

Stallkamp-Whispers

The most exciting Gossip from Stallkamp at a glance

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Hannover

About the problems of manure storage – why it pays off to invest in a stainless steel tank now

A new fertilizer law (DüVO) is in force in Germany and the extended manure holdback period increases the pressure on the farmers. Time to compare the various storage concepts for liquid manure. Stainless steel or concrete: which material is more convincing?

Comparing the expenses of both materials, the purchase costs for a stainless steel tank are higher. They consist of assembly and material costs. **But over time, the purchase of a stainless steel tank is much cheaper.** The reason are high follow-up costs, which a concrete tank causes.

Concrete causes high follow-up costs

Concrete tanks cause expenses above the original costs such as maintenance and repairing costs because concrete is not as resistant as stainless steel. Every concrete tank has cracks that can increase over time. The cracks must be repaired by costly maintenance to prevent corrosion and consequently the complete collapse of the tank. Besides, the disposal costs are of significant importance, as concrete must costly be disposed as special waste. At a disposal price of approx. 50 € to 80 € per ton, costs of 25,000 € can easily arise.

Stainless steel

Due to their corrosion resistance, Stallkamp stainless steel tanks have a long life cycle. Stainless steel owes its resistance to corrosion to a simple chemical reaction: Due to its chrome content, a razor-thin, chemically resistant passive layer is formed at the surface in connection with the oxygen in the air or water. If the passive layer is damaged due to external influences, it re-builds itself from the matrix of the stainless steel.

First Stallkamp Tank from 1985 still in use today

How durable stainless steel tanks are, is shown by the [example of the first Stallkamp tank](#): built in 1985, **the steel tank is still in good condition after more than 30 years - although no penny was spent on maintenance.** This investment was definitely worth it - even for the next generation.

In terms of environmental protection, the Stallkamp stainless steel tank can score again, as it is easily and completely recyclable. In contrast to other materials or material combinations, **it can thus be completely recycled after use and the residual value of stainless steel is retained.**

Adjusts to requirements

Comparing the flexibility of both materials, the concrete tank is less flexible because once installed, it cannot be relocated. In this point, the stainless steel tank is clearly superior. **The reason is the possibility of disassembly and reassembly** at a new location or relocation on the same property thanks to its segment-like construction.

In addition, the subsequent expansion by adding depth or height to an existing tank underlines the high flexibility of a stainless steel tank. Thus, additional storage volume can be created without investing in a new slurry tank with corresponding pump and mixer technology. This aspect also has a positive effect on the cost balance of the stainless steel tank.

Stainless steel is worthwhile

Summing up, the decision for stainless steel is worthwhile. Not only the follow-up costs for maintenance are reduced to a minimum, but also its flexibility, longevity and sustainability are convincing.

The Erich Stallkamp ESTA GmbH from Dinklage (Lower Saxony, Germany) builds stainless steel containers for agriculture for more than 30 years. [This video](#) shows the complete assembly of a corrugated steel tank, which is used as a slurry storage.



Everyone wants it: separation – but how to find the right separator for my business?

There are many ways to process nutrients to a new marketable product or increase of transportability. However, beyond all the options, a separator is usually the first step of the process. And for good reason. With the help of a separator the solid and liquid phase are firstly divided.

Press screw separators achieve high dry matter contents

The separators made by Stallkamp are equipped with a hydraulic ball head which adjusts the dry matter content of the solids hydraulically. **In combination with the stainless steel housing, very high degrees of dry matter can be reached.** This is an advantage in ongoing processes such as drying systems. Additionally, the transportability of the solids improves significantly.

Diverse separator portfolio

Depending on the application, **the throughput is more crucial** than the dry matter content. Therefore Stallkamp developed different separators, varying in their engine size. Thus, they are attractive for both small farms and large biogas plants. Industrial plants achieve the throughput by combining several separators.

The separator itself can't make it

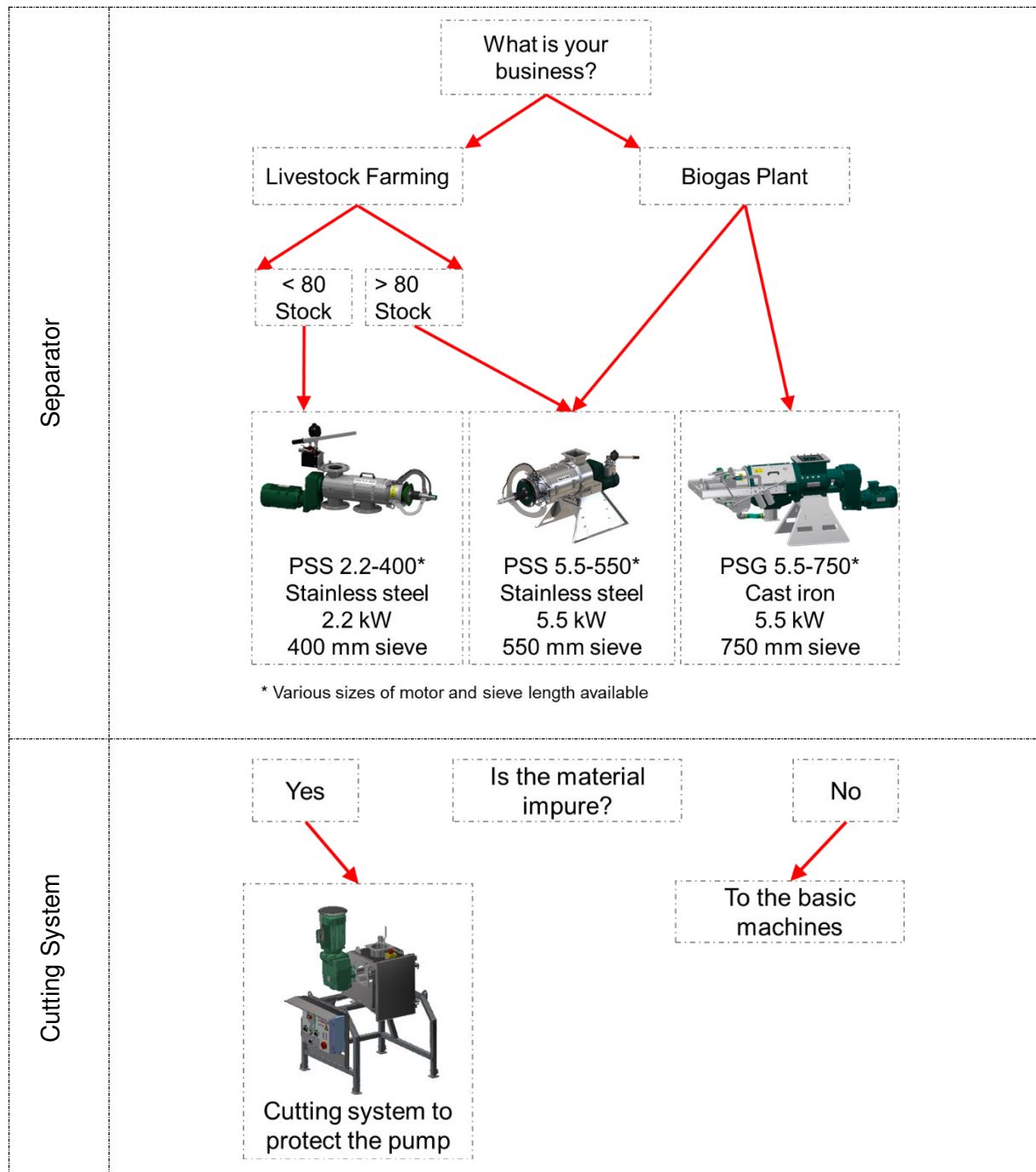
Mostly, the slurry must be conveyed to a certain height in which the separator is installed. So a pump is often needed. Stallkamp offers both low-cost rotary lobe pumps and high-performance eccentric screw pumps. **Depending on the requirements of the plant operator, the separators can be modularly assembled:**

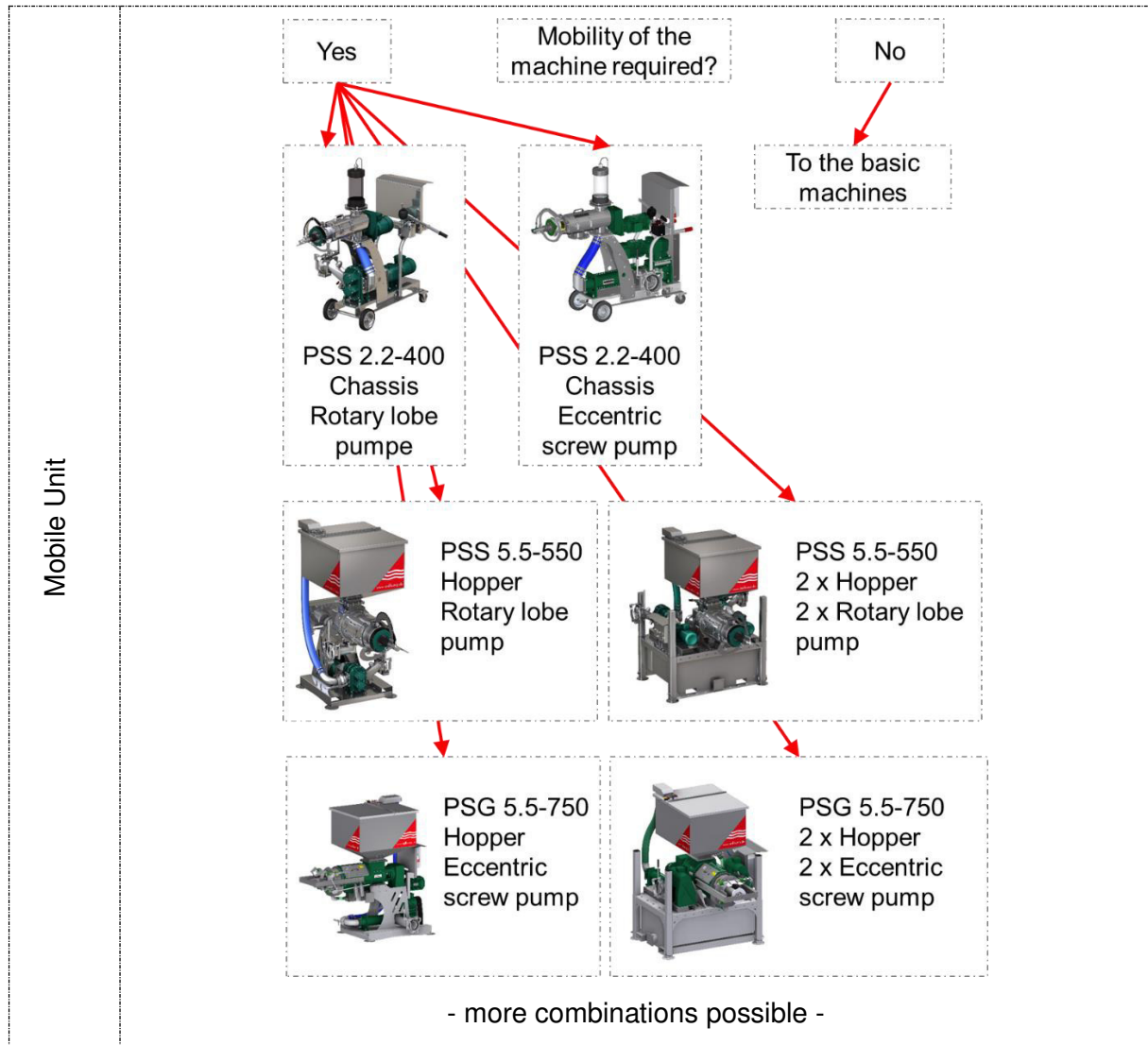
- Separator as basic machine
- Supply pump
- Discharge pump
- Cutting system as pump protection
- Mobile unit: chassis, hopper, control panel

The combination options are diverse - as diverse as the requirements of the farmers are. **Therefore it is recommended to test the machine right on the farm.**

The responsible sales partner can be found at <https://www.stallkamp.de/en/sales/search-distributors>

How to find the right separator for my business?





Nobody is able to avoid it: manure mixing – cleverly done you can save money and the environment with innovative products

Stallkamp offers the complete product range of agitator technology in all speed ranges, agitator blade sizes and blade positions. At EuroTier, two innovative mixers will be presented for the first time at a trade fair: the TMR 3S and the TMR 3D.

TMR 3S

The submersible mixer 3 S is part of the third generation agitator technology and benefits from some technical refinements. The motor housing is deepened from one part with a heavy press, which improves the engine protection. Likewise, the attachment of the blades is optimised. The screwed single blades for the impeller are replaced by welded blades. The TMR 3S differs with an impeller speed of 483 rpm from other agitators. This makes it the fastest Stallkamp mixer. **It is especially developed for pig manure in order to produce a very strong stream of thin manure.** For now, it is available with a motor power of 7.5 kW and thus achieves a circulation quantity of 4,650 m³/h.

TMR 3D

The submersible mixer 3D also has the advantages of the third generation agitator technology. New is the positioning of the three blades in combination with a rather slow rotational speed. **With 273 rpm the propeller mixes even difficult and thick media such as fermentation residues or bull manure.** The agitator is available in 6 different motor sizes between 4 and 22 kW.







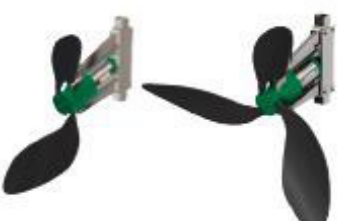
TMR 3M – The money and energy scrimper

In addition to the TMR 3D, there is another 3-bladed agitator: the TMR 3M. It is also called intermediate speed motor, because it runs faster than the large blade agitator, but slower than the standard agitator. **The special feature of this agitator is the efficiency because it reduces the electricity costs and still mixes very effectively.** The secret is the optimised ratio between circulation quantity and thrust performance. The power consumption decreases because the impeller runs with only 128 rpm. Nevertheless, the 3 optimally adjusted stirring blades achieve an even higher circulation quantity than various standard devices. Thus, less electricity is necessary at the same stirring result. Another advantage of the TMR 3M is the wear, which is considerably reduced due to the low speed. In addition, the experience of global use in biogas plants and slurry tanks ensures reliability of the agitator.

Example calculation biogas plant

On a biogas plant, a standard 11 kW mixer was replaced by a 11 kW TMR 3M from Stallkamp. The plant operator accounts an improved stirring result by about 50%, whereas the power consumption remains the same. Assuming an electricity price of 20 ct/kWh and 2,628 operating hours per year, this results in savings of about 2,900 € per year. **This means that the additional price for the TMR 3M is amortised in the first year.**

Overview of Agitator Portfolio

<p>TMR3</p>		<p>Standard agitator for reliable operation in manure tanks, wastewater tanks and digester tanks</p>
<p>NEW TMR 3S</p>		<p>The speedy with a very high rotational speed especially for pig manure!</p>
<p>NEW TMR3D</p>		<p>3 blade optimised agitator for thick manure and bio-mass in biogas plants</p>
<p>TMR3-Z</p>		<p>Agitator in circulation frame for optimal stirring result underneath the animal shed</p>
<p>TMR 3I</p>		<p>Full stainless steel agitator for aggressive media (pH 5,3 – pH 8,1)</p>
<p>TMR 3M</p>		<p>Energy-saving intermediate speed motor for optimised circulation rate</p>
<p>GFR-2 GFR-3</p>		<p>Slow large-blade agitator for powerful movement in tough flowing substances</p>

Stallkamp



Tauchmotor-Rührwerk 3M im Klärwerk Badbergen
Submersible Motor Agitator 3 M in WWTP



You 



We've got to pump it up! – Nothing runs without a slurry pump

Stallkamp's pump portfolio is designed for agriculture and convinces the farmers for years with reliable technology.

Displacement pumps

The displacement pumps include both rotary lobe pumps and horizontal eccentric screw pumps. The rotary lobe pump is built with different drive variants (electric or tractor) so the pump can be used stationary and mobile. It is characterised by a constant suction and pressure behavior and delivers up to 250 m³/h. The eccentric screw pump is driven by a flat geared motor and has much more suction power than a rotary lobe pump, consuming less power. Even high dry matter contents are easily conveyed.

Submersible motor pumps

The submersible pumps have a large pump housing which makes them resistant to blockages. Thanks to the consistent development, Stallkamp performs with a reliable and effective product between 4 and 22 kW on the market. Whether as a suction pump in the shed or at the filling port of the tank, the submersible pump is used under tough conditions. For particularly high pressures the submersible high-pressure pump is recommended because the construction prevents from gas-building in the pump housing. The high-pressure pump is built from a power of 11 to 22 kW.

Long shaft pumps

In terms of long shaft pumps, Stallkamp offers a centrifugal pump and a high pressure pump. The principle is similar to the submersible pumps with the difference that the motors are not submerged in the medium via the long shaft. Therefore they are utilised in reception pits and manure pits up to 6 m depth. The long shaft pumps are characterised by a long lifespan.

New: cutting system

Since the beginning of the year, the cutting system is produced in series. **The cutting system aims for filtering and shredding impure material.** Foreign bodies like stones, pieces of wood, etc. are filtered by offset cutting edges. The pieces are conveyed into the storage space. This is easy to empty by means of a large cleaning flap. Thus, Stallkamp offers a reasonably priced solution that pays off. The cutting filter has a motor power of 3 kW, is equipped with 2 inputs and outputs and reaches a theoretical flow rate up to 50 m³/h.

Everyone should see it – why it is worthwhile to visit the Stallkamp booth

Dive into the world of virtual reality – that is what visitors can expect at booth B25, Hall 27. **Equipped with virtual reality glasses, visitors have the chance to gaze an authentic view into a new stainless steel tank.** With the help of a 360 degree camera, a digester tank was photographed before filling. Thus, interested customers can view directly into a tank of 29 m diameter and a height of 7 m.

The subject of manure **storage** and fermentation is highlighted with two other exhibition pieces. Two samples of a tank show how the tanks are screwed in a segment like design. In addition, an example of “adding height to an existing tank” is demonstrated. It means that stainless steel shells are attached to an existing concrete tank in order to increase the storage volume.

Separation technology will also be shown with a variety of machines. From the press screw separator with 2 kW over the 5.5 kW machine up to the separator made of cast iron, all basic machines will be represented. The pump combinations are illustrated by the mobile units.

In order to present our broad portfolio of **pump** and **agitator** technology, the various devices for all applications are exhibited. This way, the visitors can convince themselves of the Stallkamp quality of the products at EuroTier.

Ensuring that every farmer finds the right contact person, Stallkamp and all its distribution partners are present for any requests. We also represent our distribution partners abroad in order to equally advise the international visitors.

The booth of Erich Stallkamp ESTA GmbH is located in Hall 27, the crossing hall from EuroTier to EnergyDecentral, at Booth B25.



The classics – who, how, where, what is Stallkamp?

Who?

In 1973, Mr. Erich Stallkamp found a mechanical engineering company for the production of drive systems for feeding, dunging and egg collection systems. Awarded as "Entrepreneur of the Year", he is still successfully leading the company with his entrepreneurial spirit.

How?

Starting with drive systems for agriculture, more and more products were added. In 1984, the world's first stainless steel tank for agriculture was successfully constructed. The development of pumps and agitators followed with great commitment and innovative strength. In the 1990s, the products were used in the wastewater industry for the first time. As the biogas boom gathered speed, Stallkamp saw the potential and delivered many stainless steel digesters. And today, the company is still on a growth course and expands worldwide.

Where?

The headquarters of Erich Stallkamp ESTA GmbH are located in Dinklage, Germany. Spread over 3 production and assembly factories as well as an own service workshop, the warehouse and the administrative building, about 200 employees work daily on the success of the company. All products are obviously made according to the quality promise *Made in Germany*.

What?

As a specialist in the design, manufacture and assembly of high-quality stainless steel products such as tanks, pumps, agitators and separators, Stallkamp is the competent partner for agriculture, biogas plants and the wastewater industry.



People behind Stallkamp



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