



Big Dutchman®



Silos, Spirals and Augers

Feed storage and transport systems

Silos – the base for hygienic 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:

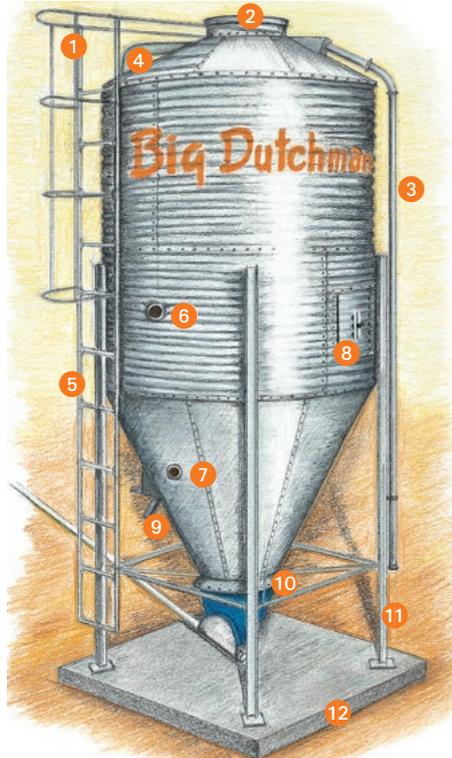
- ✓ silos made of galvanized sheet steel;

- ✓ silos made of glass-fibre reinforced plastic;
 - ✓ inside silos made of Trevira fabric.
- Select the right silo of the appropriate size from a wide range of different products. All

systems can be filled pneumatically or by auger. The respective silo size depends on daily feed consumption and required storage time.

Advantages

- ✓ high-quality zinc aluminium coating of all steel parts and use of glass-fibre reinforced plastic (GRP) for improved corrosion protection and a long service life;
- ✓ trouble-free feed discharge due to optimum degree of slope in the silo funnel;
- ✓ silo boot is either rigid or flexible, adjustable from 0° to 45° and ensures absolute operational safety;
- ✓ roof shape allows use of the entire volume of the silo;
- ✓ GRP silos are transparent, therefore making it easy to check the feed level;
- ✓ high functional reliability.



Key

- | | | |
|--------------------------|-------------------------------|----------------------------|
| 1 Safety cage | 5 Ladder | 9 Feed discharge in funnel |
| 2 Cover with opener | 6 Inspection window in ring | 10 Flange Ø 435 mm |
| 3 Pneumatic filling tube | 7 Inspection window in funnel | 11 Silo leg |
| 4 Breather tube | 8 Inspection hatch | 12 Base plate |

Examples for transporting feed from the silo to the house via spirals, augers and chain co



FlexVey



FlexVey tandem system for two silos



Inclined and cross co

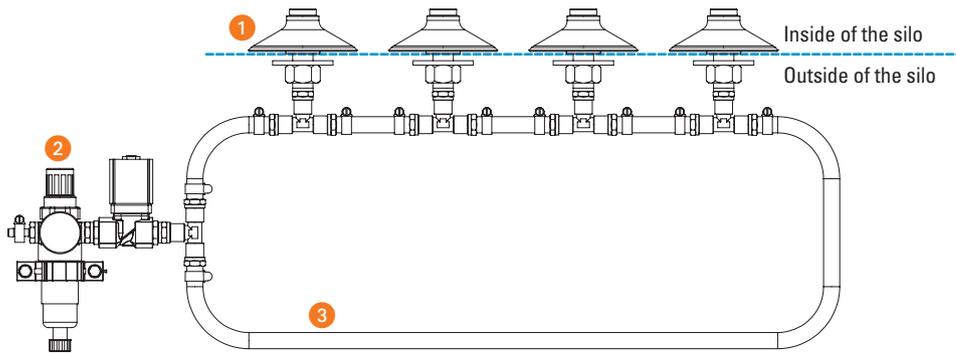
BridgeBuster and silo vibrator – dischargers for silos

BridgeBuster is a discharge aid for installation in silo funnels, storage bins and hoppers. The discharger ensures that meal-type, slow-flowing bulk material (e.g. feed, premixes) can be unloaded from a silo without residues and without arching, bridging or rat-holing. BridgeBuster uses compressed air (operating pressure: 1 - 2.5 bar) and can be operated both manually and automatically. While the bulk goods are unloaded from the silo, air flows from the vent nozzle into the bulk material between the silo wall

and the collar of the vent nozzle. At the same time, the vent nozzle starts to vibrate. The compressed air and the vibrating nozzle thus make the bulk material flow. The ventilation flow is active for 1 to 3 seconds in 10-second intervals. The special design of the collar prevents material from getting into the nozzle and plugging it. BridgeBuster can easily be retrofitted, even in already-filled silos.



Silo with BridgeBuster



How BridgeBuster works

Key

- 1 Vent nozzles (up to 4 nozzles can be installed per silo)
- 2 Pressure regulation
- 3 Air hose

An additional discharge aid in our product range is the electric silo vibrator. A sensor installed in the silo boot transmits a signal to the vibrator when it is no longer surrounded by feed. The vibrator switches off when the silo boot has been refilled. By

default, the electric vibrator operates for ten seconds. This running time can be changed if required.



Silo with electric vibrator

Conveyors



Conveying auger



Tandem auger with forced transfer



Conveyor chain (DR 850/DR 1500)

Augers and spirals for feed transport

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

We offer augers and spirals in a variety of sizes.

For conveying capacities of up to 4.5 t/h, spirals are used.

For even higher capacities or pitches of up to 75°, an auger is the ideal option. In exceptional circumstances, even pitches of up to 90° can be carried out (max. length of auger in this case: 10 m).



Feed augers with large conveying capacities

Technical data and planning details for augers

Type		S102	S150	K150	TS200
Horizontal conveying capacity*	t/h	4.3	19	17	26
Maximum conveying length	m	12	14	30	25
V-belt motor**	kW	0.75-2.2	1.1-3	1.5-5.5	2.2-5.5
Motor speed	rpm	400	400	400	150
Outside diameter of tube	mm	102	152	–	–
Material		galvanized tube	galvanized tube	galvanized trough	galvanized trough
Wall thickness	mm	1.5	2	2	2

* with a bulk density of 0.65 t/m³ of the material to be conveyed; the conveying capacity decreases by approx. 30 % at a pitch of 45°

** gear motor also available on request; specifications for TS200 apply for gear motor



FlexVey conveying system – simple and flexible

- ✓ our FlexVey conveying spiral consists of high-quality and extremely flexible spring steel;
- ✓ feed can be transported into the house around bends of up to 90° safely, quickly and without being separated;
- ✓ good conveying capacity;
- ✓ completely closed conveying system;
- ✓ universal application;
- ✓ fast and easy assembly;
- ✓ can be driven by means of a V-belt motor or a gear motor.

Technical data and planning details for FlexVey

Type		FlexVey 60	FlexVey 75	FlexVey 90	FlexVey 125
Horizontal conveying capacity*	t/h	0.5	1.4	2.5	4.5
Maximum conveying length	m	80	60	40	25
Gear motor 370 rpm	kW	0.75	0.55/0.75	0.75/1.1	1.1
V-belt motor 400 rpm	kW	0.75	0.75	0.75	1.1
Outside diameter of tube	mm	60	75	90	125
Material/wall thickness	mm	PVC / 3.3	PVC **/ 4	PVC **/ 4.3	PVC **/ 5
Tube bend radius – 45°	mm	3000	1540	1570	2750
Outside diameter of spiral	mm	45.5	60	70	100
Pitch of spiral	mm	45	60 / 40	65	70

* with a bulk density of 0.65 t/m³ of the material to be conveyed; the conveying capacity decreases by approx. 30 % at a pitch of 45° ** stainless steel tube also available on request

FlexVey PUR – innovative, flexible and wear-resistant

FlexVey PUR is an extremely flexible and wear-resistant conveying system for the transport of feed that has been newly developed by Big Dutchman. With FlexVey PUR, your feed – be it meal, pellets or crumbles – passes from

the silo into the house safely and without any loss of quality. Complicated mounting around corners is now a thing of the past. FlexVey PUR makes Big Dutchman the only supplier of an innovative product

for feed supply with a significantly longer service life. Our endurance tests have clearly proved this.



Use of FlexVey PUR exclusively, all the way from the silo to the house

Important advantages

- ✓ highly resistant to wear and tear
→ 4 to 5 times longer service life!
- ✓ can be used very flexibly, especially in curves and bends, i.e. only few couplings are required;
- ✓ very quiet to operate;
- ✓ good conveying capacity;
- ✓ made of high-quality, wear-resistant polyurethane (PUR);
- ✓ universally suitable – for any type of house;
- ✓ significantly reduced risk of failures;
- ✓ can also be retrofitted.



FlexVey conveyor spirals



Use of FlexVey PUR in combination with a rigid FlexVey tube

Technical data and planning details for FlexVey PUR

Type		FlexVey PUR 75	FlexVey PUR 90	FlexVey PUR 125
Horizontal conveying capacity*	t/h	1.4	2.5	4.5
Maximum conveying length	m	40	30	20
Inside diameter of tube	mm	75	90	125
Material		polyurethane	polyurethane	polyurethane
Wall thickness	mm	7.0	7.5	9.0

* with a bulk density of 0.65 t/m³ of the material to be conveyed; the conveying capacity decreases by approx. 30 % at a pitch of 45°

Technical data and planning details for silos

Silos made of galvanized sheet steel

Type	Code no.	Volume m ³	Overall height m	Ø of the silo m
BD-P-EU*	25-18-2010	4.1	3.5	1.80
BD-P-EU*	25-18-2020	6.3	4.4	1.80
BD-P-EU*	25-18-2030	8.6	5.3	1.80
BD-P-EU*	25-18-2120	9.2	4.7	2.10
BD-P-EU*	25-18-2130	12.3	5.6	2.10
BD-P-EU*	25-18-2140	15.4	6.5	2.10
BD-P-EU*	25-18-2220	16.6	5.5	2.75
BD-P-EU*	25-18-2230	21.8	6.4	2.75
BD-P-EU*	25-18-2240	27	7.2	2.75
BD-P-EU*	25-18-2320	32.6	6.5	3.66
BD-P-EU*	25-18-2330	41.8	7.4	3.66
BD-P**	25-17-9410	4.1	3.5	1.80
BD-P**	25-17-9420	6.3	4.4	1.80
BD-P**	25-17-9430	8.6	5.3	1.80
BD-P**	25-17-9520	9.2	4.7	2.10
BD-P**	25-17-9530	12.3	5.6	2.10
BD-P**	25-17-9540	15.4	6.5	2.10
BD-P**	25-17-9620	16.6	5.5	2.75
BD-P**	25-17-9630	21.8	6.4	2.75
BD-P**	25-17-9640	27	7.2	2.75
BD-P**	25-17-9650	32.6	6.5	3.66
BD-P**	25-17-9660	41.8	7.4	3.66
BD-P**	25-17-9670	51	8.3	3.66

* with EU structural standards (wind zone 2, inland)

** without EU structural standards

BD-P-EU and BD-P: pneumatically filled silos

– silos are also available for mechanical filling (BD-M-EU / BD-M) or for mechanic-pneumatic filling (BD-P/M-EU / BD-P/M)

– all sheet steel silos are unassembled upon delivery

Silos made of glass-fibre reinforced plastic

GRP silos are fully assembled upon delivery, including filling and breather tube. They are available for holding contents from 5 to 66 m³, with a height of 4.15 to 12.76 m and in a great variety of types. They are corrosion-resistant and weatherproof as well as virtually maintenance-free. As an option, they can be delivered including an inspection hatch.

Inside silos made of Trevira fabric

Inside silos consist of a Trevira bag and a steel stand. The silo bag with a 400 mm outlet has a sewn-on collar for connection to a silo boot. Inside silos are available with volumes from 5.15 to 20.95 m³.

Type	Code no.	Volume m ³	Overall height m
GS-1	25-30-3206	5.15	3.05
GS-A	25-30-3207	6.15	3.30
GS-B	25-30-3209	8.15	3.80
GS-C	25-30-3211	10.15	4.30
GS-D	25-30-3214	12.95	4.80
GS-E	25-30-3217	15.95	5.30
GS-F	25-30-3220	18.95	5.80
GS-G	25-30-3222	20.95	6.30

Note:

The average weight of feed amounts to 0.65 t/m³

Example: 8.4 m³ silo x 0.65 t/m³ = 5.5 t feed

Our recommendation

To record and to check the contents of the silo and the amount of feed consumed, we can offer different types of silo weighing. Let our experts advise you about all options regarding feed storage, transport and weighing that Big Dutchman has available.



Silo weighing



Cover for silo foot for secure weighing in extreme weather



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