

Silage additive tank  
LIQUIDO F

 **PÖTTINGER**

# One machine, many solutions





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The LIQUIDO F is the newly developed, versatile silage additive tank from PÖTTINGER. As a silage additive tank that includes precision application rate control for homogeneous application of the forage, it is used to produce high-quality silage. As a front bumper, it enhances safety on the road, and as front ballast, the LIQUIDO F can be used universally for a versatile range of agricultural applications. Because it can be used on any tractor with any implement, regardless of brand, the LIQUIDO F can be deployed universally. This ensures maximum cost effectiveness and enables the production of stable silage.

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# The best forage



## Optimum basic ration preservation

To ensure that you can provide your animals with high-quality, nutritious feed throughout the year, it is necessary to provide a consistent and clean supply of forage. This means that it may be necessary to preserve the harvested basic ration.

Silage is a method that preserves nutrients well and at the same time is efficient in terms of production costs.

### Preservation with lactic acid fermentation

The plants are covered in various microorganisms, including lactic acid bacteria. In the absence of air, these convert part of the sugar in the plants into lactic acid. The acid formed leads to a rapid reduction in pH value and keeps the forage stable from a microbiological point of view. The forage can now be stored.

However, there are companions to the lactic acid bacteria on forage crops can cause problems during the silage making process.

## Undesirable microorganisms

Clostridia are among the biggest enemies of lactic acid bacteria. They convert sugar, protein and lactic acid into butyric acid, which is not good. Clostridia are found in the soil and therefore enter the silage primarily as a result of dirt ingress during harvesting.

Coli bacteria predominantly produce pungent smelling acetic acids. Putrefactive bacteria decompose high-quality protein. These bacteria enter the equation as a result of contaminated forage.

Yeast and mould can cause unwanted reheating.





## The basic prerequisite for silage

The most important parameter for optimum silage quality is therefore to start with clean forage.

The end-to-end harvesting process needs to be carried out as smoothly as possible to avoid dirt ingress. The dry matter content of the material to be harvested should also be between 30% and 40% and air pockets removed as soon as possible.

When all of these factors interact, lactic acid bacteria can accelerate pH value reduction and have a positive effect on silage quality.

## Boosting the fermentation process

Silage additives can be applied during the harvesting process to positively influence the silage process and ensure the forage quality remains stable in the clamp.

The silage process can be accelerated and fermentation improved by adding lactic acid bacteria using a silage additive system. The more evenly the silage additive is applied to the forage, the better the chance of preventing incorrect fermentation and stopping it from reheating when the clamp is opened.

It is important to note that the silage additive is only an additional factor in producing stable silage.

The silage additive tank from PÖTTINGER is the surest way to achieve high-quality, stable silage.

# Cost effectiveness



## One product for multiple applications

The LIQUIDO F from PÖTTINGER is designed as a front silage additive tank.

However, it is more than a simple silage additive tank; it's a real all-rounder. The three components, consisting of a silage additive system, front ballast and a front bumper, are combined in just one machine. The multiple functions offered by the LIQUIDO F allow it to be used flexibly, making it a cost effective all-rounder.

Because it can be used for many applications and combined with different machines, maximum utilisation and longer operating times are ensured.

In addition to grassland applications, the LIQUIDO F can also be used as front ballast and safety-enhancing bumper, making it a reliable partner in all areas.

## Works with all makes

The LIQUIDO F silage additive tank can be combined with any harvesting machine.

Unlike most other silage additive systems, instead of being mounted directly on the harvesting machine, it is located on the front linkage of the tractor. This means that the PÖTTINGER silage additive tank can be used easily and flexibly in combination with a wide variety of different brands of loader wagons and balers.





## Fully integrated deployment capability

The LIQUIDO F can be used regardless of which harvesting machine is in operation. Multiple loader wagons and balers can be used one after the other with the same LIQUIDO F, so it can be used for multiple applications. Because the system can be installed and removed so quickly between the tractor and the harvesting machine, swapping machines takes next to no time.

This level of flexibility is particularly useful on farms that have several different harvesting machines. That is where the versatile LIQUIDO F silage additive tank fits in perfectly. It can be combined with any of the harvesting machines that the farm manager needs to deploy.

## “Putting the silage additive tank on the front of the tractor is what convinced me”

“This system is particularly useful for contractors because the LIQUIDO F can be used with different harvesting machines without having to make any further investments.

The silage additive tank can be attached in just a few minutes and filled easily and safely thanks to the front hydraulics. What is more, the 400-litre tank lets you carry enough silage additive to keep you going for a long time.

By setting the forage density and the desired application rate in litres per tonne, the LIQUIDO F has a very precise metering system. You can lower your costs by optimising the parameters based on this proven metering system.”

Paul Straub  
Farmer and contractor  
Opfenbach, Bavaria, Germany

# Cost effectiveness

## Multiple functions



## Three functions in one machine

The LIQUIDO F from PÖTTINGER can be used in three different ways.

It can be used as an additive tank for the production of high-quality silage. As a front bumper with adjustable outer wings and integrated lighting, it also enhances safety on the road, and as front ballast, the LIQUIDO F can be used universally for a versatile range of agricultural applications.

This ensures maximum, cost effective capacity utilisation.

Front attachment of the system results in better weight distribution, which improves the stability and driving performance of the tractor and trailed machine for a smoother ride.

The combination of main tank, fresh water tank, and hand wash tank in one silage tank system is also unique on the market. The design of the newly developed LIQUIDO F focuses on crop protection technology to enable precision metering of the silage additive.

Every feature contributes to maximising silage quality.

## Front tank

The LIQUIDO F is a front-mounted silage additive tank.

Unlike conventional silage additive systems, PÖTTINGER has made a point of choosing a front-mounted silage additive tank. The overall weight is distributed more evenly so that the payload of the loader wagon or baler is not reduced by any additional weight of the system. This allows the harvesting machine to be operated with a maximum load.





## Safe on the road with the front bumper

As a front bumper, the LIQUIDO F has an outer width of 2.55 metres and can be extended to a maximum width of 2.85 metres thanks to the extendible demarcation lights. The aim is to enhance safety on the road.

The front bumper allows oncoming vehicles to gauge the width of the tractor better and faster. The underride guard is also one of the most important safety measures.

## Flexible wings

The side-mounted wings can be adjusted using a locking bolt without the need for tools. Access to the silage additive tank control centre is adapted by flexibly adjusting the width and angle of the side wings.

The integrated demarcation lights and reflectors as well as the optional beacons, available in combination with the work lights, direct attention to the front bumper. In addition, the tractor's indicators are repeated on the front tank. This makes the tractor and trailer combination more visible during the day and at night whilst enhancing safety during transport.



## Front ballast

The silage additive tank from PÖTTINGER doubles as front ballast, enabling the full load capacity of the harvesting machine to maximise cost effectiveness.

The LIQUIDO F is available with two different sizes of base frame:

- LIQUIDO F 2000 at 500 kg
- LIQUIDO F 3000 at 1000 kg

Depending on the series, the weight can be increased as an option with an additional 500 kg of ballast. The maximum basic weight is therefore 1000 kg for the LIQUIDO F 2000, and 1500 kg for the LIQUIDO F 3000.

The ballast weight can be configured at the time of purchase to get optimum results.



# Cost effectiveness

## Tank system



## Filling up, adding and mixing, cleaning

The combination of three different tanks, which together make up the LIQUIDO F silage additive tank, is a unique feature. The tank combination makes it possible to fill the tank, mix in the silage additives by hand, then wash your hands and rinse the lines at the end of the harvesting process. It means that the workplace can always be kept clean.

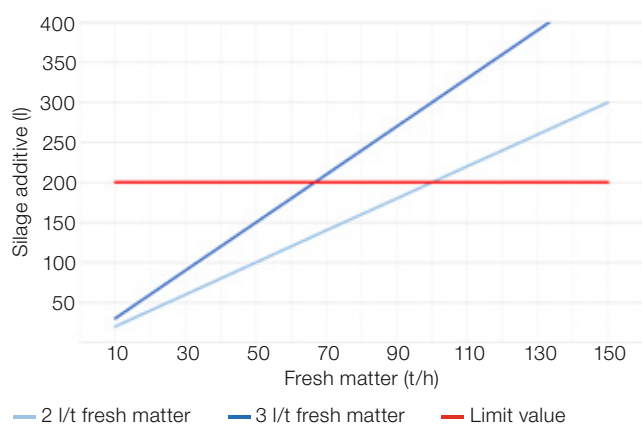
A maximum filling capacity of 200 litres or 400 litres offers the advantage of being able to operate for extended periods. There is no need to constantly refill the system, thanks to the large capacity of the tank.

## Main tank

The main tank has a standard volume of 200 litres. A 400-litre tank is also available as an option to meet higher performance requirements if needed.

Because the silage additive system can be used with a low tank level, the quantity can be specifically adjusted for each application depending on the output required. The quantity in the tank is flexible and can be varied to meet all requirements, regardless of whether a low or high application rate is being used.

## 200-litre or 400-litre tank?







## Fresh water tank

The fresh water tank is provided as standard and has a capacity of 45 litres. This tank is integrated into the side of the main tank and is used to store clean water.

At the end of the harvesting process, the fresh water tank can be used to rinse the lines. The settings of the 4-way valve are changed so that water flows from the fresh water tank through the lines on the tractor to the nozzles. This rinses out the residues of the silage additive. As a result, there is no need to drive to a water supply to flush the lines because cleaning can be carried out directly in the field.

The contents of the fresh water tank can also be used as a backup for the LIQUIDO F 3000 during a harvesting day. The water can be fed into the main tank by changing the setting of the valve in the flow line. The silage additive mixture can then continue to be diluted with the additional water, or a new application rate can be mixed directly.



## Hand washing tank

A 15 litre hand washing tank is integrated into the LIQUIDO F in the same way as the fresh water tank. This container can be used to wash hands, mix inoculant solutions and then rinse out the silage additive container.

The hand washing tank is a practical additional feature for keeping everything clean.



## Hose package

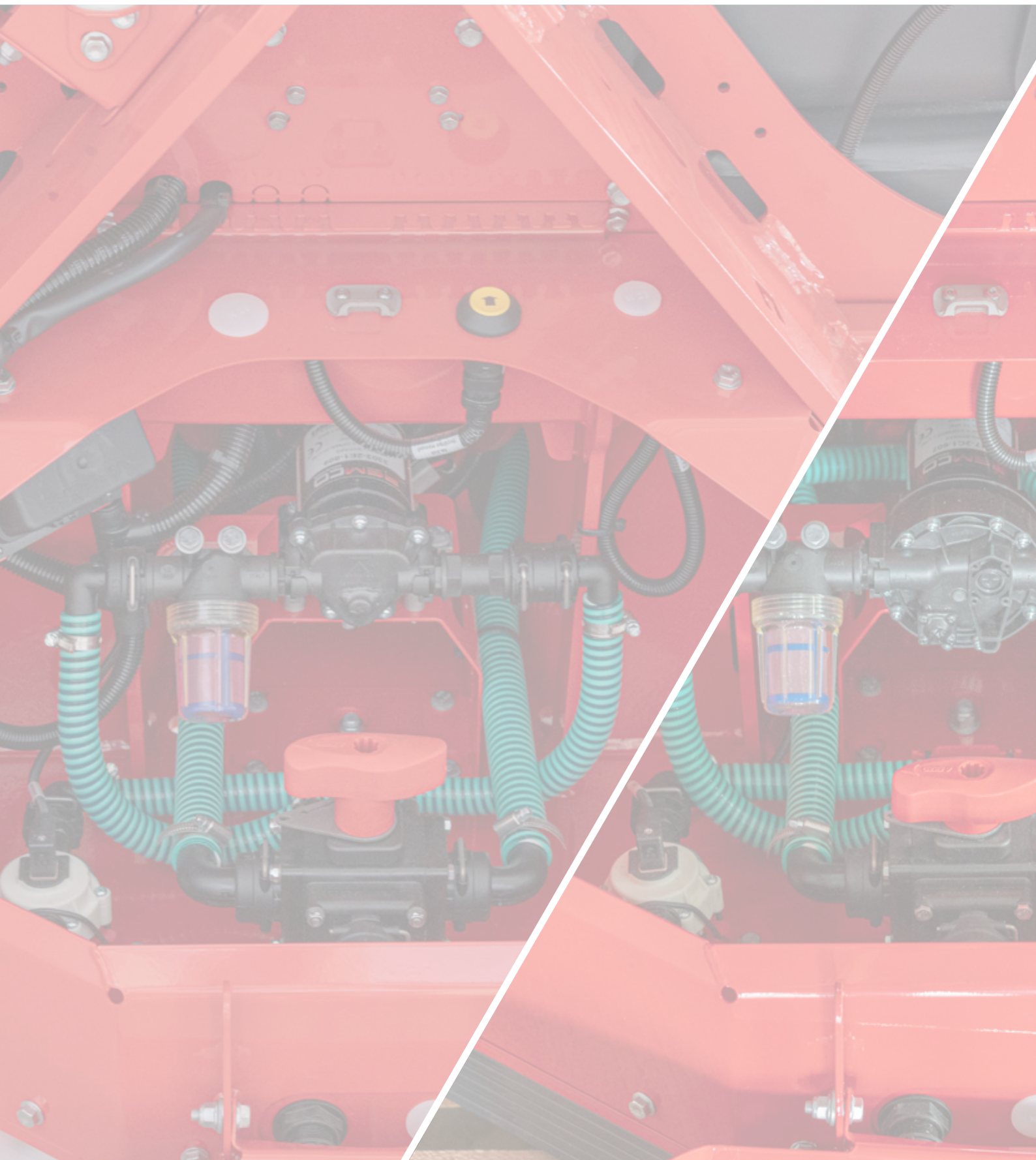
The universal hose package, which carries the silage additive solution from the tank to the nozzles, is routed over the tractor as standard. The electrics for the silage additive tank system are also mounted on the tractor.

Both of these systems can remain on the tractor and only need to be installed once.

There are coupling points for the lines at the front and back of the tractor for removing the silage additive tank and the harvesting machine. Thanks to these bolted couplings, the lines from the front tank to the tractor and the tractor to the harvesting machines can be connected and disconnected in just a few simple steps.

# Cost effectiveness

Control centre





## Control centre (pump system)

The control centre of the LIQUIDO F silage additive tank is located so that it is protected in the front attachment area. This is easily accessible thanks to the flexible side wings and is protected by a cover.

The pump is operated manually at the press of a button. The two valves – the 4-way valves for adjusting the main flow line and the flush valve for opening the line to the induction chamber on the LIQUIDO F 3000 – are also accessible from here. The controls are ergonomically positioned for user-friendly operation.

## 4-way valve

The 4-way valve is also referred to as the all-in-one valve. Depending on requirements, this valve enables simple switching between the different tanks and lines without having to disconnect and reconnect couplings.

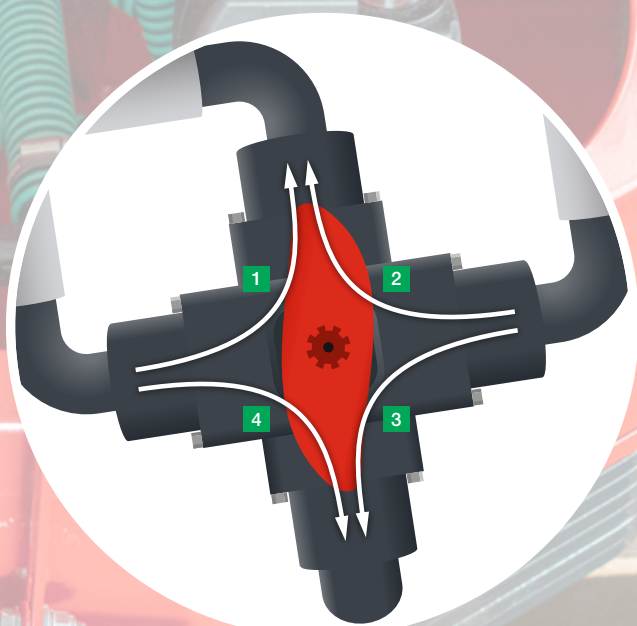
Four different functions can be selected using the 4-way valve.

## LIQUIDO F 2000

- 1 Operating setting: main tank to nozzles
- 2 Fresh water tank to nozzles
- 3 Empty fresh water tank
- 4 Empty main tank

## LIQUIDO F 3000

- 1 Operating setting: main tank
  - to nozzles or back to main tank
  - to induction chamber (flush valve open)
- 2 Fresh water tank
  - to nozzles or to main tank
  - to induction chamber (flush valve open)
- 3 Empty fresh water tank
- 4 Empty main tank



# Cost effectiveness



## Set-up modes

At the terminal, the setting for operating the silage additive system can be selected in advance using a straightforward, intuitive control panel. Starting and stopping the application and regulating the application rate of the silage additive can be set using three different set-up modes:

- 1 Manual set-up (switch application on and off at the touch of a button, flowrate is fixed)
- 2 Pick-up position (using ISOBUS or external signal; switching on and off depending on the position of the pick-up)
- 3 Dynamic application – LIQUIDO F 3000 (using ISOBUS or signal socket; application rate controlled depending on driving speed)

The pump on the LIQUIDO F 3000 does not switch off when the nozzles are deactivated (unlike on the LIQUIDO F 2000). The liquid is returned to the main tank.

Each time before the LIQUIDO F is switched on, a starting application rate needs to be set. The key parameters for this are the swath size and the level of liquid applied to the flow of forage.

Having matched the swath with the loader wagon or baler during the first pass, the values can be optimised and then transferred to the terminal.

The following parameters are required for this adjustment:

- The actual flowrate applied, measured by the flowmeter.
- The metres driven are saved via ISOBUS.
- The forage mass can either be calculated using an integrated weighing system on the machine, or by weighing the loader wagon or a bale separately.





## Automatic switching on and off using the position of the pick-up

When the pick-up is raised, the application is switched off to save silage additive.

The position of the pick-up is detected by the ISOBUS signal, and this information is forwarded to the control unit so that application is deactivated. This function avoids unnecessary application of the silage additive and achieves massive savings.

The application switches back on again when the pick-up is lowered. This makes it easy to drive over swaths and turn around in the field without wasting any of the inoculant solution.

For harvesting equipment from other manufacturers, an additional sensor can be installed to detect the position of the pick-up and switch the application on and off accordingly.



## Dynamic application – LIQUIDO F 3000

With dynamic application, the system reacts to the driving speed of the tractor and harvesting machine to regulate the application of the inoculant solution.

If the collection rate of the harvesting machine increases and the current application rate of silage additive using two nozzles is no longer sufficient for the flow of forage, the LIQUIDO F 3000 automatically increases the application rate. Two additional nozzles are activated to ensure constant and homogeneous application of the crop.

This ensures uniform application of the inoculant solution and maximum cost effectiveness.



## Digital flowrate measurement

Digital flowrate measurement is carried out by the flowmeter. This measures the volume currently being applied in litres per hour.

The flowrate of the LIQUIDO F can be adjusted by pressing a + 10% / - 10% button.

In addition, the LIQUIDO F 3000 uses a flowmeter to regulate the application rate, allowing it to react easily and efficiently to changing conditions. The exact application rate can be set using this system and then adjusted to match changes in the field at any time.

# The highest silage quality



## Maximum silage making capacity

Applying silage additives has no effect if the additive is not evenly distributed throughout the forage. If this happens, there is no homogeneous application, and the additional lactic acid bacteria cannot build up their effect.

If the pH value can be lowered quickly, sugar can be saved so it remains in the silage. This makes it all the more important for the system to ensure an even application of silage additive.

That is why PÖTTINGER has developed the LIQUIDO F silage additive tank, which helps you to achieve a high-capacity process and the highest silage quality.

## Homogeneous application

The aim should be a precise and homogeneous application of the inoculant solution to the silage crop. With the LIQUIDO F, the lactic acid bacteria are applied directly to the flow of forage between the pick-up and the loading rotor, where the solution is distributed evenly.

The nozzles are positioned so that homogeneous application is achieved with every size and shape of swath.





## Precision metering

The amount of inoculant solution to be applied per tonne of fresh matter during harvesting can be set according to the intensity required. This ensures consistent output throughout the day.

The actual application rate through the nozzles is continuously measured and can be adjusted to optimise the application rate to changing conditions.

Thanks to dynamic application provided by the LIQUIDO F 3000, the application is adjusted according to the driving speed and automatically increased when a higher output is required. Homogeneous distribution of the inoculant solution is ensured even with changing swath densities.

The result is that this system always ensures a stable process for producing the highest quality silage.

# The highest silage quality



## Nozzle header

The nozzle header is installed between the pick-up and rotor on the harvest machine. The nozzle header can be connected and disconnected to the hose on the tractor and the rest of the system using a screw coupling.

The position of the nozzle header ensures that the inoculant solution is applied precisely and evenly to the flow of forage between the pick-up and the loading rotor.

## Nozzles

The nozzle header is equipped with 2 nozzles on the LIQUIDO F 2000 and 4 nozzles on the LIQUIDO F 3000. A selection of different nozzle packages with different flowrates is also available. The fan spray nozzles are available in three different colours (yellow, red, grey) with three different flowrates.

The colour of nozzle is selected in advance depending on the application rate requirements to ensure a homogeneous distribution of the inoculant solution in the flow of forage.

## Choice of nozzles to match your needs

LIQUIDO F	2000 with 2 nozzles	3000 with 4 nozzles
Yellow	40 l/h – 90 l/h	40 l/h – 200 l/h
Red	80 l/h – 175 l/h	80 l/h – 355 l/h
Grey	115 l/h – 245 l/h	115 l/h – 470 l/h





## Variable metering quantity

The two LIQUIDO F models have different application capacities:

- LIQUIDO F 2000: 40 l/h to 245 l/h
- LIQUIDO F 3000: 40 l/h to 470 l/h

The silage additive is pumped through the lines from the tank by an electric pump. Once it arrives at the nozzles, it is applied directly to the flow of forage. Precision metering and application of the silage additive in litres per hour is guaranteed.

Metering can be flexibly adapted to the performance of each harvesting machine to ensure efficient operation.

## Controlling metering

On the LIQUIDO F, metering of the application flowrate can be controlled manually using a + 10% / - 10% button. Use this button to respond to short-term changes in forage flow or a given situation in the field.

In addition, the LIQUIDO F 3000 dynamically regulates the metering of the additive according to the driving speed.

## Induction chamber

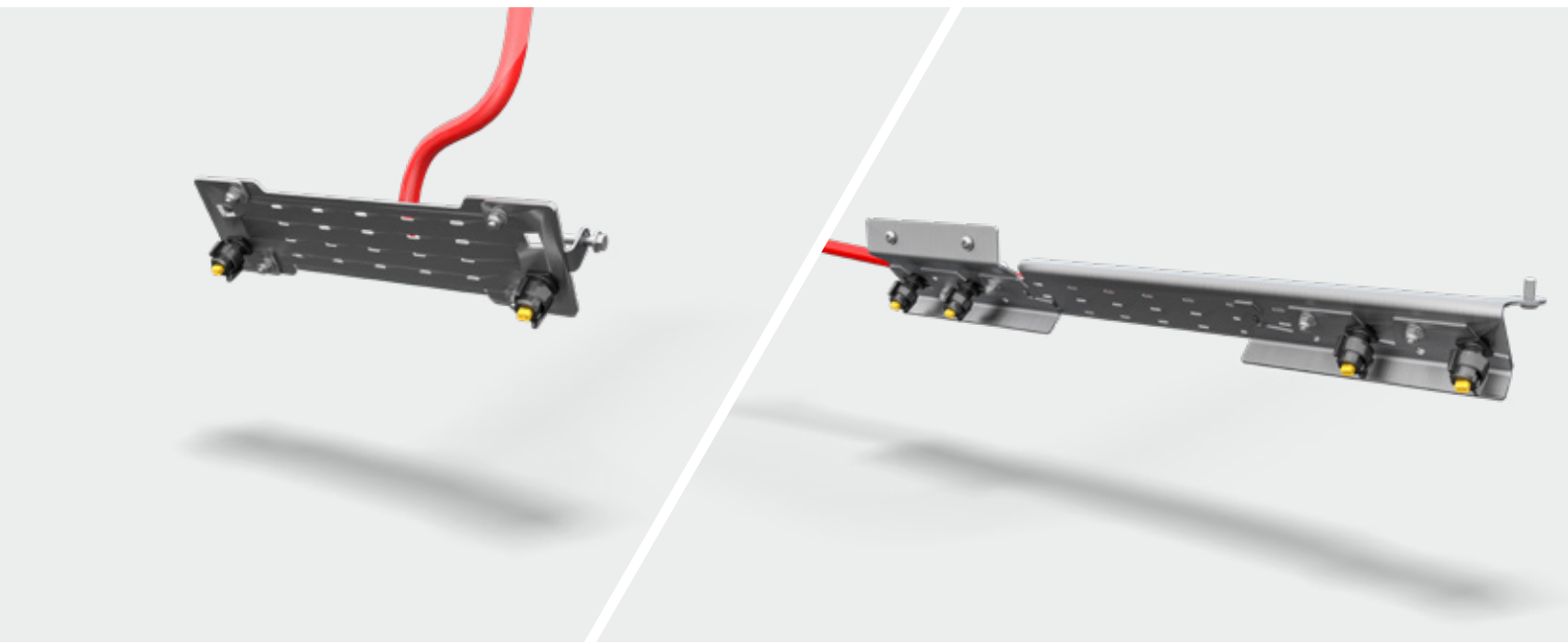
The induction chamber on the LIQUIDO F consists of a screen as standard, which leads into the main tank. Thanks to the large opening in the main tank, the previously mixed inoculant solution can be easily poured into the tank. The screen ensures that no coarse residues of the silage additive or any dirt enter the main tank.

## Integrated induction function on the LIQUIDO F 3000

On the LIQUIDO F 3000, an integrated rinse function is provided in addition to the rinsing screen. The rinse function allows the quick and easy rinsing of any residue from the mixed inoculant solution through the screen into the main tank.

The flush valve is used to switch the flow to the rinsing head, so it is fed directly from the main tank or fresh water tank, and additive solution does not flow to the nozzles. The LIQUIDO F 3000 enables loss-free mixing of the silage additive.

# The highest silage quality



## Application area

The 2 or 4 nozzles are positioned so that the silage additive is applied evenly to the flow of forage. Each nozzle covers an area 50 cm wide. This ensures homogeneous application and the best possible covering of all the forage. This quickly lowers the pH value in the clamp for perfect silage quality.







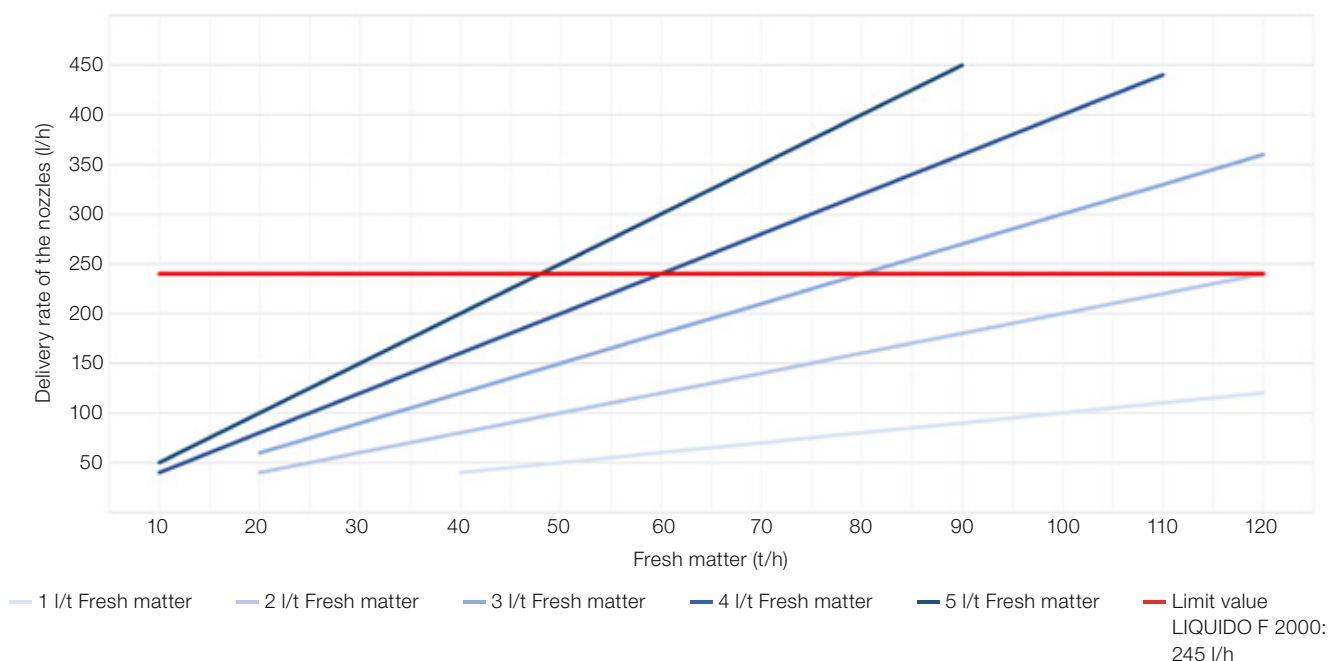
## Booster valve – LIQUIDO F 3000

The LIQUIDO F 3000 automatically switches from 2 nozzles to 4 nozzles when maximum output is needed. An electric valve automatically switches on two additional nozzles to increase the coverage area and continuously apply a higher rate of inoculant solution to the flow of forage. Because the application rate can be varied in this way, homogeneous covering with silage additive is guaranteed even with higher-density swaths and faster driving speeds.

## Continuous mixing – LIQUIDO F 3000

As soon as the pump switches on on the LIQUIDO F 3000, it remains active. When the silage additive application switches off, a circulation valve opens to keep the additive solution flowing so that it is continually mixed. There is then a closed circuit between the pump and the tank. The circulation prevents particles suspended in the solution from settling and ensures that a homogeneous mixture is maintained.

## LIQUIDO F 2000 and LIQUIDO F 3000 application rate capacities



# Convenience and maintenance



## Convenient work

During a harvesting day, practical features and intuitive work steps make things much easier. The LIQUIDO F is an eye-catcher thanks to its compact and versatile design.

Three different tank systems combined into a single unit make the silage additive tank easy to use. The main tank can be filled in next to no time, ready for a day of harvesting.

The fresh water tank also provides options for refilling and cleaning.

Quick-release couplings on the lines, which are routed from the LIQUIDO F over the tractor to the harvesting machine,

also enable easy connection and removal. Changing harvesting machines is no problem.

## Practical features

The LIQUIDO F includes many helpful features, from a fill level indicator and jaw hitch to a toolbox and optional parking rollers.

Depending on the set-up, data such as application rate per load or customer job can be displayed at any time to enhance smooth operation, also for contractors.

All these practical features make it a pleasure to work with.





## Always ready for action

Not only is filling and application straightforward and simple with the LIQUIDO F, but cleaning the tank, lines and nozzles can also be done in just a few steps.

With all configurations, the lines and nozzles can be conveniently rinsed using residual water from cleaning the main tank or using the water in the fresh water tank. This prevents the lines and nozzles from becoming blocked, and means that the LIQUIDO F is always ready for action.

# Convenience and maintenance



## Fast tank filling

A 1" camlock connection is provided for extremely fast filling of the main tank. This is a simple and leak-proof system using in plant protection technology, which is also referred to as a quick-fill system.

The connection is located at chest height on the left side of the tank in the direction of travel, so it is ergonomically positioned.

Easy attachment and removal make handling easy. Thanks to the large cross-section of the connection, the 200-litre and 400-litre tank can be filled in a very short time and do not require time-consuming supervision during the filling process.

## Rapid tank emptying

Thanks to the simple system for draining the water from the main tank, a 200-litre tank filled to the top can be completely emptied in under 10 minutes.

## A clean and bright tank

Cleaning the main tank and lines ensures that the tank is bright and ready for the next job. Flushing the lines with fresh water is recommended to completely remove the inoculant solution from the pipes and prevent the nozzles from sticking.

The main tank on the LIQUIDO F 2000 is cleaned by hand. Thanks to the large opening and the removable screen, the tank is easy to clean.

On the LIQUIDO F 3000, there is a tank cleaning nozzle integrated into the main tank. Attaching a hose to the top of the main tank feeds water in for cleaning.

The LIQUIDO F either drains the residual water directly, feeds the water through the lines to the nozzles. Cleaning the lines is carried out using the residual water from the cleaned main tank, or water carried from the fresh water tank.





## Precise measurement for a complete overview

### Tank level scale

The level of the solution in the main tank can be measured manually using an indicator scale.

The indicator scale is located inside the tank. It is easy to read the tank level thanks to the notches on the scale.

### Angle sensor including float

The level of the solution in the main tank is also displayed on the control terminal thanks to a float attached to an angle sensor.

## See how much is left

A digital level indicator displays the amount of liquid at the control terminal.

The tank level is measured in two possible ways and can be displayed using a toggle button on the terminal:

- A float included in the main tank measures the liquid level, and a sensor transmits the current value.
- Before starting the harvesting process, the tank level is transferred at the touch of a button. The flowmeter registers the amount of silage additive applied. The difference between the contents of the tank before starting and the quantity applied to the forage also gives the current status.

That is how the fill level is monitored digitally at the terminal.

## Every load at a glance

### Load counter

The load counter displays the number of trips or bales remaining with the current tank level and application settings. The remaining number of loads/bales is displayed at the terminal to provide helpful information on the harvesting process.

The remaining quantity is calculated based on the amount of liquid still available in the main tank (from the digital level monitor) and the set flowrate (from the flowmeter).

### Customer counter

Thanks to the flowmeter, the amount of solution applied is displayed on the customer counter. This provides a convenient summary of litres applied per customer.

# Convenience and maintenance



## Convenient operation

To ensure convenient operation, the LIQUIDO F silage additive tank is equipped with an ISOBUS-compatible Profiline comfort control system as standard.

This can be connected to the tractor terminal using the front ISOBUS connector on the tractor or operated using an ISOBUS connection at the back of the tractor in combination with the optional SELECT CONTROL terminal.

For non-ISOBUS-capable tractors and when working with non-PÖTTINGER harvesting machines, a connection cable without ISOBUS is used. The system is then operated using the SELECT CONTROL terminal from PÖTTINGER.

## Universal front attachment

The LIQUIDO F is easily attached to the tractor's front linkage. Four top link and three lower linkage positions are available. Apart from that, only the application line and the ISOBUS cable need to be connected.

The silage additive tank, including the various connections, can be attached and removed very quickly and easily.





## Jaw hitch for reliability

A pin is installed on the front of the LIQUIDO F. A jaw hitch is located in the centre of the front weight. Due to its robustness, the jaw hitch can withstand a pulling force of 10 tonnes, so the tractor plus harvesting machine can be pulled across the clamp without any problems if need be.



## Space for your tools

Plenty of space is provided to the left and right of the LIQUIDO F base frame. PÖTTINGER has fitted a toolbox on the right-hand side in the direction of travel as standard. The toolbox has a capacity of 32 litres and keeps things clean and dry thanks to its dust- and waterproof design, rated IP53, due to its rubber seal.



## Optional parking rollers

To make the removal and stowage of the LIQUIDO F silage additive tank easier, four separate bolt-on parking rollers are available as an option. These enable the silage additive tank to be shifted and stowed away safely and soundly to save space.



## Clear visibility even at night

Additional LED lighting is available as an option to position on the tank and make it easier to work in the dark. The area in front is perfectly illuminated by floodlights integrated into the frame, giving you a better view.

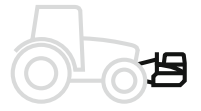
The beacon lights and indicators included with the optionally available work lighting also enhance visibility in road traffic.



## Silage additive tank







# Silage additive tank

LIQUIDO F 2000, 3000



## LIQUIDO F 2000

The LIQUIDO F 2000 is the entry-level system featuring precise and homogeneous silage additive application technology.

The silage additive tank system consists of a 200-litre main tank, a 45-litre fresh water tank, and a 15-litre hand washing tank as standard. The base frame provides a ballast of 500 kg and an outer width of between 2.55 m and 2.85 m.

The nozzle header is installed between the pick-up and the loading rotor and is equipped with two nozzles delivering a total flowrate of 40 l/h to 245 l/h. A flowmeter provides a detailed measurement of the flowrate.

The induction chamber prevents undissolved silage additive material or dirt from entering the main tank.

A level indicator and float with angle sensor inside the tank are used to measure the fill level and display the current level value on the control terminal.

### Standard equipment at a glance:

- 200-litre main tank
- 500 kg ballast
- 2 nozzles
- Application rate: 40 l/h to 245 l/h
- Flowrate measurement
- Induction chamber
- Controlled by start/stop pushbutton
- Controlled by position of pick-up





## LIQUIDO F 3000

The main difference between the LIQUIDO F 3000 and the LIQUIDO F 2000 is the ballast weight of 1000 kg. Some technical features have been added to make the silage additive tank a professional implement.

There are two additional nozzles on the nozzle header, which switch on automatically to ensure homogeneous application is maintained if the flow of forage increases in throughput. Application rates between 40 l/h and 470 l/h can be achieved as a result.

The flowmeter on the LIQUIDO F 3000 measures the application rate, and can also control it by regulating the amount of additive applied to the flow of forage to maintain even coverage.

The induction chamber is equipped with an integrated rinsing function using liquid from the main tank or fresh water tank. Actuating the flush valve dissolves and silage additive residues. When the application system is switched off, the pump on the LIQUIDO F 3000 still circulates the contents of the tank.

The contents of the fresh water tank can also be pumped into the main tank to dilute the solution, or to be used as the basis for a new silage additive mixture.

The main tank can be cleaned easily thanks to the integrated tank cleaning nozzle with hose connection.

### Standard equipment at a glance:

- 200-litre main tank
- 1000 kg ballast
- 4 nozzles with switchover valve
- Application rate: 40 l/h to 470 l/h
- Flowrate measurement
- Flowrate control
- Induction chamber with rinsing function
- Controlled by start/stop pushbutton
- Controlled by position of pick-up
- Controlled by driving speed
- Continuous mixing of the tank contents when application is switched off
- Fresh water tank as a backup
- Tank cleaning nozzle

# Digital agricultural technology

## Operation





## Simple operation

The LIQUIDO F silage additive tank from PÖTTINGER is designed for simple operation, making the system easy and intuitive to use. The level of the silage additive inside the tank and the application flowrate are both displayed on the control terminal. The flowrate of silage additive to be applied can be set and adjusted in just a few steps.



## Profiline comfort control system

The LIQUIDO F is equipped with the ISOBUS-compatible Profiline comfort control system as standard. The ISOBUS cable on the silage additive tank is connected to the front socket on the tractor, allowing it to be operated from the tractor terminal.

Each function can then be carried out immediately by pressing a button or the touch screen.

If a front socket is not available, a connection cable is routed into the tractor cab and connected to a SELECT CONTROL terminal, which is then used to operate the LIQUIDO F.

## SELECT CONTROL

Optional on LIQUIDO F

The SELECT CONTROL system has been designed with user-friendly operation in mind. Clearly assigned function keys and a 4.3" colour touch screen are used to operate a multitude of machine functions. The brightness of the display and keyboard can be adjusted as needed, ensuring optimum illumination at any time of day or night.

## Possible controls

- Tractor terminal via ISOBUS cable
- SELECT CONTROL

# Compatible products



The design of the LIQUIDO F silage additive tank makes it possible to combine with any trailed harvesting machine. It provides the most direct method for reliably achieving a successful harvest and producing stable silage.



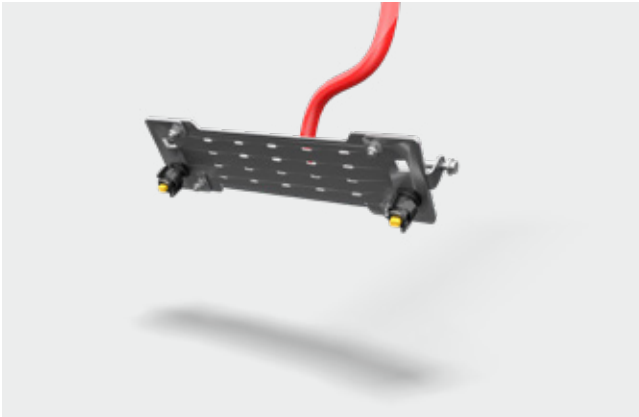
## Universal nozzle header for PÖTTINGER loader wagons

The LIQUIDO F can be easily combined with PÖTTINGER loader wagons. The silage additive tank can be used to produce high-quality, stable silage, allowing you to feed your animals the highest-quality forage.

The universal nozzle header is installed between the pick-up and loading rotor on PÖTTINGER loader wagons in just a few steps.

That is how lactic acid bacteria is applied directly to the flow of forage. The position of the nozzles and the flowrate of the solution ensure homogeneous wetting of the forage, forming the basis for stable silage.





## IMPRESS

The IMPRESS round baler and the LIQUIDO F silage additive tank are the perfect combination for producing stable bales of silage.

The nozzle header is installed between the pick-up and the loading rotor so that the inoculant solution can be applied directly to the flow of forage.



The nozzles are positioned to ensure even application of the silage additive.

Lactic acid bacteria rapidly lower the pH value for the reliable production of stable round bales.



## Can be used with non-PÖTTINGER machines

Virtually any make of harvesting machine can be combined with the LIQUIDO F silage additive tank.

This means that silage additive tank from PÖTTINGER is designed to work together with more than just new machines. The LIQUIDO F can also be used with older models, because the nozzle header is simply installed between the pick-up and loading rotor.



Even when a new machine is purchased, simply remove the nozzle header from the machine being replaced and install it on the new harvesting machine, ready for action.

Because the silage additive tank can be controlled independently using ISOBUS, the LIQUIDO F can be easily teamed up with machines from other manufacturers.

# Equipment options and technical data



400 litre main tank



Additional ballast  
500 kg



Parking rollers



Work lights and  
beacons



SELECT  
CONTROL  
Terminal

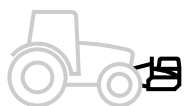
LIQUIDO F 2000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LIQUIDO F 3000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## More equipment options

- + Sensor for pick-up signal on non-PÖTTINGER harvesting machines
- + Set of cables

☐ = optional





	<b>LIQUIDO F 2000</b>	<b>LIQUIDO F 3000</b>
Tank volume	200 l	200 l
Basic weight	500 kg	1000 kg
Basic weight with max. ballast	1000 kg	1500 kg
Transport length	1150 mm	1150 mm
Transport width	2250 mm to 2850 mm	2250 mm to 2850 mm
Number of nozzles	2	4
Flowrate	40 l/h to 245 l/h	40 l/h to 470 l/h



## MyPÖTTINGER – it's easy. Anytime. Anywhere.

### Benefit from numerous advantages

MyPÖTTINGER is our customer portal that provides you with key information about your PÖTTINGER machines.

Get specific information and useful tips on your PÖTTINGER machines in "My machines." And find out more about the PÖTTINGER product range.

### My machines

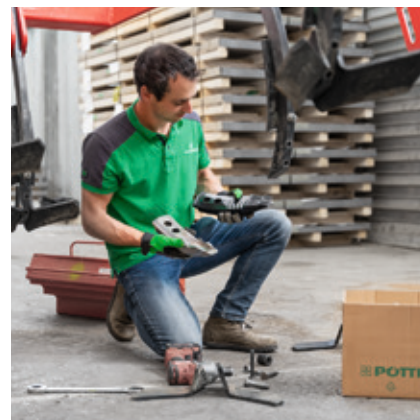
Add your PÖTTINGER machinery to "My machines" and assign a name. You will receive valuable information such as: useful tips on your machine, operating instructions, spare parts lists, maintenance information, as well as all the technical details and documentation.

### Info on the product range

MyPÖTTINGER provides you with machine-specific information for all machines built starting 1997.

Scan the QR code on the machine's data plate with a smartphone or tablet or go to [www.mypoettinger.com](http://www.mypoettinger.com) and enter the machine number from the comfort of your own home. You will immediately receive all the information on your machine, such as: instruction manuals, equipment options information, brochures, photos and videos.





## Rely on the original

PÖTTINGER ORIGINAL PARTS meet the highest demands in terms of functionality, reliability and performance. These are characteristics that PÖTTINGER is committed to delivering.

That is why we manufacture PÖTTINGER ORIGINAL PARTS from the highest quality materials. We ideally match each individual spare part and wear part to your machinery's overall system. This is because different soil and operating conditions often need to be taken into consideration.

We have been listening to our customers and now offer three different lines – CLASSIC, DURASTAR and DURASTAR PLUS – to make sure you have the right part to meet every requirement. ORIGINAL PARTS are worth every cent, because know-how cannot be copied.

## Your advantages

- Immediate and long-term availability.
- Maximum durability thanks to innovative production processes and the use of the highest quality materials.
- Avoidance of malfunctions due to a perfect fit.
- The best working results thanks to optimum match to the overall system of the machine.
- Save time and costs thanks to longer replacement intervals on wear parts.
- Comprehensive quality testing.
- Ongoing advancement through research and development.
- Worldwide spare parts supply.
- Attractive, competitive prices for all spare parts.

## Wear parts

The CLASSIC line is for standard duty applications. With these ORIGINAL INSIDE parts we have defined the benchmark for quality, best price/performance ratio and reliability.

DURASTAR is the innovation on the wear components market – durable, high quality, productive and reliable.

Are you used to putting your machines to work in the most extreme conditions? Then the DURASTAR PLUS line is the right choice for you.



## More success with PÖTTINGER

- Your reliable partner, as a family-owned company since 1871
- Specialist for arable and grassland
- Future-safe innovation for outstanding working results
- Roots in Austria – at home throughout the world

## One machine, many solutions

- Multifunctional flexibility for maximum cost effectiveness
- The highest silage quality thanks to consistent application
- Economical operation thanks to precision metering
- Helpful features for a comfortable working day
- Front-mounted, so it works in combination with any harvesting machine

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