

 **veenhuis**

# CORPORATE BROCHURE



# Manure Matters





Veenhuis Machines	3
-------------------	---

## **MANURE PROCESSING**

Agitator 4, 5 or 6 metres	4
---------------------------	---

## **MANURE TRANSPORT**

EcoFarm slurry tanks	6
EcoVac slurry tanks	8
Ecoline	12
Profiline	14
Integral tank	20
Front docking arm	26
Tank semi-trailer	28

## **MANURE APPLICATION**

Manure injectors	30
Euroject	31
Euroject Pro	32
Euroject Twin	34
Premiumject 1200	36
Arable injectors	38
Terraject 200	39
Terraject 300	40
Terraject 400	41
Terraject Disc	42
Tool attachments	43
General components	44
Manure injector components	46
Arable injectors components	47
Manure injector specifications	48
Arable injectors specifications	49
Manure Matters	50
Effective fertilisation	52
Surface application	54
Use of drag hose systems	55
Feed hose systems	56
Swivel arm	58
Rotomax	60
Quanta pump unit	64
Nutri-flow precision fertilisation	66

# VEENHUIS MACHINES



## Why?

Veenhuis Machines contributes to feeding soils, plants, animals and people. Sustainable agriculture in line with PlanetProof principles and a sustainable food chain are global goals.

We believe in utilising a closed cycle of natural fertilisers, which ensures that the nutrients provided by liquid manure are optimally used.



## How?

Veenhuis Machines develops, designs and manufactures systems and products that enable farmers to benefit from organic fertilisers and the nutrients contained in them.

Veenhuis Machines uses measurement and low-emission application technology to reduce nutrient leakage into the minerals cycle.

Natural fertilisers are not a waste product – quite the contrary: Organic fertiliser provides important nutrients for healthy soils.

Our challenges lie in evaluating slurry, and in using and applying it correctly.



## What?

Veenhuis has specialised in products for processing, transporting and spreading liquid manure since 1938, and our company's expertise is renowned all over the world.

The unmistakeable yellow Veenhuis machines are synonymous with high quality.

Manure Matters!

## Manure Matters

**Whenever you think of manure, Veenhuis Machines should be the first thing to come to mind.**

Veenhuis Machines has over 75 years of experience in the development and design of agricultural machinery, and this is clearly reflected in the quality and unparalleled functionality of Veenhuis machinery. Veenhuis is a specialist supplier of a full range of products for processing, transporting and spreading liquid manure. Veenhuis has the right solution for any (operative) situation.





# AGITATORS

## 4, 5 OR 6 METRES



### PTO-driven agitator

These are the renowned Veenhuis slurry agitators. These PTO-driven agitators mix liquid manure easily and thoroughly. They are fully galvanised, and their blades are spray-painted with two-component paint, making the agitators slurry-resistant and ensuring a long service life with minimal maintenance costs. These Veenhuis agitators stand out through their high capacity and outstanding durability.



### Three-point headstock with tilt function

The agitator can be attached to the tractor via a three-point headstock and can therefore be quickly and easily connected and moved by just one person.



### Guide frame and bracket

A bracket is available for guiding the agitator into the manure pit. A matching mount in the pit (either bricked or poured in concrete) ensures stability and optimal agitator function.



Liquid manure needs to be well agitated before separating and spreading, as homogeneous slurry produces the best results. Veenhuis has designed a powerful agitator especially for circulation in manure pits. This slurry agitator is available in lengths of 4, 5 or 6 metres and can be equipped with 50-cm or 60-cm blades. The agitators combine low power requirement with the high propulsion of the blade, ensuring that the agitator mixes even large volumes of slurry quickly and easily to produce a homogeneous mass that is easy to apply.

## Pit edge support

When the agitator is stationary, a support can be installed onto the pit to provide a stable base by enlarging the contact surface between the agitator and pit edge.



## Direction reversing gearbox

A direction reversing gearbox can be mounted to the main shaft to optimise results. This allows the direction of flow to be set to either suction or pressure and therefore facilitates a wide range of agitation options for optimally emptying manure pits.



## Electric drive

Veenhuis agitators are optionally available with an electric drive. The gearbox design allows existing agitators to be retrofitted with this option if the operational situation changes. Electrically driven agitators can always be operated mechanically as an alternative. The associated control cabinet can also be supplied, and the range of Veenhuis agitators therefore offers a ready-to-use as well as future-oriented solution for every farmer and contractor.







## FEATURES

- ✦ Solid design
- ✦ Vacuum pump
- ✦ Fully galvanised
- ✦ Uncomplicated
- ✦ Large tyres

# ECOFARM SLURRY TANKS

Veenhuis has developed the EcoFarm single-axle tank with 8,000 to 14,000 litres capacity especially for livestock farmers who want to spread their own manure. This robust tank offers options for any budget through standardisation and limited variety.

The EcoFarm tank is fully galvanised and welded to the chassis. The tank features mudguards and large wheel arches and can be equipped with large tyres with up to 1850 mm diameter. The EcoFarm comes with 800/60 R32 tyres as standard.

Its height-adjustable drawbar can be mounted easily to any tractor, regardless of the chosen tyre size.

The EcoFarm tank is a vacuum tank. Air is displaced via a B&P MEC 13,500 pump, which comes as standard. This pump delivers high capacity at a low negative pressure and therefore ensures adequate fill rates even with deep manure pits. An optional turbo filler and/or spreader can be installed to increase capacity further.

The EcoFarm tank features air brakes and a load pressure control system as standard. The latter automatically adapts to the tank fill level.

ECOFARM		
Capacity	Tank diameter	Tank length
8,000 L	1600 mm	4000 mm
9,800 L	1800 mm	4000 mm
12,500 L	1900 mm	4500 mm
14,000 L	2000 mm	4500 mm

## Rapid filling with a 6" turbo filler

A Veenhuis turbo filler allows for a vastly increased vacuum tank capacity. Using a 6" turbo filler substantially boosts the Eco-Farm's fill rate and reduces filling times to a minimum. Veenhuis turbo fillers are solidly designed and extremely resistant to wear. Turbo fillers developed by Veenhuis are characterised by high performance, combined with low wear and maintenance costs. As an additional plus, they are also easily accessible.



## Rapid removal with a 6" turbo spreader

A turbo spreader delivers additional power when spreading manure, which offers advantages when using larger working widths or applying larger volumes per hectare. The specially shaped blade ensures that blockages are reduced to a minimum, even with excessive amounts of silage residue. The already low power requirements are minimised further, as the system works at a lower tank pressure.



## Linkage

The 4-point linkage (centre distance: 880 mm) is suitable for attaching lighter injectors. Implements which can be attached include Veenhuis Ecoject grassland injectors and Veenhuis Terraject 200 arable injectors (further information on these machines can be found further in this brochure). The linkage features quick-change hooks, which allow the injector to be changed easily. Manure is conveyed from the tank to the injector via a T-joint.



## Manifold

The linkage, rear gate valve and macerator are operated via a hydraulic manifold with step switch, which is controlled via a double-acting tractor function. An automatic turning device can optionally be used for the macerator. Other functions are connected to the available double-acting functions on the tractor.







## FEATURES

- ⬢ Solid design
- ⬢ Vacuum pump
- ⬢ Fully galvanised
- ⬢ Comprehensive accessories
- ⬢ Large tyres

# ECOVAC SLURRY TANKS

Like the EcoFarm tank, the EcoVac tank is also available with capacities of 8,000 to 14,000 litres. It was developed for livestock farmers who wish to spread their own manure but want a broader range of options. Its robust design, combined with a fully galvanised tank and chassis, make this Veenhuis tank a reliable investment.

The tank features mudguards and large wheel arches and can be equipped with large tyres with up to 1850 mm diameter. The EcoVac comes with 800/60 R32 tyres as standard. Its height-adjustable drawbar can be mounted easily to any tractor, regardless of the chosen tyre size.

The EcoVac tank is a vacuum tank. Air is displaced via a B&P MEC 13,500 pump, which comes as standard. This pump delivers high capacity at a low negative pressure and therefore ensures adequate fill rates even with deep manure pits. An optional suction arm and turbo filler and/or spreader can be installed to increase capacity further.

The EcoVac tank features air brakes and a load pressure control system as standard. The latter automatically adapts to the tank fill level.

ECOVAC		
Capacity	Tank diameter	Tank length
8,000 L	1600 mm	4000 mm
9,800 L	1800 mm	4000 mm
12,500 L	1900 mm	4500 mm
14,000 L	2000 mm	4500 mm





## Top pressure cylinder

A top pressure cylinder can be installed on the drawbar to transfer loads to the tractor's front axle and therefore increase tractor traction. When combined with PremiumControl, the pressure can be set to any required level via the switch box. The system is easily deactivated once the tank is empty to reduce tyre wear to a minimum.



## VMR Superpump

This renowned pump has long been synonymous with exceptional durability and minimal maintenance costs. VMR pumps can be optionally installed on the EcoVac tank. They use very little oil and feature an inbuilt reservoir for spent oil. The special blades are made of hardened steel for a long lifespan and provide a perfect seal to the housing, ensuring maximum vacuum. The specially shaped housing minimises the development of heat. Another advantage is the pre-filter installed on each pump as standard.





## Rapid filling with a 6" turbo filler

A Veenhuis turbo filler allows for a vastly increased vacuum tank capacity. Using a 6" turbo filler substantially boosts the EcoVac's fill rate and reduces filling times to a minimum. Veenhuis turbo fillers are solidly designed and extremely resistant to wear. Turbo fillers developed by Veenhuis are characterised by high performance, combined with low wear and maintenance costs. As an additional plus, they are also easily accessible.



## Rapid removal with a 6" turbo spreader

A turbo spreader delivers additional power when spreading manure, which offers advantages when using larger working widths or applying larger volumes per hectare. The specially shaped blade ensures that blockages are reduced to a minimum, even with excessive amounts of silage residue. The already low power requirements are minimised further, as the system works at a lower tank pressure.



## Maximum speed with an 8" suction arm

The short suction arm combined with an 8" centrifugal pump delivers maximum intake performance. A double swivel joint supports intakes even from deep pits as well as directly from silos or containers. The suction arm with centrifugal pump and gate valve is controlled via a joystick. The valve opens at the push of a button, and the centrifugal pump starts rotating. When the main gate valve is closed, the suction arm ventilation is activated to ensure that the arm can be folded straight back in after use for outstanding comfort!



## Automatic dosage

Looking for precise and comfortable manure spreading? The Veenhuis EcoVac tank features not only a metering display, but also fully automatic dosage as an option. The required application rate per hectare is simply entered via a terminal, and the tank does the rest. The operator can focus on driving, and slurry is dosaged out with precision. Wheel sensors measure the speed. An industrial ball valve controls the application rate and automatically adjusts to any changes in speed. The precision of this system is DLG-tested for both high and low application volumes, so that correct dosage is ensured across the full spreading cycle.



## Manifold

The linkage, rear gate valve and macerator are operated via a hydraulic manifold with step switch, which is controlled via a double-acting tractor function. An automatic turning device can optionally be used for the macerator. Other functions are connected to the available double-acting functions on the tractor.



## EasyControl

As the name already suggests, this system ensures that all tank functions can be controlled with ease. Choose EasyControl if your tractor only has a limited number of double-acting functions or whenever operating comfort is essential. All tank functions are operated electrohydraulically via toggle switches. A suction arm, if installed, is controlled via a separate joystick.



## PremiumControl

PremiumControl meets all requirements of progressive livestock farmers who already work with application maps or intend to do so in the near future. With this option, the tank is supplied with an ISOBUS Tellus GO terminal, which can be operated via a touch-screen or push buttons. Customers are able to assign the various auto-start/stop functions according to their individual needs. The system can also be coupled with a fully automated dosage system. Upon request, it can also be used for proportional linkage control so that the pressure applying to the linkage can be controlled continuously from the terminal. Visual displays support the task you are currently working on or what is going on in the tank. Fit for today and the future!



## Linkage

The highly robust 4-point linkage (centre distance: 1010 mm) is designed for attaching heavier injectors or injectors with larger working widths. The attachment of the lift cylinders to the tank ensures that power is optimally transmitted to guarantee reliable, thorough operation. The low sub-frame attachment underneath the tank creates an ideal line of traction. The linkage features quick-change hooks, which allow the injector to be changed easily. Proportional pressure control is available as an option. This allows greater pressure (or even negative pressure) to be applied to the linkage to reduce injector strain in wet conditions and in loose soils. Naturally, all of these functions can be continuously varied from the terminal.





## FEATURES

- ⬢ Tandem boogie
- ⬢ Numerous options
- ⬢ Double-acting Veenhuis 4-point linkage
- ⬢ Galvanised

## ECO- LINE

### High-quality machine, inexpensive entry-level model

The Veenhuis Ecoline tank delivers a high-quality machine at an affordable price. The Veenhuis Ecoline tank is available as a tandem tank and features a boogie assembly. The option of installing tyres up to a size of 850/50 R30.5 is an exception in this market segment, which emphasises just how important Veenhuis believes minimal soil impact is. The tank and chassis form a unit and are fully galvanised for protection. Many of the options available in the Profiline segment can also be used in this segment (see Profiline options, pages 16–19).

Veenhuis Ecoline tanks are available with vacuum and screw pumps. The tank can be equipped with Vogelsang drag hose or Bomech trailing shoe spreaders as well as with Veenhuis injectors up to a certain working width and weight. Combined with the ability to control the implement via ISOBUS, this Ecoline machine features all the options and safeguards you need today and tomorrow.

ECOLINE TANDEM AXLE TANKS		
Capacity	Tank diameter	Tank length
14,850 L	1800 mm	6000 mm
16,600 L	1900 mm	6000 mm
18,450 L	2000 mm	6000 mm





## Tandem boogie

The Ecoline tank features an ADR tandem boogie with 150x150 axles. Solid axles with a robust spring assembly ensure that the Veenhuis tank offers the reliability and aesthetics the product deserves. The design with wheel arches in the tank creates a low centre of gravity while facilitating maximum wheel angles.



## Vacuum or screw (worm) pump

Ecoline tanks are available with vacuum or screw pumps. Tanks with vacuum pump are equipped with a 13,500-litre MEC pump, which stands out through its large capacity and low wear/low wear costs. Screw pump technology is used in the displacer version. Screw pumps deliver high, constant suction capacity, and the combination of a screw and stator creates a large contact surface, which enables the pump to take in slurry from greater depths. A cutter filter is available as an optional extra. Cutter filters protect the pump by cutting larger lumps down to pumpable size during the filling process.



With a Profiline tank,  
you're set up well for  
now and the future.



## FEATURES

- ✦ Numerous options
- ✦ Double-acting Veenhuis 4-point linkage
- ✦ Almost all Veenhuis injectors can be connected

## PROFI- LINE

Profiline tanks mean no more compromises, as they are designed as complete slurry tanks capable of being used even with heavier injectors in their standard version. This machine reflects 30 years of experience with application tanks. Profiline tanks feature a chassis with hydraulic suspension as standard. The quality of these products is evident from the fact that they come metallised, painted in yellow and protected with a clear coat of paint as standard, giving these machines the professional aesthetics they deserve. The tanks feature 800/60 R32 tyres as standard to ensure that operators can work with minimal soil compaction. Profiline tanks offer security. If your operational situation changes, many options can be either retrofitted or modified, as flexibility forms part of these machines' fundamental design. Maximum performance at an attractive price!

### PROFILINE SINGLE-AXLE TANKS

Capacity	Tank diameter	Tank length
10,000 L	1800 mm	4000 mm
12,500 L	2000 mm	4000 mm
14,000 L	2100 mm	4000 mm
14,300 L	2000 mm	4500 mm
15,800 L	2000 mm	5000 mm

### PROFILINE TANDEM AXLE TANKS

14,850 L	1800 mm	6000 mm
16,600 L	1900 mm	6000 mm
17,350 L	1800 mm	7000 mm
18,450 L	2000 mm	6000 mm
19,450 L	1900 mm	7000 mm

### PROFILINE TRIPLE-AXLE TANKS

22,000 L	1900 mm	8000 mm
24,700 L	2000 mm	8000 mm
29,100 L	2100 mm	8500 mm







## High-quality vacuum pumps

The standard equipment of Profiline tanks with vacuum pump includes a 13,500-litre MEC pump, which stands out through its large capacity and low wear costs. A double Veenhuis Super-pump can be optionally installed. These pumps use very little oil and feature an inbuilt reservoir for spent oil. The special blades are made of hardened steel for a long service life and provide a perfect seal to the housing, ensuring maximum vacuum. The specially shaped housing minimises the development of heat. Another advantage is the pre-filter installed on each pump as standard.



## Powerful screw pumps

Profiline tanks with screw pumps are available with three pump versions, from 4000 l/min to 7800 l/min. This segment therefore services the market where there is demand for this type of displacement technology. Screw pumps deliver high, constant suction capacity, and the combination of a screw and stator creates a large contact surface, which enables the pump to take in slurry from greater depths. A cutter filter is available as an optional extra. Cutter filters protect the pump by cutting larger lumps down to pumpable size during the filling process.





## Rapid filling, rapid removal

Using a turbo filler substantially boosts the Profiline tank's fill rate and reduces filling times to a minimum. Veenhuis turbo fillers are solidly designed and extremely resistant to wear. Turbo fillers developed by Veenhuis are characterised by high performance, combined with low wear and maintenance costs. As an additional plus, they are also easily accessible. A turbo spreader delivers additional power when spreading manure, which offers advantages when using larger working widths or applying larger volumes per hectare. The specially shaped blade ensures that blockages are reduced to a minimum, even with excessive amounts of silage residue. The already low power requirements are minimised further, as the system works at a lower tank pressure.



## Fully automatic dosage

Looking for precise and comfortable manure spreading? The Veenhuis Profiline tank features not only a metering display, but also fully automatic dosage as an option. The required application rate per hectare is simply entered via a terminal, and the tank does the rest. The operator can focus on driving, and slurry is dosaged out with precision. Wheel sensors measure the speed. An industrial ball valve controls the application rate and automatically adjusts to any changes in speed. The precision of this system is DLG-tested for both high and low application volumes, so that correct dosaging is ensured across the full spreading cycle.



## Powerful linkage for attaching heavier injectors

The highly robust 4-point linkage (centre distance: 1010 mm) is designed for attaching heavier injectors or injectors with larger working widths. The attachment of the lift cylinders to the tank ensures that power is optimally transmitted to guarantee reliable, thorough operation. The low sub-frame attachment underneath the tank creates an ideal line of traction. As the linkage frame is able to swivel, the attached injector is less affected by uneven surfaces on the fields. The linkage features quick-change hooks, which allow the injector to be changed easily.



## Power steering

Power steering increases both operator safety and comfort, and it is essential especially for larger-capacity implements. It reduces the loads applying to the axles when reversing on small yards and at headlands, and it facilitates manoeuvring. The steering can be connected in line with relevant DIN standards. Both hydraulic and electronic power steering is available.



## Comfortable drawbar suspension

The drawbar features a hydraulic suspension for increased operator comfort and improved safety on roads and fields. The suspension is just as effective with empty and full tanks, ensuring that you enjoy maximum control and optimal comfort while operating the tractor. Ideal in rough terrain! As the suspension cylinders are mounted to the powerful drawbar, both suspension travel and tank position can be set to any height.



## Telescopic axle for minimal soil compaction

The Profiline tank is optionally available with a telescopic axle, which can be extended by 50 cm on both sides. This ensures that machines do not need run in the same tracks as often and reduces soil compaction to a minimum in combination with the large tyres, which come as standard with Profiline tanks. The Veenhuis telescopic axle is designed for large loads. It delivers outstanding safety compared to other machines, even when working in hilly and mountainous terrain, giving these tanks a unique competitive advantage. The unique telescopic axle design keeps maintenance costs at a minimum and reduces tyre wear.



## Top pressure cylinder for increased traction

A top pressure cylinder can be installed on the drawbar to transfer loads to the tractor's front axle and therefore increase tractor traction. When combined with PremiumControl, the pressure can be set to any required level via the switch box. The system is easily deactivated once the tank is empty to reduce tyre wear to a minimum. When choosing the optional drawbar suspension, the top pressure cylinder is coupled to the drawbar suspension. As a result, power is automatically transferred without you needing to even think about it.



## Short 8" docking arm

The short docking arm comes with entry-level Profiline tanks. It offers the same comfort as a suction arm, plus high fill rates at low costs. The arm is folded down onto a docking device via a cylinder. The docking arm is controlled via a joystick, which can also be used to activate or suspend the filling cycle. A ventilation valve, which is operated automatically together with the main gate valve, is additionally installed as standard. An in-arm turbo filler is recommended for maximal performance. Veenhuis also supplies matching docking stations.



MANURE PROCESSING

MANURE TRANSPORT

MANURE APPLICATION



## Short 8" suction arm

The short suction arm is ideal for taking slurry in from pits or containers. The additional pivot joint on the suction arm allows the arm to be placed in any position. The arm is controlled via a joystick, which can also be used to activate or suspend the filling cycle. A ventilation valve, which is operated automatically together with the main gate valve, is additionally installed as standard. An in-arm turbo filler is recommended for maximal performance.



## Large, pivoting 8" suction/docking arm

The large, pivoting suction/docking arm is the perfect solution when docking at large heights. The arm can be moved both vertically and in the direction of travel. It features a quick-change system, which allows both a suction hose and short docking attachment to be connected. The arm is controlled via a joystick, which can also be used to activate or suspend the filling cycle. The joystick can also be equipped with proportional control for maximum ease of operation. A ventilation valve, which is operated automatically together with the main gate valve, is additionally installed as standard.



## Filling dome and riser with docking device

The Profiline tank can also be equipped with a hydraulically operated filling dome for external filling. The dome, which has a diameter of 600 mm, can be controlled from the tractor cab. An 8" riser with an 8" docking device can be optionally installed so that the tank can also be used for transport purposes, if required.



## Tyre pressure control system

A tyre pressure control system not only allows soil compaction to be minimised, but also ensures that tyre wear and fuel consumption can be reduced. A tyre pressure control system comprises a tyre which can be used at low pressure. Veenhuis decided to equip Profiline tanks with 800/60 R32 tyres as standard, as these have all the features you expect from low-pressure tyres. Always drive your machines at the optimal tyre pressure under any conditions! If you use a high-performance compressor, you can install a tyre pressure control system on your tractor and control it via the compressor. Veenhuis offers a range of options for this solution.



## Comfortable ISOBUS control

All Profiline tank functions can be controlled via ISOBUS. Easy-to-use push buttons and smart control functions, including for headlands, ensure comfortable operation and allow the operator to focus on driving. The linkage pressure control and application rate can be continuously adjusted while driving. ISOBUS control additionally permits the use of application maps and the connection of an NIRS sensor.



## Toolbox and water tank

With the handy toolbox, you always have the tools and tank spare parts you need at your fingertips. The box is roomy enough for all parts. The Profiline tank can additionally be equipped with a water tank for washing dirty hands at any time. Helpful extras for everyday use



## 2-chamber technology for maximum traction

Yet another option for your Profiline tank is a 2-chamber solution. With this mechanically controlled technology, the front chamber remains full until last. The system retains maximum support loads as long as possible throughout manure application. When combined with an automatic front axle load reduction, it ensures that maximum loads are transferred onto the tractor to deliver superior traction and safety. As both systems are controlled automatically, operators are able to focus on driving the machine rather than controlling it.



## Rapid 2-way ventilation

Using a rapid ventilation system, pressure inside (vacuum) tanks can be quickly released once the tank has been emptied. As a result, a vacuum can be instantly recreated inside the tank, which prevents contaminated air from passing through the vacuum pump. Tanks equipped with a screw pump feature a ventilation system as standard, which is also closed mechanically once the tank is full. This ensures that the slurry remains inside the tank during transport and cannot spill out of the tank in case of sudden braking.





## FEATURES

- ⬢ Maximum performance
- ⬢ All Veenhuis injectors can be connected
- ⬢ Double-acting Veenhuis 4-point linkage
- ⬢ Minimal maintenance costs

# INTEGRAL TANK

Veenhuis Premium Integral tanks set new benchmarks in terms of efficiency, flexibility and comfort. This product line is based on technology which has proven to be effective in the Profiline segment. The main difference lies in pump technology and different suction arm versions.

INTEGRAL TANDEM		
Capacity	Tank diameter	Tank length
14,850 L	1800 mm	6000 mm
16,000 L	1800 mm	6500 mm
19,000 L	1900 mm	7000 mm
20,000 L	2100 mm	6000 mm

INTEGRAL TRIPLE-AXLE TANKS		
22,000 L	1900 mm	8000 mm
26,500 L	2100 mm	8000 mm
30,000 L	2100 mm	9000 mm
34,000 L	2100 mm	10000 mm

INTEGRAL FOUR-AXLE TANKS		
40,000 L	2300 mm	10000 mm

The centrifugal technology installed in Integral tanks ensures outstanding performance of up to 14,000 litres per minute, making it ideal for working with large working widths. As the technology is not self-priming, it uses a combination pump technology. The combination of a vacuum system and centrifugal technology allows outstanding performance to be achieved during the filling cycle. A vacuum is applied to the entire tank, which ensures that slurry is being extracted continuously. The filling cycle is not interrupted by air bubbles. You can additionally choose between three overhead crane arms and the suction arms from the Profiline segment to cover the full range of requirements. The large, pivoting crane arms are the most flexible suction arms of their type. Left or right, from the top or bottom – with this arm you easily reach any corner. The arm can optionally also be equipped with a submersible pump. All versions ensure that the tank is filled in the shortest possible time. The design of the Integral tank maintains a low centre of gravity and thus provides reliably firm ground contact. Combined with the hydraulic suspension, this delivers high operator comfort. The tank comes with 800/60 R32 tyres and a wide steering angle as standard. This premium product features electronic controls, a powerful 4-point linkage and ISOBUS control as standard. Premium tanks come metallised, painted in yellow and protected with a clear coat of paint as standard, giving these machines the professional aesthetics they deserve.





## Overhead docking arm

The overhead docking arm is ideal if only transport vehicles are used. The 8" swivel arm ensures quick and easy docking, whether on the left or right side in the direction of travel. This arm features a centrifugal pump as standard to keep filling times as short as possible. The arm is comfortably operated via a joystick with proportional control. The top arm can be easily returned to its centre position. A display indicates the arm position at any time. Any residual slurry dripping from the arm is collected in a container below the docking attachment once the arm has been returned into its resting position.



## Overhead crane arm

The 8" crane arm is the most flexible overhead arm option. Regardless of whether you need to take in slurry from a pit, silo, transport vehicle with docking device or other docking options – this arm lets you meet any challenge successfully. A quick-change system makes for easy switching between suction hoses and docking attachment. Naturally, a centrifugal pump has also been integrated to reduce filling time to a minimum. The additional kink in the arm offers great flexibility, even allowing you to take slurry in from 6 metres depth from a 4-metre silo. The arm is comfortably operated via a joystick with proportional control.





## Crane arm with submersible pump

The third variant in terms of crane arms is a crane arm with hydraulically operated submersible pump. Submersible pumps deliver the highest fill rates, as slurry is pushed from the medium. As this technology is not self-priming, it cannot be used to take slurry from directly from transport vehicles or docking devices. The arm can optionally be equipped with a telescopic section to increase its reach even further. An additional kink in this arm again delivers extra flexibility. The arm is comfortably operated via a joystick with proportional control.



## Large, pivoting 8" suction/docking arm

The large, pivoting suction/docking arm is the perfect solution when docking at large heights. The arm can be moved both vertically and in the direction of travel. It features a quick-change system, which allows both a suction hose and short docking attachment to be connected. The arm is controlled via a joystick, which can also be used to activate or suspend the filling cycle. The joystick can also be equipped with proportional control for maximum ease of operation. A ventilation valve, which is operated automatically together with the main gate valve, is additionally installed as standard.



## Front docking arm

If operators frequently drive in the slurry tracks during application, the front docking arm provides an ideal solution for filling the tank on the side of the field with minimal damage to crops. This offers the advantage that the tank can be filled anywhere that is accessible to the vehicle without needing to fold the injector in. The front docking arm can be mounted to tractors from any manufacturer, and it ensures rapid coupling and uncoupling. A 6" or 8" side gate valve can be installed as an option. As the arm is not mounted to the tank with this option, less weight applies to the tank.



## Directly driven spreader pump

Integral tanks feature a large spreader pump, which is driven directly from the PTO and is located directly below the tank to ensure complete drainage. This technology does not require pressure to be applied to the tank during spreading. With a blade diameter of up to 450 mm, high application rates are guaranteed. In contrast to displacement technology, centrifugal pumps of this type are not easily damaged by rocks or other foreign bodies which may be present in the slurry. This system additionally reduces maintenance and wear costs to a minimum.



## Hydraulic drive with on-board hydraulics

A separate on-board hydraulic system can be optionally installed instead of using a direct PTO drive. In this case, the hydraulic system drives the spreader pump and turbo filler. This allows the spreader pump to reach even higher speeds, which in turn increases application rates even further. The LS pump version allows the spreader pump speed to be continuously varied. As a result, less tractor power is required for lower application rates or narrower working widths. Together with the turbo filler, the high-pressure on-board hydraulic system delivers unrivalled fill rates.



## High-quality vacuum pump technology

The combination of centrifugal and vacuum technology uses a vacuum pump with high air flow and therefore ensures rapid tank filling. As no injection system is used in this case, the tank can be drained fully, and suction intake is more stable. With this process, consistently minimal filling times ensure maximum efficiency.



## Comfortable ISOBUS control

Integral tanks feature ISOBUS control as standard. Easy-to-use push buttons and smart control functions, including for headlands, ensure comfortable operation and allow the operator to focus on driving. The linkage pressure control and application rate can be continuously adjusted while driving. ISOBUS control additionally permits the use of application maps and the connection of an NIRS sensor.



## Fully automatic dosage

Looking for precise and comfortable manure spreading? The Integral tank can optionally be fitted with fully automatic dosage. The required application rate per hectare is simply entered via a terminal, and the tank does the rest. The operator can focus on driving, and slurry is dosaged out with precision. Wheel sensors measure the speed, and an industrial ball valve controls the application rate. This industrial ball valve prevents pressure drops and variations in system control. The precision of this system is DLG-tested for both high and low application volumes, so that correct dosage is ensured.





## Powerful linkage for attaching heavier injectors

The highly robust 4-point linkage (centre distance: 1010 mm) is designed for attaching heavier injectors or injectors with larger working widths. The attachment of the lift cylinders to the tank ensures that power is optimally transmitted to guarantee reliable, thorough operation. The low sub-frame attachment underneath the tank creates an ideal line of traction. As the linkage frame is able to swivel, the attached injector is less affected by uneven surfaces on the fields. The linkage features quick-change hooks, which allow the injector to be changed easily.



## Telescopic axle for minimal soil compaction

The Integral tank is optionally available with a telescopic axle, which can be extended by 50 cm on both sides. This ensures that machines do not need to return to the same tracks as often and reduces soil compaction to a minimum in combination with the large tyres, which come as standard with Integral tanks. The Veenhuis telescopic axle is designed for large loads. It delivers outstanding safety compared to other machines, even when working in hilly and mountainous terrain, giving these tanks a unique competitive advantage. The unique telescopic axle design keeps maintenance costs at a minimum and reduces tyre wear.



## Tyre pressure control system

A tyre pressure control system not only allows soil compaction to be minimised, but also ensures that tyre wear and fuel consumption can be reduced. A tyre pressure control system comprises a tyre which can be used at low pressure. Veenhuis decided to equip Integral tanks with 800/60 R32 tyres as standard, as these have all the features you expect from low-pressure tyres. Always drive your machines at the optimal tyre pressure under any conditions! If you use a high-performance compressor, you can install a tyre pressure control system on your tractor and control it via the compressor. Veenhuis offers a range of options for this solution.



## Filling dome

The Integral tank can also be equipped with a hydraulically operated filling dome for external filling. The dome, which has a diameter of 600 mm, can be controlled from the tractor cab. The version with overhead suction arm uses a 14" variant.



## Comfortable drawbar suspension

The drawbar features a hydraulic suspension for increased operator comfort and improved safety on roads and fields. The suspension is just as effective with empty and full tanks, ensuring that you enjoy maximum control and optimal comfort while operating the tractor. Ideal in rough terrain! As the suspension cylinders are mounted to the powerful drawbar, both suspension travel and tank position can be set to any height.



## Top pressure cylinder for increased traction

A top pressure cylinder can be installed on the drawbar to transfer loads to the tractor's front axle and therefore increase tractor traction. When combined with PremiumControl, the pressure can be set to any required level via the switch box. The system is easily deactivated once the tank is empty to reduce tyre wear to a minimum. When choosing the optional drawbar suspension, the top pressure cylinder is coupled to the drawbar suspension. As a result, power is automatically transferred without you needing to even think about it.



## 2-chamber technology for maximum traction

Yet another option for your Integral tank is a 2-chamber solution. With this mechanically controlled technology, the front chamber remains full until last. The system retains maximum support loads as long as possible throughout manure application. When combined with an automatic front axle load reduction, it ensures that maximum loads are transferred onto the tractor to deliver superior traction and safety. As both systems are controlled automatically, operators are able to focus on driving the machine rather than controlling it.



## Additional equipment

The modular structure of the Profiline series makes various options available for Integral tanks as well, including the filling dome, automatic grease lubrication, LED work lights, toolbox and water tank. Helpful extras for everyday use





## FEATURES

- ✦ Separate control system
- ✦ Premium turbo filler
- ✦ Can be coupled to Veenhuis Profiline and Integral tanks
- ✦ Can be coupled to tanks by other manufacturers
- ✦ Unrestricted view during transport and docking

# FRONT DOCKING ARM

Front docking arms are a must with today's technology. Whenever you think of manure, Veenhuis should be the first thing to come to mind. This is why Veenhuis has included a front docking arm in its range. The well-thought-out design allows this arm to be coupled to any tractor. As ground clearance is important and the tractor's emergency exit must be kept clear by law, Veenhuis has routed the suction hose over the tractor cab. This offers the benefit of minimising flow resistance and allowing for rapid filling. Front docking arms also offer the advantage that they can be docked directly to transport vehicles right from the tramlines to reduce crop damage to a minimum. As the injector can be left on the field in the folded-out position when used with this system, maximum efficiency is guaranteed.

The front docking arm is equipped with its separate control, which can be easily connected to the tractor's LS system. This also allows this front docking arm to be coupled to tanks by other manufacturers.

Veenhuis has decided to position the front docking arm to the right of the centre to maximise your unobstructed view during both transport and work in the field. During docking, the docking arm moves to the centre of the tractor, again providing an optimal view of the docking device during the process. This ingenious Veenhuis system stands out through its safety and user-friendliness.

## OPTIONS

- ✦ 6" side gate valve
- ✦ Double 6" side gate valve
- ✦ 8" side gate valve
- ✦ Lights
- ✦ Work light





MANURE PROCESSING

MANURE TRANSPORT



MANURE APPLICATION



## FEATURES

- ✦ Low centre of gravity
- ✦ Capacity 28,000 litres
- ✦ 1200 mm fifth wheel height
- ✦ Stainless steel tank (V2A), coated with 2K paint
- ✦ Rotary pump

# TANK SEMI-TRAILER

Veenhuis has a tank semi-trailer with 28,000 litres capacity for transporting slurry on trucks.

This semi-trailer has a low centre of gravity and is therefore very stable on roads. The machine can be combined with various options to configure it for any type of application. The tank is made of stainless steel (V2A) and features baffles in accordance with applicable guidelines. The chassis is equipped with 3 BPW axles with disc brakes, which, together with air suspension, ensure excellent operator comfort. The fill level indicators and "tank full" display take any worry out of tank filling and guarantee that the tank is always completely filled.

The optional flush pipe with several nozzles ensures that the tank can be fully drained, even when working with difficult slurries where slurry parts have settled during transport. The various functions are controlled from a lockable switch box at the rear of the tank, which is also where the pivoting filling pipe is located.

## OPTIONS

- ✦ Friction-steered rear axle
- ✦ Lift axle
- ✦ Filling dome
- ✦ Flush pipe
- ✦ Docking device for docking high and low





MANURE PROCESSING

MANURE TRANSPORT

## Pump design

The tank is filled via a rotary pump. The semi-trailer can be unloaded either from above or below the tank via the rotary pump or an 8" docking device. The pivoting pipe ensures that the suction hose can be easily connected. The design features generous stone traps and flowing lines inside the pipes to minimise any cavitation at the pump. A robust bumper with LED lights, fog lights and reversing lights complement the generous features.



## Aesthetics, comfort and user-friendliness

A hose support is integrated in the mudguards on the left and right of the tank semi-trailer. The mudguards slope downwards at the front and back of the chassis. The hose supports are sealed at the bottom and side to prevent any slurry residue from leaking from the hose. The hose supports can be drained at any time via the drain valves. The various functions and the "tank full" display of the semi-trailer are located on the left in the direction of travel and are therefore easily accessible. This Veenhuis tank semi-trailer stands out through exceptional comfort and very user-friendly operation.



MANURE APPLICATION

# MANURE INJECTORS

The Veenhuis range of manure injectors comprises four series.  
Veenhuis injectors are absolutely state-of-the-art in injection technology.

## ECOJECT

Low-maintenance, robust  
slurry injector for farmers  
and contractors



## EUROJECT PRO

Robust injector  
for slurry tanks and  
self-propelled vehicles



## EUROJECT TWIN

Robust injector for  
intensive applications and  
optimal results



## PREMIUMJECT 1200

Professional injector  
with a 12-metre  
working width







## FEATURES

- ⬢ Working widths between 5.32 and 8.36 metres
- ⬢ Ground contour following
- ⬢ Double-acting hydraulic drip stop
- ⬢ The ideal entry-level model for slurry technology
- ⬢ With discs with a diameter of 300 mm and a width of 20 mm
- ⬢ Hydraulic folding with transport lock

## ECOJECT

The Ecoject is the entry-level Veenhuis injector.

This injector is designed for lighter trailed slurry tanks. This low-maintenance machine is extremely durable due to its straightforward, robust design.



## OPTIONS

- ⬢ Steps and platform
- ⬢ Available with quick-coupling system
- ⬢ Hydraulic folding transport safety device

The Ecoject injector is low-maintenance and features a leaf spring for ground contour following. Its hubs are equipped with grease nipples to protect them against moisture.







## FEATURES

- ⬢ Professional Veenhuis injector
- ⬢ Available in working widths from 5.63 to 8.63 metres
- ⬢ Optimal ground contour following due to a hydraulic pendulum parallelogram
- ⬢ With discs with a diameter of 350 mm and a depth of 24 mm

# EUROJECT PRO

The Euroject Pro is the professional injector for trailed slurry tanks and self-propelled vehicles.



## OPTIONS

- ⬢ Steps and platform
- ⬢ Automatic grease lubrication
- ⬢ Quick-coupling system
- ⬢ Multifaster
- ⬢ Pneumatic drip stop
- ⬢ Section control and section control via GPS/RTK

Euroject Pro injectors feature the Veenhuis parallelogram. The parallelogram design and suspension ensure that both tracks and ground contours are followed optimally, with the rubber outlet supplying fertiliser consistently at a 90°-angle and constant distance to the ground. Euroject Pro injectors feature a unique, three-part cutter disc, which remains sharp even as it wears. This design ensures that your grass is not damaged. The parallelogram features make the Euroject Pro ideal for fertilising fields for cereal crops.







## Three-part cutter disc

The shape of the self-sharpening cutter disc is designed to provide sufficient space in the soil at minimal depth. Each cutter disc is equipped with a set of highly durable, low-maintenance bearings and seals. They are simply lubricated from the rear of the injector, or via an automatic lubrication system.



## Parallelogram system

Each element features two cutter discs. The element is moved up and down via a parallelogram with hydraulic suspension. As the hydraulic cylinders are connected with each other, the pressure applying to each element – and thus the cutting depth – remain consistent across the full working width. The elements follow both tracks and ground contours and therefore adapt perfectly to surfaces and prevent any damage to soils. The specially shaped outlet guarantees that manure is optimally deposited.







## FEATURES

- ⊕ Professional Veenhuis injector
- ⊕ Available in working widths from 7.88 to 8.63 metres
- ⊕ Optimal ground contour following with pendulum frame
- ⊕ With double discs (TWIN)
- ⊕ Track following elements
- ⊕ Readjustable discs as the disc diameter decreases
- ⊕ Heavy-duty, low-maintenance bearing and high-quality seals
- ⊕ Mechanically controlled transport safety device

# EUROJECT TWIN

The Veenhuis Euroject Twin injector not only ensures that livestock and arable farmers and contractors are well prepared for new legislation, but also provides them with the best injector of its type, which can even be used in row cultures. The Veenhuis Euroject Twin injector is therefore a useful addition to the already powerful line-up of Veenhuis injectors.

## OPTIONS

- ⊕ Steps and platform
- ⊕ Automatic grease lubrication
- ⊕ Quick-coupling system
- ⊕ Multifaster
- ⊕ Pneumatic drip stop
- ⊕ Section control and section control via GPS/RTK







## Bearings and adjustability

The Euroject Twin stands out through its robust, low-maintenance, lubrication-free bearings. The use of high-quality seals makes lubrication redundant, and the robust bearings allow lateral forces to be easily absorbed. Readjustable cutter discs constitute yet another advantage. As the cutter disc diameter is reduced, the gaps between the discs increase. The cutter discs and other important parts can be easily readjusted, reducing maintenance cost to a minimum.



## Elements

The twin discs feature a moveable spring suspension per outlet pair, and the main frame allows for pendulum movement to ensure optimal ground contour following. The Veenhuis Euroject Twin injector is equipped with double (twin) sets of discs, which require less force to cut soils in dry conditions. The design provides maximum clearance between the element and cutter discs to reduce blockages to a minimum.



## Section control

Discs arranged at 187.5-mm distances, combined with (hydraulic or pneumatic) section control ensure that the Veenhuis Euroject Twin injector can also be used to fertilise rows. The injector is available with automatic GPS/RTK section control, with the drip stops being controlled pneumatically.



With a 12-metre working width, the Premiumject is the widest Veenhuis injector.



## FEATURES

- ✦ The widest Veenhuis injector
- ✦ Optimal ground contour following due to a hydraulic pendulum parallelogram
- ✦ 12-metre working width for minimal soil compaction
- ✦ With adjustable wheels with pneumatic tyres
- ✦ With discs with a diameter of 350 mm and a depth of 24 mm
- ✦ Pneumatic drip stop

## PREMIUMJECT 1200

The Veenhuis Premiumject 1200 injector is suitable for use behind large trailed slurry tanks, drag hose systems and self-propelled slurry tankers.



In contrast to other Veenhuis injectors, the Premiumject 1200 features 40-mm hoses and a vertical cutter distributor. Premiumject injectors feature a unique, three-part cutter disc, which remains sharp even with long-term use. This design ensures that your grass is not damaged. The parallelogram features make the Premiumject ideal for fertilising fields for cereal crops.





## Parallelogram system

Each element features two discs. The element is moved up and down via a parallelogram with hydraulic suspension. As the hydraulic cylinders are connected with each other, the pressure applying to each element – and thus the cutting depth – remain consistent across the full working width. The elements follow both tracks and ground contours and therefore adapt perfectly to surfaces, especially given the large cylinder stroke of this parallelogram system. This is indispensable when using large working widths and working in difficult terrain. The specially shaped outlet guarantees that manure is optimally deposited.



## Section control

Discs arranged at 187.5-mm distances, combined with pneumatic drip stops, which come as standard, ensure that the Veenhuis Premiumject injector can also be used to fertilise rows. The injector is available with automatic GPS/RTK section control.



# ARABLE INJECTORS

The Veenhuis range of arable injectors comprises four series of high-quality machines for professional users who value efficient manure application and good tillage. The different versions provide a matching solution for any user's needs. These injectors stand out through 60-mm outlets, heavy vibration tines and a robust design.

## TERRAJECT 200

Two rows of tines  
maximum working width:  
6.50 metres



## TERRAJECT 300

Three rows of tines  
maximum working width:  
8.12 metres



## TERRAJECT 400

Four rows of tines  
maximum working width:  
6.44 metres



## TERRAJECT DISC

Two rows of discs  
maximum working width:  
6.00 metres







## FEATURES

- ✦ For trailed tanks
- ✦ Available in four working widths: 4.72/5.31/5.90 and 6.49 metres
- ✦ Available as a 6-metre row version (8 rows at 75 cm each)
- ✦ With two rows of vibration tines and wear-resistant chisels
- ✦ Continuously variable wheels

# TERRAJET 200

The Veenhuis Terrajet 200 was developed for injecting manure into arable fields.

This machine is suitable for all types of soils and is ideal for trailed tanks. Its special spring tines ensure that the machine only requires very little tractive force.

The injector features continuously variable wheels with pneumatic tyres for setting the correct working depth.

## OPTIONS

- ✦ Various tool attachment options
- ✦ Quick-coupling system
- ✦ Multifaster
- ✦ Tow hook
- ✦ Pneumatic drip stop
- ✦ Section control and section control via GPS/RTK
- ✦ Steps and platform







## FEATURES

- ✦ For trailed and self-propelled tanks
- ✦ Available in three working widths: 6.96/7.54 and 8.12 metres
- ✦ Available in a 7.50-metre row version (10 rows spaced 75 cm apart)
- ✦ With three rows of vibration tines and wear-resistant chisels
- ✦ Continuously variable wheels
- ✦ Range of options

## OPTIONS

- ✦ Various tool attachment options
- ✦ Quick-coupling system
- ✦ Multifaster
- ✦ Tow hook
- ✦ Pneumatic drip stop, divided into sections
- ✦ Section control and section control via GPS/RTK
- ✦ Steps and platform

# TERRAJECT 300

The Veenhuis Terraject 300 injector is a robust, wide arable injectors.

The Terraject 300 is available in working widths from 6.96 to 8.12 metres and therefore Veenhuis' widest arable injectors. The Terraject 300 features three rows of vibration tines with wear-resistant chisels for applying manure and tilling the soil in a single pass. The working depth is continuously variable.







## FEATURES

- ✦ For larger trailed and self-propelled tanks
- ✦ Available in three working widths: 5.32/5.88 and 6.44 metres
- ✦ With four rows of vibration tines and wear-resistant chisels
- ✦ Continuously variable wheels

# TERRAJECT 400

The Veenhuis Terraject 400 injector is a robust, wide arable injector with four rows of tines.

This is the ideal machine for professional contractors and for attachment to heavy and self-propelled tanks. The adjustable spring tines and chisels, and the continuously variable working depth ensure optimal performance under any conditions.

## OPTIONS

- ✦ Various tool attachment options
- ✦ Quick-coupling system
- ✦ Multifaster
- ✦ Tow hook
- ✦ Pneumatic drip stop
- ✦ Section control and section control via GPS/RTK
- ✦ Steps and platform







## FEATURES

- ⬢ Two rows of serrated discs
- ⬢ Available in working widths of 4, 5 and 6 metres
- ⬢ Perfect tillage
- ⬢ Maintenance-free bearings
- ⬢ Optimal hose routing
- ⬢ Height-adjustable wheels

# TERRAJECT DISC

The Terraject Disc is a disc harrow which cuts stubble, turns soil and spreads manure in a single pass.

The disc harrow features two rows of serrated discs. The height of the four steel wheels can be adjusted via a pivot. With its compact design and low weight, the Terraject Disc is ideal for trailed and self-propelled tanks. The adjustable outlets in front of the first row of discs allow manure to be spread at various sites to ensure that it is optimally applied.

## OPTIONS

- ⬢ Various tool attachment options
- ⬢ Quick-coupling system
- ⬢ Multifaster
- ⬢ Pneumatic drip stop
- ⬢ Section control and section control via GPS/RTK
- ⬢ Steps and platform





# TOOL ATTACHMENTS

MANURE PROCESSING

## Tine harrow

A tine harrow can be optionally installed. Tine harrows have a lightweight design and are used to level soils. When working on stubble fields, the spindles can be turned in to fold the tine harrow up. Tine harrows are suitable for both light and heavy soils. Injector depth is adjusted via the wheels.



## Drag tines

Drag tines can be optionally installed. Drag tines have a lightweight design and are used to level soils. When working on stubble fields, drag tines can be turned in to fold the toothed harrow up.



## Crumbler roller

A crumbler roller can be optionally installed. Crumbler rollers are used to break down large clumps of soil. The diagonal roller arrangement ensures smooth operation without blockages. The soil is levelled at the same time. Crumbler rollers are suitable for both light and heavy soils and can be adjusted independently of the set fertilisation depth.



## Bar roller

A bar roller can be optionally installed. The injector's working depth is adjusted via the bar roller. The bar roller for the Terraject 200 is available with a diameter of 450 mm. The Terraject 300 and 400 have a bar roller with a diameter of 620 mm. A bar roller can also be installed on a Terraject Disc. Bar rollers are used to crumble soils and at the same time reconsolidate it lightly. Their spiral design ensures smooth operation and prevents blockages.



MANURE TRANSPORT

MANURE APPLICATION

# COMPONENTS

## GENERAL



### Optimum slurry spreading

The domed lid and central supply on Veenhuis macerators ensure an optimal flow of slurry, where the manure is guided through specially shaped openings to create a reliably even flow across the entire width.



### High shredding quality

The manure is shredded at an angle in the macerator. The D-shaped openings, rotating knives and 60-mm outlets are highly effective in preventing blockages. Additional knives can be installed to ensure even better dosage at various application rates. The rotating movement keeps the knives sharp at all times, and the pressure can be adjusted quickly and easily via a central pressure regulator.



### DLG-certified

The Veenhuis macerator guarantees optimal distribution across the full machine width. The DLG has measured its distribution at various application rates and with different types of manure. The result was consistently outstanding distribution, which was awarded a ++ rating.



### No mixing of oil and liquid manure

The separate seal rings in the macerator gearbox prevent any mixing of manure and oil. A leakage channel is provided to ensure that any leakage resulting from damage to either seal is quickly detected.



# Proven quality of Veenhuis macerators

## 60-mm hoses

All Veenhuis injectors except the Premiumject feature 60-mm hoses. This ensures an even, unobstructed flow of manure and reduces the risk of blockage to a minimum. Veenhuis has been renowned for using outlet hoses with a diameter of this size for many years. This large hose volume results in a continuous transition to maintain an uninterrupted flow of manure, even with frequent injector use.



## Pneumatic drip stop

All injectors are available with pneumatic drip stops. This technology allows manure injectors to be equipped with drip stops, which prevent soiling at headlands and ensure that manure is instantly available and ready whenever the injector is used. All manure injectors with pneumatic drip stops can be equipped with single-row deactivation, which also allows them to be coupled to GPS/RTK.



## GPS/RTK section control

Veenhuis uses pneumatic drip stops to allow the machine to be connected to a GPS/RTK system. With Veenhuis tanks, the connection is made to the ISOBUS system on the tank. In self-propelled vehicles, Veenhuis also uses all available ISOBUS systems or connects to an existing system. The system works with air valves and is therefore capable of operating independently of the hydraulic system, allowing rapid switching without delays.



## Quick-coupling system/ Multifaster

Veenhuis injectors can be equipped with a quick-coupling system, which can be screwed in at the same location as the 3-point attachment. This allows the injector to be retrofitted with such a system. Injectors can be quickly and easily attached by using a Multifaster.



# COMPONENTS

## MANURE INJECTORS



### Vertical macerators

Premiumject injectors feature two vertical macerators to ensure optimal manure spreading. The distributor is equipped with a unique cutting system, which supplies the 32 outlet pipes (diameter: 40 mm). An eccentrically rotating knife guarantees high shredding performance to minimise the risk of blockages. The system is easily accessible to make maintenance works a breeze.



### Rubber outlets

The specially shaped Veenhuis rubber outlets ensure that manure is applied very narrowly towards the rear and therefore optimally deposited in the cut. The rear opening prevents pressure from building up between the outlet opening and contact surface, so that manure cannot splash out to the sides.



### Hydraulic drip stop

Veenhuis grassland injectors feature hydraulic drip stops as standard. These can be connected to all trailed or self-propelling tanks with an available main or three-way valve. An excellent, reliable seal is ensured by the independent closure of each element and the special shape and design of the closing mechanism.



### Safe transport

The hydraulic transport lock guarantees safe injector transport. Veenhuis injectors feature transport safety locks as standard. Veenhuis injectors are also equipped with transport safety locks according to legal requirements as standard. The hydraulic or mechanical folding mechanism of this transport lock can be operated from the tractor cab. Safety is ensured at all times.



# COMPONENTS

## ARABLE INJECTORS

### Spring tines

Veenhuis uses special spring tines or vibration tines for its injectors. The powerful oscillating movement of vibration tines not only ensures that they require substantially less tractive force, but also results in effective breaking down and mixing of the soil. This type of tines has a natural breaking force, which is limited by the spring. The shallow chisel angle results in more soil being lifted onto the chisel, which ensures both good manure injection and thorough tillage.



### Terraject Disc coulters

Veenhuis uses coarsely serrated disc coulters with a diameter of 510 mm. The size of the disc serrations corresponds to the natural diameter. Larger discs therefore have larger serrations to incorporate greater volumes of plant material. The coarse serration additionally breaks soils better in heavy conditions. Veenhuis has the bearing on the concave side of the discs to prevent blockages in heavy and sticky soils.



### Terraject Disc rubber outlets

The Veenhuis rubber outlets are also used in Terraject Disc machines. The outlets are shaped to ensure that manure is deposited very narrowly towards the rear to prevent panning in front of the injector. The serrated disc then places this narrow manure strip inside the cut created by the adjacent disc. This design guarantees optimal manure incorporation. The flexible rubber material additionally ensures that any stubble residue passes easily through the machine, again effectively preventing blockages.



### Hose routing

Veenhuis positions hoses on top of manure injectors so that they always drain and can be drained. This prevents both blockages and negative pressure developing in the hoses. Solid support is provided as required to maximise hose durability and absorb vibrations appropriately.



# SPECIFICATIONS

## MANURE INJECTORS

	ECOJECT					
Working width (m)	4.56	5.32	6.08	6.84	7.60	8.36 *
Transport width (m)	2.60	2.60	2.60	2.60	2.60	2.60
Weight (kg)	± 1200	± 1380	± 1660	± 1860	± 1920	± 2200
Disc diameter (mm)	Ø 300	Ø 300	Ø 300	Ø 300	Ø 300	Ø 300
Number of discs	24	28	32	36	40	44
Discs/element	2	2	2	2	2	2
Distance between discs (mm)	190	190	190	190	190	190
Transport height <sup>1</sup>	2170	2550	2930	3310	3690	3929
Mounting	3-point or 4-point cat. II or cat. III					

\* The Ecoject 8.36 has a different frame design.

	EUROJECT PRO				
Working width (m)	5.63	6.38	7.13	7.88	8.63
Transport width (m)	2.80	2.80	2.80	2.80	2.80
Weight (kg)	± 2300	± 2500	± 2750	± 3340	± 3500
Disc diameter (mm)	Ø 350	Ø 350	Ø 350	Ø 350	Ø 350
Number of discs	30	34	38	42	46
Discs/element	2	2	2	2	2
Distance between discs (mm)	187.5	187.5	187.5	187.5	187.5
Transport height <sup>1</sup>	2600	2980	3750	3365	3740
Mounting	3-point or 4-point cat. II or cat. III				

	EUROJECT TWIN	
Working width (m)	7.88	8.63
Transport width (m)	± 2.80	± 2.80
Weight (kg)	± 3050	± 3200
Disc diameter (mm)	Ø 406	Ø 406
Number of discs	42	46
Discs/element	2	2
Distance between discs (mm)	187.5	187.5
Transport height <sup>1</sup>	3335	3710
Mounting	3-point or 4-point cat. II or cat. III	

	PREMIUMJECT
Working width (m)	12.00
Transport width (m)	3.00
Weight (kg)	± 4100
Disc diameter (cm)	Ø 350
Number of discs	64
Discs/element	2
Distance between discs (mm)	187.5
Transport height <sup>1</sup>	3600
Mounting	3-point or 4-point cat. II or cat. III

<sup>1</sup> The transport height is measured with the injector folded in and resting on the ground.



# SPECIFICATIONS

## ARABLE INJECTORS

	TERRAJECT 200			
Working width (m)	4.72	5.31	5.90	6.49
Transport width (m)	2.70	2.70	2.70	2.70
Weight (kg)	± 1620	± 1720	± 1800	± 1880
Number of tines	16	18	20	22
Tine rows	2	2	2	2
Number of outlet pipes	16	18	20	22
Tine distance (mm)	295	295	295	295
Number of wheels	4	4	4	4
Transport height <sup>1</sup>	2450	2750	3040	3335
Mounting	3-point or 4-point cat. III or cat. IV			

TJ 200 ROW INJECTOR	
Working width (m)	6.00
Transport width (m)	2.70
Weight (kg)	± 1700
Number of tines	16
Tine rows	2
Number of outlet pipes	16
Tine distance (mm)	375
Number of wheels	4
Transport height <sup>1</sup>	3050
Mounting	3-point or 4-point cat. III or cat. IV

	TERRAJECT 300		
Working width (m)	6.96	7.54	8.12
Transport width (m)	2.80	2.80	2.80
Weight (kg)	± 2500	± 2780	± 2880
Number of tines	24	26	28
Tine rows	3	3	3
Number of outlet pipes	24	26	28
Tine distance (mm)	290	290	290
Number of wheels	4	6	6
Transport height <sup>1</sup>	3190	3480	3770
Mounting	3-point or 4-point cat. III or cat. IV		

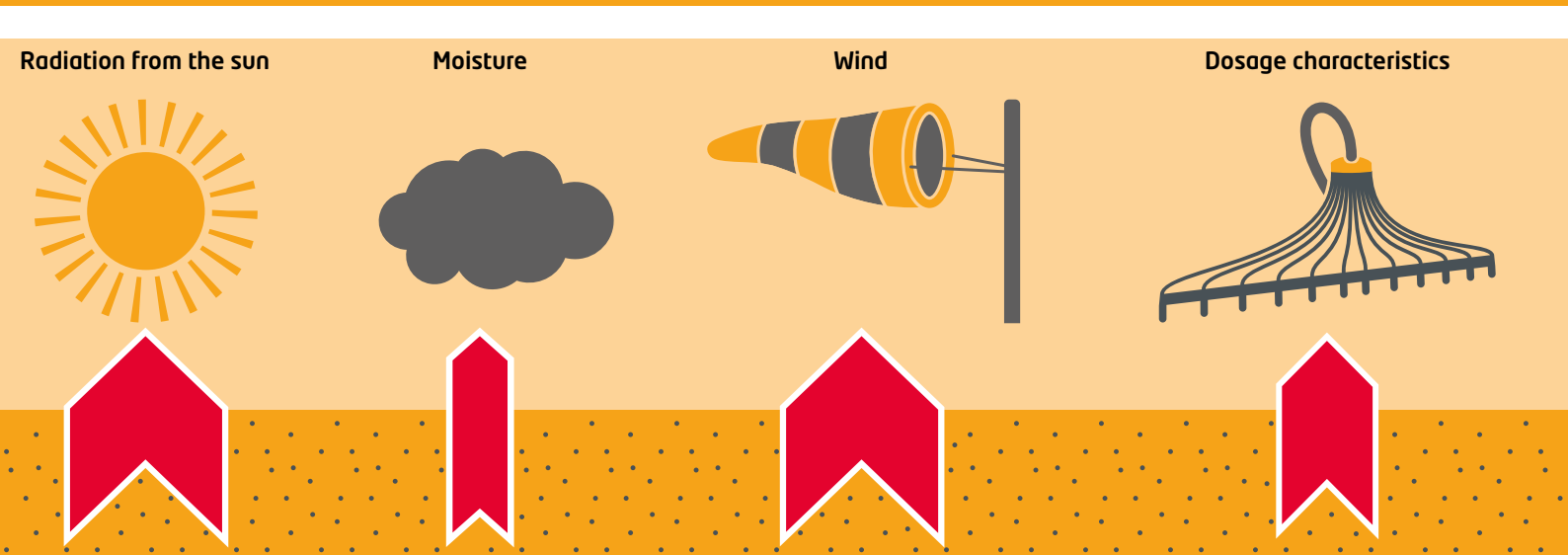
TJ 300 ROW INJECTOR	
Working width (m)	7.50
Transport width (m)	2.80
Weight (kg)	± 2500
Number of tines	20
Tine rows	3
Number of outlet pipes	20
Tine distance (mm)	375
Number of wheels	6
Transport height <sup>1</sup>	3480
Mounting	3-point or 4-point cat. III or cat. IV

	TERRAJECT 400		
Working width (m)	5.32	5.88	6.44
Transport width (m)	2.85	2.85	2.85
Weight (kg)	± 2320	± 2420	± 2520
Number of tines	19	21	23
Tine rows	4	4	4
Number of outlet pipes	19	21	23
Tine distance (mm)	280	280	280
Number of wheels	4	4	4
Transport height <sup>1</sup>	2940	3220	3500
Mounting	3-point or 4-point cat. III or cat. IV		

	TERRAJECT DISC		
Working width (m)	4.00	5.00	6.00
Transport width (m)	2.85	2.85	2.85
Weight (kg)	± 2450	± 2650	± 2850
Number of tines	32	40	48
Tine rows	2	2	2
Number of outlet pipes	16	20	24
Tine distance (mm)	250	250	250
Number of wheels	2	4	4
Transport height <sup>1</sup>	2130	2630	3130
Mounting	3-point or 4-point cat. III or cat. IV		

<sup>1</sup> The transport height is measured with the injector folded in and resting on the ground.  
When tool attachments are used, the transport height may be greater.

# Manure



## N loss with various application techniques



### Splash plate

- ◆ **Approx. 70% N losses**
- ◆ Reduced nutrient utilisation, as solid manure components grow upwards with crops
- ◆ Limited uptake with grazing and from silage
- ◆ High risk of burning



### Drag hose

- ◆ **Approx. 40% N losses**
- ◆ Reduced nutrient utilisation, as solid manure components grow upwards with crops
- ◆ Crop losses, again as solid manure components grow upwards
- ◆ Limited uptake with grazing and from silage
- ◆ Risk of burning



### Trailing shoe spreader

- ◆ **Approx. 30% N losses**
- ◆ With thicker slurry, there is still a risk of silage contamination and lower uptake with grazing
- ◆ Crop losses
- ◆ Risk of burning



### Manure injector

- ◆ **Approx. 10% N losses**
- ◆ No loss of crops and maximum uptake of nutrients from manure
- ◆ Maximum uptake with grazing and no manure residue in silage
- ◆ No burning



### Frable injector

- ◆ **Approx. 10% N losses**
- ◆ Maximum uptake of nutrients from manure
- ◆ Direct injection and good tillage
- ◆ Minimal losses with longer intervals between fertilisation and sowing

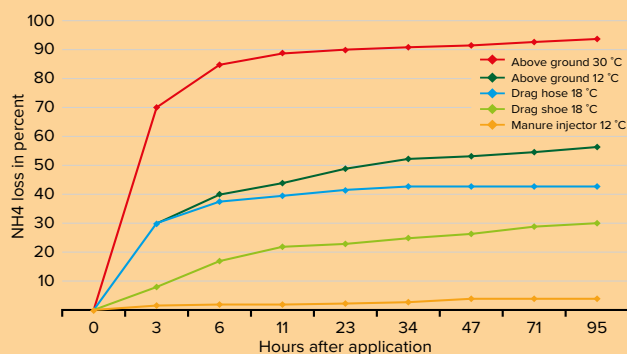


# Matters

Animal manure and digestate contain important nutrients and are therefore not waste products, but instead high-quality fertilisers. Veenhuis injectors are designed to ensure that valuable nutrients are properly incorporated into the soil so that they ultimately reach the plants. This results in improved growth and higher crop quality. Nitrogen (N), phosphate (P), potassium (K) and magnesium (Mg) are the most important nutrients contained in manure, although nitrogen can evaporate.

Evaporation processes, and with them nitrogen emissions, are influenced by both temperature and weather conditions. As Veenhuis injectors minimise the contact surface between manure and the environment, this approach to manure spreading delivers maximal utilisation of this valuable mineral.

**NH<sub>4</sub> loss with field application relative to temperature and application method**



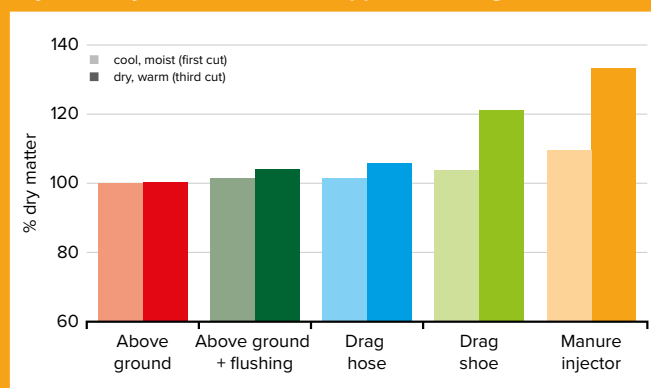
Source: Lorenz & Steffens, 1996

## And how about yields?

Modern technologies not only allow emissions to be avoided, but also boost yields. The higher the temperature, the greater the yield. This produces an increased dry matter content and boosts the utilisation of nitrogen and other nutrients.

- ◆ Less use of artificial fertiliser
- ◆ No contamination of grass or silage
- ◆ Better crop quality
- ◆ Higher dry matter content and more cuts

**Dry matter yield after manure application to grassland**

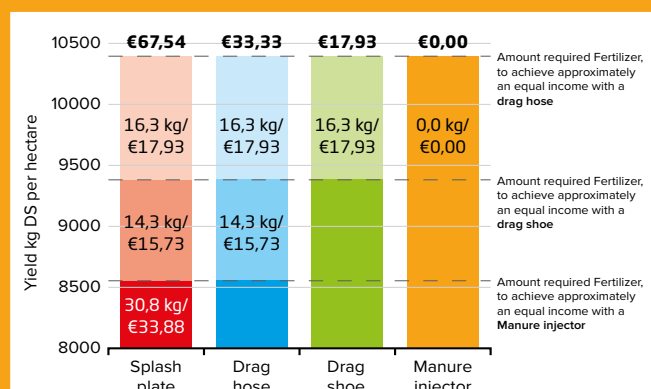


	Yield in kg DM/ha	Yield increase compared to baffle plates (kg DM/ha)	Yield increase compared to baffle plates (%)	Profit from yield increase in kg DM/ha (€0.24/kg)
Splash plate	8,000	n/a	n/a	n/a
Drag hose	8,640	640	8%	€ 154
Drag shoe	9,600	1600	20%	€ 384
Manure injector	10,400	2400	30 %	€ 576

Source: Lorenz & Steffens, 1996

## Where are the savings?

Injecting manure with a Veenhuis injector maximises the utilisation of the nutrients contained in manure. Compared to drag hose and trailing shoe systems, Veenhuis injectors deliver substantial savings in the use of artificial fertiliser. Depending on the technology used, investments of €17.93 to €67.54 are required per hectare to achieve the same results per hectare as with an injector.



# EFFECTIVE FERTIL WITH AN EUROJECT PRO ON

Veenhuis Euroject Pro manure spreaders are excellent for fertilising cereal fields. For many years, the Euroject Pro has been a popular choice for farmers and contractors due to its hydraulic parallelogram system and design with a three-part disc. As the hydraulic cylinders for the various parallelograms are connected with each other, the same pressure is applied to each element. This is important, as it ensures that manure is deposited accurately in the soil across the full working width. The three-part disc prevents blockages and is self-cleaning, even in sticky soils. For loose soils, a load relief function is recommended for relieving the linkage of the trailed or self-propelling tank. This allows the working depth to be set to any level you require.

## Practical example: fertilising an oat field with a Veenhuis Euroject Pro spreader



### 7 May: Fertiliser application

The left part of an oat field was fertilised with a Veenhuis Euroject Pro spreader. At the same time, the right side of the field was fertilised with a splash plate spreader. The same dosage was applied through both systems, and the pass across the field was done randomly so that effects on crop damage could be assessed.



### 8 June: Assessment

One month after the manure had been applied, the crop fertilised with the Veenhuis Euroject Pro spreader had a much greener colour than that fertilised using a splash plate spreader. Also, the crop fertilised with the Veenhuis Euroject Pro was considerably taller. This is the result of improved and more efficient uptake of nitrogen from the fertiliser. No crop losses due to damage to plants was observed.

# Manure



# ISATION

## A CEREAL FIELD



### 8 June: Assessment of leaf and plant growth

The picture on the left shows the leaf and plant growth after fertilisation with a Veenhuis Euroject Pro spreader. The picture on the right shows the leaf and plant growth after fertilisation with a splash plate spreader. It is clearly evident that both plant density and leaf size developed further and better after fertilisation with a Veenhuis Euroject Pro spreader, even after a short period of time. This is the positive outcome of more efficient nitrogen uptake.



### 8 June: Assessment of weed growth

The picture on the left shows the leaf and plant growth after fertilisation with a Veenhuis Euroject Pro spreader. The picture on the right shows the leaf and plant growth after fertilisation with a splash plate spreader. Fertilisation with the Veenhuis Euroject Pro resulted in greater plant density, leaf size and plant growth, even after a short period of time. As a result, less sunlight reaches the soil and weed growth is effectively suppressed.

# Matters

# SURFACE APPLICATION



## Splash plate in frame

For slurry tanks with linkages, the Veenhuis range includes a splash plate in a 4-point frame, which can easily be installed at the linkage. This allows the feed hose between the tank and injector to be connected to the splash plate, and the automatic metering system/dosage display on the tank can still be used.



## Double Mösch distributor

For slurry tanks with linkages, the Veenhuis range includes a double Mösch distributor in a frame, which can easily be installed at the linkage. This allows the feed hose between the tank and injector to be connected to the mösch beam, and the automatic dosage system/metering display on the tank can still be used. This Mösch distributor allows a maximum spreading width of 21 metres to be achieved.



## Spraying booms with double Mösch distributor

For slurry tanks with linkages, the Veenhuis range includes a spraying boom with double Mösch distributor, which can easily be installed at the linkage. This allows the feed hose between the tank and injector to be connected to the spraying beam, and the automatic dosage system/metering display on the tank can still be used. This Mösch distributor allows a maximum spreading width of 27 metres to be achieved.



# APPLICATION

## DRAG HOSE SYSTEMS

MANURE PROCESSING

### Vogelsang drag hose spreaders

Veenhuis is able to supply various Vogelsang dribble bar spreaders with working widths from 9 to 36 metres. Veenhuis thus offers a full tank/injector package, with the injector being installed by Veenhuis and tested and set up in combination with the tank. The combination is therefore ready for use as soon as it is delivered.



### Bomech trailing shoe spreaders

Veenhuis is also able to supply Bomech trailing shoe spreaders, more precisely the models Bomech Farmer, Multi and Multi Profi, in combination with a tank. Veenhuis does all the installation and subsequently tests and sets up the system in combination with the tank. You again receive a fully operational, complete solution that is ready for use.



MANURE TRANSPORT

MANURE APPLICATION

# SOLID CAPACITY

## FEED HOSE SYSTEMS

### Premiumject 1200

Drag hose spreader with swivel arm or railsystem and a 12-metre working width. High capacity and low soil compaction.



### Rotomax

High-capacity slurry reel, suitable for small to very large lots. Lot fertilisation as with a trailed tank, but without damaging crops. Hose placement requires no traction, and the reel can therefore be used even earlier than traditional drag hose systems.



### Quanta pump unit

Well thought-out system for pumping manure directly from pits, silos, containers or trucks. This system can also be operated remotely if it is coupled to the vehicle on the field (optional).







## Why use a feed hose system?

As the window for application is very narrow due to legislation, regulation and weather conditions, contractors, livestock and arable farmers are forced to spread a lot of manure within short periods of time. Poor soil stability and wet conditions often make it difficult to fertilise using slurry tanks early in the season. If slurry tanks cannot be used under these conditions, feed hose systems can take over!

Soil compaction hampers crop growth. Veenhuis feed hose systems have a 12-metre working width. When combined with low tyre pressure, they minimise soil compaction during fertilisation and therefore optimise your crop's growth. As feed hose systems provide a continuous supply of manure, there are no time losses due to loading and unloading. Veenhuis feed hose systems facilitate continuous fertilisation.



## FEATURES

- ✦ 12 m working width
- ✦ Perfect ground contour and track following
- ✦ With 3-part coulters discs with a diameter of 350 mm and a depth of 24 mm
- ✦ Proportional pressure adjustment on the discs
- ✦ Parallelogram system with a very large range
- ✦ ISOBUS control
- ✦ Large wheels
- ✦ Pneumatic drip stop and minimal soil compaction

## OPTIONS

- ✦ Section control
- ✦ Automatic section control using GPS/RTK
- ✦ Automatic lubrication
- ✦ Flowmeter
- ✦ Radio connection to the pump system

## SWIVEL ARM

### Model with swivel arm

This system has come to prevail over other drag hose systems in recent years. The rail-system is replaced by an arm connected to the front linkage and the tractor's front-loading system to optimise weight distribution.

With longer track lengths, this system applies less pressure on the rear axle and more pressure on the front axle of the tractor. As a result, the tractor can be operated with substantially lower tyre pressure, which in turn reduces soil compaction. The arm can be swivelled by 360° to ensure it is always positioned in an optimal line of traction and reduces maximum loads from the hose at the headland.

Another advantage is that brake pedals no longer need to be adjusted when turning or working at the headland. Also, there is no need for operators to control the swivel arm separately during application, and they are therefore able to focus fully on driving. The end section of the swivel arm is height-adjustable, which allows the load distribution between the tractor's front and rear axle to be adjusted as well. This is ideal for long track lengths! As the injector disc pressure can be controlled proportionally from the cabin, the pressure applying on the rear axle of the tractor can also be adjusted. This combination of technologies and low tyre pressure allows trail distances that used to be considered unachievable. The swivel arm no longer exerts any tractive forces on the injector, which extends the injector's service life. Finally, the straightforward design minimises maintenance costs.





## Elements

Thanks to a unique parallelogram system, the outlet angle to the soil surface is always 90° to achieve consistently optimal manure application. As the pressure cylinders are connected with each other and can be controlled proportionally, the same pressure applies to each element. With a large parallelogram range, this system is ideal for work on ploughed fields or in other difficult terrain. The outlets feature pneumatic drip stops, which also enable automatic section control.



## Wheels and macerators

The large wheels with pneumatic tyres are controlled via the linkage, taking loads off the tractor even when turning at the headland to minimise soil damage and compaction. Premiumject injectors feature two vertical macerators to ensure optimal manure spreading. The distributor is equipped with a unique cutting system, which supplies the 32 outlet pipes (diameter: 40 mm). An eccentrically rotating knife guarantees high shredding performance to minimise the risk of blockages.



## ISOBUS control

All injector functions of the Premiumject 1200 are operated via ISOBUS controls. Easy-to-use push buttons and smart control functions, including for headlands, ensure comfortable operation and allow the operator to focus on driving. ISOBUS control additionally permits the use of application maps and the connection of an NIRS sensor.





## FEATURES

- ⬢ Minimum soil damage
- ⬢ No contamination
- ⬢ High capacity
- ⬢ High efficiency due to short start-up and clean-up times
- ⬢ For small to very large lots.

# ROTOMAX

The Veenhuis Rotomax slurry reel guarantees minimum soil damage and delivers high capacity.

As this fertiliser combination does not need to pull the hose, it requires substantially less traction and therefore effectively prevents contamination and crop damage. Tyre pressure can be reduced to a mere 0.5 bar, making this system the gentlest in terms of negative impact on soils and plants compared to any other system on the market. "Where conventional drag hose systems reach their limits, this machine simply keeps going", say satisfied users of this Veenhuis system.

The Veenhuis Rotomax stands out compared to conventional systems, as the feed hose is placed on the ground and picked up again from the same spot by a swivel arm. This makes for great flexibility on the field and allows lots to be fertilised in the same manner as with a tractor/tank combination.

Set-up and clean-up times are very low with the Rotomax. Once you have arrived at your field, you simply connect the hose and are ready to start applying fertiliser. Once you are finished, the hose can be cleaned with water or air. The Rotomax can also be simply disconnected, and you can continue to work on the next lot. The well-thought-out system of a feed hose on the reel ensures that both small and large lots can be fertilised effortlessly.

## OPTIONS

- ⬢ 900/65 R32 tyres
- ⬢ Slurry measurement
- ⬢ NIRS measurement
- ⬢ Telescopic axle
- ⬢ Articulated drawbar
- ⬢ 4.5" hose
- ⬢ 5" hose





## Small and large lots

As there is no need for unrolling the entire Veenhuis Rotomax slurry reel, small lots can be easily fertilised without needing to worry about how many metres of hose you'll need for the lot. This is in pleasant contrast to conventional drag hose systems. If you start working in the middle, lengths of up to 1100 metres can be completed on large lots. On average, lots up to 40 hectares in size can be completed in a single pass, without needing to couple or uncouple. Rotomax is synonymous with high capacity and effectiveness!

## Hose routing arm

The hose routing arm guarantees that the hose can be placed in any position, even right next to the injector, with a 12-metre working width, allowing this system to be used with row cultures. The design of the hose routing arm ensures that the hose runs evenly through the arm and any soiling on the hose is removed immediately, which prevents hose wear. Hose durability is extended substantially thanks to the Rotomax system (compared to conventional drag hose systems). The arm can be folded in hydraulically for transport.







## Articulated drawbar

The Veenhuis Rotomax slurry reel is optionally available with an articulated drawbar so that you can spread fertiliser even with offset tracks. This also allows very tight turns at the headland and makes for easy manoeuvring around difficult access areas to your lots.



## Telescopic axle

The Veenhuis Rotomax slurry reel is optionally available with a telescopic axle, which can be extended by 50 cm on both sides. This ensures that machines do not need to return to the same tracks as often and reduces soil compaction to a minimum in combination with the large tyres, which come as standard with the Rotomax. The Veenhuis telescopic axle is designed for large loads. It delivers outstanding safety compared to other machines, even when working in hilly and mountainous terrain. The unique telescopic axle design keeps maintenance costs at a minimum and reduces tyre wear.



## Tyre pressure control system

A tyre pressure control system not only allows soil compaction to be minimised, but also ensures that tyre wear and fuel consumption can be reduced. A tyre pressure control system comprises a tyre which can be used at low pressure. Veenhuis therefore offers the Rotomax with the option of 900/65 R32 tyres, which offer all the features you expect from low-pressure tyres. Always drive your machines at the optimal tyre pressure under any conditions! If you use a high-performance compressor, you can install a tyre pressure control system on your tractor and control it via the compressor. Veenhuis offers a range of options for this solution.



## PremiumControl

The Veenhuis Rotomax slurry reel is equipped with ISOBUS control and is supplied with an Isomatch Tellus GO terminal as standard. This terminal can be connected to a matching joystick, which users can program and set up with the functions they need. Easy-to-use push buttons and smart control functions, including for headlands, ensure comfortable operation and allow the operator to focus on driving. The linkage pressure control and reel speed can be continuously adjusted while driving. ISOBUS control additionally permits the use of application maps and the connection of an NIRS sensor.



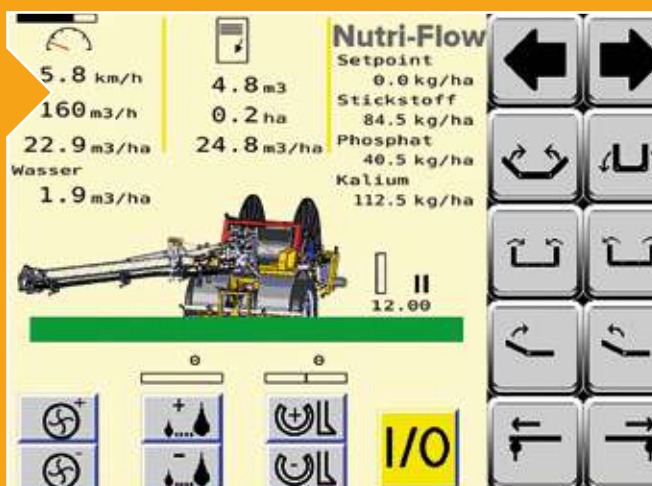
## Remote control

The pump for the Veenhuis Rotomax can also be remotely controlled. This allows the feed to be interrupted at the headland to avoid pressure peaks in the feed hose and damage to the hose. At the same time, there can be no miscommunication between the pump unit operator and Veenhuis Rotomax operator, and the slurry flow is always started and suspended at precisely the right time. Veenhuis also supplies a separate set for installation on existing pump units.



## Flowmeter Slurry and water

The Veenhuis Rotomax slurry reel is optionally available with a flowmeter for precise metering. The terminal displays both the application rate per hectare and the cubic metres applied per hour. The latter value indicates current capacity and provides information about the overall system operation. Where slurry has a higher dry matter content (above 5%), water can be added via the pump unit. In this case, the water flow can be displayed when using the system with the Veenhuis Quanta pump unit.



## Hose diameter selection

The Veenhuis Rotomax can be equipped with 600 metres of a 4.5" hose or 500 metres of a 5" hose. The choice of hose depends on the lot size: the longer the hose, the more flexibility; the larger the hose, the greater the capacity.



## Precision fertilisation

The Veenhuis Rotomax slurry reel features an ISOBUS system, which allows the Rotomax to be equipped with an NIRS sensor for real-time analysis while spreading manure. Additionally, application maps and fully automated section control can be used in combination with a GPS system. The Veenhuis Rotomax system can also be used to determine nutrient needs precisely for specific locations.





## FEATURES

- ⬢ 2-chamber tank with 11,000 l
- ⬢ Vacuum pump for start
- ⬢ Bauer SX 1000 pump
- ⬢ Pressure monitor and automatic bypass mode
- ⬢ 8" accelerator in the suction line
- ⬢ Intake pipe for cleaning ball

# QUANTA PUMP UNIT

The Quanta pump unit conveys slurry from the manure tank to the injector. The pump unit features a vacuum pump as standard to fill the manure tank before starting. The Bauer pump then conveys the slurry to the feed hose system on the field. An 8" accelerator in the suction line ensures that the slurry tank remains filled during pumping so that the Bauer pump can work uninterruptedly.



### Hose and injector cleaning

The hose and injector can be flushed after use. For this purpose, the pump unit pumps 7,000 litres of water from its water tank through the hose and injector. Optional: Screw-type compressor to push a cleaning ball through the hose after flushing.

### Radio control

The injector operator can control the pump via a radio unit. This allows the feed to be interrupted at the headland to avoid pressure peaks in the feed hose and damage to the hose.

### Water flowmeter

A water flowmeter can be optionally installed. When combined with radio control and the Veenhuis feed hose system, operators are also informed about how much water is added while they are on the field. The display shows how much water and slurry are being applied.

## OPTIONS

- ⬢ Slurry measurement
- ⬢ Water measurement
- ⬢ Radio control





## Front compressor

The Veenhuis range includes a compressor to push a cleaning ball through the hose after flushing. The Quanta pump unit features an intake pipe for such a cleaning ball, which safely inserts the ball into the hose at high pressure. Given the intensive air flow under high pressure, the cleaning ball is easily propelled through the hose and any couplings.



## Transport reel

The Veenhuis range includes a transport reel, which allows a 6" transport hose to be carried. The 3-point attachment allows the reel to be easily transported on the tractor's 3-point or front linkage. The reel can carry up to 800 metres of 6" transport hose.





# veenhuis

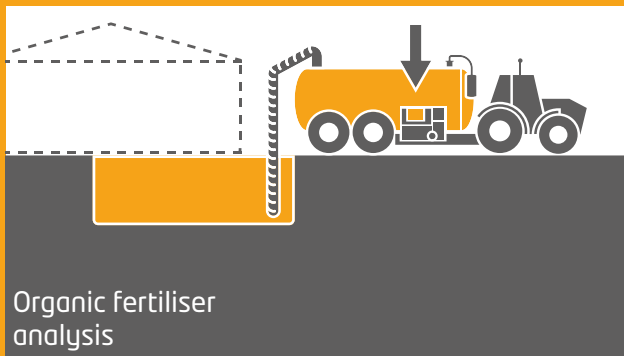
## NUTRI-FLOW





# NUTRI-FLOW

## PRECISION FERTILISATION



Veenhuis has developed Nutri-Flow to show the added value of organic fertiliser based on an analysis of the nutrients contained in it. The following nutrients are analysed using NIRS technology:

**Nitrogen, phosphate, potassium, ammonium and dry matter (N, P, K, NH<sub>4</sub>-N ammonium, DM content)**

Analyses can be conducted at source, i.e. even before transport, as well as in real time during low-emission spreading of organic fertiliser.

Nutri-Flow enables farmers to adapt the spreading of organic fertiliser to the local fertilisation (i.e. nutrient) needs of their soils and crops.

Nutri-Flow therefore makes an important contribution to precision farming, as organic fertilisers can be analysed even before application. This allows nutrient excretion and potential downstream corrections in cultivation to be avoided.

**Knowing = Growing,  
Guessing = Stressing!**



## ADVANTAGES - HOW

- ⬢ Evaluation of organic fertiliser
- ⬢ Better utilisation of organic fertiliser
- ⬢ Measurable results

## VEENHUIS OFFERS - WHAT

- ⬢ Thorough analysis of organic fertiliser
- ⬢ Measurement of nitrogen, phosphate, potassium, ammonium and dry matter %
- ⬢ Registration of N, P, K, NH<sub>4</sub>-N ammonium and DM with low-emission application
- ⬢ Metering based on nutrients in kg/hectare
- ⬢ Low-emission application and metering of organic fertiliser based on application maps
- ⬢ Location-specific addition of liquid fertiliser
- ⬢ Automatic section control to avoid overlaps

**Veenhuis Nutri-Flow enables growers to know! So they grow!**

# **veenhuis**

## GOOD, BETTER, **MANURE**



veenhuis.com

t +31 (0)572 35 21 45  
e info@veenhuis.com

Almelosestraat 54  
8102 HE Raalte