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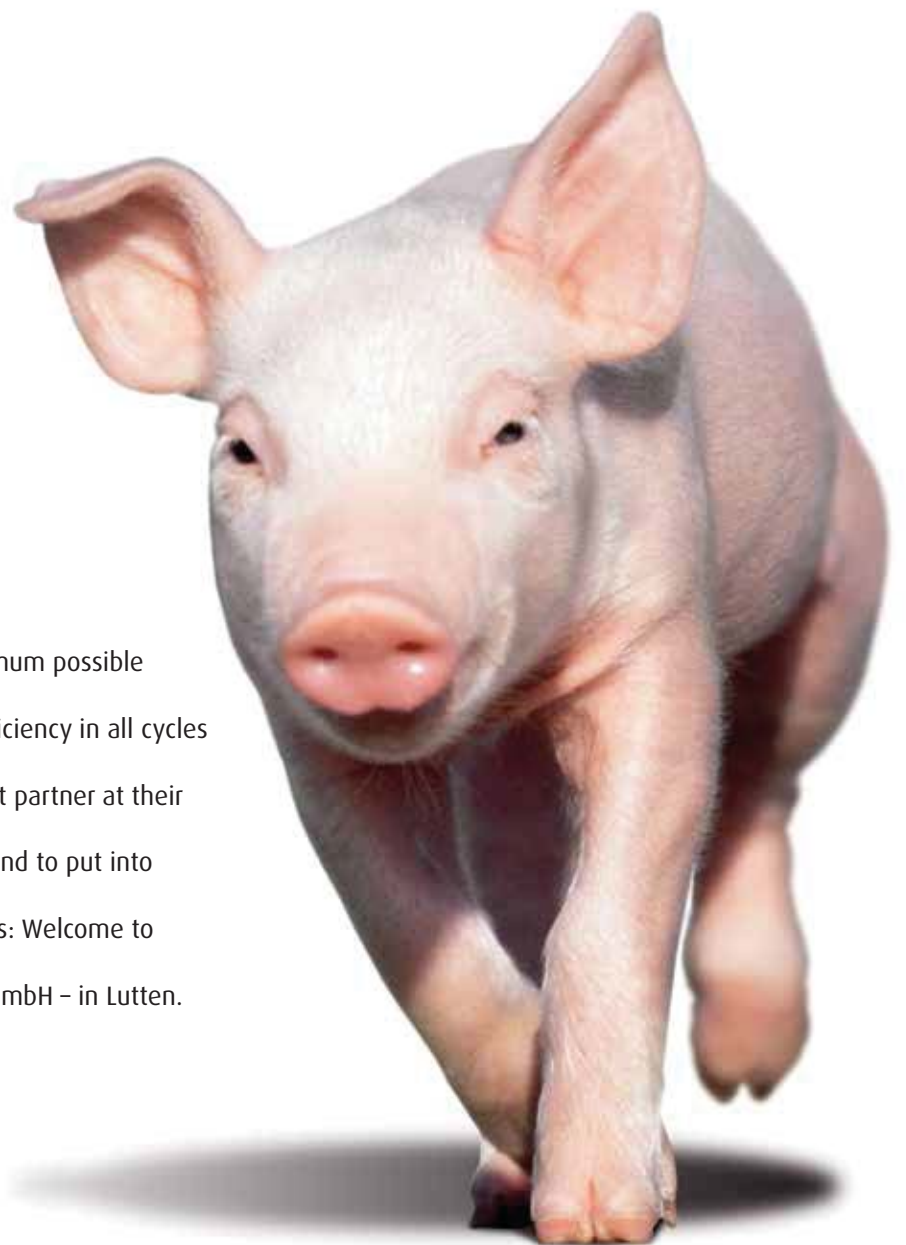
Product Portfolio



We care about pigs

We care about pigs.

Those wishing to aim for the maximum possible degree in quality and profitable efficiency in all cycles of pig production need a competent partner at their side – one who is able to develop and to put into practice made-to-measure solutions: Welcome to Weda – Dammann & Westerkamp GmbH – in Lutten.



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Weda No-Residue Feeding BW+

Made-to-measure solutions for your livestock

By means of the Weda Liquid Feeding System, large amounts of feed can be transported by circular pipeline over great distances within a very short time. With this system, small as well as large numbers of livestock will at all times be optimally provided for.



Characteristics

- » Reduction of costs as improved animal performance can be gained with same feed amount
- » Greatest hygiene security by Weda's hygiene package (Hy.Light, pH-Control, cleaning with alkaline, acid wash and many more; you will find details in our Hygiene Brochure)
- » Weda's own conception and in-house production and therefore extraordinary system security
- » Computer controlled, fully automatic operation and therefore minimization of labour input
- » Exact mixing and dosing of feed without residues (economical)
- » Greatest feed accuracy
- » Feeding of any component and exact supplementation of any kind of additive
- » Provision and control of all production sectors via a central control system
- » Tremendous efficiency due to state-of-the-art technology
- » Transport of large feed amounts over large distances without problems
- » Modular system – the components of the unit can be combined in a modular construction system
- » Optimal adaptation to any kind of animal house or pen
- » Feeding can be carried out by means of trough probes and predetermined feeding periods
- » By means of the liquid feeding system, all kinds of products can be fed out, therefore no exclusive limitation to grains as in dry feeding systems
- » Rationed feeding or ad lib principle is possible
- » Number of feeding periods is freely adjustable
- » Relief for humans and animals due to low formation of dust
- » Feeding with feeding time measuring of weaners, fatteners and sows
- » The mixing containers fit through any door

The size of the unit is irrelevant for Weda. We construct your feeding system in any size you wish – in accordance with your individual requirements.



Weda offer highest feeding accuracy for any type of unit.



In case of very large distances between feed preparation and animal location, feed provision takes place via satellite preparation room.

Weda No-Residue Feeding BW+

Always on the safe side

The integrated Weda Hygiene Package guarantees optimal hygiene security. Hy.Light, pH-Control, cleaning with alkaline and acid wash are reliably fighting bacteria and germs inside the feeding unit. Due to this, animal losses are clearly reduced.



Weda Liquid Feeding Systems are perfectly suited for any unit size.



The individual components of Weda liquid feeding systems can be easily combined with each other.



The Double Feed System enables problem-free feeding of sows, fattening animals and piglets.



Weda liquid feeding units can be flexibly installed in almost all rooms of any size.



The Weda systems allow the smooth mixing and dosification process of even smallest amounts of feed.

Nutrix+, the Suckling Piglet Feeding System

Optimum Feeding for the small ones

Nutrix+ is a fully automatic sensor controlled liquid feeding system for the additional supportive feeding of suckling piglets during the first days after farrowing.



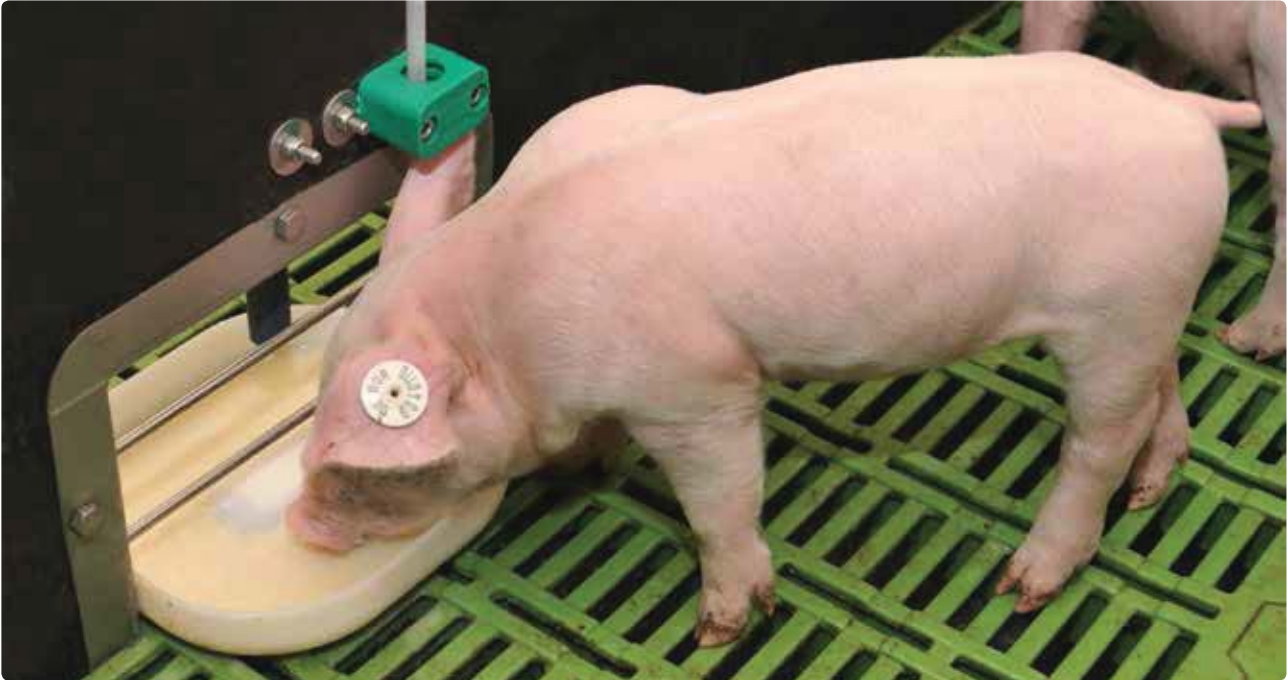
Feed Preparation



Switching cabinet with Touch Panel

Characteristics

- » Dosification of smallest amounts of only 30-40 g per trough dosification
- » Feeding of sows' milk via prestarter to weaning feed
- » Modular expandability enables upgrading of up to three mixing containers and allows the use of various feed mixes
- » One computer provides 600 farrowing places around the clock without any problems. Overnight, the suckling piglets take in 40-50% of the feed.
- » Control and operation by means of Touch Panel
- » Adapted to the growth of the suckling piglets
- » The digestive tract of the suckling piglets slowly becomes accustomed to piglet feed 1 (weaning feed)
- » Automated, computer-controlled possibility of individual adjustment of mixing temperatures
- » Sensor feeding: a „full“ report already takes place at 0.07 l filling capacity
- » A special pneumatic method enables emptying of the lines back into the dosification container
- » Maximum state of hygiene due to the proven cleaning method of an acid / lye rinsing
- » Considerably reduced workload in the management of large litters as the system can be fully automatically operated and remote-controlled.
- » Special double troughs with grids ensure permanent social contact of the piglets between two pens.
- » Rounded plastic trough with an isle where the feed always gathers in the front. This way, the piglets can feed directly without climbing into the trough; the residues are clearly reduced.
- » Suckling piglets will be unable to lie down in the trough
- » Trough only protrudes 7 cm into the pen
- » No dead corners at the trough
- » Optional: tilting trough of high-grade steel available
- » Over 1 kg more weaning weight and at least 3 kg more in fattening will be possible per piglet
- » Protection and relief of the mother sow due to sow losing less weight. Thus, condition and fertility of the sow are improved
- » Lower piglet losses
- » Guaranteed animal provision also in cases of large litters
- » Partly more than 100 feedings per day



The pale special troughs of plastic with a centrally placed isle make entering and lying down an impossibility.



Alternatively, a tilting trough can also be installed into the pen. Due to its tilting function, the trough can be easily cleaned.

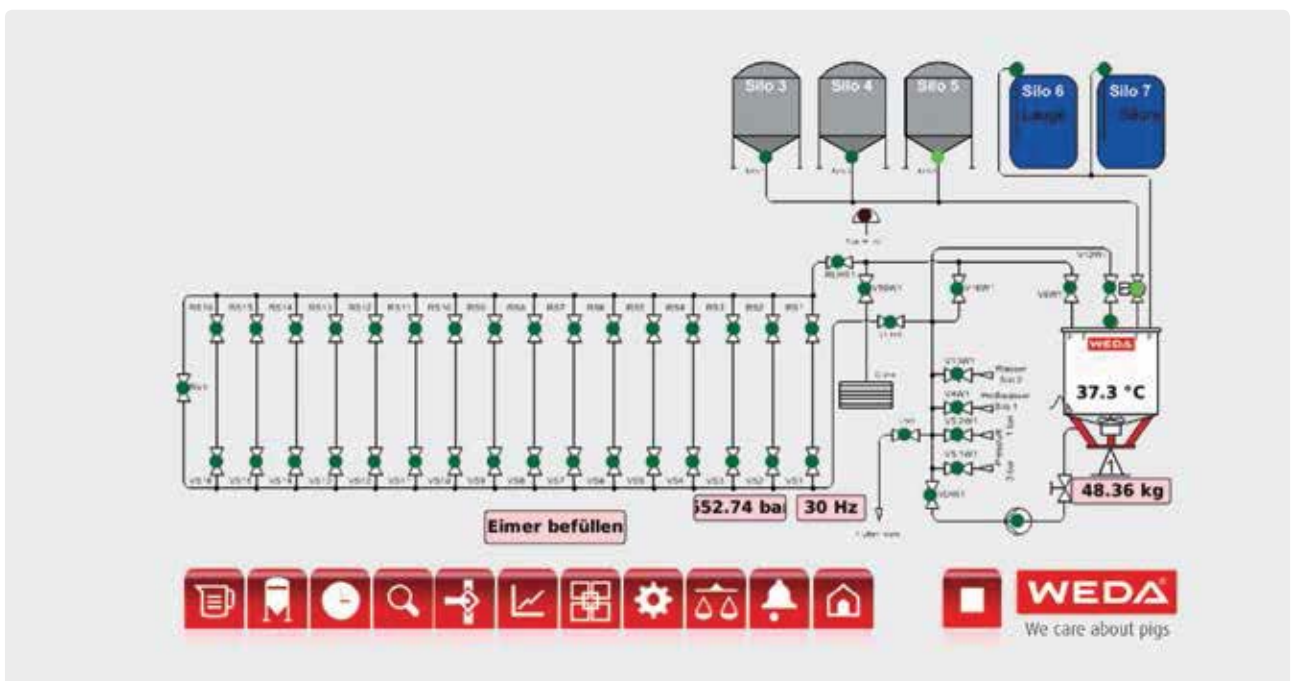
Nutrix+, the Suckling Piglet Feeding System

Relief of the Mother Sow

Higher litter numbers demand larger amounts of milk from the mother sow, who will not always be able to produce such amounts. Nutrix+ ensures relief for these sows as it supports them in the feeding of suckling piglets.

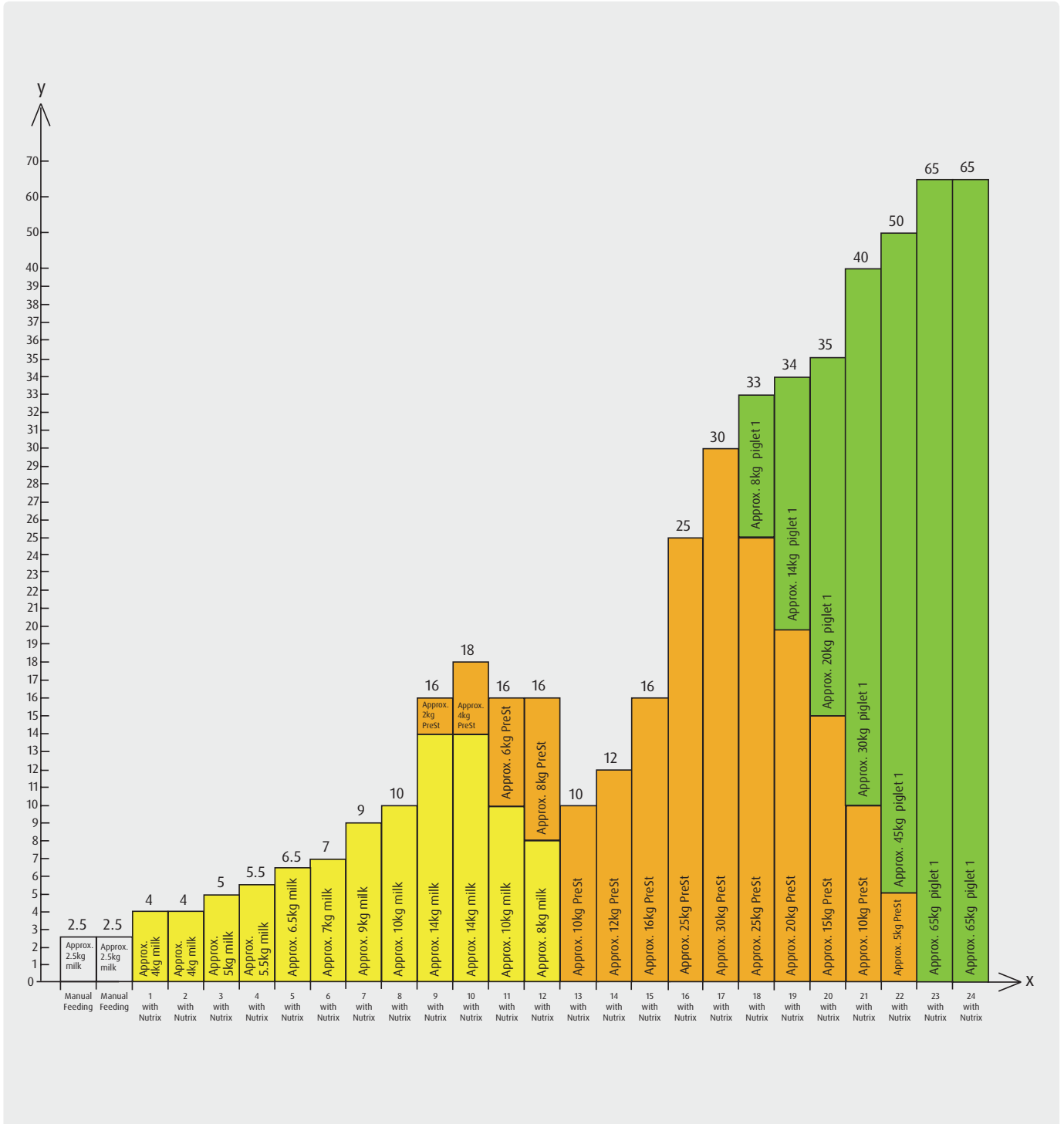


Best provision for piglets with Nutrix+



Unit Visualization

Feed consumption Suckling Piglet Feeding System Nutrix+ (650 suckling piglets at on-road test)



Index:

- Milk = piglet milk
- PreSt = Prestarter
- Piglet1 = piglet raising feed 1

x = time (in days)
y = feed amount (in kg)

Feed dosificator FD100 / FD200 / FD600 for Nutrix+

Quick and easy dosification

The feed dosificators FD100, FD200 and FD600 ensure quick and easy dosification of the feed in the mixing tank of the suckling piglet feeding system, Nutrix+.



Characteristics

- » Inlet hopper with attachment
- » Contents FD100: approx. 100 ltrs
- » Contents FD200: approx. 200 ltrs
- » Contents FD600: approx. 600 ltrs
- » Drive: 0.75 kW
- » 6m feed screw
- » Diameter of pipe: 75 mm

Feed dosificator FET600 for Nutrix+

Reliable dosification

The feed inlet hopper FET600 ensures smooth and continuous conveying of dry feed to the suckling piglet feeding system Nutrix+.



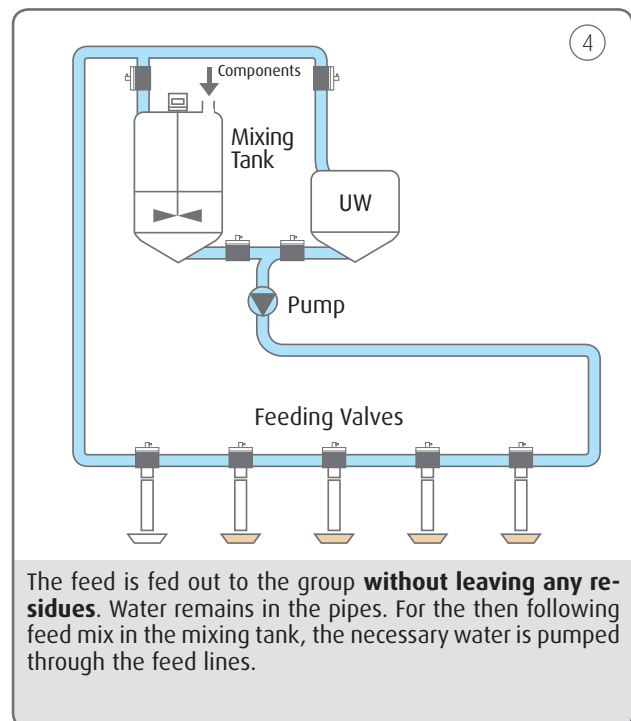
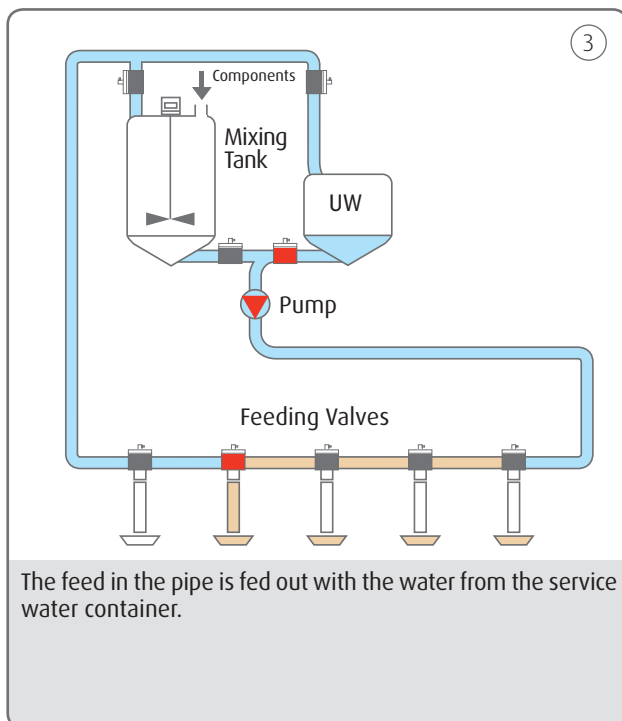
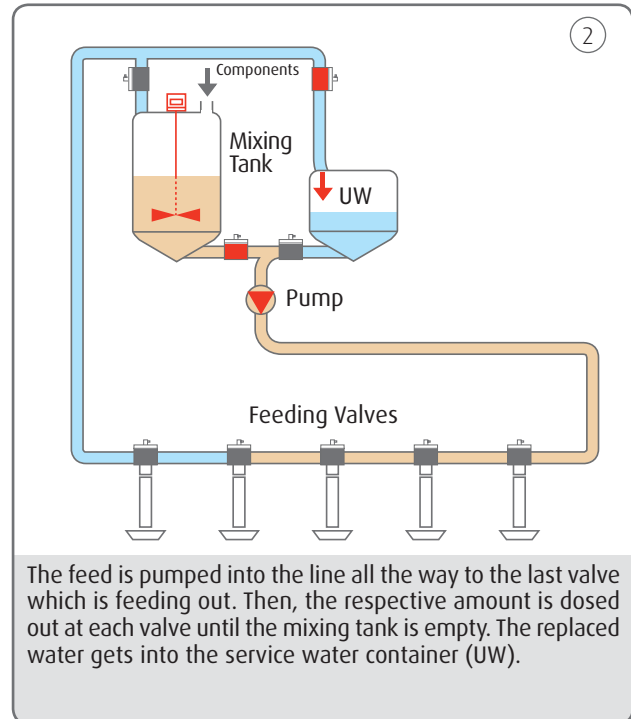
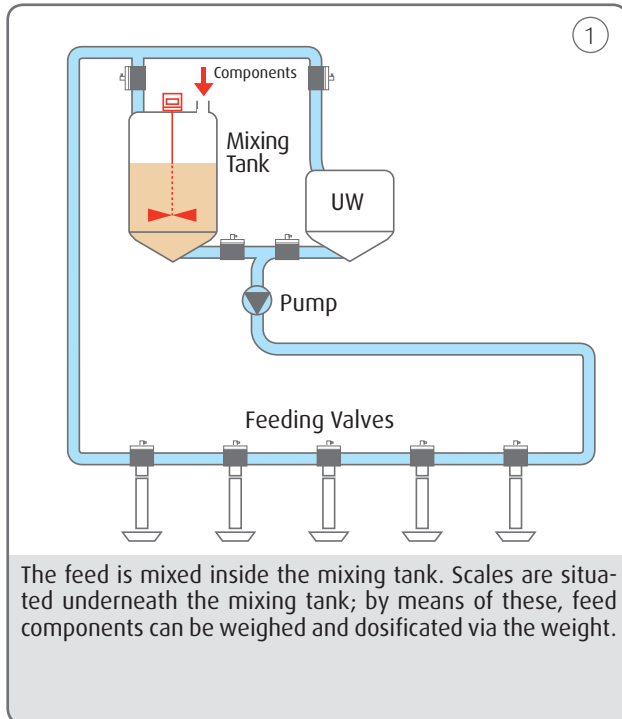
Characteristics

- » Feed inlet hopper with surface mounted box of high-grade steel
- » Surface mounted box with protection grid
- » Contents approx. 600 ltrs.
- » Dosification by means of chain conveyer 60mm
- » robust
- » Even conveyance
- » Complete emptying
- » No formation of bridges



Weda No-Residue Feeding BW+

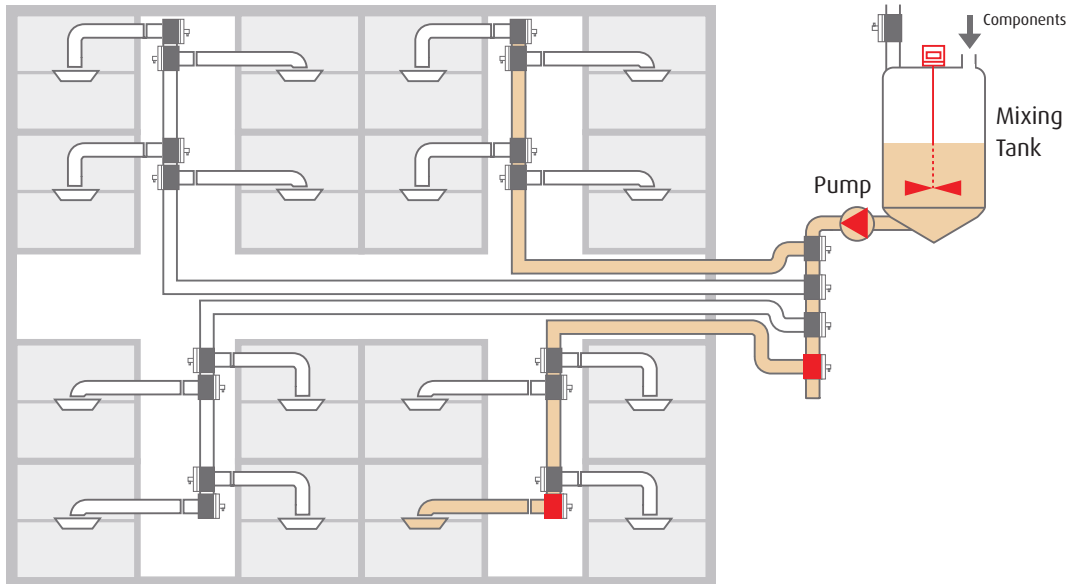
Working Method of the Non-Residue Feeding System (Closed Circular Pipeline):



Spur Line

Optimal for small animal houses

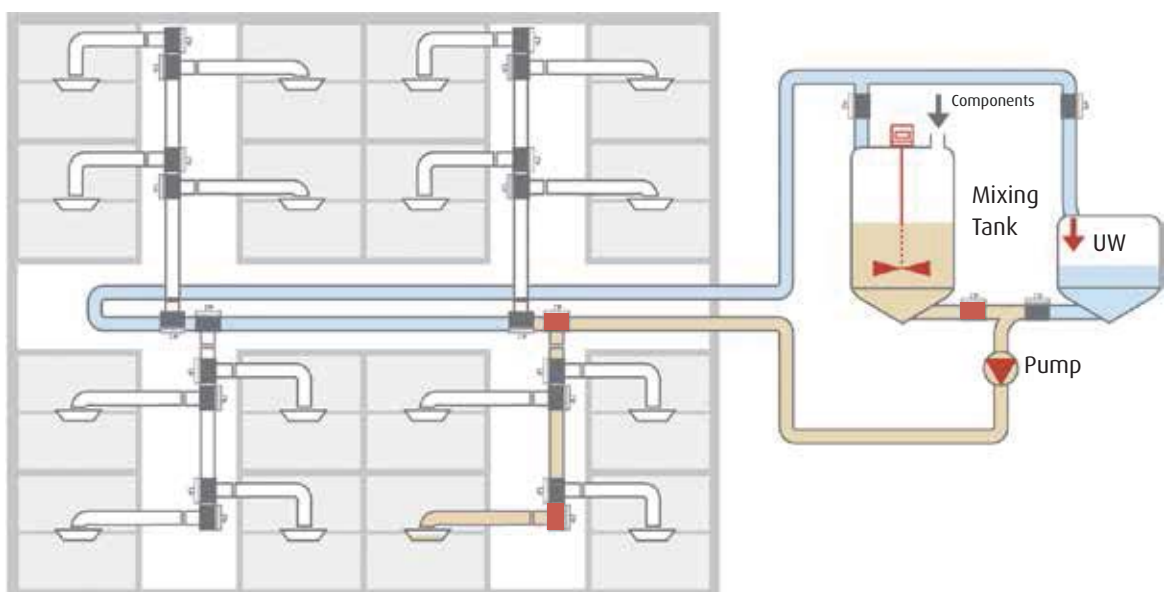
By means of this system, each division can be specifically controlled via its own feed line. With the last feeding of the day, water can be fed out into the stubs so that no feed residues remain in the pipe during the night.



Ring Circuit Combined with Spur Lines

Ideal for larger animal houses

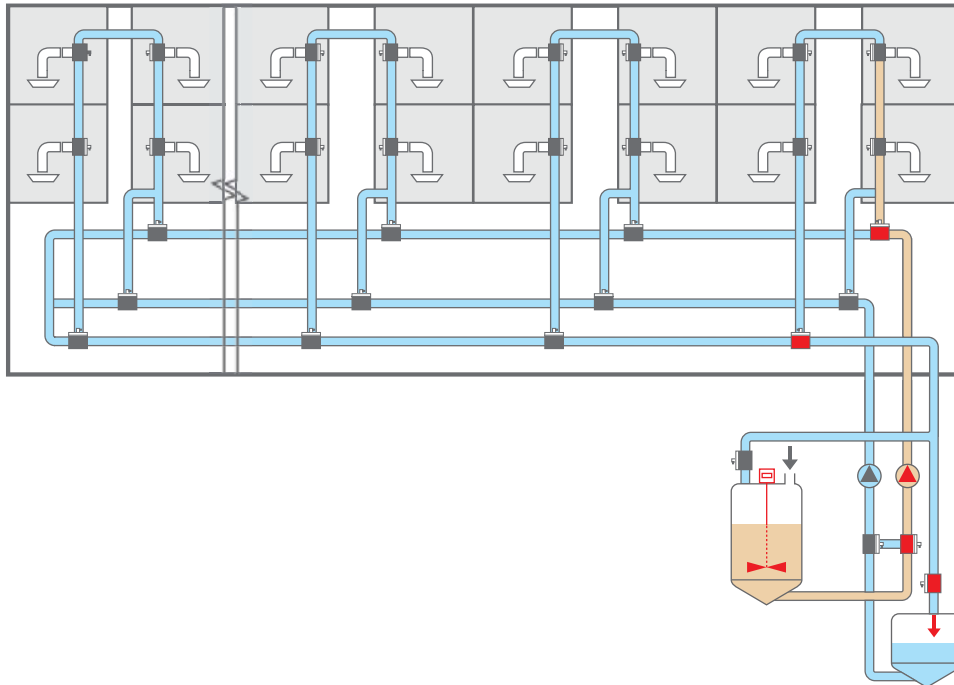
With this solution, larger animal houses with many divisions can be provided for without any problems. Feed paths can be clearly shortened and consequently costs of material can be saved. Additives can be simply injected into the spur pipe.



FastLine

Sophisticated technology right to the last valve

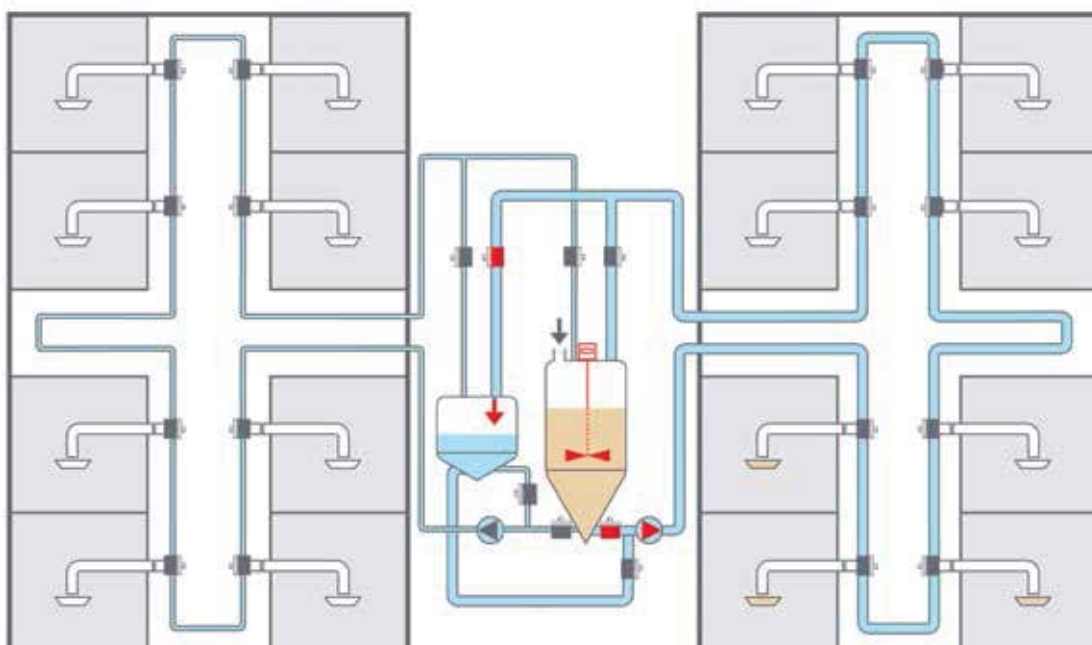
A separate service water line in the connector enables an optimal and considerable faster forward feed of the feed soup. The service water cannot only be switched over in the feed preparation, but also directly in front of the division!



Double Feed

The solution for all fields of production

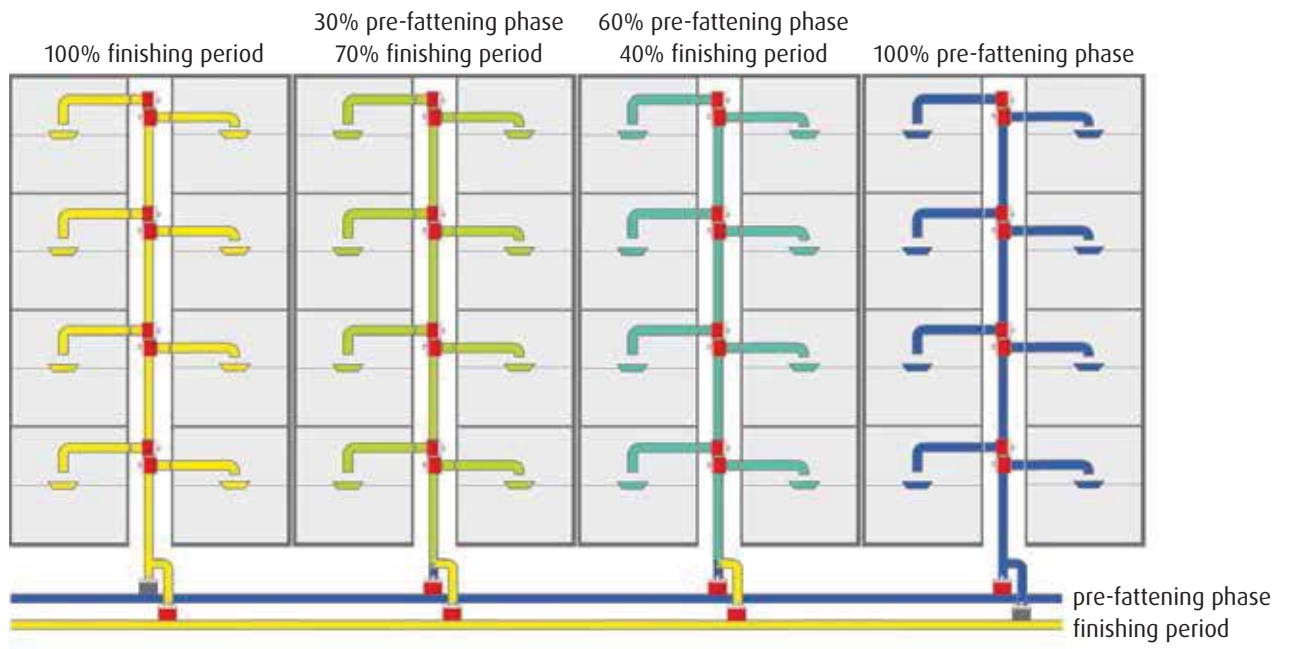
This system unites two liquid feeding systems in one mixing container. The container has a large connection for the feeding of sows and fattening animals as well as a small one for piglet feeding. This guarantees that no residual amounts of the feed of sows or fattening animals are fed out to the piglets.



Magic Feed

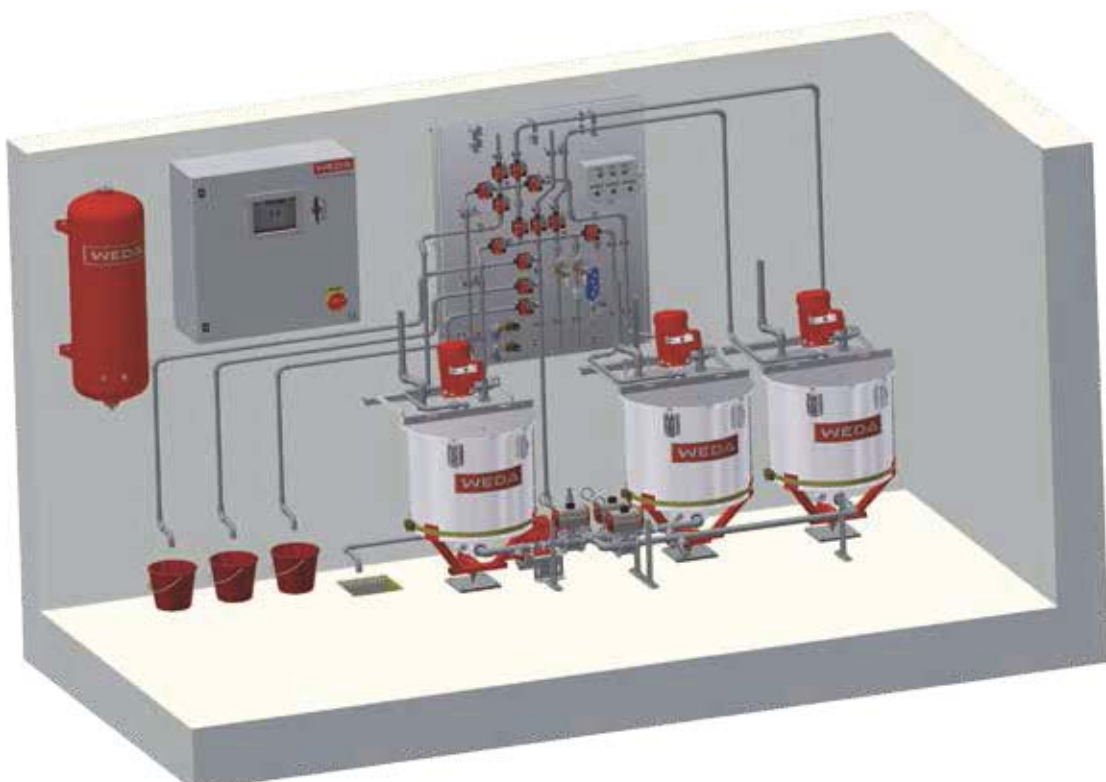
All feeding systems in one

Magic Feed is a feeding combination which unites multiphase, double pipe and stub feeding as well as non-residue feeding (via an additionally installed return flow). Pre-fattening and finishing feed can be fed out in various mixing ratios.

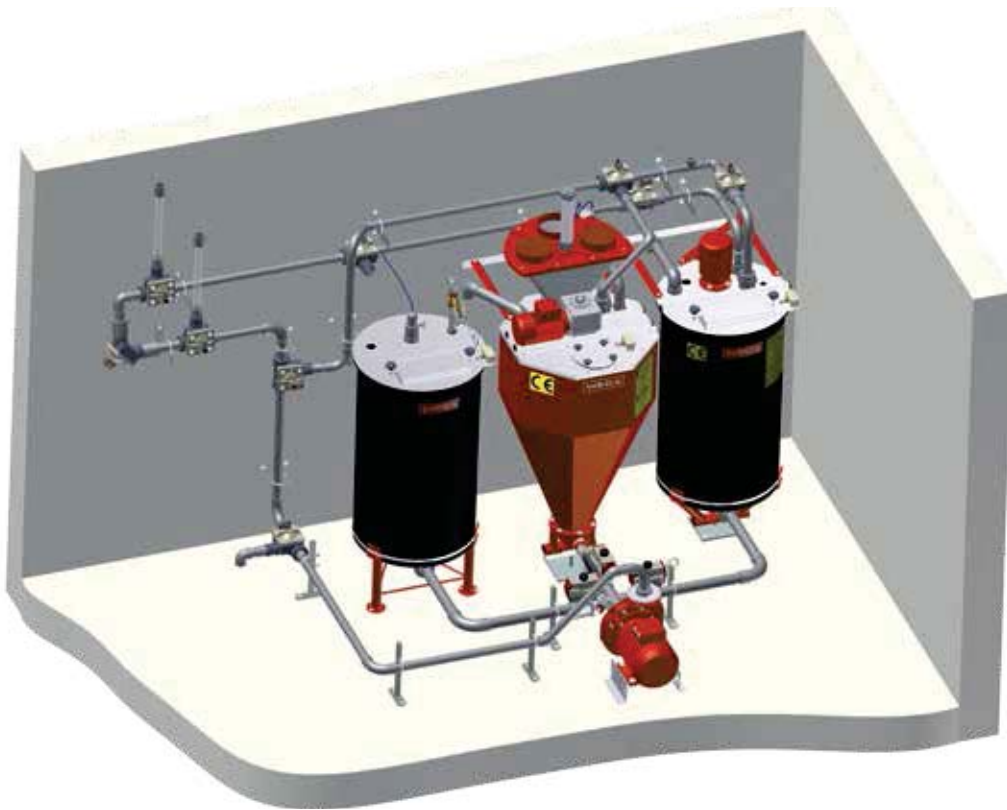


Example for a No-Residue Unit BW+

Nutrix+, the Suckling Piglet Feeding System



Conticomp-System for up to 1,500 piglets

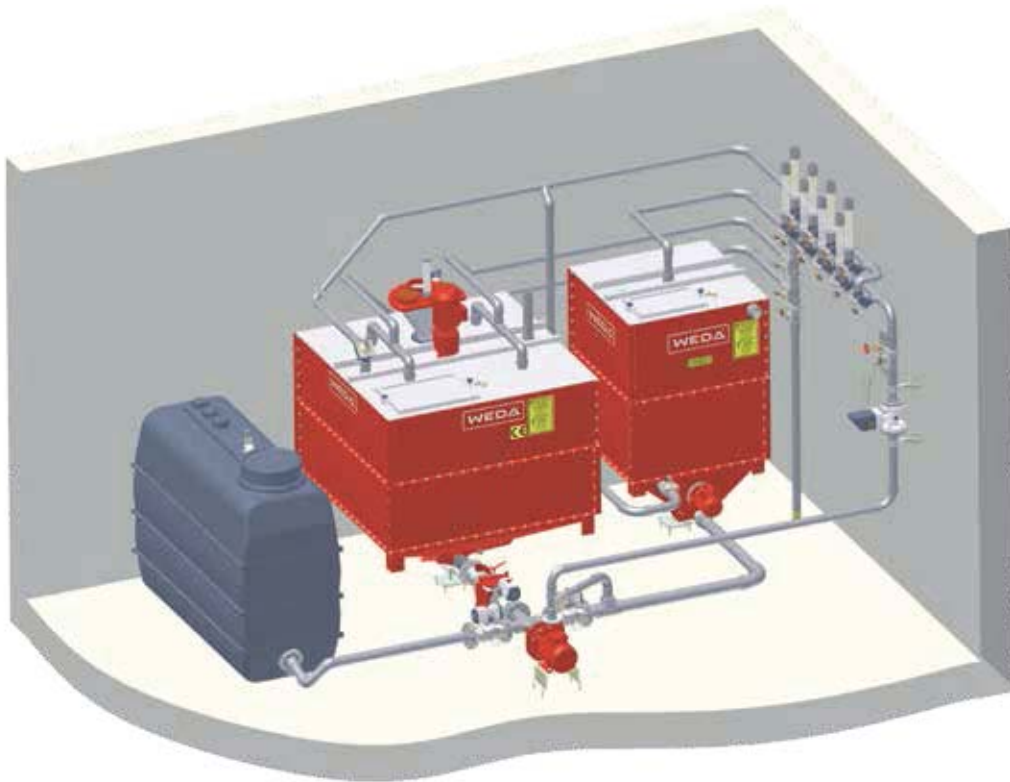


Double Feed System, e.g., for 150-sows' unit in a closed system

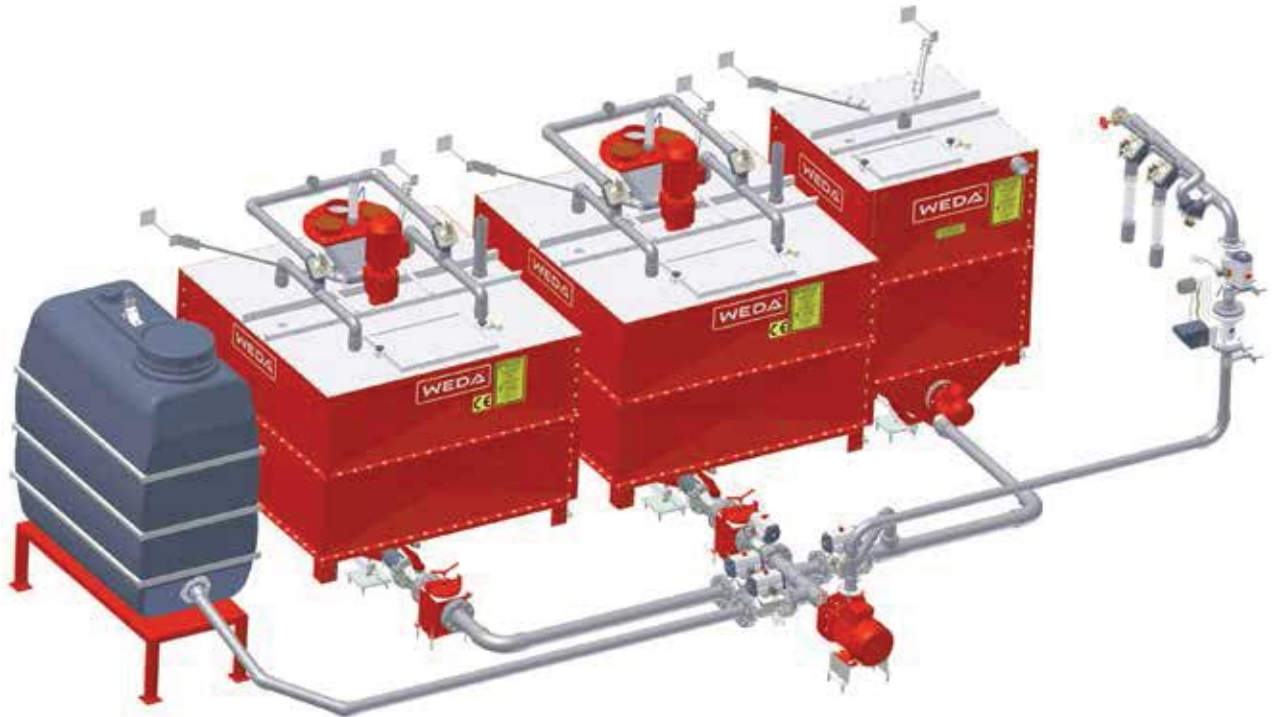


Unit Examples Liquid Feeding

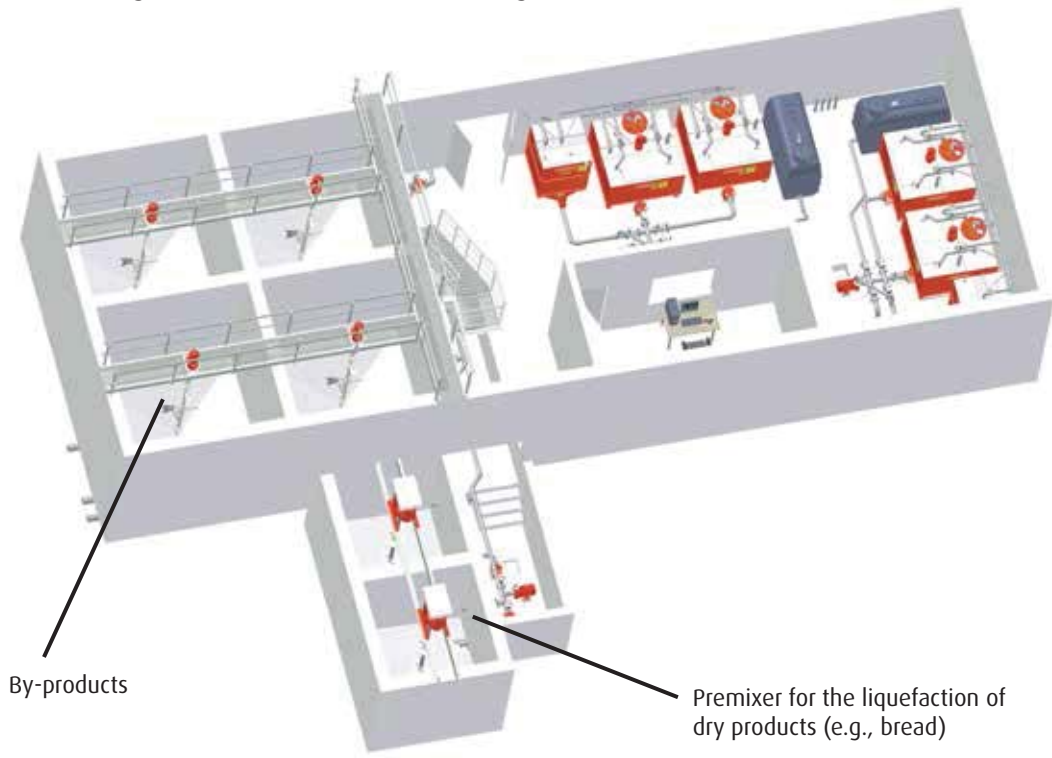
Non-residue feeding unit for up to 4,000 fattening animals



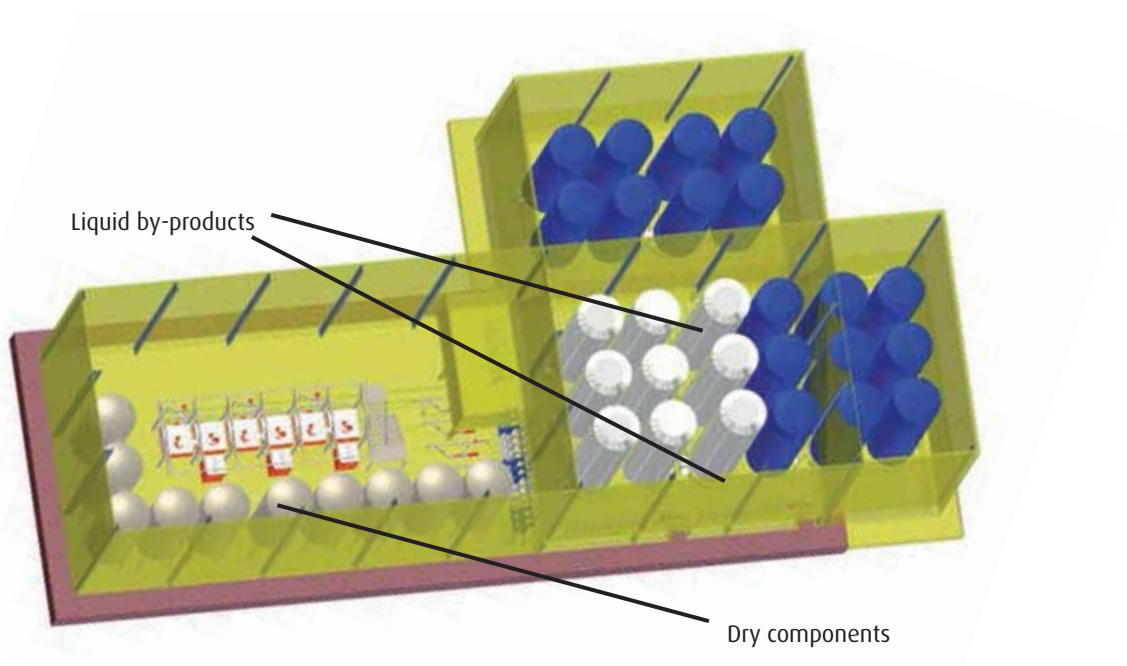
Unit with parallel working mixing tanks for about 4,000 to 8,000 fatteners



Non-residue feeding unit for about 10,000 fattening animals



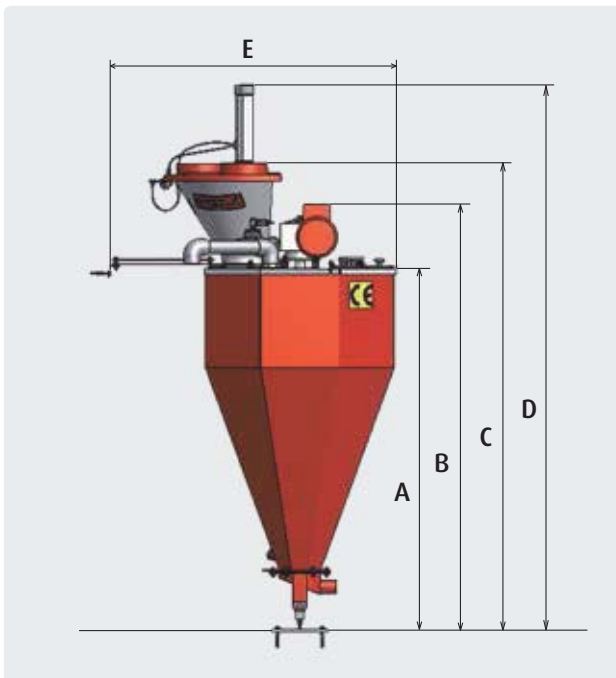
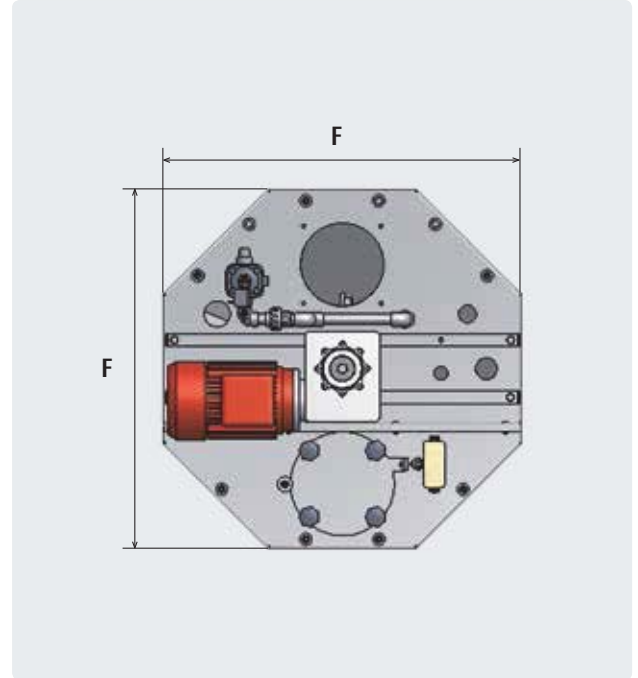
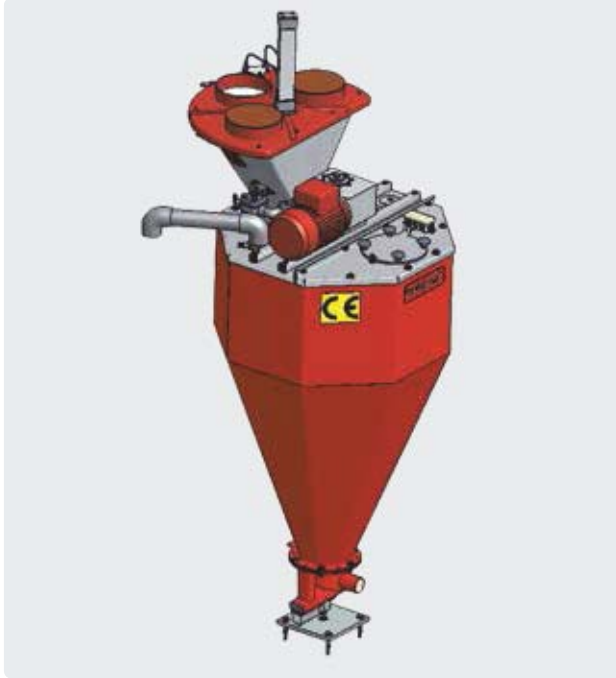
Unit for approx. 20,000 fatteners



Tank Type „Conticomp“

The liquid feeding tank for weaners

The Conticomp tank is ideal for a feed provision of your weaners which is in keeping with their needs and which is hygienically safe. Smallest flowing feed amounts can be mixed without any problems.



Characteristics

- » For liquid feeding of weaners of up to 1,500 animals
- » Mixing and feeding out of smallest flowing feed amounts of 5kg only and also of maximum mixing amounts of 150kg is possible
- » Ideal for weaners of 6 to 35kg
- » Conticomp-System is permanently furnished with Hy.Light, pH-control, alkaline cleaning and acid washing
- » Maximal strand length to the last dosification valve: 75 m with a 32-conduct; 100 m with a 40-conduct
- » Combination with already existing liquid feeding units possible
- » Optional: pre-assembly on frame

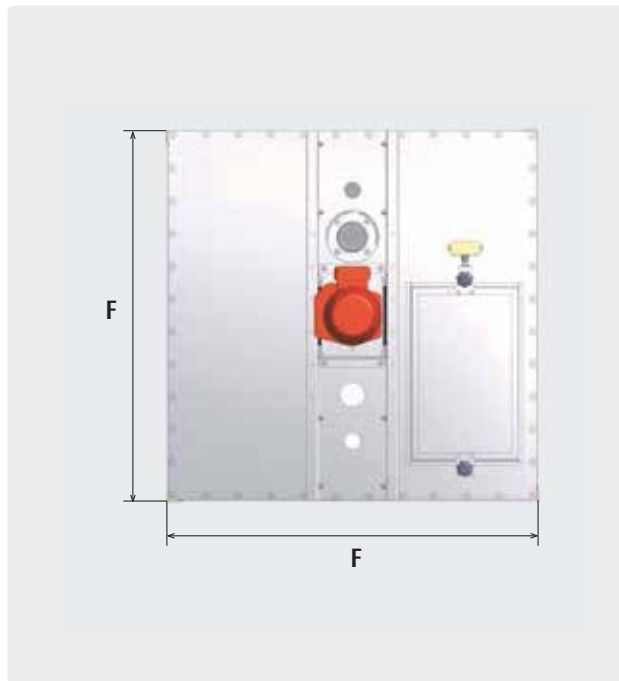
	A	B	C	D	E	F
Measurement (mm)	1,335	1,565	1,710	1,990	1,048	688



Tank Type „QXS“

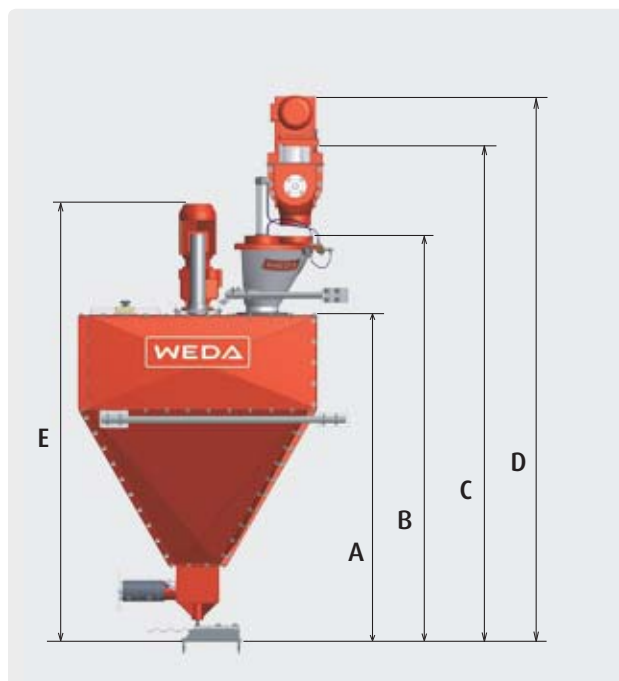
The little one for large-scale houses

By means of the QXS tank, piglets as well as sows and fattening animals can be fed by using different conveyor cross-sections. The cuboid “sump” underneath the container makes this possible.



Characteristics

- » 2 pump-driven cleaning nozzles
- » Cleaning nozzles are resistant and do not clog up
- » Equipped with Agitator Type “MSE” of high-grade steel.
- » Minimal mixing amount: approx. 15-20kg
- » High-grade steel tanks are clean, robust and extensible
- » Additional installation of ultraviolet light for the destruction of germs and bacteria
- » The cuboid “sump” underneath the tank enables smallest mixing amounts
- » Available with outlet 90, 50 or combined
- » Modular construction method
- » 1-point weighing
- » Stirs even underneath the ground bearing

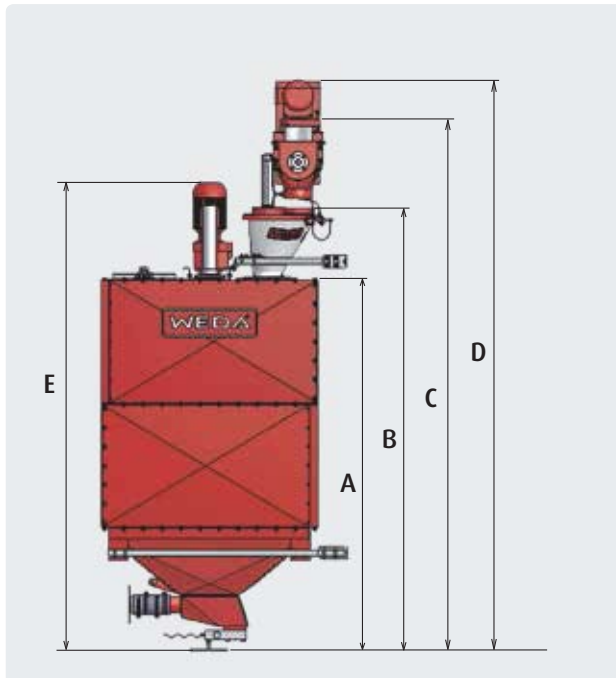
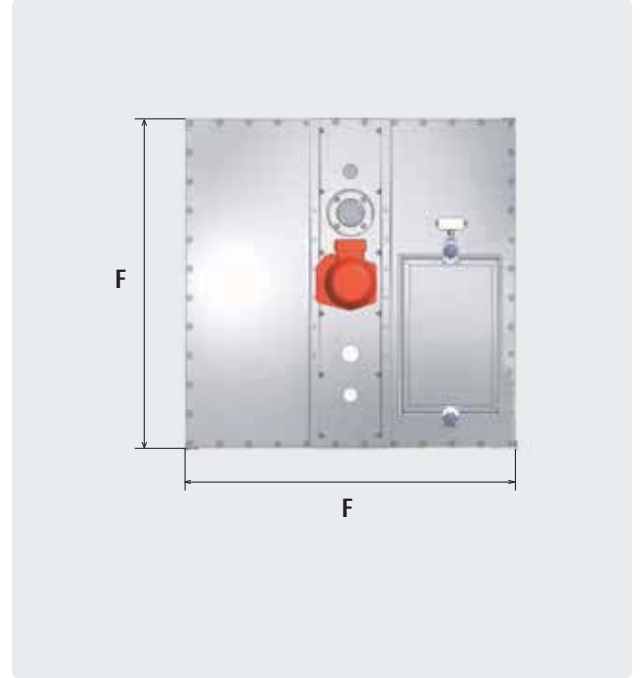


Cubic Capacity/ltr.	650	900	1,150	1,400	1,650
Measurement A (mm)	1,565	1,765	2,015	2,215	2,415
Measurement B (mm)	1,940	2,140	2,390	2,590	2,790
Measurement C (mm)	2,375	2,575	2,825	3,025	3,225
Measurement D (mm)	2,610	2,810	3,060	3,260	3,460
Measurement E (mm)	2,095	2,295	2,545	2,745	2,945
Measurement F (mm)	1,140	1,140	1,140	1,140	1,140
Agitator blades	1	1	1	1	2
Drive (kW)	1.5	1.5	1.5	1.5	1.5

Tank Type „QS“

Our mixing tanks fit through any door

The square mixing tank type „QS“ of top-quality high-grade steel is installed on-site. Fast installation as well as simplified transport are saving costs.



Characteristics

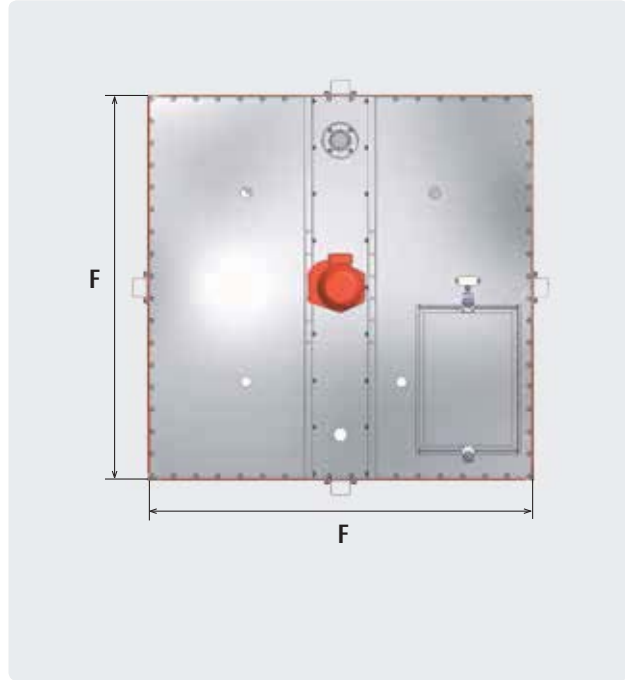
- » 2 pump-driven cleaning nozzles
- » Cleaning nozzles are insensitive and do not clog
- » Equipped with agitator type „MSE“ of high-grade steel. Agitator blades individually adjustable in height and inclination
- » Minimal mixing amount: 40kg
- » High-grade steel tanks are clean, stable and extendable
- » Additional installation of an ultraviolet light for the killing of germs and bacteria possible
- » Square construction ensures favourable stirring effect
- » 1-point weighing, 4-point weighing possible on demand

Cubic Capacity/ltr.	500	750	1,000	1,250	1,500	1,750	2,000
Measurement A (mm)	1,105	1,305	1,560	1,760	1,960	2,215	2,415
Measurement B (mm)	1,485	1,685	1,940	2,140	2,340	2,595	2,795
Measurement C (mm)	1,915	2,115	2,370	2,570	2,770	3,025	3,225
Measurement D (mm)	2,145	2,345	2,600	2,800	3,000	3,255	3,455
Measurement E (mm)	1,610	1,810	2,065	2,265	2,465	2,720	2,965
Measurement F (mm)	1,140	1,140	1,140	1,140	1,140	1,140	1,140
Agitator blades	1	1	1	1	2	2	3
Drive (kW)	1.5	1.5	1.5	1.5	1.5	1.5	2.2

Tank Type „QM“

We construct made-to-measure tanks

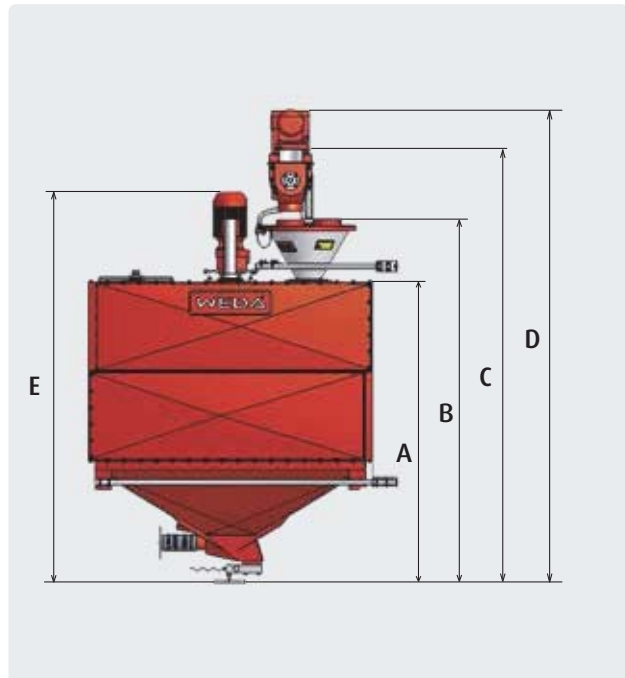
The top quality high-grade steel components of the mixing tank „QM“ can be transported for installation into the feed preparation - independent of local peculiarities.



Characteristics

- » 4 pump-driven cleaning nozzles
- » Cleaning nozzles are insensitive and do not clog
- » Equipped with agitator type „MSE“ of high-grade steel. Agitator blades individually adjustable in height and inclination
- » High-grade steel tanks are extendable
- » Additional installation of an ultraviolet light for the killing of germs and bacteria possible
- » Square construction ensures favourable stirring effect
- » 1-point weighing, 4-point weighing possible on demand

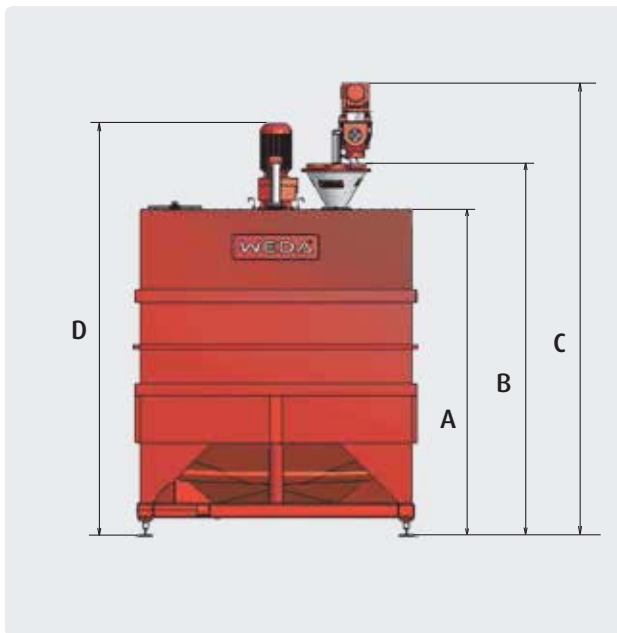
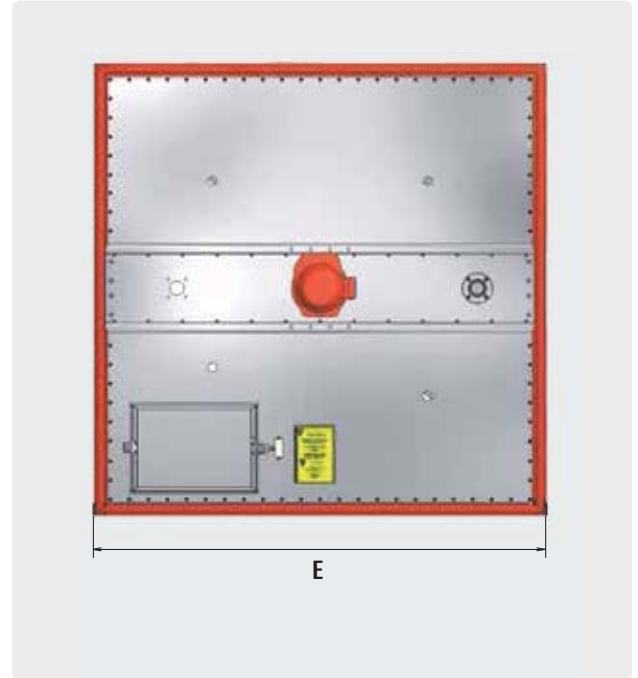
Cubic Capacity/ltr.	1,500	2,000	2,400	3,000	3,900	4,800	5,500
Measur. A (mm)	1,290	1,495	1,635	1,835	2,175	2,520	2,785
Measur. B (mm)	1,670	1,875	2,015	2,215	2,555	2,900	3,166
Measur. C (mm)	2,100	2,305	2,445	2,645	2,985	3,330	3,596
Measur. D (mm)	2,340	2,545	2,685	2,885	3,225	3,570	3,835
Measur. E (mm)	1,835	2,040	2,180	2,420	2,810	3,155	3,420
Measur. F (mm)	1,730	1,730	1,730	1,730	1,730	1,730	1,730
Agitator blades	1	2	2	2	2	3	3
Drive (kW)	1.5	1.5	1.5	2.2	3.0	3.0	3.0



Tank Type „Q“

Our tank for maximum amounts

Square, welded of top-quality high-grade steel, our mixing tank „Q“ offers space for maximum amounts. Up to 25,000 litres serially – and if you wish – more.



Characteristics

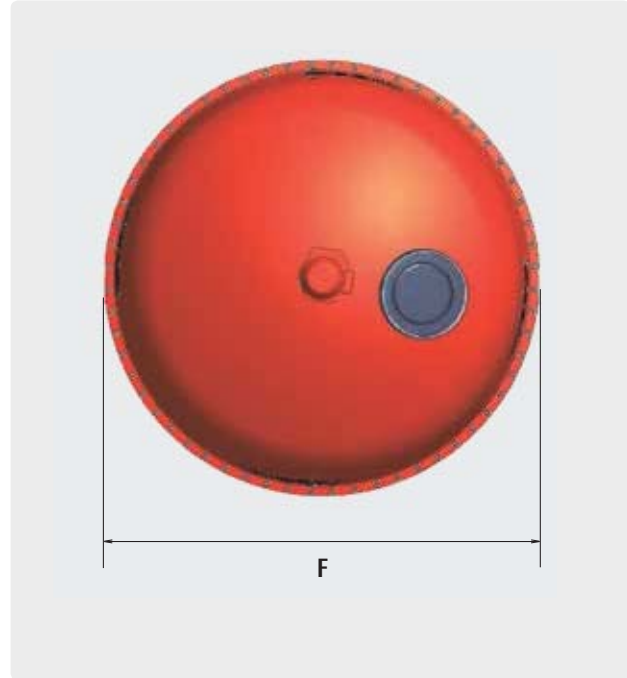
- » 4 pump-driven cleaning nozzles
- » Cleaning nozzles are insensitive and do not clog
- » Equipped with agitator type „MSR“ of high-grade steel. Agitator blades individually adjustable in height, width and inclination
- » Also suited for SS agitators
- » High-grade steel tank is clean, stable and extendable
- » Additional installation of an ultraviolet light for the killing of germs and bacteria is possible
- » Square construction ensures favourable stirring effect
- » For 4-point weighing

Cubic Capacity/ltr.	4,000	5,200	6,400	8,000	10,000	12,500	15,000	17,500	20,000	25,000
Measurement A (mm)	1,900	1,900	2,150	2,350	2,770	3,300	3,750	4,250	3,815	4,565
Measurement B (mm)	2,280	2,280	2,530	2,730	3,150	3,680	4,130	4,630	4,195	4,945
Measurement C (mm)	2,900	2,900	3,150	3,350	3,770	4,300	4,750	5,250	4,815	5,565
Measurement D (mm)	2,495	2,495	2,765	2,965	3,640	4,170	4,660	5,160	4,730	5,480
Measurement E (mm)	2,000	2,250	2,250	2,400	2,400	2,400	2,400	2,400	2,622	2,622
Agitator blades	2	2	3	3	3	3	4	4	5	5
Drive (kW)	3.0	3.0	4.0	4.0	5.5	5.5	7.5	7.5	7.5	7.5

Tank Type „GR“

An „All-Rounder“

The tank of type „GR“ is a round, stationary and closed mixing tank of fibreglass reinforced plastic.



Characteristics

- » Equipped with agitator type „MSR“ of high-grade steel. Agitator blades individually adjustable in height, width and inclination
- » Sizes of 1,000 to 6,200 litres cubic capacity
- » Depending on size and requirements, suitable for 1-, 3-, or 4-point weighing system
- » 2 cleaning nozzles operated via feed pump
- » Cleaning nozzles are insensitive and do not clog
- » Additional installation of ultraviolet light for the killing of germs and bacteria possible
- » Installed baffle plates ensure desired mixing effect
- » Reasonably priced alternative to high-grade steel containers

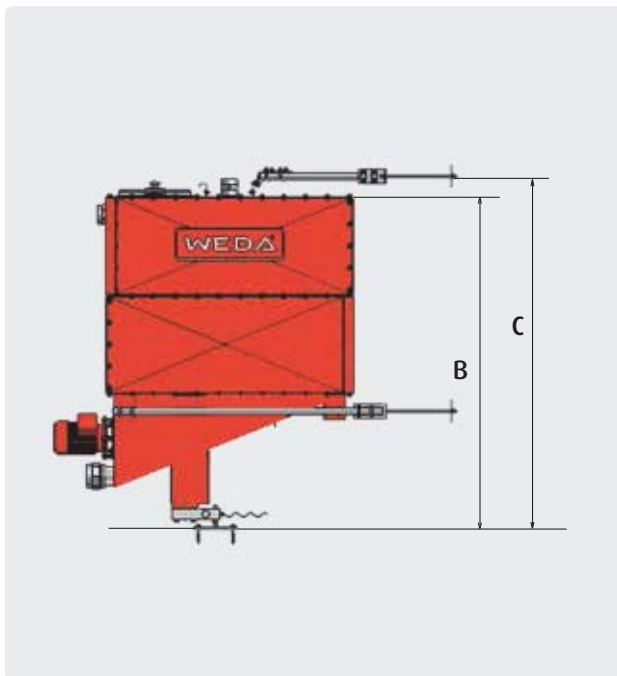
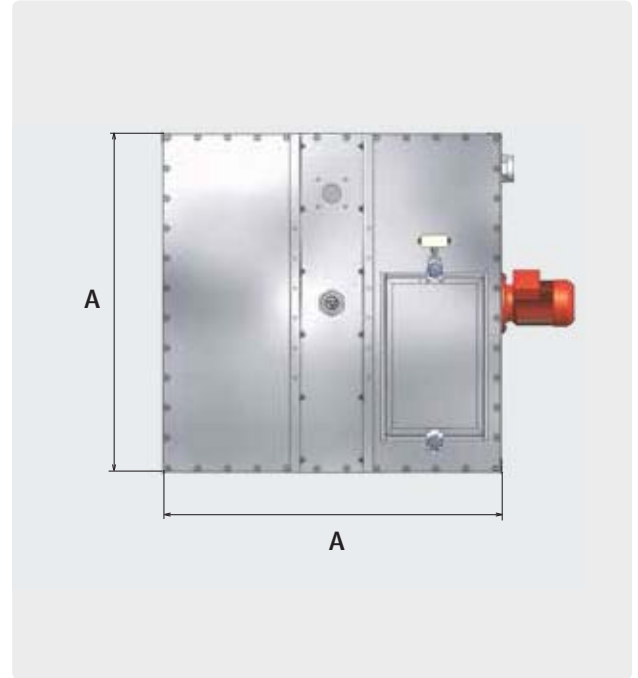


Capacity / ltr.	1,000	1,500	2,200	3,200	4,400	5,300	6,200
Measur. A (mm)	1,665	1,965	1,965	2,110	2,305	2,605	2,905
Measur. B (mm)	2,005	2,305	2,305	2,450	2,645	2,945	3,245
Measur. C (mm)	2,485	2,785	2,785	2,930	3,125	3,425	3,725
Measur. D (mm)	2,670	2,970	2,970	3,150	3,410	3,710	4,540
Measur. E (mm)	2,167	2,467	2,467	2,649	2,916	3,216	3,540
Measur. F (mm)	1,400	1,400	1,700	1,900	2,100	2,100	2,100
Agitator blades	1	2	2	2	3	3	3
Drive (kW)	1.5	1.5	1.5	2.2	3.0	3.0	4.0
Weighing	1P/3P	1P/3P	1P/3P	1P/3P	1P/4P	1P/4P	only 4P

Used Water Tank „BWS“

The ideal used water tank for your No-Residue Feeding System

The used water tank of high-grade steel is available in various construction sizes. Integrated cleaning systems ensure a high degree of hygiene.



Characteristics

- » Collecting tank of high-grade steel
- » Construction sizes of 500 up to 2,000 litres
- » A cleaning nozzle operated via feed pump
- » Cleaning nozzles are insensitive and do not clog
- » Additional installation of ultraviolet light for the killing of germs and bacteria possible
- » Problem-free installation of an additional agitator in the case of probe feeding

Cubic Capacity/ltr.	500	750	1,000	1,250	1,500	1,750	2,000
Measur. A (mm)	1,140	1,140	1,140	1,140	1,140	1,140	1,140
Measur. B (mm)	1,077	1,277	1,532	1,732	1,932	2,190	2,390
Measur. C (mm)	1,172	1,372	1,627	1,827	2,027	2,286	2,486
Drive (kW)	0.55	0.55	0.55	0.55	0.55	0.55	0.55



Agitators

Well stirred – not shaken!

The Weda agitators provide for an optimal mixing of feed components in order to produce homogeneous liquid feed. Our agitators are also available as fast running cutter/agitators.



Characteristics of the SS-Agitator

- » Fast running cutting agitator
- » For size-reduction of feed components (e.g., bread, potato chips, noodles)
- » From 7.5 to 30kW
- » For pre-mixing tanks with a capacity of 4,000 to 25,000 litres (with one agitator)
- » With an installation of 2 agitators suitable for pre-mixing tank with a capacity of up to 50,000 litres

Characteristics of the MSE-Agitator

- » Medium fast running agitators with drive motor (approx. 64min^{-1})
- » Engine design to match tank size
- » Agitator blades and shaft of high-grade steel
- » For all tank sizes of the QS and QM type
- » Agitator blade freely adjustable in height
- » Conception of agitator blade ensures more than 20% of energy saving
- » Also available with 40min^{-1} for fermentation



Mixing paddle of SS agitator with knife-spraying protection

By-Products

We care for an efficient feeding of your by-products – you save money!

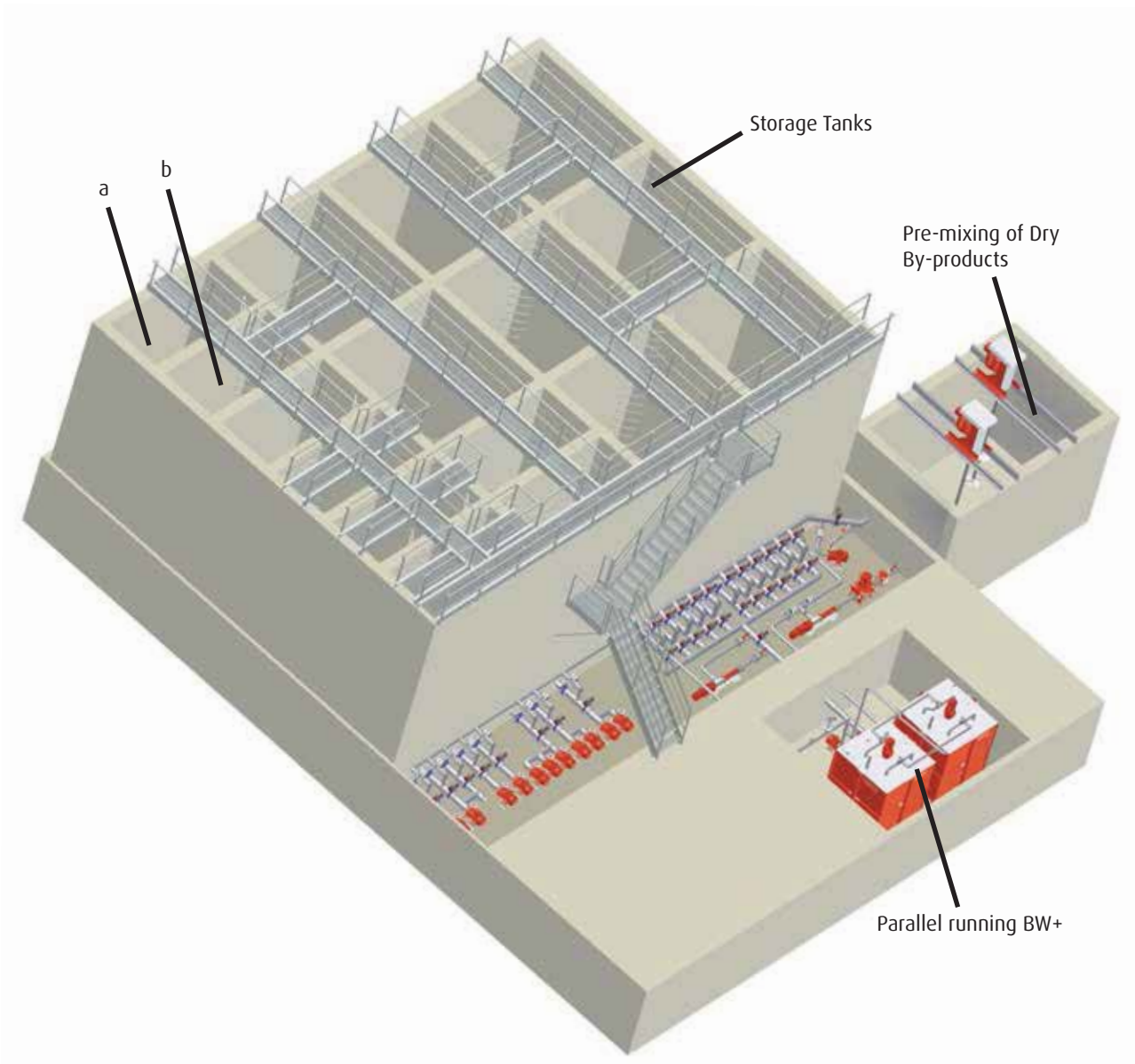
By-products like e.g., whey, kitchen waste or distiller's waste from potatoes are low-price protein and fat suppliers, which can be mixed with traditional feed components and can then be fed.



Characteristics

- » Lower priced than traditional animal feed
- » Faster growth of the animals
- » Nutrition-physiological advantages
- » Improvement of animal health due to organic acids

Unit for 18,000 fatteners, 2,800 sows and 12,000 weaners



In this unit, customary feed is mixed centrally and is then distributed to the different divisions by pipes. For any product - no matter whether customary feed or by-products - two exchange tanks exist.

Example:

Tank a is filled with whey and is emptied during feeding; tank b is full. When tank a is completely emptied, it can be cleaned. Meanwhile the unit draws whey from tank b.

By-Products

Improvement of animal health

Organic acids in the by-products ensure an improvement of animal health. Moreover, by-products are more cost-effective than customary feeds.



Premixer



Premixing tank



Planning



Realization

Fermentation

Lower costs with better health

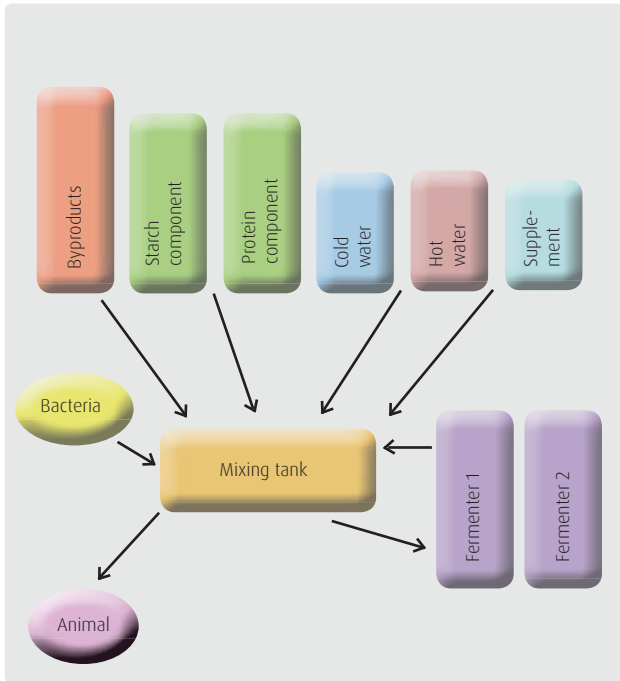
Fermented feed components have a verifiably positive effect on the health of the animals in the house. Coughs and diarrhoea problems are clearly receding and salmonellae are reduced. This lowers veterinary costs and the use of antibiotics.



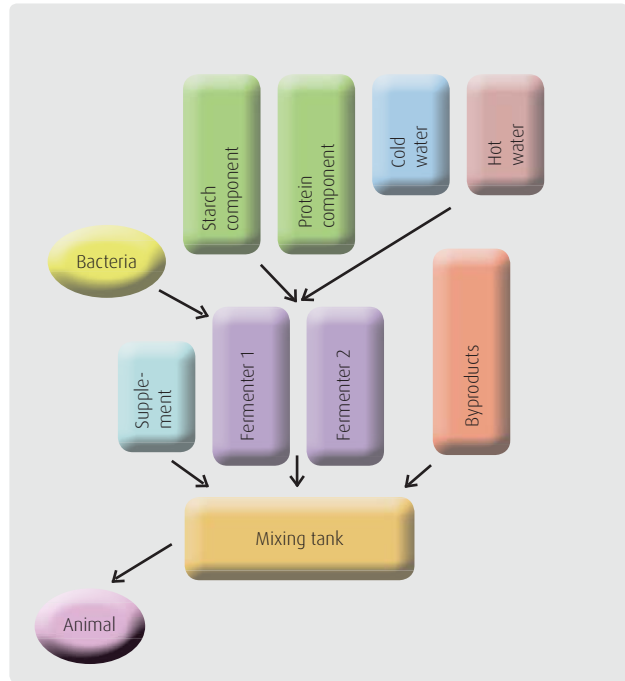
Characteristics

- » In food industry, food products are preserved and value is added by means of fermentation processes.
- » Fermented foodstuffs support the natural immune defence and promote health
- » Clear reduction of the application of medications
- » Lowering of veterinary costs
- » By means of fermentation, certain feed components in pig managements can be modified in such a way that a kind of "pre-digestion" takes place. The advantage: better feed conversion, which clearly reduces the feed expenses per animal.
- » Higher feed uptake
- » Increasing animal performance
- » Cost savings because due to cost-effective, domestic feed components (e.g., rape and rye) instead of expensive, genetically modified soy, almost identical animal performance can be reached.
- » In case of fermentation, the addition of mineral phosphorus and feed acids will not be necessary. This saves additional costs.
- » Increase in turnover and profit
- » Lower environmental pollution due to the reduction of phosphorus and nitrogen in liquid manure
- » Reduction of the total amount of liquid manure as by means of fermentation higher dry substance - and thus higher nutrient - contents can be fed out.
- » Controlled fermentation process in comparison with continuous procedure is clearly better suited because better control is possible.
- » For the controlled procedure, a liquid feeding system and two containers for the fermentation of the feed are required. Due to the change of containers, each fermentation process can proceed untroubled.
- » The bacteria culture necessary for fermentation can be added in three different ways: in combination with a breeding ground for the pre-cultivation in a pre-vaccination container; as a pre-fabricated dry component that is dosed out directly into the mixing container via dry-dosificator; or as a ready-made liquid component.

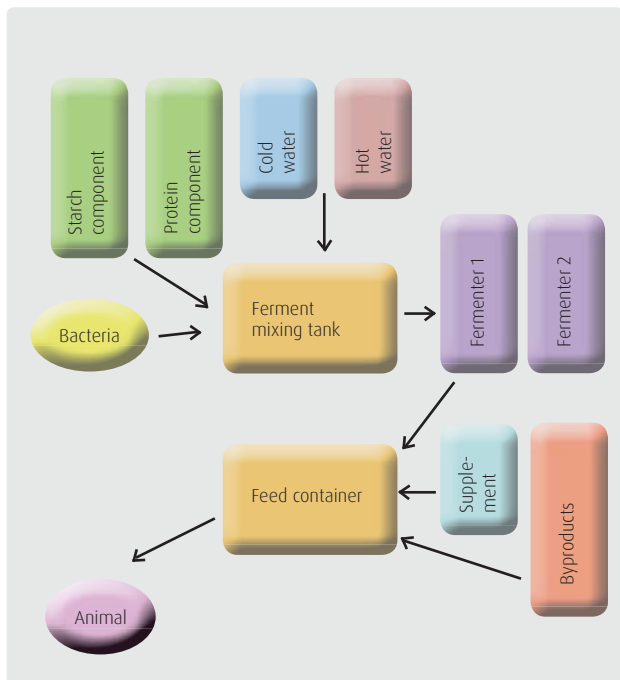
Possibilities of fermentation



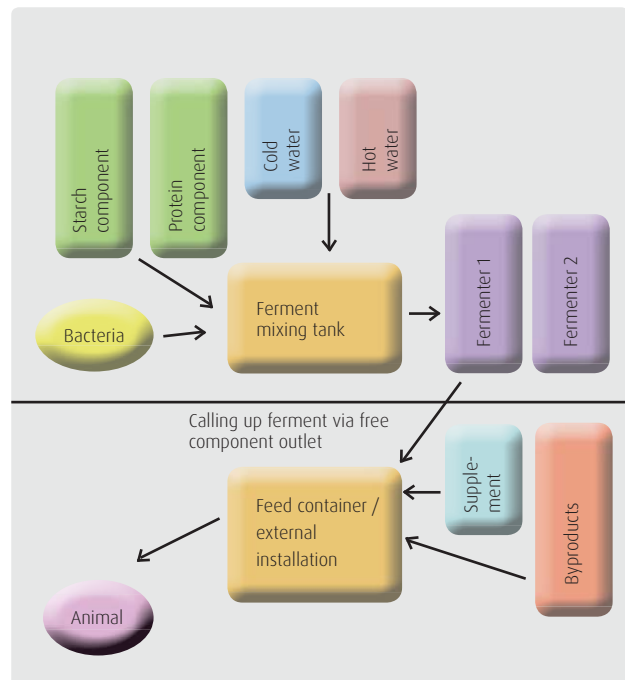
Mixing in feed tank



Mixing in fermenter



Mixing in separate tank



Mixing in separate tank with external installation

Fermentation

FermCube

In order to retrofit already existing units with a fermentation system, a construction permit might quite often be necessary. For cases like this, we have an ideal solution with our „Fermentation inside the Container“, our FermCube, because no construction permit will be required for the container.



Characteristics

- » Compact fermentation unit in a container, including complete process control, process monitoring, mixing technology and hot water processing
- » Standardized modular system can be employed in almost any size of house
- » Integrated monitoring system evaluates fermentation data and ensures high process reliability.
- » Container will be delivered completely assembled and only has to be connected with the existing unit.
- » Unproblematic combination with the liquid feeding systems of other manufacturers or with already existing house units
- » Ferment production, water treatment and feeding run automatically.
- » All fermentation data can be automatically transferred from the WEDA Software Fermi 4PX via an interface to the respective feed producers. Possible disturbances are thus directly recoverable.
- » No GVO soy necessary any more
- » Healthier animals
- » Reduced use of phosphorus in the feed
- » Lower feed expenses due to better feed conversion



High Moisture Corn Doser

Optimal intermediate storage of the feed at any time

The High Moisture Corn Doser is an intermediate storage for dry and moist feed components. The conveyance of the feed components into the mixing tank of the liquid feeding system takes place via CCM meal auger or by means of a pumping station.



Characteristics

- » Tank made of fibreglass reinforced plastic (GRP) with reinforced steel upper edge
- » Base plate of tank of stainless steel
- » Discharge auger with 0.37kW
- » Ideal for CCM (Corn Cob Mix) and moist grain
- » Discharge by means of rotating sword guarantees that the residual CCM is always brought out first
- » Larger bales and lumps are easily broken up and discharged
- » The disturbing formation of bridges is avoided
- » Available in five different sizes
- » Optional with backflow pump: flexible transport to several mixing tanks, independent from distances and floor levels, due to liquid conveyance with high conveying capacity (for feed amounts of more than 150kg if the dosing feeder is not put up in the feeding kitchen)

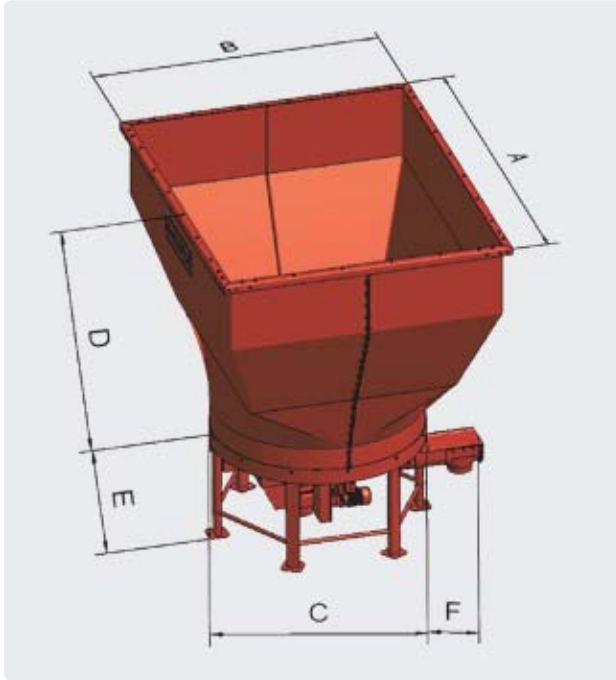


Lid of the High Moisture Corn Doser

High Moisture Corn Doser

Intermediate storage with a maximum of hygiene

The Silage High Moisture Corn Doser is ideal for the intermediate storage of CCM and moist grain. Larger bales and lumps can be reduced in size and dosed out without any problems. Residual amounts are principally always extracted first.



Technical Details	2.7m ³	3.5m ³	4.3m ³	6.0m ³	10m ³
Measurement A (mm)	2,200	2,200	2,200	2,646	2,956
Measurement B (mm)	1,800	1,800	1,800	2,365	2,366
Measurement C (mm)	1,700	1,700	1,700	1,716	1,716
Measurement D (mm)	1,000	1,250	1,500	1,516	2,217
Measurement E (mm)	750	750	750	755	755
Measurement F (mm)	550	550	550	387	387
Contents (cbm)	2.7	3.5	4.3	6.0	10.0
daily ration (number of fattening pigs)	900*	1,100*	1,300*	1,900*	3,200*

* If feed consistency: 50% CCM proportion (TS contents: 40%) of the dry feed

Macerator

For permanently even consistency of the feed

The Macerator serves for the size-reducing of pumpable media like e.g. chips and potatoes. Heavy foreign matter like e.g. stones are kept back.



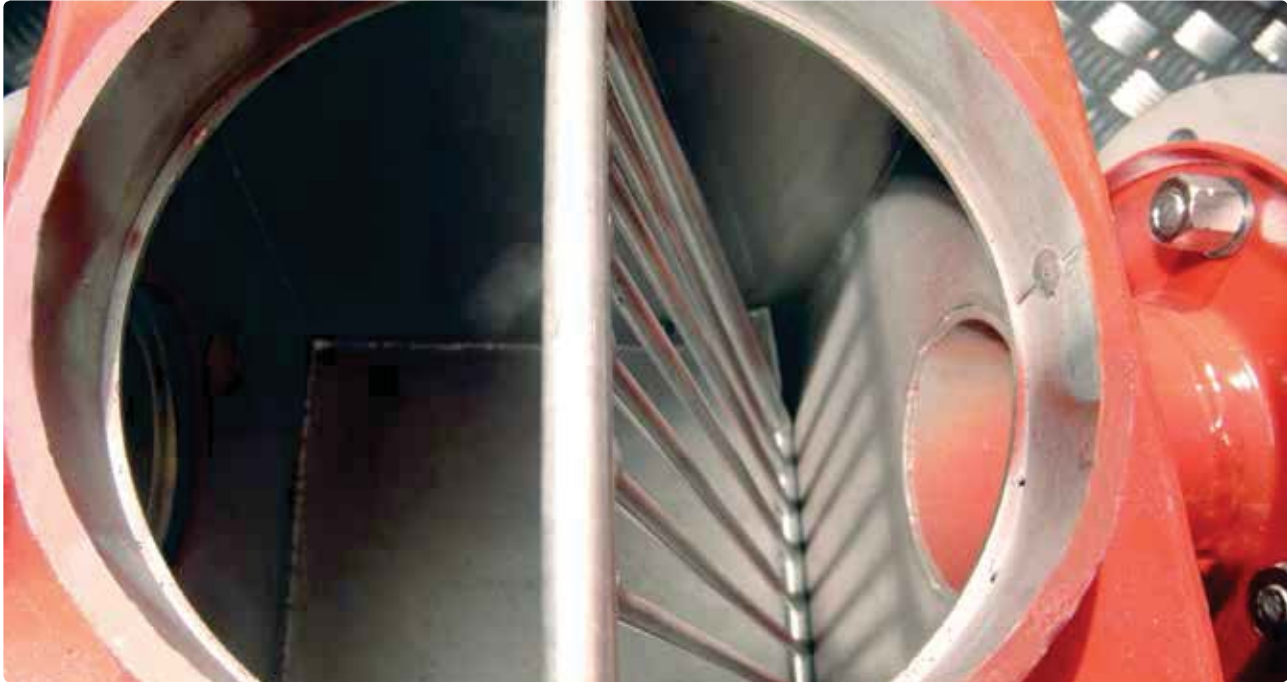
Characteristics

- » Equipped with high speed cutting agitator
- » Light ingredients or potatoes are reduced to small pieces by the blades of the cutting screen
- » Heavy items like stones and metal items are securely kept back in its container
- » Macerator can be controlled by means of a frequency converter (for variable torques)
- » Furnishing with automatic pressure monitoring possible

Stone Trap

Security for your pumps

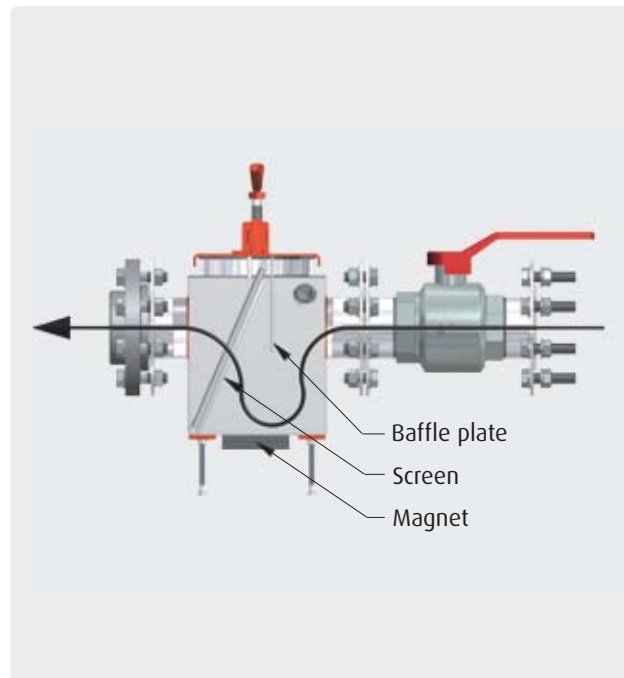
In order to protect the pumps of your liquid feeding unit, the Stone Trap is employed. Strong magnets ensure the separation of metallic foreign bodies and an integrated screen separates non-metallic ones.



The screen inside the stone trap holds back impurities which are situated inside the feed.

Characteristics

- » Magnet keeps back metallic parts
- » Filter for the segregation of non-metal items
- » Available for the following pipe diameters: 75mm, 90mm, 140mm, 160mm and 200mm
- » Compact construction for smaller residual amounts
- » Feeding-depending control intervals



Flow direction of the feed in the stone-trap.

Pumps

For a reliable transport of liquid feed

Weda manufactured pumps are known for reliable operation and provide for smooth transport inside your liquid feeding system.



Characteristics of the Centrifugal Pump

- » Power consumption of 4.0kW or 7.5kW
- » Pump casing as standard in high-grade steel
- » Weda self-construction
- » With replaceable wear parts
- » Before leaving the company, each pump is subject to an extensive examination on a test bed

Technical Details	Unpressurized conveying amount (to./h.)	Conveying amount during feeding		Max. conveying pressure	
		(ltr./min.)	(to./h.)	50Hz	60Hz
Centrifugal pump, 4.0 kW	20	133	8	3.6	5.1
Centrifugal pump, 7.5 kW	40	166	10	4.8	7.2
Centrifugal pump, 4.0 kW for Conticomp System	--	50	3	4.6	6.5

Characteristics of the Eccentric Pump

- » Short, compact construction with directly flanged on drive (block construction)
- » Application in extreme areas like for example viscous media or high dosing accuracy (<5kg)
- » Pump casing of high-grade steel
- » With frequency and pressure sensor for your liquid feeding system
- » WD 15/4 with flange-mounted ball valves in order to avoid residual amounts
- » Weda self-construction
- » With replaceable wear parts
- » Before leaving the company, each pump is subject to an extensive examination on a test bed

Technical Details	Power (kw)	Conveying amount (to./h.)
Type WD10	4.0	10
Type WD15	4.0	15
Type WD15/4	4.0	15



Cleaning with Alkaline & Acid Wash

Hygiene Mr. Clean is dreaming about

In regular intervals, the entire liquid feeding unit is automatically washed out by rinsing with a lye (pH value >12). During acid washing, the tanks are cleaned with a low pH-Value of 4 and less.



Characteristics

Cleaning with alkaline:

- » A sophisticated system based on a double effect of chemical cleaning processes and the wash effect by re-rinsing
- » Considerably increases hygiene in the liquid feeding system
- » The entire unit (weighing-mixing tank, used water tank and feeding pipes) is automatically washed by rinsing with lye of a high pH-value
- » Killing of the, for the most part acid-tolerant flora like e.g., yeast fungi inside the tanks and pipes
- » Intervals for the rinsing are freely selectable
- » Reduction of stress as well as a decrease of animal losses due to improved hygiene conditions
- » The total amount of the lye is so low that this can be discharged into the liquid manure without causing any problems at all

Acid wash:

- » In addition, acid wash-out treatment is also possible for preventing possible bacteria populations
- » During the following feed rations, the acid from the washout is fed out to the animals which brings about additional advantages in terms of nutritional physiology
- » Fully automatic process

- » Economical application of water
- » Economical application of chemical cleaners, in particular in connection with pH control
- » No danger for human beings or technology as in the case of acid fumigation
- » Effective and by far more insensitive than acid fumigation as available cleaning nozzles are used
- » Application of organic individual acid or acid mixtures

Characteristics of lye / acid dosification V1:

- » Acid resistant / alkaline consistency
- » 220V
- » 50Hz
- » 50W
- » Conveying capacity: max. 60ltr./h.
- » Protection kind: IP55

Characteristics of lye / acid dosification V3:

- » Acid resistant / alkaline consistency
- » 24V
- » Air-pressure controlled
- » Conveying capacity: up to 496.8 ltr./h

Hy.Light

For the professional cleaning of mixing tanks, used water tanks and water tanks

Hy.Light is a component of the Weda Hygiene Package. The system based on 100% ultraviolet light kills germs and bacteria at the walls of the tanks. Furthermore the formation of fungi and yeasts is prevented, and all this with low running costs.



Characteristics

- » Killing of germs and bacteria on tank surface
- » Growth of fungi and yeasts is prevented
- » Perfectly neutral with regard to feed composition
- » No danger potential whatsoever due to security switches, in particular in comparison with acid fumigator. When opening the tank, the light is automatically switched off. In the case of acid fumigation there is risk of injuries due to overpressure.
- » Pipes available in lengths of 32cm and 92cm
- » Advantageous operating costs (40W-pipe)
- » Approved for food according to §13 clause 2 No. 1,2 of the Foodstuffs and Consumer Goods Law

Weda pH-Control

The ideal solution for an optimal state of health and low animal losses

By means of the pH-Control, the pH-value of the mixed feed is measured. If the desired pH-value has not been reached, a small amount of feed acid is added. This procedure will be repeated until the desired pH-value is reached.



Characteristics

- » Mixing of a feed composition with a desired pH-value by adding liquid feed acid (selectable depending on mixture)
- » Patented Weda method
- » Causes an optimal gut flora within the gastrointestinal tract of the animals as a constant pH-value has a positive influence on the amount and on the activity of the digestive enzymes
- » Ideal pH-value improves the vitality of your animals
- » Of particular relevance when feeding weaners and sows
- » Fully automatic procedure
- » The computer naturally considers various pH-values for each recipe



WACS - Efficient Cleaning of Downpipes

Mechanical cleaning at the highest level

The WACS (Weda Active Cleaning System) is a computer-controlled downpipe cleaning system for liquid feeding units. The system is based on pneumatic pressure and suitable for pipe diameters of up to 63 mm.



The pressure-water-air mix, in connection with high speed, ensures thorough cleaning of the downpipe.

Characteristics

- » Mechanical cleaning by an air-water mix, which is transported through the downpipes with very high speed.
- » An additional installation of plastic downpipes with an antibacterial effect or enrichment of the air-water mix with disinfectants by means of injector is possible
- » Suitable for all unit types (incl. stubs)
- » Additional automatic mechanical cleaning of the feed line that is situated in front of the valve
- » Reduction of manual cleaning works
- » Time-saving
- » The daily number of cleanings can be adapted to the requirements of the respective unit and can be programmed into the control system to the unit accordingly
- » Cost-effective as system can be operated with a customary compressor (required air pressure: 1.5 bar to 2.5 bar)
- » Can be integrated into already existing houses or pipe systems without any problems because only the air-water injector has to be installed in front of the feed line of the division in question.

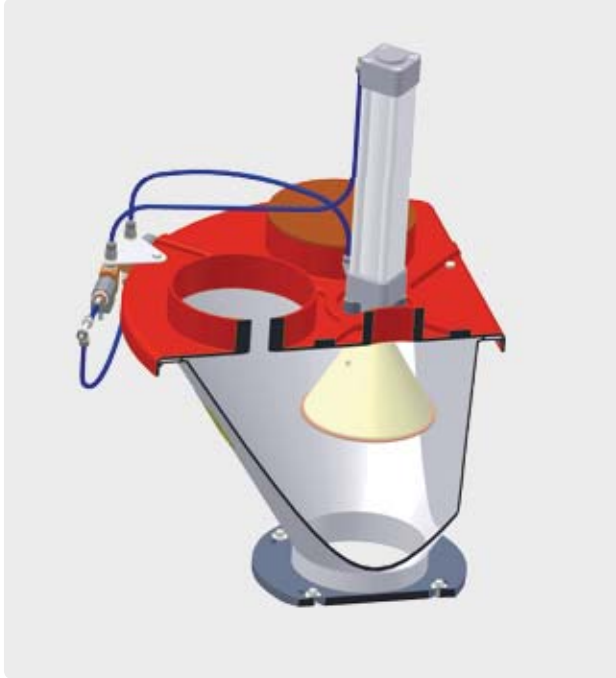


Air-water distributor

Inlet Hopper

No chance for fungus and the like

Via the Inlet Hopper, the dry components arrive inside the mixing tank of the liquid feeding system. The specially designed conic stopper is an ideal protection for the feed at the inlet of the dry components against dampness from the mixing tank.



Characteristics

- » Possesses three or four connections
- » Closure blade is even with tank lid in order to avoid disturbing edges in the tank
- » No dead corners and therefore easy cleaning of the tank
- » The formation of fungi at the augers is prevented as due to the conic stopper water cannot reach up to the dry components
- » Protection against the growth of "disease inflicting" germs at the auger inlets
- » Optionally also available with ultraviolet light
- » Also with 2 connections of 75mm for Nutrix+ or fermentation system

Tank Cleaning System / Sprinkler

Thorough cleaning of your tank

The Tank Cleaning System and its integrated sprinkler provide a thorough cleaning of the mixing- and used water tank. The provision with cleaning liquid takes place via the feed pump.



Characteristics

- » For centrifugal pumps and eccentric pumps
- » Of high-grade steel
- » Depending on tank size, 4 sprinklers can be employed in a tank

Sprinkler for centrifugal pumps (picture):

- » Agitator blades ensure distribution of cleaning liquid at the sides
- » By means of a spinning disk underneath the agitator blades, cleaning liquid is distributed to the top and this way, the tank lid is thoroughly cleaned

Sprinkler for eccentric pumps:

- » Integrated spiral for increasing the exit pressure
- » Distribution of cleaning liquid via variable angle wings



Electromagnetic Flow Measuring

Measurement independent of scale values

Flow rate measuring of the outgoing feed or water takes place after the pump, independent of scales value. The measuring prevents an overproduction of fresh water and can increase the dosing accuracy.

Characteristics

- » Prevents overproduction of used water in no-residue feeding as (necessary for many weaner and sow units) returning used water is immediately integrated back into the circular flow and no extra water is produced
- » Very high dosing accuracy
- » Deviations of the scales due to movements of liquid inside the tank do not influence the flow rate measuring

Explanation for the avoidance of overproduction of water by means of an example:

5 valves at a distance of 150m are to be supplied with 60kg of liquid feed. For a 63-pipe, approx. 380ltr. are required until the feed reaches the last valve. There are, however, only 60kg inside the mixing tank which means 320ltr. less than required. These 320ltr. have to be pumped into the feed columns in the form of water in order to transport the feed column to the valve which is feeding. If this valve is fed ten times a day, this means an additional amount of 3,200ltr. of water, and consequently a strong over-production of water. Quite often, this surplus water cannot be fed out to the other animals and therefore has to be pumped into the liquid manure pit. Weda are the only producers who do not tolerate this waste of water. Flow rate measurement exactly determines the amount of used water which is required for transporting the feed column to the respective valve. The returning used water flows back into the circuit.

With regard to flow rate measurement and frequency regulation:

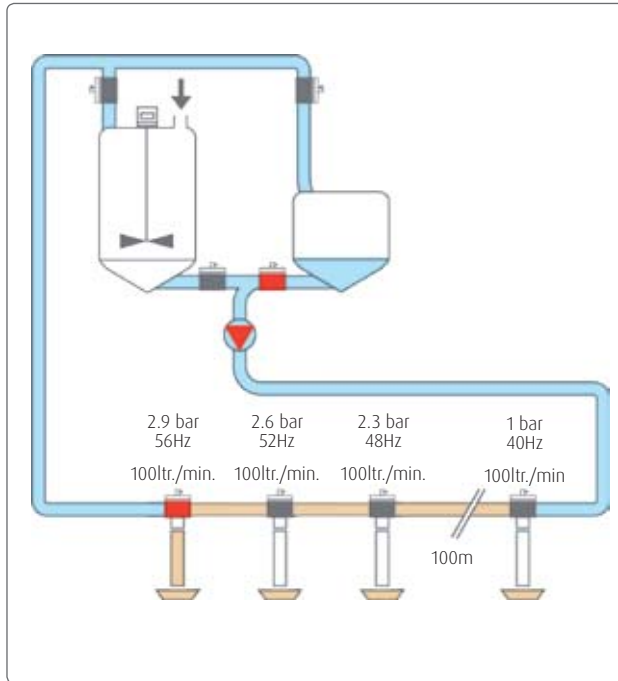
Opposed to other customary methods which e.g. reach higher dosing accuracy via special valve constructions, the Weda systems feature no negative effects whatsoever with regard to membrane wear or unit overpressure.



Flow Rate Regulation

For a long life-span of your unit

A control unit ensures a constant flow rate inside the pipe and results in an even outflow at each release valve although the pressure changes with changing distance.



Characteristics

- » Regulation of flow rate
- » Continuous regulation of feed pumps
- » Reduction of feed losses, long waiting times and no splashing during feed discharge
- » Very exact dosification at the outlets
- » No beats
- » Long operating life, low wear of unit
- » Less electricity consumption
- » Several motors addressable after one another. Thus, meal components can be exactly dosificated into the mixing container

Example:

At a small distance from the valve there is only a low counter pressure to the pump. With increasing distance from the valve the counter pressure to the pump also goes up due to friction, etc.

Weda are sole providers of flow rate regulators with continuous frequency regulation. This system keeps the flow rate of the feed constant. With growing distance, the frequency and therefore simultaneously the conveying capacity of the pump is increased. In the case of valves at a close range the flow rate control guarantees that splashing of the feed during the dosing-out process is prevented. In the case of valves at a greater distance the system ensures an even flow of the feed. This allows for uninterrupted feeding and high dosification accuracy.

Furthermore, the system prevents unnecessary burden of the valve bodies as it is made clear by the following example: Starting point: 63-pipe with a volume of 2.55ltr./m. With a pipe conduct length of 200m, approx. 500kg are transported at a rate of 3.5m/sec. (12.6 km/h). In case of an abrupt stop (locked valve), 500kg of mass would therefore run frontally against a valve body and would in the long run harm the system. Weda have a different approach with regard to this: before the closing of the valve the feed-flow is slowed down. This Weda solution will consequently provide a long life span of your unit.



Mix-Pipe

Revolution in liquid feeding: demixing of water and feed prevented!

Liquid feed often has to be transported over greater distances. In the case of conventional feeding pipes it comes to a de-mixing of water and feed. Our Mix-Pipe prevents such de-mixing and ensures homogenous liquid feed at every dispensing valve.



The Mix-Pipe (above) developed by Weda prevents the de-mixing of water and feed on the entire length of the feeding pipes. Its spiral-shaped internal structure ensures a permanent thorough mixing of the liquid feed and thus prevents sedimentation inside the feeding pipe. Our Mix-Pipe was awarded the gold medal of the DLG as especially in the case of spur-lines the sedimented feed inside the pipe is immediately thoroughly mixed again.

In the case of conventional feeding pipes (below), however, feed and water demix. This leads to dosing out of a water- and feed mixture with different DS contents to the respective valves. The animals inside the house consequently do not receive the same necessary amount of feed and therefore grow irregularly.



Our Mix-Pipe does not only inspire our customers but it also inspires our competitors. The products of competitors available on the market (here as an example: feeding pipe with iron spiral) are merely integrated into the feed line in certain intervals and are therefore unable to prevent de-mixing. As opposed to other producers there is no diminution of the pipe in our Mix-Pipe. Such diminution would not only slow down the flow of the liquid feed due to the increased resistance but would also in some cases lead to a blockage of the feed-lines.

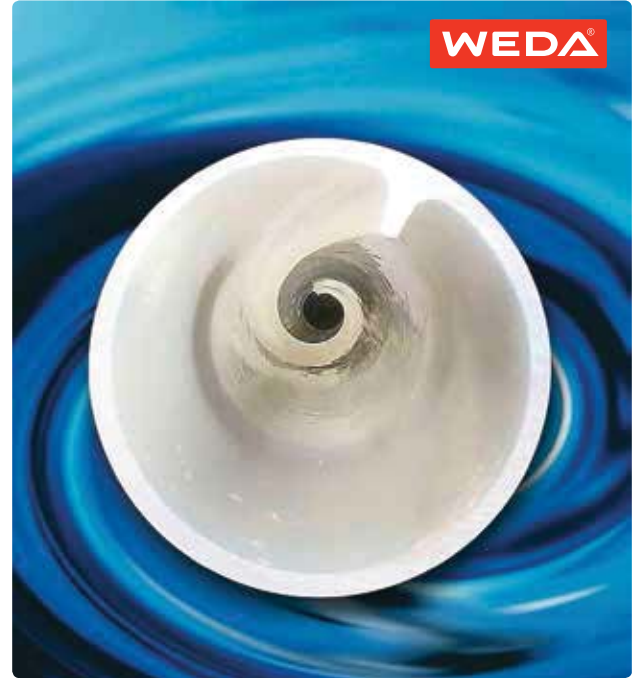
Mix-Pipe

Pipe Always Clear

By means of the Mix-Pipe, a sedimentation of the feed inside the line is prevented and thus, blockage of the pipes is prevented. In addition, the Mix-Pipe grants dosification of liquid feed with almost identical dry substance content at each valve.



Tube with iron spiral



Mix-Pipe

Characteristics

- » During its passage inside the pipe the feed mixture is permanently mixed through
- » Dosing out of liquid feed with almost similar content of dry substance is guaranteed at each valve
- » Installation of the pipe over the entire length is necessary so that sedimentation cannot set in again
- » Mix-Pipe causes no additional resistance
- » No pipe clogging due to sedimentation
- » Inside is furnished with a spiral-shaped structure in the shape of an approx. 10mm high lip
- » Behind the lip, no „hidden areas“ exist in which dirt could form
- » PVC pipe with diameters of 63, 50, 40 or 32mm

Within the framework of several tests, the number of rotations of our Mix-Pipe was optimized by our specialists to approx. 1m per rotation. The Mix-Pipe has to be supported over its entire length as the heavy feed components already start their sedimentation process after a few metres.

Many attempts have been made to copy the Weda Mix-Pipe. In this context, some providers have furnished their pipes with an iron spiral. As one can clearly see when comparing these with our Mix-Pipe, this leads to the described diminution of the feed conduct.

We therefore advise you:

Stay with the original and keep your pipes clear!



Injection MK

Your reliable helper for absolutely pinpoint additive administration

The Injection MK is a screwable valve for the direct administration of additives into the downpipe. Besides the input into the spur line, feeding into a separate circuit or an injection into a certain downpipe is also possible.

Characteristics

- » With corresponding adapter, additive valves can be installed (by means of screwtop) beside each feed valve and connected to the additive circuit within seconds
- » Treatment of individual pens but also of complete animal houses is possible
- » In case of dosing into the downpipe, dangerous procrastinations of additives into the feed lines are prevented
- » Optimal mixing of the feed is guaranteed
- » Integration of flow rate measuring possible, otherwise administration of additives respective of time
- » Should no additives be given into a valve, the serially installed manual cock can also be manually closed per valve
- » PC documentation



Additives Dosing Feeder MD 250 or 125

Additives – simple and safe!

By means of the Additive Dosing Feeder, additives can be easily and quickly processed and then be fed into liquid feeding systems. Here, the dosing either takes place directly into the mixing tank, or via the Injection MK into the feed-line, resp. into the downpipe.

Characteristics

- » Completely ready for connexion (400V/50Hz)
- » Dosing directly into the mixing tank or via the Injection MK directly into the feeding pipe, resp. into the outlet pipe
- » Dry-running of the pump is prevented via sensor
- » Completely equipped with agitators and dosing pump
- » Liquid dosing with 125, resp. 250ltr. storage container and 0.55kW agitator
- » Integrated discharge valve for the cleaning of the storage container
- » Manual lock valve for water connexion 1" and mounting frame
- » Dosing pump with a capacity of approx. 4,000ltr./h
- » Optional: as a mobile design with connections in front of each division into feed-line / spur line



Additives Dosing Feeder MD 40

For strong health of your animals

The MD 40 is a dry dosing feeder of high-grade steel for the administration of additives via the feed.



Characteristics

- » Holding capacity approx. 65ltr.
- » Discharge of additives takes place by means of a spiral
- » Spiral, diameter 55mm, drive 0.37kW (400V)
- » Including vibrating unit
- » At the top loose lid for easy cleaning

Additives Dosing Feeder MD 15

For the effective treatment of your animals

By means of a spiral, the Additive Dosing Feeder MD 15 administers the additives in a dry form.



Characteristics

- » Dry dosing feeder
- » Dosing of smallest amounts
- » Contents: 15ltr.
- » Motor: 24V
- » Dosing accuracy in the case of powder: 5-6g/sec.
- » Dosing accuracy in the case of minerals: 10-12g/sec.
- » Complete with connecting branch for mixing tank
- » At the top loose lid for easy cleaning



Additives Dosing Feeder S400

Additives always well stored

The additive dosing feeder S400 serves for the storage of additives for liquid and dry feeding. Transport in the feeding unit takes place via spiral.

Characteristics

- » Made of high-grade steel
- » Dimensions: 1.20 x 1.20 x 1.00m
- » Contents: approx. 400kg
- » Drive: 0.75kW
- » Integrated spiral
- » Conveying of additives via spiral (75mm)



Silos

Securing of best feedstuff quality for a healthy animal stock

Dry feed can be optimally stored in Weda feed silos. The feed stays fresh and nutritious, no matter which silo version you decide on.



Feed silos of GRP



Indoor silo

Characteristics

GRP Silos:

- » Of high-value, weather-proof GRP
- » Fast assembly, simple maintenance
- » Feed stays fresh and nutritious
- » No feed residues as no "screw-joint seams" at the side
- » Available in one piece, or in two parts

Galvanized silos:

- » Production according to TS EN ISO 9001:2000
- » Thickness of silo walls is adapted to the given facts
- » Long life-span due to special corrugated sheets
- » For pneumatic and mechanical filling
- » Excellent feed flow
- » Feed stays fresh and nutritious
- » Favourable temperature situation in silo
- » Simple maintenance

Indoor Silos:

- » Breathable, uncoated and high-strength high-tech fabric prevents the formation of fungus and adherences
- » Constant grain quality according to hygiene requirements
- » Silo bag with 400 mm outlet

Technical Details	Volume (m ³)	Diameter (m)	Total height (m)	Dimensions (m)
Indoor silos (Treviera)				
Available from	2.2	--	2.90	1.30 x 1.30
to	27.7	--	5.40	3.10 x 3.10
GRP-Silos				
Available from	6	2.20	4.34	--
to	60	2.80	12.10	--
Silos, galvanized				
Available from	8.1	1.79	5.84	--
to	53.3	2.68	12.52	--

Augers & Spiral Conveyors

For reliable dosing of dry components

Our augers and spiral conveyors ensure problem-free dosification of the dry feed components into the mixing tank. For varying demands, there are different augers and spiral conveyor types at your disposition.



Trough auger



Auger

Characteristics

Trough auger (R-L-auger)

- » For the dosing into 2 mixing tanks
- » With cover and 2 outlets
- » Available in the variations of high-grade steel and galvanized steel
- » V-belt drive
- » High-grade steel version especially for acid-treated grains or e.g. CCM

Augers

- » Galvanized
- » Conveyor length up to 2m
- » Diameter: 100 and 150mm
- » With drive motor, auger box, auger head and outlet

CCM meal auger

- » Of high-grade steel
- » Diameter: 200mm

Spiral Conveyor

- » With spiral of special steel, receiving hopper, control unit with downpipe, drive motor
- » Pipes and elbows of low-wear plastic material (NOVICOR™)
- » By means of additional conveyor pipe extensions (3m pieces) extensible to random length
- » With additional pipe elbows (1.5 m pieces), edges or obstacles do not present any problem
- » Special design: Two lines from one silo, complete with double receiving hopper, 2 control units with downpipe and 2 drive motors

Technical Details	Conveying Capacity (to./h) at 45°
Auger type S 102	approx. 3
Auger type S 150	approx. 9.5
Trough Auger (R-L-auger) galvanized or high-grade steel	approx. 15
Spiral conveyor	
Diameter 55mm	approx. 0.52
Diameter 75mm	approx. 1.3
Diameter 90mm	approx. 2.6
Diameter 125mm	approx. 4.5

Compressors and Accessories

The right amount of air at the right time

The compressor provides the required amount of air which is necessary for the control of the connected feeding valves, resp. aggregates.



Compressor W90

Technical Details	W40*	W90**
Voltage (V)	400	400
Capacity (kW)	1.5	3
Max. delivery amount (ltr./min)	175	350
Container volume (ltr.)	40	90
Pressure (bar)	10	10
Number of cylinders	1	2
Weight (kg)	58	77
Dimensions (LxWxH in mm)	900x400x960	1200x480x900

* W40: recommended for units up to 100 valves

** W90: recommended for large-scale units, resp., more than 100 valves

Characteristics

Compressor:

- » High-value electro compressor
- » In two sizes (W40 & W90)
- » Dust-free stand necessary
- » Portable and mobile

Accessories (optional):

- » The 4PX air pressure monitoring reports pressure-losses or failure of the compressor to the system.
- » The air supply container increases the volume of the air supply and ensures less start-up of the compressor. The air supply container holds 6 or 20 litres.
- » The water outlet from the compressed air tank by means of an automatic drain valve ensures longer life-span of the compressor.
- » The shut-off valve inside the air-conduct ensures the blocking of the air-conduct and thus helps to detect leakages.
- » The maintenance unit 3/8" with automatic ball valve and air cylinder is issued with an automatic condensation outlet for the protection of valves and with oiler and manometer (oiler only for ball valves and air-cylinder; not for membranes)



Fresh Water Tank

Always sufficient fresh water

The Fresh Water Tank will always provide you with an ample supply of fresh water for the mixing of your liquid feed.

Characteristics

- » Due to black outside walls (PE) no natural light can enter the tanks. Owing to this, the growth of algae is prevented
- » Integrated Hy.Light kills germs and bacteria (optional)
- » Available in sizes 250 (Conticomp) 1,000, 1,500 and 2,000 litres
- » 5,000, 10,000 and 13,000 litres in blue
- » Two tanks can be combined via bridge



Ball Valves

Approved technology on highest level

One ball valve each is positioned in front of the mixing, used water and fresh water tank and can be controlled via computer. If fresh water, liquid feed or used water is pumped into the pipes, the respective valve opens and allows free passage to the pump.

Characteristics

- » 1.5; 2.5; or 3 inches
- » Positioned in the suction area of the pump in order to provide best possible passage
- » Low wear and tear and therefore long life-span
- » With above average sized pneumatic stamp
- » With PVC flanges for fast exchange (no gluing of the valves and several hours of unit stoppage during drying time of the adhesive)
- » Is currentless automatically closed (optional)
- » Of high-grade steel
- » Ball of solid material



Feeding Valves

Tried and tested a million times over

Liquid feed is dosed into the trough via membrane valves. Weda offer you a multitude of different valve types.



Characteristics

- » Large passage diameter, no residual amount in valve body, low wear and tear
- » Long life-span special membrane
- » Optional: black or transparent lid
- » Outlet is situated below. Heavy substances will therefore not remain inside the pipe
- » Nuts and washers of high-grade steel
- » Special membrane for components with much oil and fat available
- » Various types: PV0 to PV7
- » The Silence-Kit enables almost noiseless feeding in the sows' house



Profile of PV4-Valve





Valve Cable / Cable Box

Always optimally connected

The feed valves are connected with the feeding computer via a 24 core control cable. The plugs are necessary for the connection of the individual valve.

Characteristics

Valve Cable:

- » In case of a 24-core cable 128 valves can be connected
- » When using probes, 48 valves can be connected

Cable Box:

- » Hose proof (IP 65)
- » Up to 2 probes and 2 valves per box can be connected
- » Optional: anti-fluid spray protects cables and cable connections in cable box against moisture and prevents corrosion even more effectively.



Feeding Time Control / Sensor Feeding

Optimal utilization of the genetic potential of your animals

The trough probe can be employed for the control of the feeding as well as for feeding by means of a sensor. With the aid of trough probes the feeding computer checks up on the feed level inside the troughs and thus optimizes the feed supply.



Characteristics

- » Distance from probe to trough bottom: 1.5 to 2cm
- » Probe is constructed in such a way that no feed residues form underneath it and that the animals can take up the feed underneath the probe (wobble probe)
- » Higher feed uptakes and therefore increase of the daily gains possible
- » Avoiding of under or overfeeding of the animals
- » Water feeding via liquid feeding system controlled possible by means of sensor

Explanation Sensor Feeding:

(Animal / Feeding place ratio of 2 : 1 to 3 : 1):

In order to examine the filling level inside the troughs, the feeding computer sends low-current electricity through the probe into the trough. In case the trough is still filled up with feed, the current is led via the feed to a second trough probe, resp., to an earth cable, and the system receives the report that currently no further feeding is required.

In case the trough is empty no transfer of the electric current takes place and the system receives the report that feed has to be mixed accordingly.

Sensor feeding keeps up the natural and highly frequent feeding behaviour of the piglets after weaning and provides young animals from a weight of 6kg onwards with small and fresh portions, up to 10-12 times a day.

Feeding time control:

(Animal / feeding place ratio of 1 : 1; for lengthways troughs and for individual trough)

After the complete feeding out of the feed into the trough the feeding computer measures the feed level in regular intervals by means of a probe until there is no more feedback. The feeding computer then compares the measured values with the previously determined reference value and heightens or reduces the amount of feed according to the reference value.



Downpipes

The appropriate pipe for any type of house

The liquid feed is dosed into the troughs via downpipe. For this, the exact fastening of the pipes is adapted to the local conditions.



Characteristics

- » Fastenings in areas with animal contact are made of high-grade steel
- » Always granting perfect distribution of liquid feed into the troughs
- » Available as single or Y-downpipes
- » In areas with animal contact all pipes are serially manufactured of thick-walled material
- » Special 100°-elbows for long downpipes
- » Diameters: 32mm to 63mm
- » Various types of pipes:
 - Type A resp. AS: For one feeding place
 - Type AY resp. ASY: For troughs up to a length of 2m
 - Type B resp. BS: For troughs up to a length of 4m
 - Type C resp. CS: For troughs up to a length of 6m



Downpipes

Favourable Distribution At All Times

The outlet pipes ensure favourable distribution of the liquid feed into the troughs. In the contact area of the animals, the outlet pipes are made of especially thick-walled materials.



Feed line installed above the walkway.



Feed line in sow area.



Weda Farm Software

Comprehensive Management for Your House

With the help of the Weda Farm Software, the farmer can log himself into the feeding and climate computer by means of his central computer or by a mobile device in order to obtain an overview on the status and to carry out required modifications.



By means of the Weda Farm Software, you will have your unit in view at any time and from everywhere.

Characteristics

- » Remote House Control of all Systems
- » User interface can be adapted to the requirements of the respective user (language, control panels)
- » If you wish, the system will send you an e-mail every morning with pre-defined information of the user (e.g., "Which animals did not take enough feed yesterday?")
- » Simple Administration
- » Clear arrangement and easy handling due to comprehensible pictograms
- » Cost-effective
- » Informative "traffic light system". Rectangular colour fields beside the house areas display the respective status in the colours of traffic lights: green = OK, red = disturbance
- » If required, you can protect pages by using a password
- » By means of the filter function, a choice of desired information can be made

Coupling Possibilities:

- » Direct connection from Farm-PC to 4PX in the animal house
- » Weda-Service, resp, any PC with internet connection can be linked with the 4PX inside the house via internet.
- » Weda Service, resp, any PC with internet connection links up via internet with a Farm PC. The Farm PC is directly connected with the 4PX inside the house.

Internet access can also take place by means of Smartphone, Tablet PC or Laptop with UMTS-Stick.

Excellent 4PX

Description of Piktograms

Via pictograms of the Excellent 4PX, you will have fast and easy access to the desired topic where you will be able to carry out the respective alterations.



Starting Page
Basic side



Recipes
Adjustment of recipes and mixtures



Component data
Information about the ingredients, dry substance contents and the price of the feed components



Feed graphs
Displays all data regarding feed graphs



Daily schedule
Determination of all actions, which will take place within one day



Groups
Feeding sequence of division



Process Visualization
The process of the unit is visually presented.



Feeding control
Information on how much feed was fed at which time



Valve data
Displays all data regarding individual feed valves (e.g., number of animals and feed amounts)



Error List
Shows errors and helps to correct them



Stalling out
Entry of the stalled-out animals at the respective valve



Losses
Entry of animal losses



Stalling out remaining animals
Entry of remaining animals at the valve



Animal batches
Everything on the subjects of stalling in, stalling out and animal losses



Stalling in
Entry of the animals stalled in at the valve



Help
Display of help texts for current page



Rehousing
Entry of rehoused animals per valve



Notes
Notepad



By means of its individualized “Dashboard”, the operator of the feeding unit will be in a position to register the actual state of his animal house, including all significant key figures at one glance. The meaning of the symbols can be understood at a glance. The three traffic-light colours are integrated into the displays so that deviations can be quickly recognized. Green stands for OK, yellow for slight deviations, and red for strong deviations.



When the farmer clicks on the respective display, he is directed to the relevant page in the submenu of the computer where he can pick up respective detail information and from where he can - if necessary - take appropriate measures. In addition to the display of the actual state, trends and tendencies are calculated and presented by the feeding computer. Thus, the user already realizes at a very early stage whether problems within his animal stock are beginning to emerge. The Dashboard is also suitable for mobile terminal equipment like tablets and smartphones.

Excellent 4PX

Farm Management at the Highest Level

Login	Logout	Benutzer	Ergebnis
2018-09-14 08:25:43	2018-09-11 10:00:11	WEDA	1
2018-09-14 10:00:11	2018-09-11 02:16:28	Service	1
2018-09-14 12:15:25	2018-09-11 13:18:02	WEDA	1
2018-09-14 13:18:02	2018-09-11 14:34:59	Service	1
2018-09-14 14:34:59	2018-09-11 15:09:41	WEDA	1
2018-09-14 15:09:41	2018-09-11 17:26:19	Service	1
2018-09-14 17:26:19	2018-09-14 07:02:18	WEDA	1
2018-09-15 01:01:06	2018-09-14 07:02:18	WEDA	1
2018-09-15 07:02:18	2018-09-14 08:03:49	Service	1
2018-09-15 08:03:49	2018-09-14 08:22:47	WEDA	1
2018-09-15 08:22:47	2018-09-14 08:30:37	Service	1
2018-09-15 08:30:37	2018-09-14 08:30:37	WEDA	1
2018-09-15 08:30:39	2018-09-14 08:30:37	WEDA	1
2018-09-15 08:33:50	2018-09-14 08:55:35	Service	1
2018-09-15 08:55:35	2018-09-14 08:55:35	WEDA	1
2018-09-15 08:58:37	2018-09-14 08:58:35	WEDA	1
2018-09-15 10:58:09	2018-09-14 08:58:35	WEDA	1
2018-09-15 10:01:06	2018-09-14 14:10:30	WEDA	1
2018-09-15 16:01:25	2018-09-14 14:10:30	WEDA	1
2018-09-15 16:07:56	2018-09-14 14:10:30	WEDA	1
2018-09-15 16:10:34	2018-09-14 14:13:38	WEDA	1
2018-09-15 18:11:37	2018-09-14 18:13:38	WEDA	1
2018-09-15 18:13:40	2018-09-14 18:18:59	WEDA	1
2018-09-15 18:18:41	2018-09-14 18:18:59	WEDA	1
2018-09-15 18:18:59	2018-09-14 18:22:04	Service	1
2018-09-15 18:19:35	2018-09-14 18:22:04	WEDA	1
2018-09-15 18:22:11	2018-09-14 18:23:04	WEDA	1

By means of the "User Administration", various user groups can be generated and their access to certain data can be limited. Data not relevant for certain users can be masked out by the administration in order to prevent incorrect entries. In addition, the system records which users have worked with the system at what time.

Lieferschein

Lieferscheibenummer: 2

Futterlieferant:
WEDA Ausstallungshalle
Am Bahnhof 1
D-49424 Lutten

Von 2018-08-01 bis 2018-08-31 wurde geliefert:

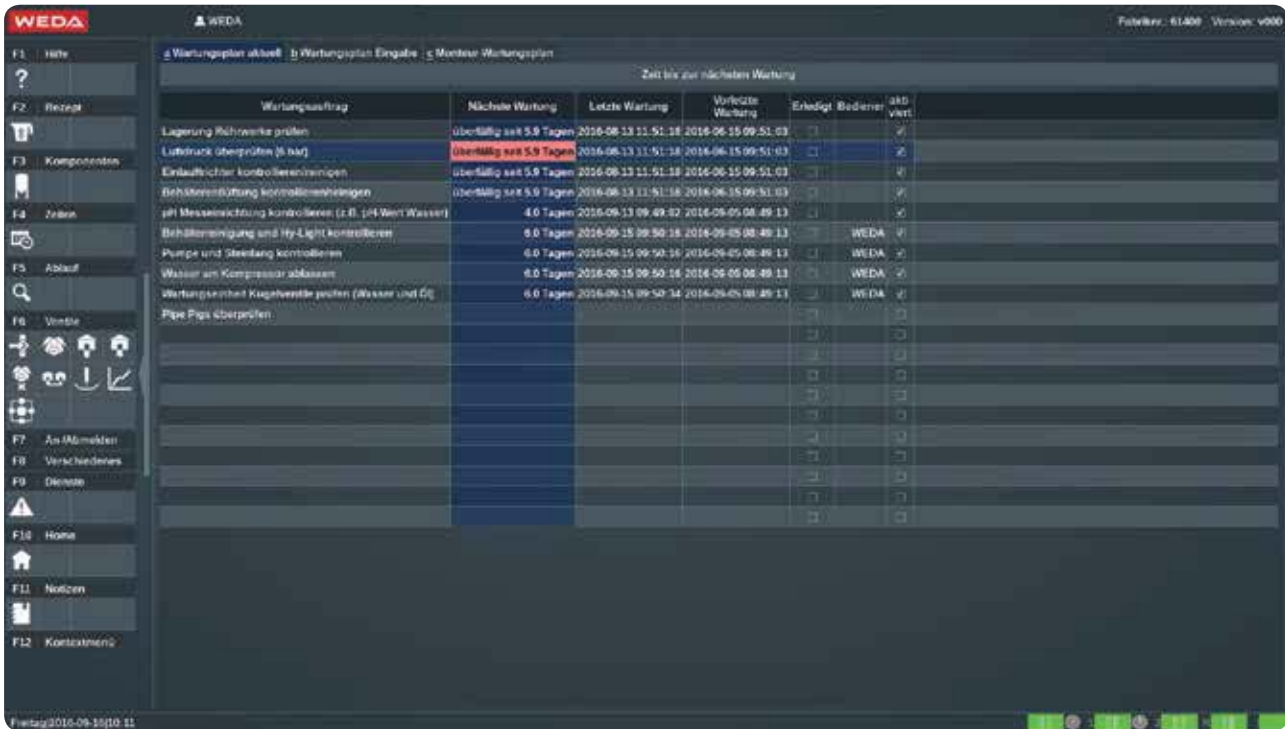
Abteil 1: 11 Lieferungen (Summe 20)

Artik.	Menge (kg)	Stk (Stk)	Preis / 1 kg	Preis ges.
1 Wasser	2045,00	0,00	0,00	0,00
2 Brauchwasser	2290,70	0,00	0,00	0,00
10 Proteinmehl	2170,27	2000,00	0,27	545,46
10.0000000000	2168,27	2000,00	0,26	563,25
10.0000000000	2166,27	2000,00	0,26	581,04
10 Wasser	2060,70	2071,00	0,26	535,97
10.0000000000	2058,70	2071,00	0,26	553,76
10.0000000000	2056,70	2071,00	0,26	571,55
Summe	2060,70	2071,00	0,26	589,63

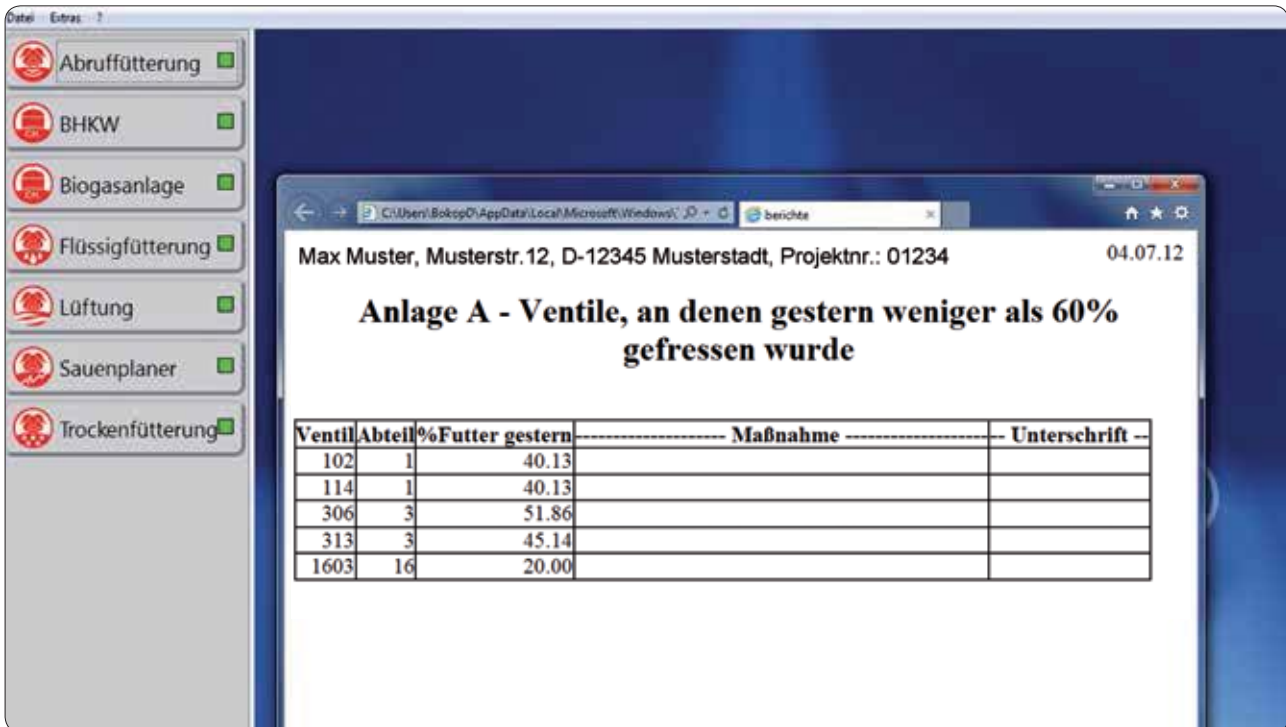
Abteil 2: 11 Lieferungen (Summe 20)

Artik.	Menge (kg)	Stk (Stk)	Preis / 1 kg	Preis ges.
1 Wasser	2100,24	0,00	0,00	0,00
2 Brauchwasser	2290,70	0,00	0,00	0,00
10 Proteinmehl	2022,55	2000,00	0,26	525,86
10.0000000000	2020,55	2000,00	0,26	543,65
10.0000000000	2018,55	2000,00	0,26	561,44
10 Wasser	2020,24	2000,00	0,26	525,26
10.0000000000	2018,24	2000,00	0,26	543,05
10.0000000000	2016,24	2000,00	0,26	560,84
Summe	2020,24	2000,00	0,26	576,69

The function "Delivery Note" supports the farmer by issuing a proof for the divisions of the unit. Over a certain period, the system is able to give exact evidence, which animal groups have received which amount of feed and the price thereof; and it issues the relevant delivery note. Furthermore, the system can carry out weighing-specific documentation, which is particularly helpful for farming units which are connected with a grinding mill and which sell the feed.



In the "Maintenance Plan" maintenance parameters can be entered individually. After a previously defined period of time you will receive an automatic report when the next maintenance is due. If the maintenance will not be explicitly confirmed to the system, the report will be repeated the following day. For external devices, maintenance can be determined in days and for connected devices in operation hours.



With the function, "Report Generator", the farmer is able to access relevant data immediately and compactly. The predefined data in clearly arranged shape of forms are globally posted to the farmer by e-mail or, if required, directly printed out. This function saves time as data do not have to be picked out unassisted and laboriously. Thanks to the freely selectable dispatching time, the data will already be available before start of work.

Excellent 4PX

Optimum Sow Management

Sows Nr	Responder Nr	WG	ZT	Kond. Nr	Feik. Anz	Beleg Datum	Alderkehl Datum	Absetz Datum	Alter Nr
2001 S14262	123456	1	120	3	0	2015-09-15			20
2002 S14256	654321	1	120	3	0	2016-09-15			20
2003 S14257	987654	1	120	3	0	2016-09-15			20
2004 S14258	543210	1	120	3	0	2016-09-15			20
2005 S14259	876543	1	120	3	0	2016-09-15			20
2006 S14260	456789	1	120	3	0	2016-09-15			20
2007 S14261	321098	1	120	3	0	2016-09-15			20
2008 S14262	654321	1	120	3	0	2016-09-15			20
2101 S14262	888478	2	23	3	0	2016-09-15			21
2102 S14263	999032	2	23	3	0	2016-09-15			21
2103 S14264	758865	2	23	3	0	2016-09-15			21
2104 S14265	958762	2	23	3	0	2016-09-15			21
2105 S14266	782856	2	23	3	0	2016-09-15			21
2106 S14267	129788	2	23	3	0	2016-09-15			21
2107 S14268	258746	2	23	3	0	2016-09-15			21
2108 S14269	352465	2	23	3	0	2016-09-15			21

With the function "Valve Data", the sows can be identified as individual animals inside the group at the feed valve. This allows an accurate and continuous animal control through all product sections.

Tier	Resp.	Tg	Gr.	Kond.	FZ [sec]	N-FZ [sec]	Wo. Gr.	Sel. Me.	sel.	Ist sel.	FM-M.	F1	F2	F3	FM	Ort
S14001	7380791	62	1	3	12	15	1	0	<input type="checkbox"/>	<input type="checkbox"/>	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	WB1
S14008	7380766	120	1	1	12	15	1	0	<input type="checkbox"/>	<input type="checkbox"/>	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	WB1
S13024	7380782	120	1	5	12	15	1	0	<input type="checkbox"/>	<input type="checkbox"/>	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	WB1
S13065	7380774	120	1	3	12	15	1	0	<input type="checkbox"/>	<input type="checkbox"/>	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	WB1
S14023	19317473	62	1	3	12	15	1	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	SB1
S14012	19493286	120	1	3	12	15	1	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	WB1

Also data from an external computer, like for example from the demand feeding station, can be read in from the liquid feeding computer via interface. The data that was entered, like e.g., the number of the sow, the responder number or the day of the cycle are stored in the domain "General Data" and are now directly available for the user.



Excellent 4PX

The cost-saving control system for your animal house

Excellent 4PX is a cost-saving control system based on Linux which can be used as an efficient control for all processes during feeding. By means of the Excellent 4PX now also several independent day's schedules can be fed at the same time.



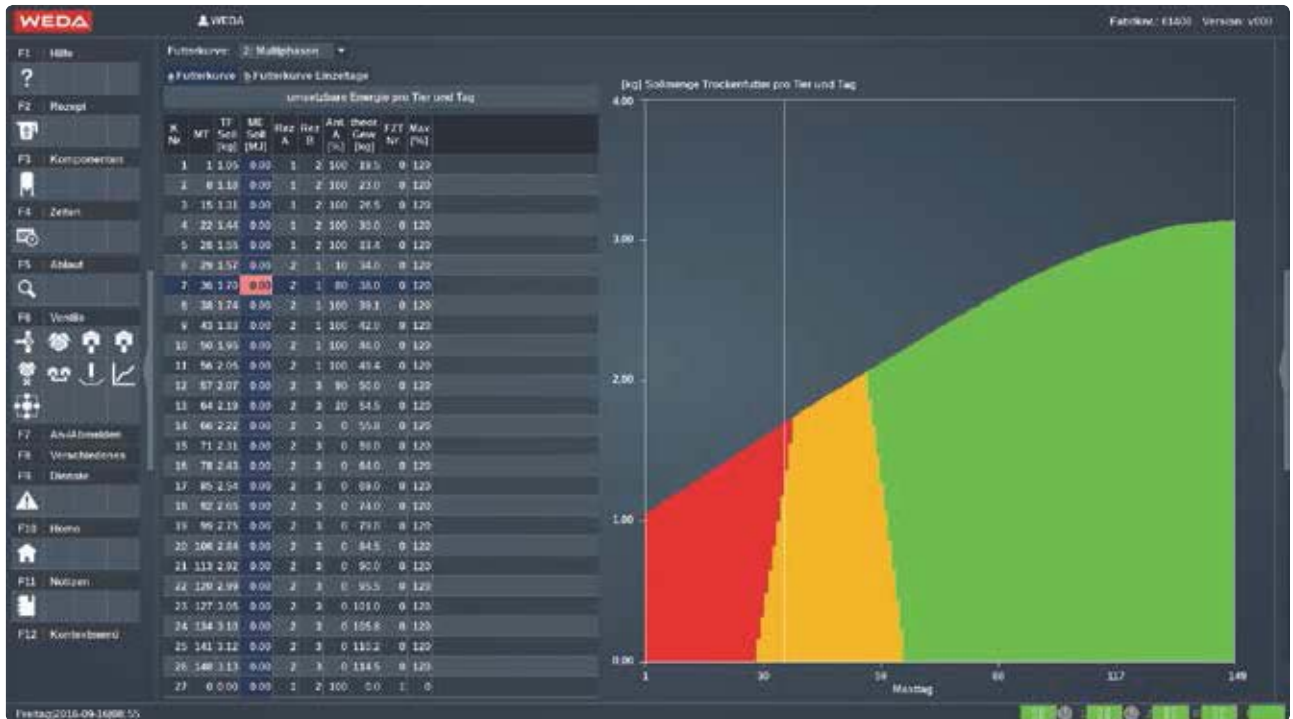
Excellent 4PX PLUS

Characteristics

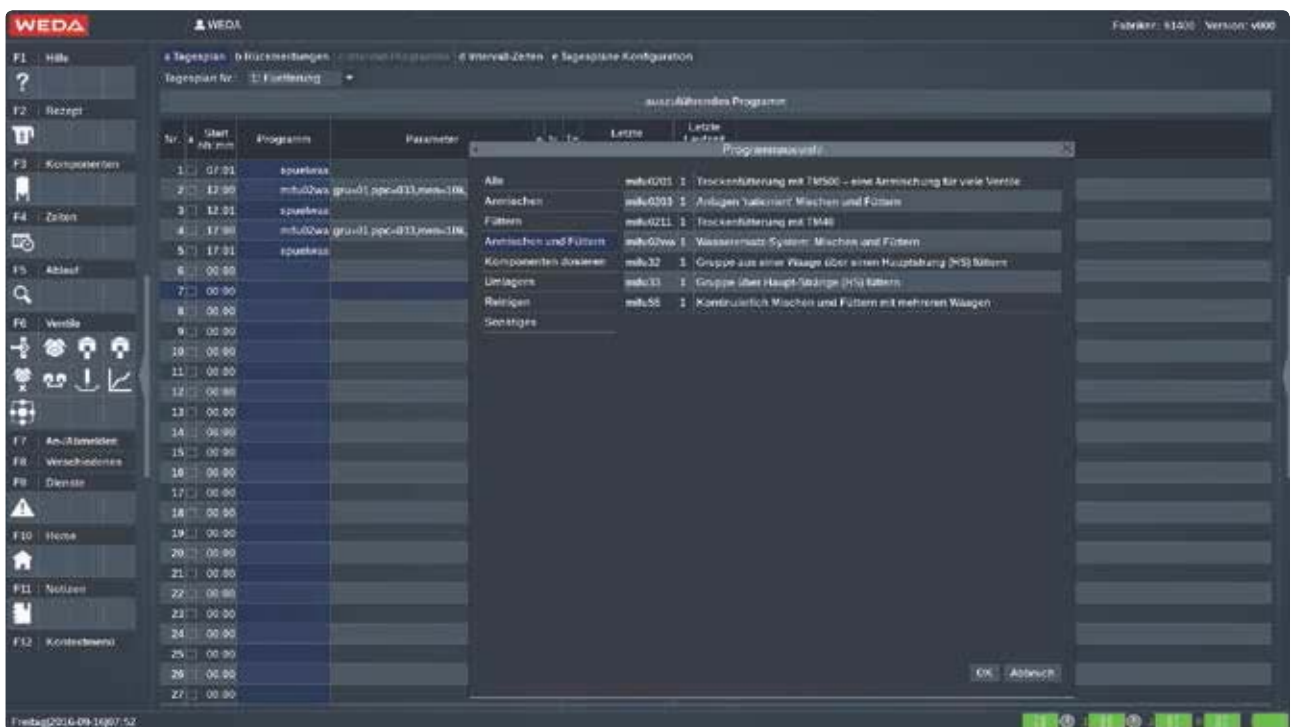
- » Concept and construction on the premises at Weda
- » Ready assembled and extensively pretested
- » Low change of hardware and therefore low fluctuation of computer versions
- » Long-time delivery of spare parts
- » Equipped with low-radiation 19" flat screen and easy to clean, gas-tight sealed plastic foil table keyboard or touch screen
- » Equipped with Ethernet interface, therefore integrable into the farm network via cable, glass fibre, radio or telephone
- » 4PX is ISOagriNET-compatible, therefore communication with likewise compatible control computers of other companies possible
- » Data securing possible via USB interface
- » Traceability can be carried out via log
- » Easily comprehensible icons for more security in pig production (e.g., reminder for the observance of waiting times)
- » Several independent day's schedules
- » Batch-tracing for animals. Despite numerous kinds of animal movements inside the house, animals can be identified problem-free
- » Individual process picture visualization.
- » In case of disturbances, the complete construction plans are available at Weda's competent Service Team
- » If desired, the Weda Service Team can dial into your system and support it with regard to settings and problems
- » Integrable into the control of extensive grinding and mixing processes
- » Integrated MINI-SPS (wiring in software) additionally enabled by a change of wiring via telephone from factory or on-site
- » Robust industrial control
- » No components prone to dust like CD-ROM and disk drives
- » Customer-individual equipment in the domain of hardware and software based on modular construction, therefore simple possibilities of extension
- » Control of alkaline cleaning and pH-value
- » Regulation of flow rate
- » Reading of feeding time
- » Recording of operating hours
- » Possibility of creating individual mixing temperatures. Temperature peaks of the feed are avoided and the cleaning effect of the lye is increased by the higher temperature

Excellent 4PX

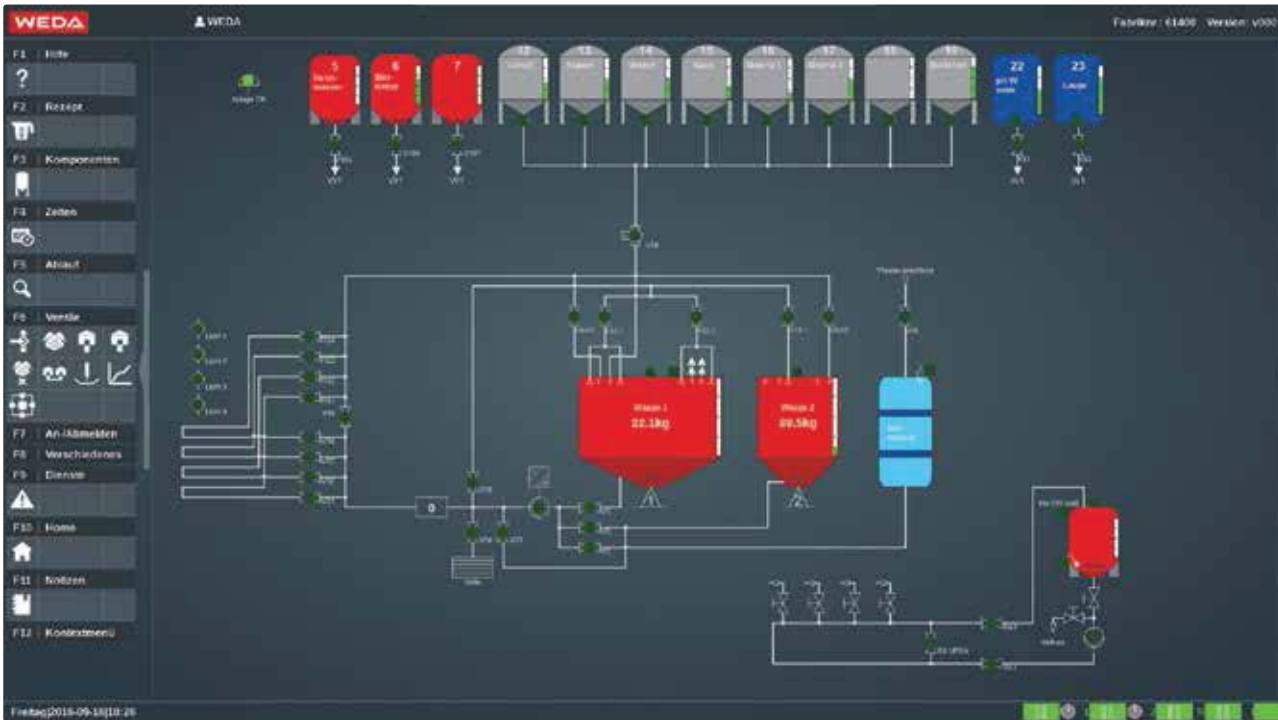
Intelligent and user friendly



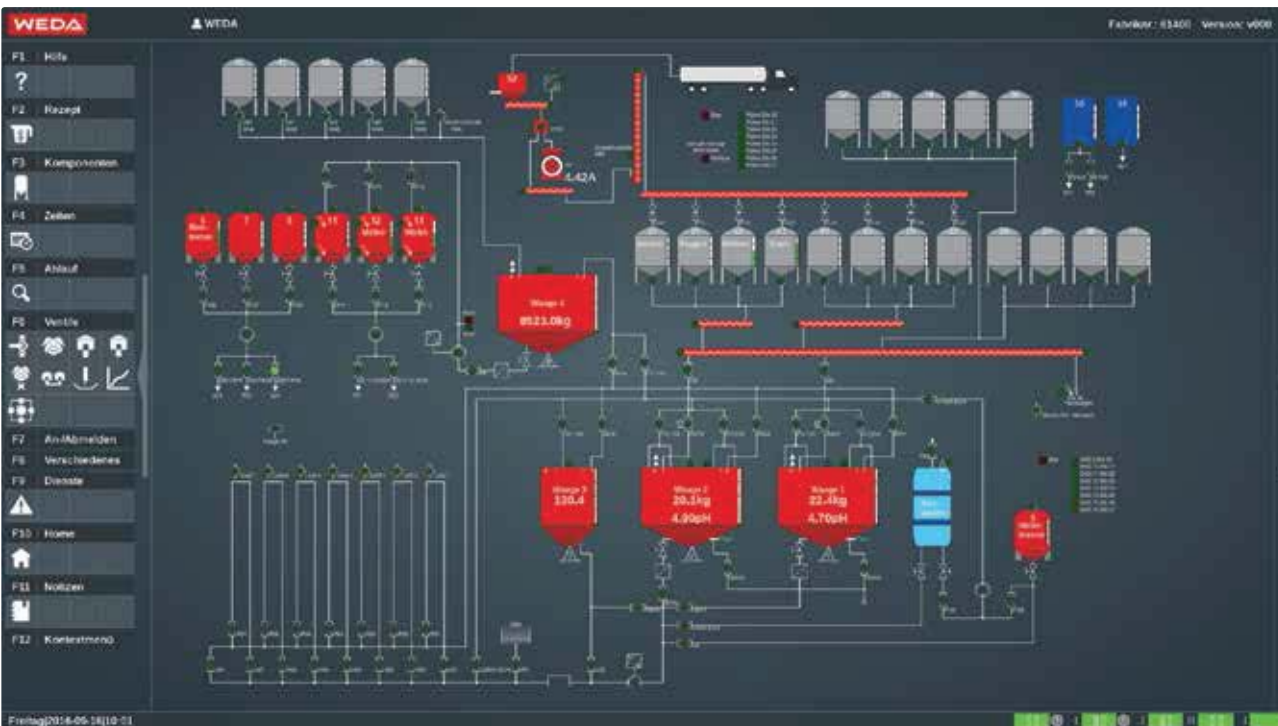
In the menu "Feed Graph", the system displays the multiphase feed graph. Here, the recipes will be shown in the previously assigned colour. Additionally, the selected position in the chart is shown by means of a line in the feed graph. This ensures a quick overview.



Further, in the section "Day's Schedule", individual daily routines – like for example feeding programs - can be simply and fast compiled at random by means of program selection. And all this without knowledge of programming and understanding of specific abbreviations.



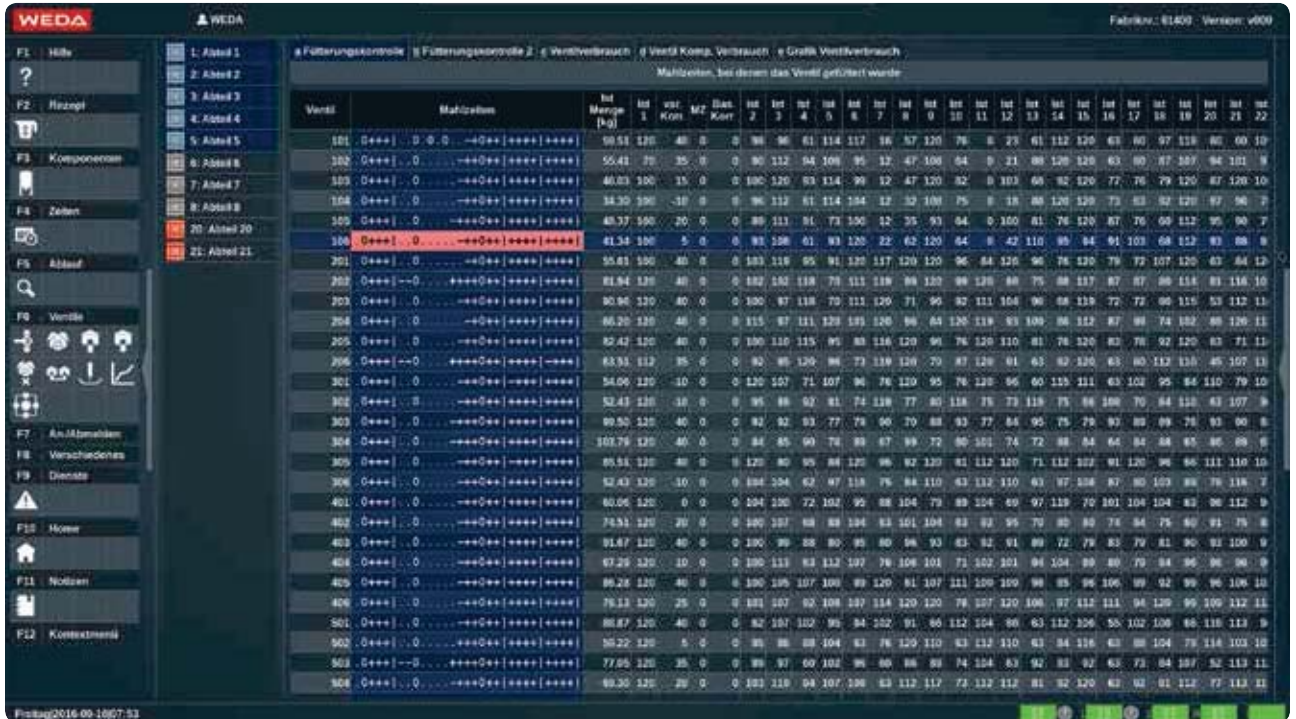
The Excellent 4PX displays an “individual visualization” of the process graphic of your unit. No matter whether you operate a simple...



or a complex unit, any registered device can be directly chosen and controlled via process visualization. By means of user-defined forms the control of the connected devices can be adapted – right into detail - to individual requirements, even afterwards. Via valve control the individual feed valves can be directly activated. Furthermore the control panel display can be simply and fast additionally faded in on the monitor.

Excellent 4PX

Monitoring of your animals

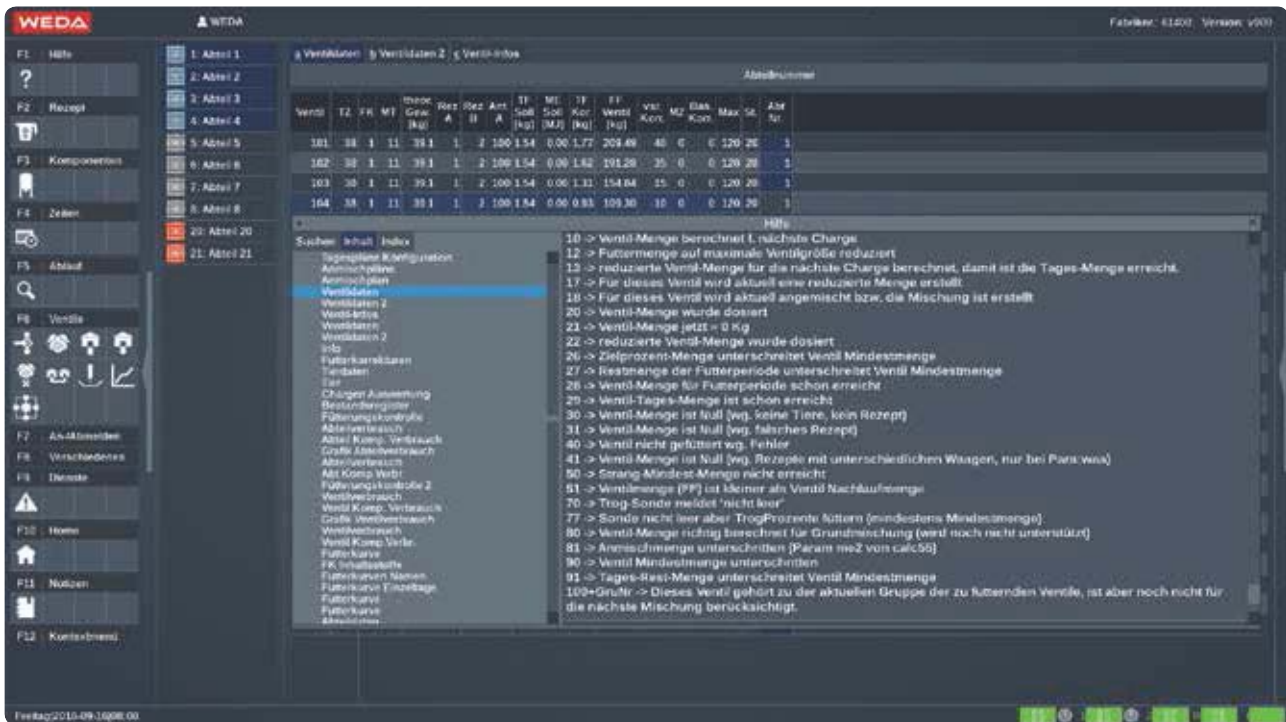


You want to know how much feed your animals have taken up at which point in time? No problem: our “Feeding Control” shows you all these data over the last then days. By means of our system you are not only able to optimize the routine of day with regard to feeding but - if you wish - you can also be shown the valves at which feed uptake can still be optimized.

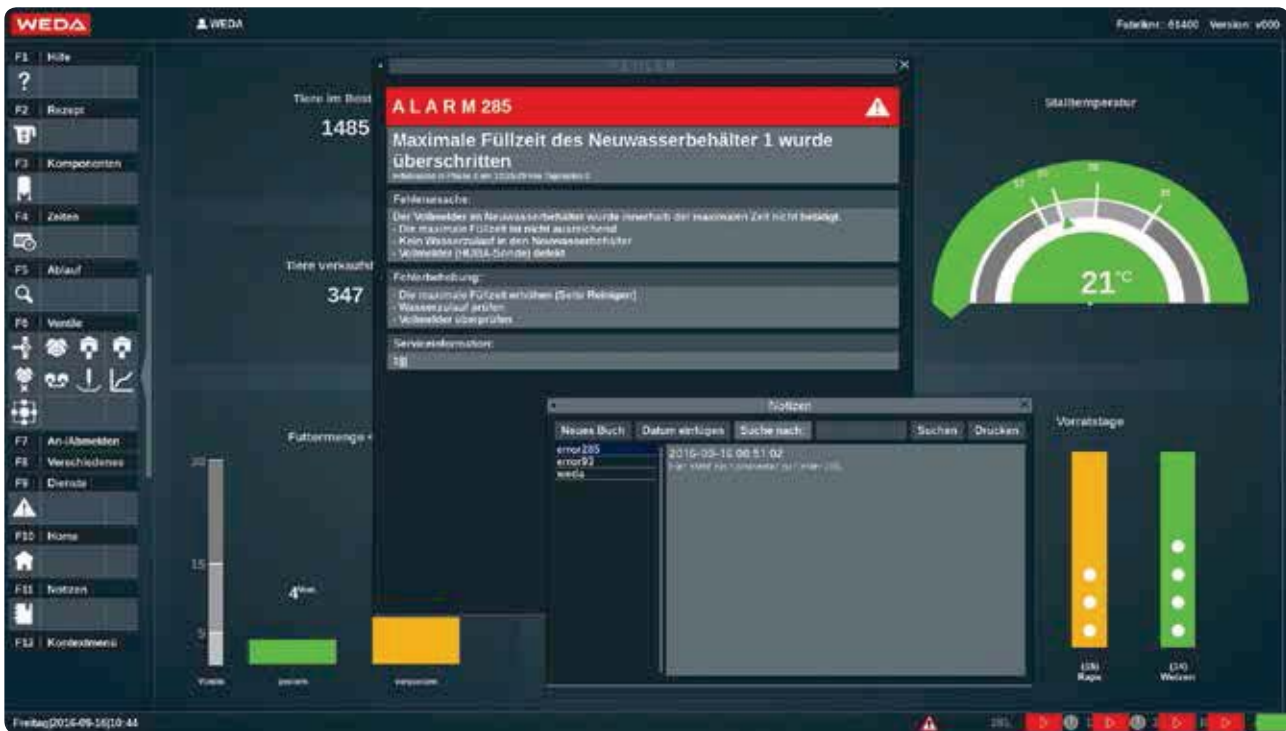
You are just interested only in a certain value range? The filter can be individually set and is stored by the system.



The “Feeding Time Measuring” shows you the speed your animals require for feeding. If the trough is emptied after a certain time at the first feeding, the system will then at the next feeding automatically add a determined percentage rate of feed to the original feed amount. If - after a certain time - the trough is still filled, the amount of feed will be reduced by a determined percentage rate at the next feeding. The feeding time charts can be assigned per fattening day in the feed graph. This way, weaners for example have a feeding time chart which differs from that of fattening pigs and sows.



The Excellent 4PX has an extensive “Help Function”. This can be selected from any menu item by means of the F1 key and shows you directly the relevant support for this menu item. From there, you can certainly also have direct access to supports for other domains.



Your system displays an error? Don't worry, we have ensured proper support for you. Already the “Alarm” will offer you exact data with regard to the cause of trouble. Furthermore, via the “Notes” button, a notepad can be opened into which the user can enter additional comments.

Excellent 4PX

Weda Fermi 4PX - The Fermentation Software

The screenshot shows the WEDA software interface for recipe configuration. The main window displays a table of components for the recipe 'Vormast':

Kom. Nr.	Komponente	Tr. Sub. [%]	Tr. [%]	Real [%]	Real [kg]	Fests. Menge [kg]	PW Va
1	Brauchwasser	0.00	0.000	63.889	638.889	0	
2	Ferment	27.00	20.000	18.111	181.111	0	
3	Gerste	87.00	29.000	7.250	72.500	0	
4	Weizen	87.00	48.000	12.000	120.000	0	
5	Milchsaug	1.87.00	3.000	0.750	7.500	0	
			130.000	100.000	1000.000		

The right panel shows the 'Ausgleichskomponente' (Balancing Component) section for '3: Brauchwasser', including a table for 'Inhaltsstoffe' (Ingredients) and 'pH-Wert Säuerung' (pH Value Acidification).

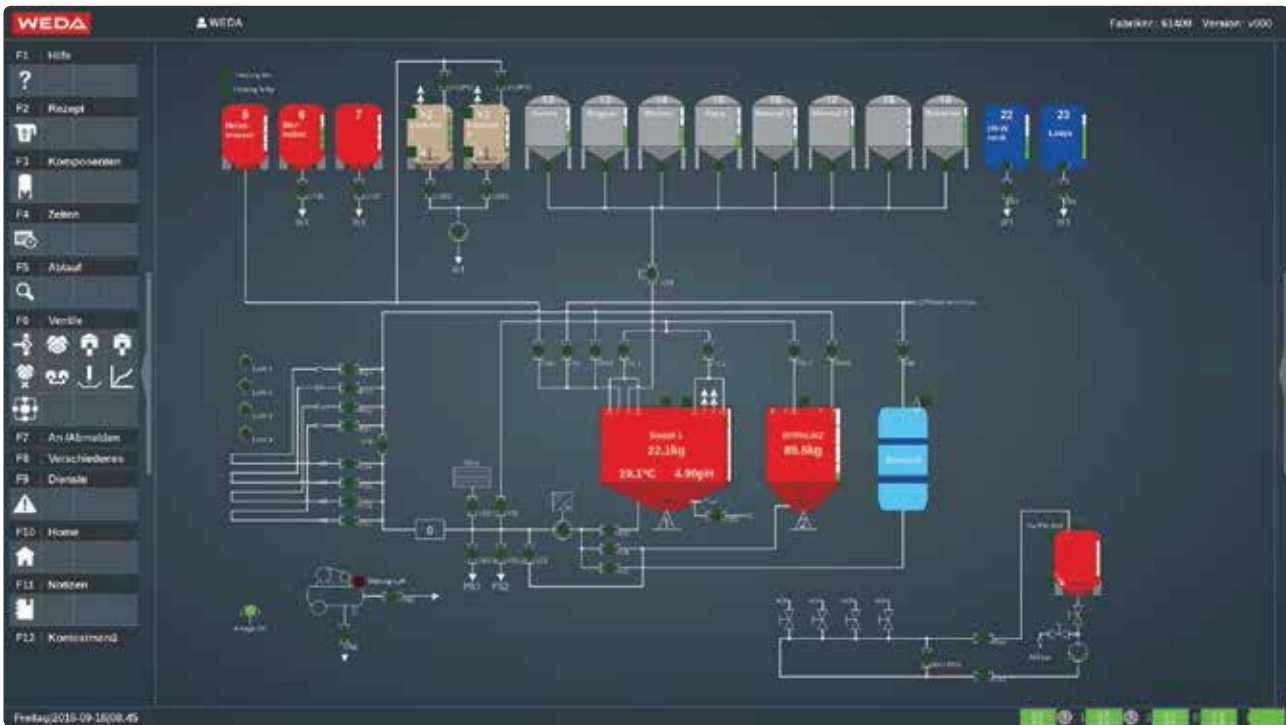
Via the "Starting Page", the user of the unit can enter the required temperature, pH-value and formula for each recipe into the computer, which then calculates the exact amounts of the required components as well as their ingredients, and which creates a mixing plan.

The screenshot shows the 'Mischungsplan' (Mixing Plan) dialog box. It provides detailed information on the mixing procedure, including component amounts and temperatures:

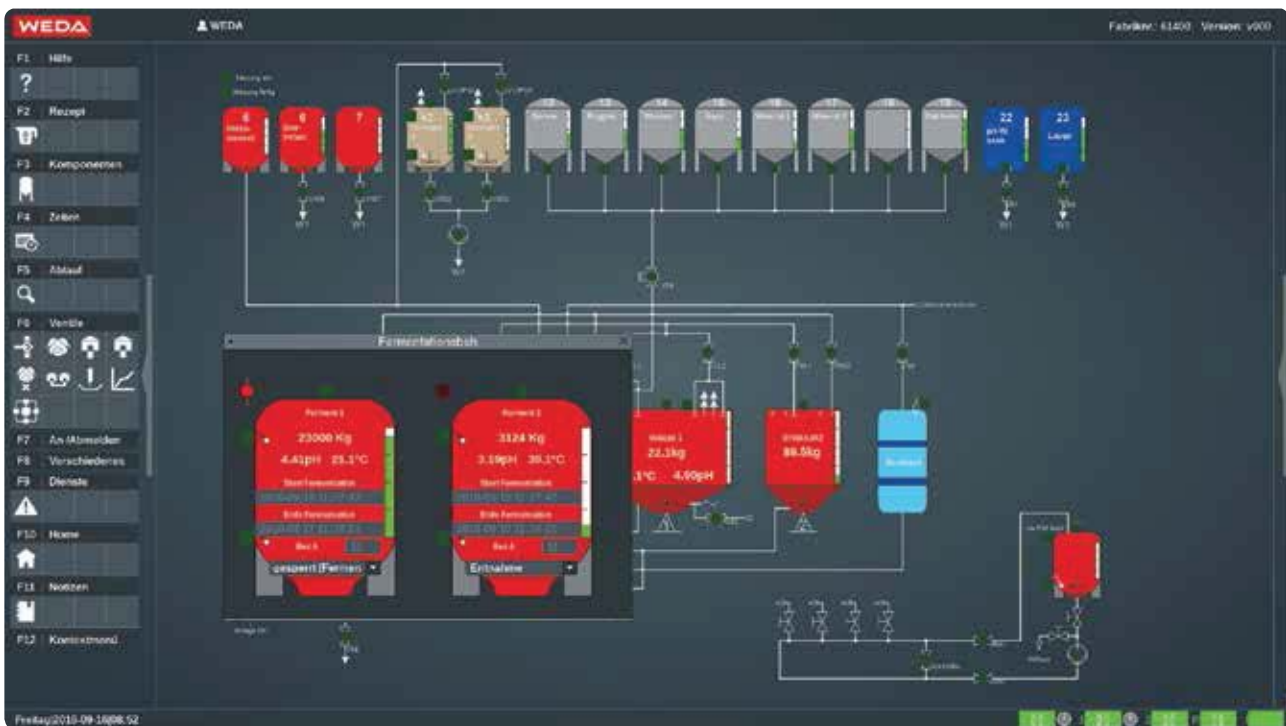
Kom. Nr.	Komponente	Menge [kg]	Misch. TS. [%]	Komp. Temp. [°C]	Misch. Temp. [°C]
1	Brauchwasser	34.722	0.00	18.0	15.0
5	Heisswasser	804.187	0.00	50.0	42.9
8	Ferment	181.111	9.44	10.0	40.5
12	Gerste	72.500	12.21	18.0	39.0
15	Weizen	120.000	21.26	18.0	38.1
16	Milchsaug	7.500	21.75	18.0	38.0
3	Brauchwasser	0.000	21.75	10.0	38.0
6	Heisswasser	8.000	21.75	50.0	38.0

The dialog also shows 'Temperatur von Waage: 10.0 °C' and 'Temperatur von Heisswasser: 50.0 °C'. The background shows the same recipe configuration screen as the previous screenshot.

The "Mixing Plan" contains detailed information on the mixing procedure including all required amounts and temperatures. After an examination as to whether it is possible to reach the temperature stated in the mixing plan with the components available in the unit or with the temperature stated in the mixing plan, the recipe or the temperatures of the different components have to be adapted if necessary. At the latest (without manual adaptation) when leaving the recipe page, a report is made that it will be impossible for the system to comply with the specifications.



By means of the „Visualized Display“, the user keeps an eye on the complete fermentation unit and is able to obtain an overview in a fast and simple way. This way, for example, the current silo filling levels are displayed.



In the „Visualized Display“, the fermentation tanks are displayed like silos. A double-click on the container opens a separate window with all essential information (like for example temperature, pH-value, weight / filling level, etc.).

The computer can lock the container for feed withdrawal in order to prevent that insufficiently fermented feed is fed out. The blocking is displayed by a red LED at the container. In addition, a blocking of the mixture in case of a deviating pH-value and / or deviating temperature is possible.

Excellent 4PX

Weda Fermi 4PX - The Fermentation Software



By means of the “Measured Value Indicator”, the unit operator is at all times in a position to be informed on the measuring values of the last few days. A double-click on the display, for example, provides information with regard to the pH-value, temperature and weight in relation to time. Due to these values, the unit operator is at any time able to analyze processes subsequently and to correct possible errors.

Datum / Uhrzeit	Beh. Nr.	Beh. Name	Menge (kg)	Menge (kg)	Proz. Gakt. (%)	Start Anmachsch	Start Fermentieren	Ende Fermentieren	Temp. 1 (°C)	Temp. 2 (°C)	Temp. 3 (°C)	pH 1	pH 2	pH 3	Messzeit 1 (Min)	Messzeit 2 (Min)	Messzeit 3 (Min)	Müht. dauer (Min)	Temp. HW (°C)	Anz. 500	Ba A
2016-09-09 14:12:25	203	Ferment 3	14042	75	0.50	2016-09-09 14:16:15	2016-09-09 15:15:25	2016-09-10 16:17:06	23	23	23	3.00	3.00	3.00	15	600	1000	0	23	0	1161473
2016-09-09 15:22:27	205	Ferment 5	14090	75	0.50	2016-09-09 15:26:34	2016-09-09 16:23:22	2016-09-10 20:08:08	25	25	25	5.00	5.00	5.00	15	600	1000	0	25	0	1161473
2016-09-09 18:35:03	202	Ferment 2	10902	38	0.50	2016-09-09 18:38:14	2016-09-09 20:06:25	2016-09-11 07:42:08	22	22	22	2.00	2.00	2.00	15	600	1000	0	22	0	1161473
2016-09-09 21:12:37	204	Ferment 4	14022	75	0.50	2016-09-09 21:17:04	2016-09-09 22:15:30	2016-09-11 05:12:06	24	24	24	4.00	4.00	4.00	15	600	1000	0	24	0	1161473
2016-09-10 06:01:19	206	Ferment 6	14015	75	0.50	2016-09-10 06:05:28	2016-09-10 07:02:08	2016-09-11 11:34:09	28	28	28	6.00	6.00	6.00	15	600	1000	0	28	0	1161473
2016-09-10 10:38:43	201	Ferment 1	10908	38	0.50	2016-09-10 10:42:49	2016-09-10 12:09:48	2016-09-11 17:48:07	21	21	21	1.00	1.00	1.00	15	600	1000	0	21	0	1161473
2016-09-10 16:31:43	203	Ferment 3	14020	75	0.50	2016-09-10 16:35:48	2016-09-10 17:34:43	2016-09-11 16:42:07	23	23	23	3.00	3.00	3.00	15	600	1000	0	23	0	1161473
2016-09-10 20:16:17	205	Ferment 5	14012	75	0.50	2016-09-10 20:20:22	2016-09-10 21:17:08	2016-09-12 07:08:07	25	25	25	5.00	5.00	5.00	15	600	1000	0	25	0	1161473
2016-09-11 06:01:04	204	Ferment 4	14014	74	0.50	2016-09-11 06:04:51	2016-09-11 07:03:29	2016-09-12 09:00:14	24	24	24	4.00	4.00	4.00	15	600	1000	0	24	0	1161473
2016-09-11 08:09:38	202	Ferment 2	10920	38	0.50	2016-09-11 08:13:45	2016-09-11 09:40:48	2016-09-12 15:12:07	22	22	22	2.00	2.00	2.00	15	600	1000	0	22	0	1161473
2016-09-11 11:47:02	206	Ferment 6	14018	75	0.50	2016-09-11 11:51:09	2016-09-11 12:47:48	2016-09-12 16:34:09	26	26	26	6.00	6.00	6.00	15	600	1000	0	26	0	1161473
2016-09-11 18:08:28	201	Ferment 1	10922	34	0.50	2016-09-11 18:12:15	2016-09-11 18:30:23	2016-09-13 08:48:07	21	21	21	1.00	1.00	1.00	15	600	1000	0	21	0	1161473
2016-09-11 18:49:47	203	Ferment 3	14015	75	0.50	2016-09-11 18:53:55	2016-09-11 20:52:52	2016-09-12 21:34:08	23	23	23	3.00	3.00	3.00	15	600	1000	0	23	0	1161473
2016-09-12 07:18:03	205	Ferment 5	14018	75	0.50	2016-09-12 07:20:08	2016-09-12 08:15:53	2016-09-13 13:34:06	25	25	25	5.00	5.00	5.00	15	600	1000	0	25	0	1161473
2016-09-12 09:12:02	204	Ferment 4	14020	75	0.50	2016-09-12 09:16:08	2016-09-12 10:11:52	2016-09-13 12:42:06	24	24	24	4.00	4.00	4.00	15	600	1000	0	24	0	1161473
2016-09-12 15:17:32	202	Ferment 2	10944	38	0.50	2016-09-12 15:21:13	2016-09-12 17:10:56	2016-09-14 04:31:00	22	22	22	2.00	2.00	2.00	15	600	1000	0	22	0	1161473
2016-09-12 16:40:00	203	Ferment 3	10944	38	0.50	2016-09-12 16:40:13	2016-09-12 18:56:25	2016-09-14 04:45:06	51	51	51	0.00	0.00	0.00	15	600	1000	0	0	2	1161473
2016-09-12 17:17:33	206	Ferment 6	14018	75	0.50	2016-09-12 17:21:55	2016-09-12 18:18:29	2016-09-14 04:05:08	26	26	26	6.00	6.00	6.00	15	600	1000	0	26	0	1161473
2016-09-12 21:01:37	203	Ferment 3	14016	75	0.50	2016-09-12 21:06:04	2016-09-12 22:54:28	2016-09-14 06:01:06	23	23	23	3.00	3.00	3.00	15	600	1000	0	23	0	1161473
2016-09-13 06:27:26	203	Ferment 3	14016	75	0.50	2016-09-13 06:27:30	2016-09-13 09:20:18	2016-09-14 09:20:18	51	51	51	0.00	0.00	0.00	15	600	1000	0	0	1	1161473
2016-09-13 06:37:58	201	Ferment 1	10918	38	0.50	2016-09-13 06:41:48	2016-09-13 10:18:44	2016-09-14 16:13:14	21	21	21	1.00	1.00	1.00	15	600	1000	0	21	0	1161473
2016-09-13 12:52:18	204	Ferment 4	14022	75	0.50	2016-09-13 12:56:21	2016-09-13 13:55:13	2016-09-14 15:04:08	24	24	24	4.00	4.00	4.00	15	600	1000	0	24	0	1161473
2016-09-13 14:02:16	205	Ferment 5	14018	75	0.50	2016-09-13 14:06:31	2016-09-13 15:03:12	2016-09-14 18:12:08	25	25	25	5.00	5.00	5.00	15	600	1000	0	25	0	1161473
2016-09-14 06:01:04	206	Ferment 6	14028	75	0.50	2016-09-14 06:04:58	2016-09-14 07:02:28	2016-09-15 11:34:06	24	24	24	4.00	4.00	4.00	15	600	1000	0	24	0	1161473
2016-09-14 07:09:32	202	Ferment 2	10934	38	0.50	2016-09-14 07:13:38	2016-09-14 08:41:17	2016-09-15 14:26:06	22	22	22	2.00	2.00	2.00	15	600	1000	0	22	0	1161473
2016-09-14 08:49:49	203	Ferment 3	14020	74	0.50	2016-09-14 08:53:57	2016-09-14 09:52:33	2016-09-15 11:04:09	23	23	23	3.00	3.00	3.00	15	600	1000	0	23	0	1161473

Fermi 4PX collects all relevant fermentation data of the unit in tabular form and saves these over a period of 30 days. The farmer can send these files by e-mail to special evaluation programs (e.g., the feed company or the bacteria suppliers). The specialists there will then be able to point out in good time possible problems in the fermentation process to the farmer and suggest solutions for avoiding those problems. In addition the processes can be monitored and the fermentation can be further optimized.

W-Mobile

Wireless Access to all animal and feed data

By means of the W-Mobile, feed corrections and animal movements can be directly carried out inside the house. The data are fed into the central Computer by W-LAN interface (Hot Spot).



Start-up Screen



Display of Valves



Fast Entry



Easy Adding of Data

W-Mobile

Wireless Access to all animal and feed data

By means of the W-Mobile, feed corrections and animal movements can be directly carried out inside the house. The data are fed into the central Computer by W-LAN interface (Hot Spot).



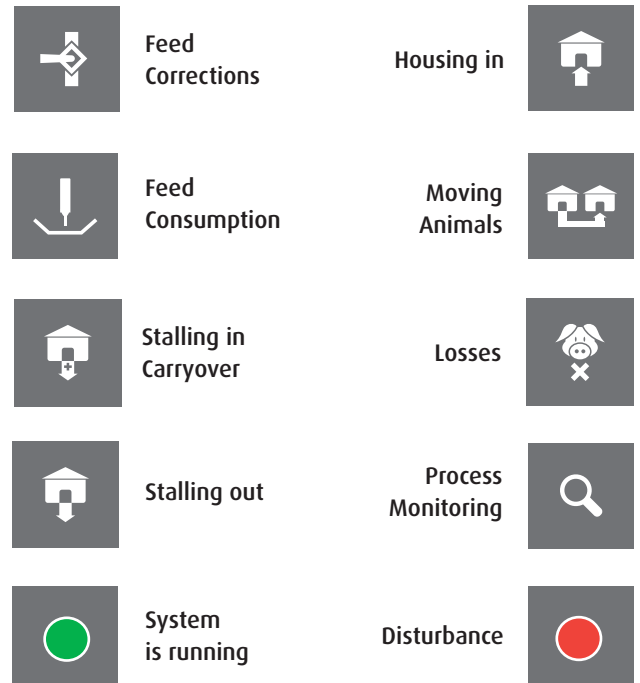
Feeding Control



Feeding Control

Characteristics

- » Administration of housing in, stalling out and moving of animals, animal losses and feed corrections
- » Touch Screen operation
- » Connection with Excellent 4PX via W-LAN or UMTS
- » Fast entry possible without keyboard

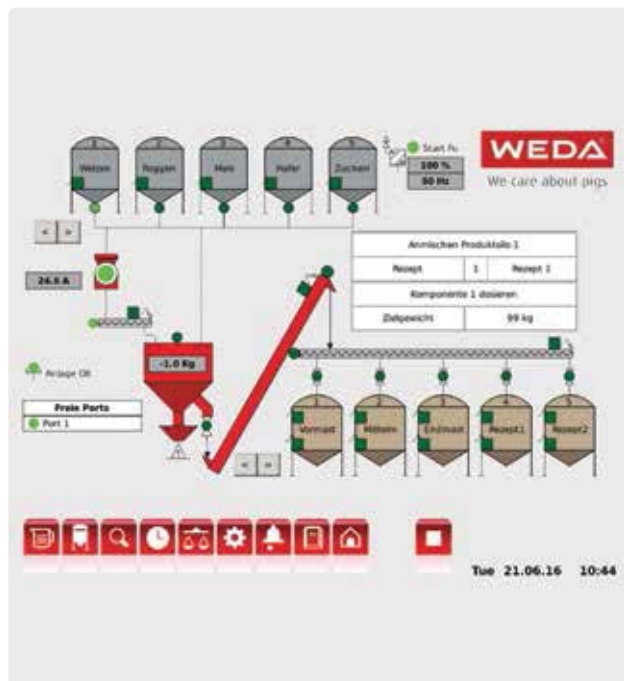




Grinder control

Everything under control

The grinder control is operated via touch screen and can be locally adapted to the customer's unit.



Visualization



Control cabinet

Characteristics

- » Touch screen
- » Visualization
- » Simple handling
- » Administration of:
 - » 15 components
 - » 10 product silos
 - » 1 grain mill
 - » 1 discharge screw conveyor
 - » 1 weighed dry mixer
- » Setting of 10 recipes
- » Choice between automatic and manual dosification
- » Day's schedule control with mixing and allocation program
- » 4 outlets freely assignable and therefore connection of optional devices possible
- » Time-controlled day's schedule
- » Substitute components can be stored (switch silo)
- » Empty report for component silos
- » Full and level report for product silos
- » Conveyance monitoring
- » Data securing and a mixing proof can be called up via USB and Ethernet