



Animal feed silos, Mineral Nutrients silos,  
Grain silos & Outdoor silos

# Flexible Silos for **AGRICULTURE**

Robust, longlasting and efficient.

## PRODUCT OVERVIEW

# A.B.S.-ANIMAL FEED SILOS

Capacity: 0.7 - 30.0 t

**Flexible silos made of breathable, uncoated polyester fabric for a constant feed quality without the formation of mould and lumps.**

The lowest-cost storage possibility with an optimal space utilisation. The filling process is simple and dust-free by tank truck or grinding and mixing system. The well thought through construction guarantees a quick assembling pro-

cess, which can also be effected by the customer.

The filling level is visible from outside through the dust-proof polyester fabric. Through different specifications the silo construction can meet special requirements (e.g. outlet diameter, cone bevel, Stuko®, ventilating cone, emergency outlet, additional filter, etc.)

# A.B.S.-GRAIN SILO

Capacity: 1.0 - 30.0 t

The breathable indoor silo, which can optionally be equipped with a filter lid and ventilation cone, protects natural

products. This means, that there will be no formation of mould due to condensed water, in contrast to solid silos.

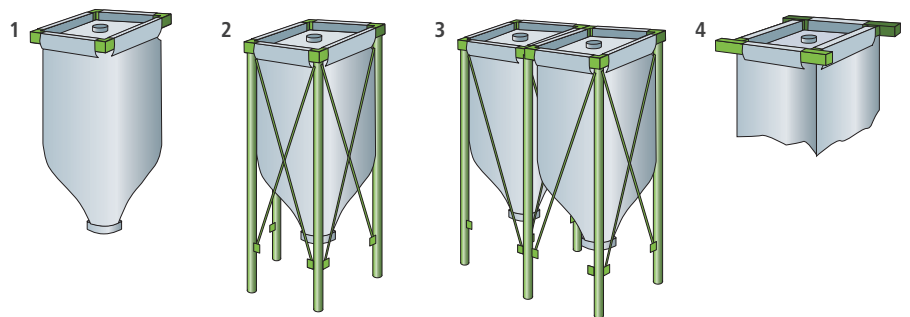
## Versions

**1** Animal feed silo with filter lid and filling nozzle, supporting or complete steel frame can be manufactured by yourself with our assistance.

**2** Animal feed or grain silo in a steel frame for installation on the floor. Ground clearance 0.6 m or according to local conditions.

**3** Double frame for two silos of the same height and width. Double frames are cheaper and more attractive than single frames.

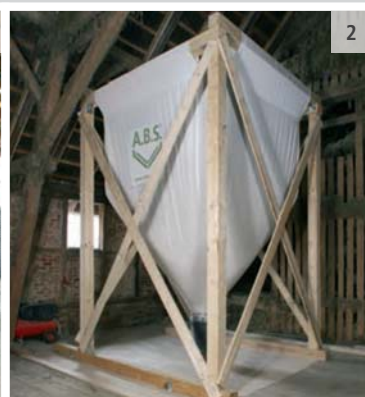
**4** Supporting frame made of steel or wood for the suspension of the silos. The supporting bars are extended and rest, e. g. on the building wall or on a beam.



## Our Animal Feed Silos

- 1 ANIMAL FEED SILOS** made of black, UV-proof fabric with Stuko®
- 2 ANIMAL FEED SILO** with Stuko® in a wooden frame

- 3 ANIMAL FEED SILOS** with 60° cone
- 4 ANIMAL FEED SILOS** with Stuko®



# A.B.S.-MINERAL NUTRIENTS SILO

Capacity: 1.5 - 12.5 t

Mineral nutrients are a vital component of animal feed and have to be added to the feed mixture.

Because mineral feed is hygroscopic, the silo is made of coated, moisture-impermeable fabric, in order to prevent the formation of lumps.

# A.B.S.-OUTDOOR SILOS

Capacity: 3.7 - 16.0 t

With all the advantages of the flexible silo. The galvanised steel construction, the coating as well as the roof cover made of coated polyester fabric, make the silo weather-resistant. The filling pipe is integrated under the roof and coating.

The animal feed, grain etc. is stored inside the breathable, poly-

ester fabric silo, which means that in contrast to solid silos, there will be no formation of mould due to condensed water.

**A.B.S. outdoor silos are your guarantee for the best animal feed quality and a healthy livestock.**

## Tested quality fabric



Our fabric has been tested for tear-resistance by the **HOHENSTEIN RESEARCH INSTITUTE!**

- 5 **MINERAL NUTRIENTS SILOS** in a double frame made of coated fabric. Discharge with conveyor screw.
- 6 **OUTDOOR SILOS** in a double frame + single frame available in almost all sizes, extendable for different types of feed.



Animal feed silo in a steel frame with filling pipe and locking gate valve.



Grain silo in a steel frame with locking gate valve.



5



6



# WE SPECIALISE IN VARIETY

## Production according to your requirements



### Wide range of tested fabrics

#### Breathable and coated fabrics

- > All feed and grain silos are made of our high-strength breathable fabric, which reliably prevents formation of mould. For the storage of mineral nutrients, our coated fabric is used. For external silos, we use a fabric which is coated on both sides. Please contact us for your desired colour!

#### If required, we will produce food-proof silos for you

- > The fabric meets all requirements of the EC regulation no. 1935/2004 and particularly of the EU regulation no. 10/2011.
- > Our food-proof fabric has been tested by an accredited testing institute.

- > For your buyers from the milk and meat processing sector, they offer the guaranteed characteristics that the used animal feed is stored in suitable food-safe silos. Decide yourself which fabric is used for producing your silo!

#### Tested quality with seven-fold safety

- > We monitor the fulfilment of our quality requirements by means of regular internal and external tests of the fabric and the seam connections. For the external tests, we are supported by the Hohenstein Research Institute.
- > All our silos are developed with at least seven-fold safety for seam and fabric.



### Your extra volume PLUS

- > The special A.B.S. lid extension will give you extra volume PLUS. This is achieved by means of a special stiffening seam in the A.B.S. lid, with the same floor space.

The available space above the support frame is optimally used. You only need additional room height for this.

## Choose your easy-to-assemble steel frame

### NEW! galvanized version

#### Grounded and galvanized frame design

- > Our steel parts get their high-quality surface coating with corrosion protection from a specialist company.
- > With immediate effect, our frames are also available in a galvanized version. This high-quality surface coating enables an installation even in difficult climatic conditions.

#### Production in accordance with valid DIN standards

- > We comply with all valid DIN standards for the design and production of the silo frames.

#### Easy assembly – stable design

- > Easy-to-assemble due to an optimised construction system: our silo sack is looped in at a safe working height on the floor because the supporting bars are completely screwable. Then they can be easily lifted for installing the feet.
- > With our frame system with tie bars in combination with eye bolts, the A.B.S. frames are accurately aligned and tensioned. This frame construction is particularly convincing due to its stable design and firm stand.



# SILO-EXAMPLES



Outdoor silo A18/25G:  
Discharge with tube chain conveyor



2 animal feed silos F18/25G with Stuko:  
Discharge with tube chain conveyor



4 animal feed silos F30/45G with 60° cone:  
Discharge with tubular screw conveyors



2 animal feed silos in a double frame:  
Discharge with conveyor spirals

# ANIMAL FEED SILOS

Animal feed silo



Animal feed silo with UV-fabric



Silo-Type	Capacity Calculated content		Steel frame dimensions (metres)		
	m <sup>3</sup> ①	t ①	Length x width ②	Height of frame (metres) ②	Height of silo (metres) ③
F 10/15	1,2	0,7	1,10 x 1,10	2,25	1,5
F 10/20	1,7	1,0	1,10 x 1,10	2,75	2,0
F 10/25	2,3	1,4	1,10 x 1,10	3,25	2,5
F 12/16	1,6	0,9	1,30 x 1,30	2,35	1,6
F 12/20	2,2	1,3	1,30 x 1,30	2,75	2,0
F 12/24	2,8	1,7	1,30 x 1,30	3,15	2,4
F 12/28	3,5	2,1	1,30 x 1,30	3,55	2,8
F 12/32	4,1	2,4	1,30 x 1,30	3,95	3,2
F 12/36	4,7	2,8	1,30 x 1,30	4,35	3,6
F 12/40	5,3	3,1	1,30 x 1,30	4,75	4,0
F 15/22	3,5	2,1	1,60 x 1,60	2,95	2,2
F 15/26	4,4	2,6	1,60 x 1,60	3,35	2,6
F 15/30	5,3	3,2	1,60 x 1,60	3,75	3,0
F 15/35	6,5	3,9	1,60 x 1,60	4,25	3,5
F 15/40	7,6	4,6	1,60 x 1,60	4,75	4,0
F 15/45	8,8	5,3	1,60 x 1,60	5,25	4,5
F 18/22	4,6	2,7	1,90 x 1,90	2,95	2,2
F 18/25	5,7	3,4	1,90 x 1,90	3,25	2,5
F 18/30	7,2	4,3	1,90 x 1,90	3,75	3,0
F 18/35	8,9	5,3	1,90 x 1,90	4,25	3,5
F 18/40	10,6	6,3	1,90 x 1,90	4,75	4,0
F 18/45	12,2	7,3	1,90 x 1,90	5,25	4,5
F 21/24	6,3	3,8	2,20 x 2,20	3,15	2,4
F 21/26	7,2	4,3	2,20 x 2,20	3,35	2,6
F 21/28	8,2	4,9	2,20 x 2,20	3,55	2,8
F 21/33	10,7	6,4	2,20 x 2,20	4,05	3,3
F 21/36	11,7	7,0	2,20 x 2,20	4,35	3,6
F 21/40	13,3	8,0	2,20 x 2,20	4,75	4,0
F 21/45	15,5	9,3	2,20 x 2,20	5,25	4,5
F 24/30	10,9	6,6	2,50 x 2,50	3,75	3,0
F 24/32	12,1	7,3	2,50 x 2,50	3,95	3,2
F 24/35	13,6	8,1	2,50 x 2,50	4,25	3,5
F 24/40	16,6	10,0	2,50 x 2,50	4,75	4,0
F 24/47	20,7	12,4	2,50 x 2,50	5,45	4,7
F 30/35	18,7	11,2	3,10 x 3,10	4,25	3,5
F 30/40	23,2	13,9	3,10 x 3,10	4,75	4,0
F 30/45	25,4	15,2	3,10 x 3,10	5,30	4,5
F 32/51	33,5	20,0	3,30 x 3,30	6,10	5,1
F 32/60	42,0	25,0	3,35 x 3,35	7,00	6,0
F 35/60	50,0	30,0	3,65 x 3,65	7,00	6,0

We reserve the right to make technical changes.

## Computer-supported production of silos which are made of 100% polyester fabric.

Further information about special sizes such as rectangular silos is available upon request. Also special sizes, e.g. rectangular silos etc. additional costs available. On request, you can also obtain every Flex-Silo in high-strength design, steeper outlet and adapted outlet diameter. All steel constructions are statically calculated and our fabrics have been tested for tear resistance by institutes.

## SILO-VARIETY



Silo



Silo + frame grounded



Silo + double frame grounded

## ACCESSORIES



lid extension



filling pipe 3"



filling pipe 4"

Further Accessories page 10

## ADDITIONAL PRICES



Food conform fabric



UV-fabric



frame, partly galvanized



double frame, partly galvanized

All steel parts will be delivered grounded, packed on a wooden pallet.

① Indicates the capacity with a bulk weight of 0.6 t/m<sup>3</sup> as well as the maximum permitted storage capacity.

② The first two numbers indicate the dimensions of the frame or the structure. Total height of the frame up to the upper edge of the silo hanger (in metres), **0.65 metres ground clearance**. An additional charge of € 79,- occurs for an increase of the **ground clearance up to 1 metre**, including filling pipe extensions for all sizes.

③ The number represents the silo height from the upper edge of the hanger to the bottom edge of the outlet after the first filling process. An additional height of **approx. 0.4 – 1.0 metres** above the silo is required for the filling pipe. If this space is not available, the silo can not be used to its full capacity. For such cases, we deliver silos where filling will be effected from the side or with an adjustable spreader.

# GRAIN SILOS




Silo-Type	Capacity Calculated content		Steel frame dimensions (metres)		
	m <sup>3</sup> ①	t ①	Length x width ②	Height of frame (metres) ③	Height of silo (metres) ④
G 10/15	1,2	1,0	1,10 x 1,10	2,40	1,5
G 10/20	1,7	1,4	1,10 x 1,10	2,90	2,0
G 10/25	2,2	1,8	1,10 x 1,10	3,40	2,5
G 12/20	2,4	1,9	1,30 x 1,30	2,90	2,0
G 12/25	3,1	2,5	1,30 x 1,30	3,40	2,5
G 12/30	3,9	3,1	1,30 x 1,30	3,90	3,0
G 15/22	4,1	3,3	1,60 x 1,60	3,10	2,2
G 15/25	4,7	3,8	1,60 x 1,60	3,40	2,5
G 15/30	5,9	4,7	1,60 x 1,60	3,90	3,0
G 15/35	7,0	5,6	1,60 x 1,60	4,40	3,5
G 15/40	8,1	6,5	1,60 x 1,60	4,90	4,0
G 15/45	9,3	7,4	1,60 x 1,60	5,40	4,5
G 18/25	6,6	5,3	1,90 x 1,90	3,40	2,5
G 18/30	8,3	6,6	1,90 x 1,90	3,90	3,0
G 18/35	9,9	7,9	1,90 x 1,90	4,40	3,5
G 18/40	11,5	9,2	1,90 x 1,90	4,90	4,0
G 21/25	8,6	6,9	2,20 x 2,20	3,50	2,5
G 21/30	10,9	8,7	2,20 x 2,20	4,00	3,0
G 21/35	13,0	10,4	2,20 x 2,20	4,50	3,5
G 21/40	14,4	11,5	2,20 x 2,20	5,00	4,0
G 24/30	13,8	11,0	2,50 x 2,50	4,05	3,0
G 24/35	16,8	13,4	2,50 x 2,50	4,55	3,5
G 24/40	18,2	14,6	2,50 x 2,50	5,05	4,0
G 30/30	20,3	16,2	3,10 x 3,10	4,10	3,0
G 30/35	22,2	17,8	3,10 x 3,10	4,60	3,5
G 32/45	33,5	25,0	3,32 x 3,32	5,50	4,5
G 32/52	38,0	30,0	3,36 x 3,36	6,20	5,2

We reserve the right to make technical changes.

## Not suitable for animal feed; without filter lid



- Indoor silo without filter lid or a ventilation cone for grain with up to 15% humidity. These silos are not suitable for animal feed.
- Silo with ventilation cone for storing, cooling and drying of grain. The grain must be aired twice a day with the available grain blower for approx. 1 hour at 17% humidity and approx. half an hour per day at 16 % humidity. Grain can be stored for up to approx. two weeks without being aired.

## SILO-VARIETY

-   Silo
-   Silo + frame grounded
-   Silo + double frame grounded







## ACCESSORIES

-   Ventilation cone
-   Supporting frame

Further Accessories  
page 10

## ADDITIONAL PRICES

-   Food conform fabric
-   UV-fabric
-   frame, partly galvanized
-   double frame, partly galvanized

All steel parts will be delivered grounded, packed on a wooden pallet.

- Indicates the capacity with a bulk weight of **0.8 t/m<sup>3</sup>** as well as the maximum permitted storage capacity.
- Dimensions of the frame or the steel supporting frame.
- Total height of the frame up to the upper edge of the silo hanger (in metres), **0.80 metres ground clearance**.
- Height of the silo from the upper edge of the hanger to the bottom edge of the outlet after the first complete filling process.



# MINERAL NUTRIENTS SILOS

Made of coated polyester fabric



Silo-Type	Capacity Calculated content		Steel frame dimensions (metres)		
	m <sup>3</sup> ①	t ①	Length x width ②	Height of frame (metres) ②	Height of silo (metres) ③
M 10/20	1,7	1,7	1,10 x 1,10	2,75	2,0
M 12/20	2,3	2,3	1,30 x 1,30	2,75	2,0
M 12/28	3,5	3,5	1,30 x 1,30	3,55	2,8
M 15/22	3,5	3,5	1,60 x 1,60	2,95	2,2
M 18/24	5,1	5,1	1,90 x 1,90	3,15	2,4
M 21/24	6,3	6,3	2,20 x 2,20	3,15	2,4
M 21/28	8,2	8,2	2,20 x 2,20	3,55	2,8

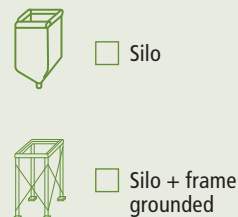
We reserve the right to make technical changes.

**Additional silo sizes available upon request. All steel parts will be delivered grounded, packed on a wooden pallet.**

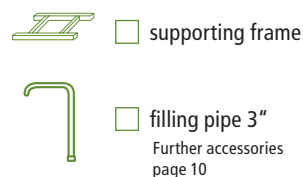
- ① Indicates the capacity with an apparent weight of **1.0 t/m<sup>3</sup>** as well as the maximum permitted storage weight.
- ② Dimensions of the frame or steel structure. **Ground clearance 0.65 metres.**

③ The number represents the silo height from the upper edge of the hanger to the bottom edge of the outlet after the first filling process. An additional height of **approx. 0.4 – 0.6 metres** above the silo is required for the filling pipe. If this space is not available, the silo can not be used to its full capacity. For such cases, we deliver silos where filling will be effected from the side or with an adjustable spreader.

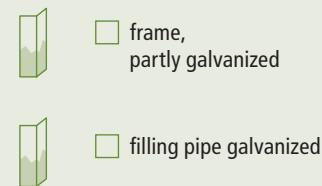
## SILO-VARIETY



## ACCESSORIES



## ADDITIONAL PRICES



# OUTDOOR SILOS

Silo-Type	Capacity Calculated content		Steel frame dimensions (metres)		
	m <sup>3</sup> ①	t ①	Length ②	Width ②	Height ②
A 18/25	6,2	3,7	1,9	1,9	4,3
A 18/37	10,8	6,5	1,9	1,9	5,5
A 21/31	11,0	6,6	2,2	2,2	5,4
A 21/43	16,3	9,8	2,2	2,2	6,1
A 24/30	13,5	8,1	2,5	2,5	5,2
A 24/45	22,3	13,4	2,5	2,5	6,7

We reserve the right to make technical changes.

**All steel parts will be delivered grounded, packed on a wooden pallet.**

- ① Indicates the capacity with a bulk weight of **0.6 t/m<sup>3</sup>** as well as the maximum permitted storage weight.

② Length x width x height up to the top of the cover. **0.9 metres ground clearance.**

**Complete outdoor silo made of 100% polyester with frame and including filling pipe, couple and filter cover.**

The silo with a protective roof and a cover for rain. Both act like insulation and offer this silo all the advantages of the breathable polyester fabric silos:

- > Condensed water does not build up
- > Feed does not go bad
- > No additional maintenance or cleaning required
- > Features an excellent outlet mechanism
- > Galvanized steel construction



# EXAMPLES

for filling and discharge



Filling of an outdoor silo Type A21|31 DG via truck



Filling pipe with TW coupling

## A.B.S. Accessories



- 1 Locking gate valve
- 2 Screw box
- 3 Stuko® for animal feed which causes discharging problems with automatic feeding systems, e. g. with laying meal.

You can find further accessories on the following pages and on the Internet: [www.abs-silos.de](http://www.abs-silos.de)



# List for ACCESSORIES



## BOILER TUBE BEND 90°

88,9 mm Ø, unpainted – Radius 500 mm, 3"

88,9 mm Ø, unpainted – Radius 250 mm, 3"



## WELDING NIPPLE

for screwing on tank truck coupling



## HOSE CLAMP

for fastening the silo inlet nozzle to the filling pipe



## EXHAUSTING NOZZLE

if the silo is supposed to be filled with your own blower. Such compressors usually have larger pipes and significant quantities of air that should be removed at the exhausting nozzle and with an additional filter system



## ADDITIONAL FILTER

made of cotton (nettle) approx 4.5 m<sup>2</sup> with connection bend and holder as well as connection nozzle on the silo cover. Recommended for silo sizes 12/.. and 15/.. as well as for silos to be filled by your own blower



## STUKO® AND FLANGES

for feeding systems where the feed does not flow easily. E.g. feed for laying hens with a silo capacity up to 6.5 tons Stuko® with stronger seams for silos above 6.5 tonnes and with flanges

above 9.5 tonnes with reinforced seams

**WARNING:** To prevent a reduction in capacity when using Stuko®, the filling pipe must be placed 0.2 m higher. Otherwise the silo will suffer a loss of capacity of approx. 8% of the indicated potential capacity. It is not possible to discharge every product with Stuko®, especially if a different type of conveying device is used instead of a conveying screw, e.g. for finely ground wet grain.



## SCREW BOX

to be attached on the silo outlet and for the insertion of a screw with automatic feeding systems

+tension band (please consider the Stuko®).

Height of the screw box with 0.2 m reserve-allowance at 0° = 0.5 m, with 15° = 0.6 m, at 30° = 0.7 m and at 45° = 0.8 m. Please note that with 30° and 45° it will be necessary to have more than 0.6 m of ground clearance.

## BOILER TUBE

88,9 mm ø, unpainted, wall thickness 3.2 mm Per metre 6,8 kg  
 114,3 mm ø, unpainted, wall thickness 3,6 mm Per metre 9,8 kg



## TANK TRUCK COUPLING

Temporary cover for tank truck coupling



## HOSE CLAMP

for fastening the filling pipe to the building



## CONNECTING PIECE

made of galvanized sheet steel ø 420 mm, with tension band for a spiral adapting funnel



## LOCKING GATE VALVE

with two grips for pellets, grain and shredded feed with tension band  
 ø 250 mm  
 ø 350 mm, only for kibbled feed and flour  
 ø 150 mm, only for grain:  
 Other sizes available upon request



## PIPE COUPLING

with sealing set for connecting two filling line parts  
 Ø 88,9 mm  
 Ø 114,3 mm



## DISCHARGING HOSE

1 m discharging hose and connection ring                      ø 250                      ø 350  
 with 2 tension belts  
 with 2 m hose  
 with 3 m hose  
 It is possible to connect a normal gate valve to the outlet pipe.



## MANUAL OUTLET

at the cone for silos with automatic feeding systems, so that feed can be removed without dismantling the automatic feeder (helpful during maintenance work or when technical problems on your feeding system occur)  
 Not suitable for attaching conveying screws or locking gate valves without a handle.





Installation example



## Safe **transport**, simple **assembly**

Our goods will be delivered in time and on only one pallet. Our silos can be assembled by everyone.

## A strong team with more than **35 years of experience**

Over **75.000 silos installed** worldwide give you the certainty that you have found a competent partner for your project. As experts for flexible storing systems our team knows exactly what it takes! We will be happy to assist you with the planning of your

personal installation and we will give you non-binding advices and suggestions for the perfect integration of A.B.S. silos into your workflow with an optimal space utilisation. In this way you will save time and money.



WEBSITE  
[www.abs-silos.de/en](http://www.abs-silos.de/en)



YOUR HOTLINE:  
**+49 6291 6422-0**



## How to find us:

**A.B.S.  
Silo- und Förderanlagen GmbH**

Industriepark 100  
74706 Osterburken - GERMANY

Phone +49 6291 6422-0  
Fax +49 6291 6422-50  
info@abs-silos.de

[www.abs-silos.de/en](http://www.abs-silos.de/en)

