman experts advise you in detail on the available options regarding feed storage, feed transport and feed weighing.

Silos made from galvanised sheet steel



Silos made from galvanised sheet steel with manhole

The Big Dutchman steel silos are characterised by a high-quality OptiCoat coating, which protects the silos from corrosion, ensuring a long service life. The roof is shaped in such a way that the entire silo storage volume can be used. Trouble-free feed withdrawal is guaranteed by the optimum degree of slope in the silo funnel. The corresponding silo boot can be adjusted between 0° and 45°. Big Dutchman's steel silos come with capacities from 4 m³ to 51 m³. You can select how the silo's filling system should work: pneumatically, mechanically or pneumatic-mechanically.



Key

- 1 Lid with opener
- 2 Pneumatic filling pipe
- 3 Breather pipe
- 4 Inspection window in ring
- 5 Ladder
- 6 Safety cage
- 7 Manhole (optional)
- 8 Connection to silo boot
- 9 Silo leg
- 10 Base plate (provided by customer)

Silos made from glass-fibre reinforced plastic

Big Dutchman supplies its GRP silos fully assembled, including filling and breather pipes. The GRP silos are available for holding contents from 4 m³ to 66 m³, with a height of 3.7 m to 12.2 m and in a great variety of types. They are corrosion-resistant and weatherproof as well as virtually maintenance-free. The material is translucent for easy monitoring of the level of contents. An extremely smooth interior ensures that the feed flows without obstructions. As an option, GRP silos can be delivered with an inspection hatch.



GRP silos with FlexVey conveyor spiral



GRP silos with DR 1500 conveyor chain

Options to determine the silo content

From feed level measuring to highly accurate feed weighing

SiloCheck AIR

SiloCheck AIR is an innovative sensor, offered by Big Dutchman, that records the feed level in silos. The sensor uses radar technology to measure the silos' feed levels and transmits this data to your smartphone, tablet or PC using the IoT gateway OrbitX. You can, of course, also receive alarm notifications, for example if the feed in the silo has reached a minimum level previously defined by you. An important benefit of the new SiloCheck AIR sensor is that it is easy to install on the silo's roof. This wireless sensor is fully self-sustaining and has a predicted battery life of up to ten years.

Keep track of your silos' contents and never miss another feed order again!



Silo weighing

For accurate recording and checking of the contents of a silo and the amount of feed withdrawn, Big Dutchman offers two easy-to-use options for silo weighing:

- ✓ UniScale
- ✓ QuadScale

Both weighing systems are well-suited for outside installation directly at the silo (protection rating IP 66/67) and equipped with a display (optional for UniScale). This display means that suppliers can see for themselves how much feed they are adding, and provides you with a fast and accurate overview of your silos' feed levels. Each scale can weigh up to four silos.

Both systems are additionally available as a stand-alone solution. For easy data analysis, UniScale also comes as a BigFarmNet application. With QuadScale, data can be analysed using Big Dutchman's digital platform, BFN Fusion, by means of the IoT gateway OrbitX. QuadScale is easy to retrofit onto existing silos without having to lift the entire silo.



UniScale



QuadScale



Cover for silo foot for accurate weighing even in extreme weather



The QuadScale weighing module can be retrofitted without lifting the entire silo

Electric discharge aid for silos

Where slow-flowing or bridging feed is stored in a silo, Big Dutchman recommends using an electric vibrator. A sensor installed in the silo boot transmits a signal to the vibrator when it is no longer surrounded by feed, prompting the vibrator to start operating. The vibrator switches off when the silo boot has been refilled. By

default, the vibrator operates for ten seconds. This runtime can be changed if required. The Big Dutchman discharge aid is available for silos made from galvanised sheet steel and for GRP silos.



Silo with electric vibrator

Spirals, augers and conveyor chains

For effective and safe feed transport from the silo into the building

With Big Dutchman conveying systems, your feed – be it meal, pellets or crumbs – passes from the silo into the livestock house safely and without any loss of quality. The product range includes

spirals, augers and conveyor chains of different sizes.

For conveying capacities of up to 4.5 t/h, spirals are used. When capacities must be higher or pitches reach up to 75°, an

auger is the ideal option.

Conveyor chains should be selected for longer conveying lengths and complicated building layouts. The feed runs in a circuit in this case.

FlexVey conveyor spirals

- ✓ FlexVey conveyor spirals are made from high-quality and extremely flexible spring steel;
- ✓ feed can be transported into the house around bends of up to 90° safely, rapidly and without being separated;
- ✓ good conveying capacity;
- ✓ completely closed conveying system;
- ✓ universal application;
- ✓ fast and easy assembly;
- ✓ gear motor or V-belt motor available as drive.



FlexVey conveying system: simple and flexible

FlexVey		FlexVey 60	FlexVey 75	FlexVey 90	FlexVey 125	FlexVey 90 HS
Conveying capacity* 0°/45° pitch	kg/h	800/600	1900/1500	2500/1900	7200/5400	4700/3900
Maximum conveying length	m	80	60	40	25	40
Outside pipe diameter	mm	60	75	90	125	90
Material	mm	PVC	PVC**	PVC**	PVC**	PVC/stainless steel
Pipe bend radius – 45°	mm	3000	1533	1568	2750	1568
Spiral diameter	mm	45	60	70	100	70

* for a bulk density of 0.65 t/m³ of the material to be conveyed

** also available as stainless steel version upon request

Auger conveyors

- ✓ high conveying capacity;
- ✓ completely closed conveying system;
- ✓ well-suited for pitches of up to 75°, even 90° pitches can be realised in exceptional cases; the auger can then be no longer than 10 m;
- ✓ quiet to operate, even when empty;
- ✓ gear motor or V-belt motor available as drive;
- ✓ low maintenance requirements.



Feed augers with large conveying capacities

Augers		S102	S150	S200	K150	K200
Conveying capacity* 0°/45° pitch	t/h	4.3/3.0	19/13.3	48/33.6	26/18.2	34/23.8
Maximum conveying length	m	12	14	12	30	15
Outside pipe diameter	mm	102	152	226	–	–
Material		galvanised pipe	galvanised pipe	galvanised pipe	galvanised trough	galvanised trough

* for a bulk density of 0.65 t/m³ of the material to be conveyed; also available with gear motor upon request

DryRapid conveyor chains

DryRapid is a versatile conveying system and, therefore, ideally suited when refurbishing existing houses. Feed can be withdrawn directly from the silo, i.e. additional auger conveyors are not necessary. Converting the system into a computer-controlled feeding system is possible at any time.

DR 6500 is an especially good choice as a centralised system that distributes feed from the main silo to the silos right next to the house.

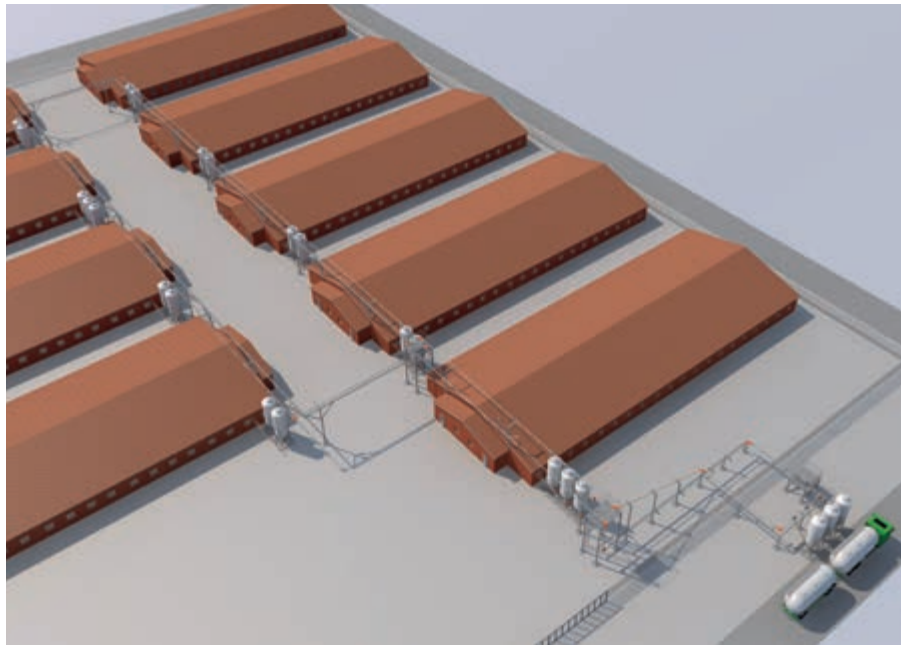
- ✓ high conveying capacity;
- ✓ smooth feed transport with minimum losses;
- ✓ low maintenance requirements and a long service life.



DR 6500 and DR 1500 – conveying pipe with conveyor chain

DR 6500

DR 6500 is the ideal conveying system for large farm complexes. It has a high conveying capacity and is able to supply multiple houses with feed using one or more main silos, making the system very cost-effective. The feed supplier's lorries do not have to enter the farm's clean area when delivering feed, which increases biosecurity.



DR 6500 is a conveying system for large farm complexes

Chain conveyors		DryRapid 1500	DryRapid 6500
Drive power	kW	1.5	5.5
Chain speed	m/min	27	42
Conveying capacity*	t/h	up to 1.5**	up to 6.5
Max. conveying length with 4 corners	m	300 (standard)	300

* for a filling level of 66 % and a feed density of 0.65 t/m³

** in case of forced infeed, the capacity may vary depending on the feed texture

Examples for feed transport from the silo into the house



FlexVey conveyor spiral



Vertical and cross auger conveyor



Conveyor chain (DR 1500)



FlexVey tandem system for two silos



Tandem auger with forced transfer



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