

Mill and Mix Technology

Experience that speaks for itself/counts



Systems for your success

Above anything else, it is often the attention to detail that makes a product or service particularly successful. At Buschhoff we leave nothing to chance!

From the very first discussions with our qualified personnel to the point when your plant is fully commissioned, our customers benefit from our ability to build bespoke systems tailored to meet their individual needs.

Always the right choice!

There is one quite simple reason why Buschhoff hammer mills work so well yet, at the same time, are so easy to operate: they are built using 40 years experience!

The know-how we have built up over the years is your best guarantee of success!

Buschhoff technicians calculate how to make best use of the space available and which plant will be best suited to ensure you produce the very best, top quality finished feed.

Buschhoff has built its reputation on providing sound advice, outstanding service and products, all at the cutting edge of technology.

Technical innovation has enabled us to provide high quality products and services which, in turn, enable our customers to successfully produce their animal feed.

Buschhoff is ready to work with you whether you require a complete new plant or you just want to add to or upgrade your existing equipment. Buschhoff can help!

We can offer you the right equipment whatever your needs. Fan mills with pneumatic discharge from our **BHS range** are particularly suitable for small to medium sized requirements. It is also suitable where you need to suck in raw materials where space is limited.

If you have a greater feed requirement and you have sufficient space to convey grain by auger, you can rely on our fan-less auger discharge mills from our **BHOS range** to do the job.

Whatever equipment suits you best, you can be assured that Buschhoff can offer a high quality, well built plant that will enable you to make quality fresh feed for your animals whenever you require.

Detailed Specification

BHOS range - fan-less mills for auger discharge



BHOS fan-less mills have a considerably greater milling capacity than mills with fans that have the same motor power. This is due to the fact that the **BHOS** models can use all of their energy to mill as they do not require air to convey the grain.

Our **BHOS** will help you save up to 40% on energy costs for your mill and mix equipment. Buschhoff not only looks after your wallet but the environment too!

The **BHOS** is available in 2 sizes, with high capacity 3 phase motors ranging from 11-45kW. For efficient intake, the hammer mill is equipped with 24/32 tungsten tipped hammers. These hammers will process 5000t or more! For an even longer working life, you may consider our reinforced round hole or wire meshed screens.

Milling output falls within the range of 1.9 to 8.5 tonnes per hour. A further advantage of this mill is that it produces a high quality feed with minimal dust which should considerably improve animal health

A summary of the advantages

- Highly efficient
- Robust rotor
- Minimal maintenance required
- Particularly long working life
- Excellent mill output
- Optimum feed quality
- Minimal heating of grain
- Maximum screen area used
- Cost efficient & energy saving
- Exceptionally quiet
- Automatic night operation to use cheap rate electricity

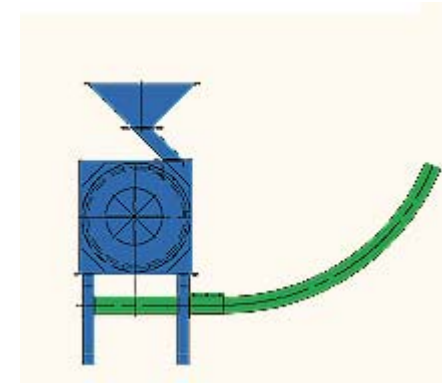
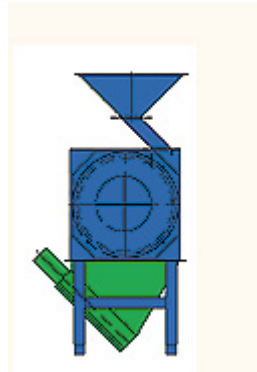
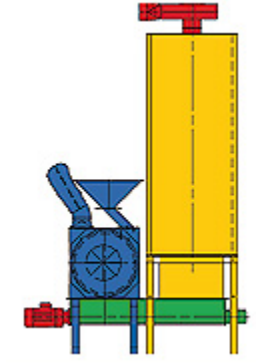


When installing a fan less mill we recommend the use of automatic filters. The fully automatic Buschhoff filter carries out 3 functions:

1. It sucks the feed out the mills, resulting in very little dust.
2. It helps to cool the feed after the milling process by filtering the contents and avoiding the build up of harmful condensation.
3. It keeps the whole plant under vacuum and minimises the chance of dust getting out.

Model	BHOS 150	BHOS 200	BHOS 250	BHOS 300	BHOS 500	BHOS 600
Plant Power (kW)	11	15	18,5	22	37,5	45
Milling output (kg/h)	1150	1570	1940	2300	3900	4700
Barley	1950	2700	3400	3900	7200	8500
Wheat	2900	2900	2900	2900	1450	1450
Rpm	24	24	24	24	32	32
Number of hammers	280	299	312	362	700	730
Approx. weight (kg)						

Based on a 4mm screen and grain with a moisture content of 14%. Grain type, moisture content, and set-up are all factors which can have a significant influence on milling output.



Discharge to trough auger
45° discharge to pipe auger
Discharge to spiral conveyor

Get great results from:- BHS range of fan mills with pneumatic discharge



At Buschhoff, the individual wishes and requirements of our customers are paramount. With this range, the impellers can be set out according to individual conveying requirements.

The equipment has a 3 phase motor from 7.5 to 18.5kW. You can expect an exceptionally long working life from the particularly solid rotor construction.

12 large tungsten tipped coated hammers guarantee consistent milling quality throughout the whole of the milling process. They are suitable for all types of grain. Not only are they extremely efficient and effective, the hammers also have an exceptionally long working life. Tests have shown hammers lasting for 5000t of processing.

The mill housing is made of a highly durable material and the reinforced screens also have a long working life.

Due to the quality of construction, very little maintenance is required. All of the replaceable parts can be replaced on an individual basis. This means the plant is very cost efficient to run.

Using the appropriate computer control, the plant will work automatically, allowing you to take advantage of cheap rate electricity.

A summary of the advantages:

- Highly efficient
- Robust rotor
- Minimal maintenance required
- Particularly long working life
- Excellent mill output
- Consistent grain size
- Minimal heating of grain
- Maximum screen area used
- Cost efficient & energy saving
- Automatic night operation to use cheap rate electricity
- Effective load control at each intake point



BHS Hammer Mill

Model	BHS 100	BHS 150	BHS 200	BHS 250
Power (kW)	7,5	11	15	18,5
Output (kg/h)	470	750	1000	1200
RPM	2900	2900	2900	2900
No. Hammers	12	12	12	12
Diameter suction/blower pipe (mm)	80/100	80/100	80/100	80/100
recommended filter area (m ²)	9	14	14	18
max. conveyor length (m)	50	60	60	40
weight (kg) approx	192	235	240	255

Save Energy with electronic load control Rotary Motor Valve and Intake Equipment



Electronic load control enables optimal energy use. During operation, the control constantly monitors the electric load of the mill motors. Regulating the flow of material through the electric motorised control on the intake line.

The rotary motor opens and closes the suction pipe and ensures optimal milling output since it is placed directly in front of the intake.



EMD 80 TR
For intake of components from flexi silos



EMD 80 S
For intake of grain from hopper bottom silo.

EMD 80 TB

Buffer hopper to be refilled from large silo by auger.

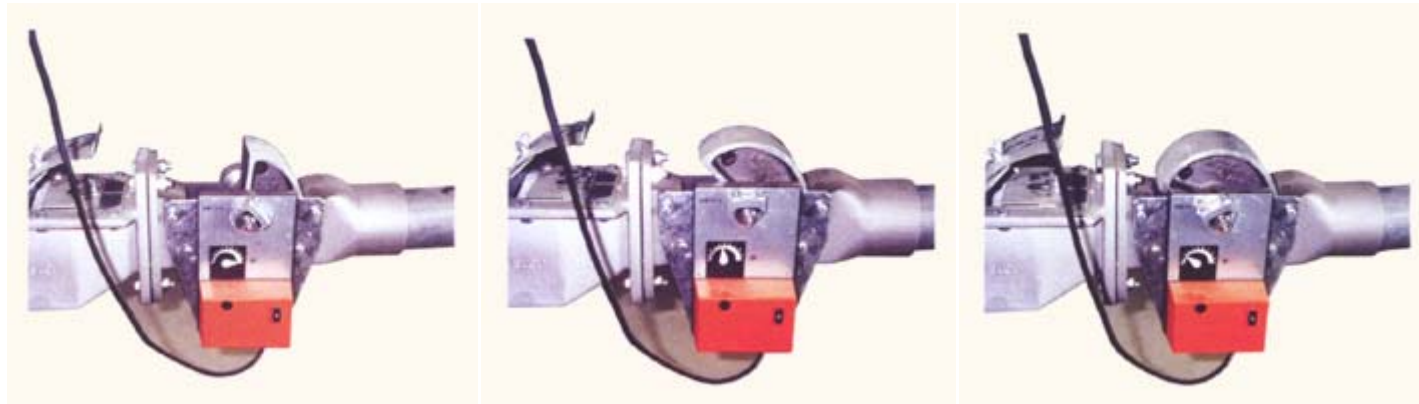


The mill holds as much grain as can be optimally milled. Electrical surges and overloading the motor can therefore be avoided.



Apart from saving electricity, it will also prolong the life of the Buschhoff plant. Economy of use for our customers is always a priority at Buschhoff!

Suction Pipe SRT 80
Suction pipe for intake of grain from flat bottomed silo.



Functions of load control.

© 2006 Th. Buschhoff GmbH & Co.
Kruppstraße 44 - 59227 Ahlen
Tel. +49 (0 23 82) / 80 84-0 - Fax +49 (0 23 82) / 80 84-21

Efficient work made easy! - M1-6 Feed Mixer Range



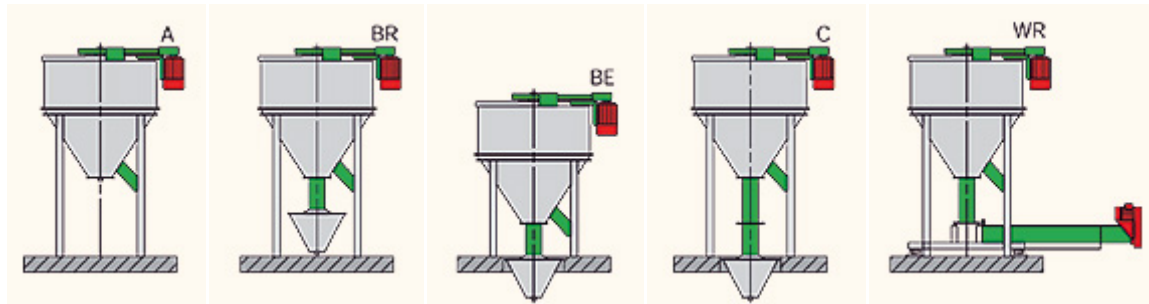
Buschhoff feed mixers can be delivered in several different models and configurations. Each has a capacity of between 750 and 3000kg. They work according to tried and tested pre-set mixing parameters and are accurate to 1:100,000. The large, slow running mixing auger is gentle in action yet quick to mix.

A further advantage of the WR model is that it can be fitted with delivery augers up to 4m long. This guarantees dust free intake of components.

Technical Specification at a glance:

- Mixing capacity of 750 to 3000kg (at SpWt of .06t/m³.)
- Mixing accuracy of 1:100,000
- Mixing auger with 28cm diameter
- Electronic deflection
- Several discharge points can be added
- Add up to 5% oil
- Short mixing time
- Central discharge if required (complete discharge)
- Exact electronic weighing (optional)





Mixer Type	M1	M2	M3	M4	M5	M6
Production capability (kg) (at SpWt of .06t/m ³ .)	750	1000	1400	1850	2550	3000
Mixing time (minutes)	5-8	6-10	7-12	10-15	10-15	10-15
Electric Motor (kW)	3	3	3	4	5,5	5,5
Build type A	3	3	4	5,5	7,5	7,5
Build type B,C and WR						
Total Height H (mm)	2145	2370	2770	3220	3845	4465
Build type BE	2740	2956	3365	3815	4440	5006
Build type A, BR and C		3050	3450	3900	4525	5106
Build type WR						

Technology for your success - GM 1-4 Feed Mixer Range

With a production capacity of 4-12 tonnes, these feed mixers are especially suited to larger users. Its welded construction means this Buschhoff large mixer is extremely robust. The mixer can be delivered in numerous different build types to meet the individual needs of each customer and ensure the best possible plant construction.

The mixer works to a precision of 1:100,000 and uses pre-set mixing parameters. Discharge capacity is up to 50t per hour with a central outlet. Delivery augers allow for dust free component addition. Oil can be added up to 5%.

Technical Specification at a glance:

- Production capacity of 4 to 12 tonnes
- Mixing accuracy of 1:100,000
- Mixing auger with 400mm diameter
- Several discharge points can be added
- Short mixing time
- Add up to 5% oil
- Dust free component addition
- Motor with 1,000 rpm
- Suitable for commercial use
- Exact electronic weighing (optional)

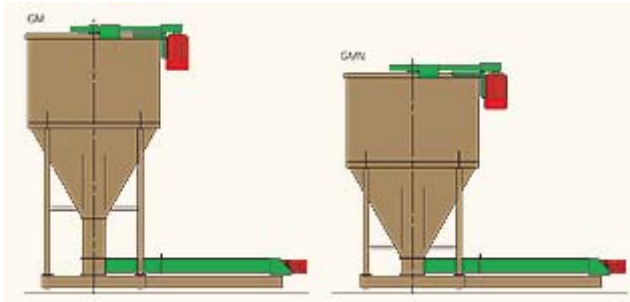
A solution for every problem!

Buschhoff produces an extensive range of equipment which, when added to a Buschhoff feed mixer, offers an efficient and effective milling solution for agricultural or commercial use.

For example, you may consider oil or acid pumps. The BTS150 intake auger, up to 4m in length, allows an intake capacity of up to 200kg per minute. The BTS200 intake auger, up to 7m in length, will even go up to 400kg per minute. Weigher frames and motorised discharge slides finish the package off!



Mill and Mix plant with a GM type feed mixer.



Mixer Type	GM1	GM2	GM3	GM4
Capacity (m3)	8	12	16	21
Production capability (kg) (at SpWt of .06t/m ³ .)	4,8	7,2	9,6	12,6
Electric Motor (kW)				
Build type GM	5,5	7,5	11	11
Build type GMN	5,5	5,5	7,5	11
Total Height H (mm)				
Build type GM	4600	5250	6000	7100
Build type GMN	3600	4250	5000	6100

The newest technology guarantees the best results!
With WIDOMIX© or MOLARUS© your feed will always reach the right destination!



At the very heart of efficiency!

Buschhoff equipment not only ensures the very best mill and mixing, it also guarantees a fast and reliable discharge to where you want it to go.

As an example, Buschhoff offers conveying equipment such as elevators, pipe and trough augers as well as spiral conveyors. Motorised 2 way valves and discharge slides allow silos to be filled automatically. Pneumatic conveying enables feed to be transported problem free, without mixing.

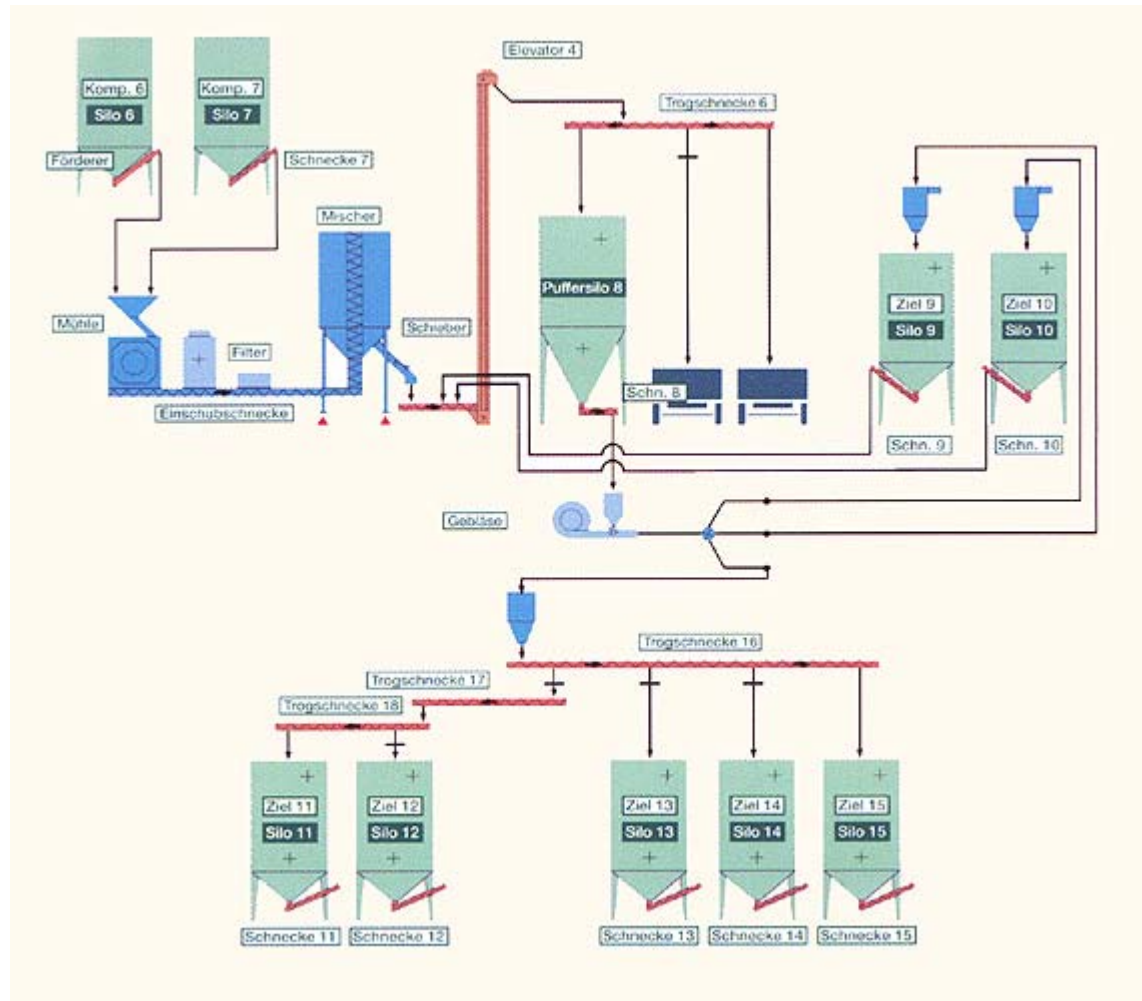
For pneumatic conveying Buschhoff has developed the SG 50F Type Feed Blower. It can be used to convey up to 200m. Capacity is dependent upon the length of the pipe but can be up to 3 t/h. Our computer control panel ensure optimal conveying performance. The grain will be carefully and economically moved since the blower works under pressure and therefore saves energy. (like silo tankers)The equipment comes with maintenance information, air filter and pressure gauge.

The equipment comes with maintenance information, air filter and pressure gauge.

An empty indicator in the intake device minimises the risk of production stand stills. The rotary manifold for 3 pressure lines, which can also be motorised for automatic destination ordering, as well as the swing-type check valve in the connections completes the performance!

Technical Specification at a glance:

- Conveys up to 200m
- Conveys up to 3 t/h dependent on the conveying length
- 4kW blower
- Star feed rotary valve in moulded housing
- Maintenance information for air filter
- Pressure gauge
- Empty indicator in intake device
- Rotary manifold for 3 pressure lines (optional)



Cutting edge technology that is easy to use

MOLARUS, the intelligent computer control for your plant

Save time and increase output with the fully automated MOLARUS milling programme, only from Buschhoff

Our wide range of economical and efficient equipment can be complimented with an intelligent computer control unit to create a fully automated plant. The control unit is particularly easy and safe to use. It saves time and money and, more importantly, provides absolute reliability under the toughest of conditions.

MOLARUS is extremely easy to use through a keypad control. The large, well lit display makes the unit comfortable to use. The newest technology gives utmost reliability and protection against power surges.

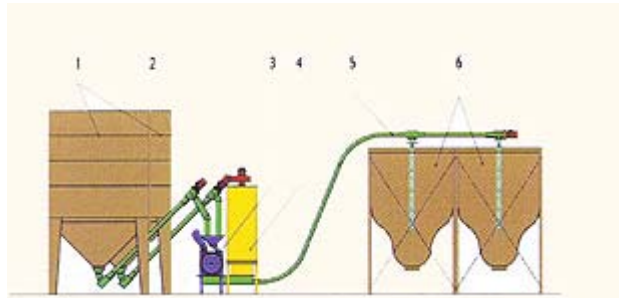
More money through intelligent technology

MOLARUS has an electronic load control with switch off on empty which enables optimum energy use and can save up to 50% power. Start and stop times are programmable enabling you to make the most of cheap rate electricity.

MOLARUS can also be used with existing equipment. You do not have to buy new milling equipment to enjoy the benefits of MOLARUS.

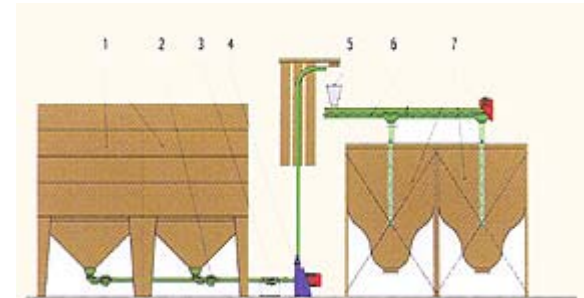
Our special alternating milling programme allows you to programme several components to be mixed into a finished feed.





- | | |
|---------------------|----------------|
| 1. Component Silos | 4. Autofilter |
| 2. Pipe Augers | 5. Conveyor |
| 3. BHOS Hammer Mill | 6. Grain silos |

Kruppstraße 44 - 59227 Ahlen
 Tel. +49 (0 23 82) / 80 84-0 - Fax +49 (0 23 82) / 80 84-21



- | | |
|---------------------|--|
| 1. Component Silo | 5. Delivery Pipe with cyclone and filter |
| 2. Intake | 6. Trough Auger Conveyor |
| 3. Magnet Seperator | 7. Grain silos |
| 4. BHS Hammer Mill | |

WIDOMIX Mill and Mix Technology –
from 500 kg to 10t/h finished feed.

Our know-how guarantees your success!



WIDOMIX is a complete milling control system enabling load control, weighing, mixing and transportation of finished feed. The WIDOMIX computer will enable your mill and mix plant to be completely automated and will help you to produce highly nutritious feed especially made to suit the needs of your animals. With a choice of 70 components, our computer is able to mix 300 diets and to convey the finished feed product to 30 freely programmable destinations. As the computer is modular, it can be modified at any time to meet your requirements.

The menu driven system is unbelievably simple to use, and the easy to read, well lit LCD display gives a quick and reliable overview of all the functions and tasks. And with respect to safety, nothing is left to chance: the last mixing programme is recorded and the silos constantly monitored.

Our high specification computer means that our equipment is Quality System compliant.

8 separate LUPUS weighers can be used with the WIDOMIX system. This means that even small quantities can be dosed exactly using separate weighers.

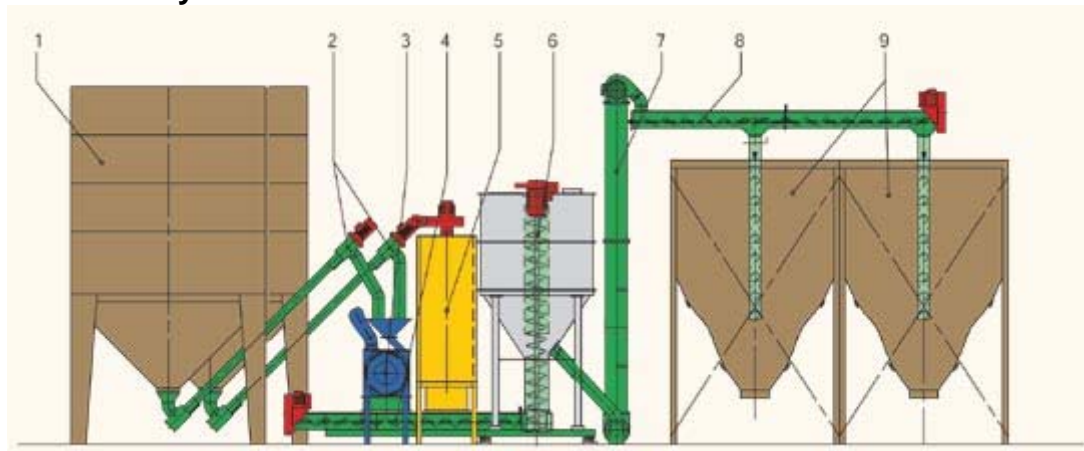


The WIDOMIX system enables you to produce feed to your exact requirements.

A summary of the advantages:

- Integrated electronic load control
- Option of 2 mills
- Option of 8 weighers (to nearest 100g)
- Capacity to hold 300 diets
- 70 programmable components
- Empty Indicator enables automatic re-filling of destinations
- Simple menu driven operation
- Silo monitoring
- Overrun corrector
- Quantity balancer
- Mix recording
- Quality System compliant
- Digital LUPUS 500 weighers with separate display can be added if required
- Simple wiring as all switches are wired onto one terminal block
- A CAD wiring plan
- CAN Bus system than can be upgraded at any time
- PC programme (optional)
- Large weigher display (optional)

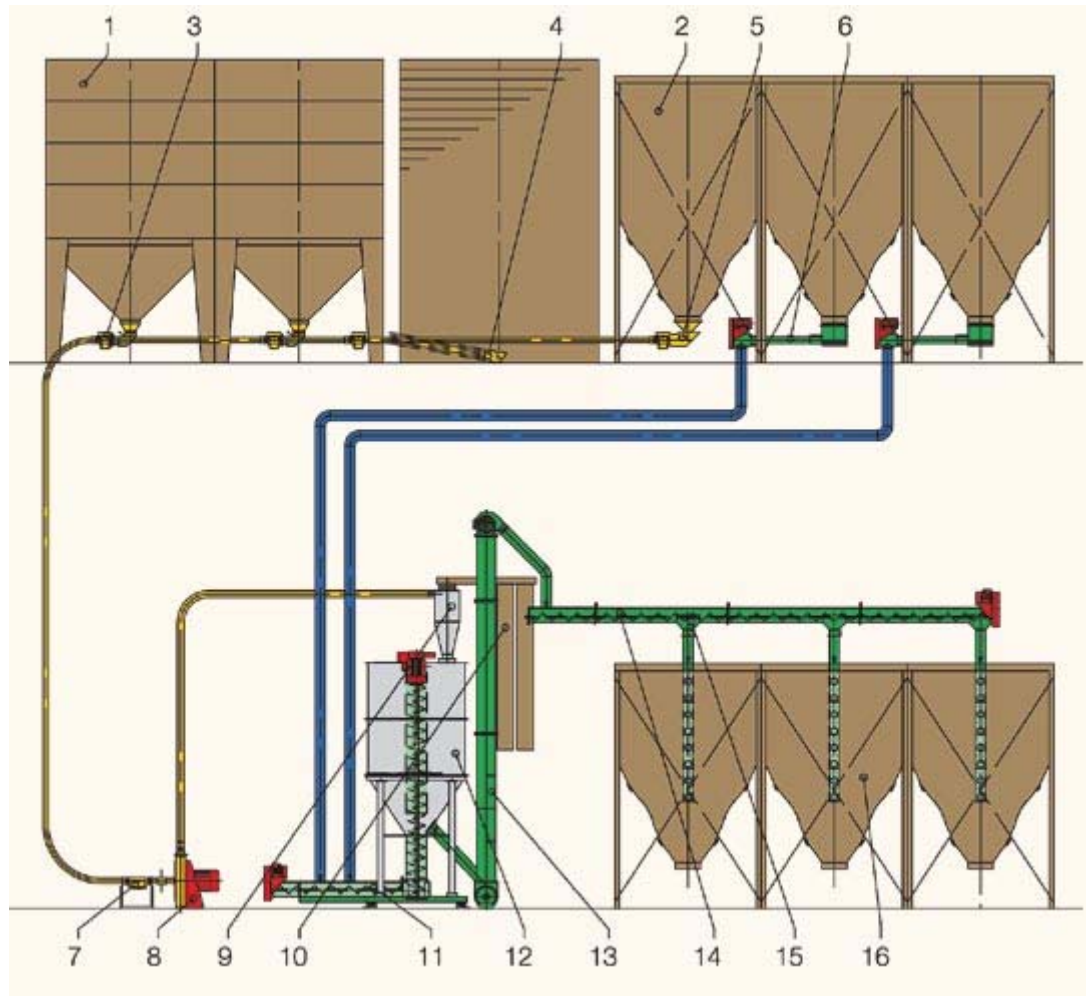
WIDOMIX system with BHOS Fanless Hammer Mill



- 1 Component Silos
- 2 Pipe Auger
- 3 BHOS Hammer Mill
- 4 Intake Auger
- 5 Autofilter

- 6 Feed Mixer
- 7 Chain Elevator
- 8 Trough Auger
- 9 Finished Feed Silos

WIDOMIX system with BHS Hammer Mill with fan



- 1 Component Silos
- 2 Flexi Silos
- 3 Intake EMD 80 S
- 4 Suction Pipe SRT 80
- 5 Intake EMD 80 TR
- 6 Component Auger
- 7 Magnetised extractor
- 8 BHS Hammer Mill

- 09 Cyclone
- 10 Filtersystem
- 11 Intake Auger
- 12 Mixer
- 13 Chain Elevator
- 14 Trough Elevator
- 15 Discharge with slide
- 16 Finished Feed Silos

