



# Aggronic Slurry Tankers



# AGRONIC-Low Center of Gravity with Unprecedented Power.

**AGRONIC** slurry tankers are designed and manufactured for demanding applications, and have been a favourite amongst Finnish contractors for many years. Our tankers are manufactured from quality Scandinavian S355MC steel.

The tanker walls feature a thickness of between 4-6mm, making the structure is extremely durable, yet lightweight. From front to back the tanker is supported by strong beams, reducing stress, as well as maintaining the tanker is top operational condition for many years. **Agronic has an extensive range of steering systems, pumping arms, and spreading ramps** which can be tailored to suit the requirements of each individual customer.

The slurry tanker range comprises of 4 versions: Base Models, XS, FG, HS, and HXA. These models can be equipped as required, and all versions are suitable for use by professional contractors and farmers alike. All models have been sold throughout Scandinavia, and are recognized for their exceptional strength and stability.



All Agronic slurry tankers feature a 5-bladed turbine within the bilge pump, mounted on double-row roller bearings, and mounted on a shaft manufactured from Corr-I-Dur for added resistance against corrosion and a long service life.



## New Way of Slurry Application:

- a low center of gravity
- excellent driving performance on the road and in the field
- the bottom tank on the front of the boom empties the last one, the weight remains sufficient until the end of the load
- a self-supporting structure,
- hydraulic hoses and cables run inside the frame beams
- Tanker's inside surface is epoxyed, outside surface is sandblasted, painted and lacquered
- comprehensive accessories
- axles and suspension according customer's needs.

The unique design of the chassis places an emphasis on lowering the overall center of gravity for the tanker. Side hills and slopes can be safely navigated even with a fully loaded tanker, and even with the lower center of gravity a ground clearance of 40cm can still be maintained.

Three or four-piece interior baffles as standard: As sloshing can lead to control problems, up to three or four anti-slosh baffles are fitted to the interior of each Agronic tanker, depending on the size.

The high-quality paint used not only makes Agronic tankers looking good for many years, it is also easy to clean. The well-thought out design, which keeps things as smooth and modern as possible, also minimizes catch points for mud and slurry.

Nokian ELS radial tires are used, which feature a 15% reduction in rolling resistance, and 20% less surface pressure than conventional cross-ply tires. The smoother tread design also allows for the tires to clean out effectively. Maximum permissible speed limit is 65 km/h





## AGRONIC-XS Series: Single Axle Tankers



**Tankers AGRONIC XS** are light agile single axle tankers.

A tanker equipped with a hydraulic bilge pump, no PTO shaft.

- Maneuverable, lightweight, and affordable tanker.
  - A variety of spreading ramps and pumping arms are available.
  - Top fill tanker with filling funnel
  - Funnel descends 50cm into the tanker, no hatch needed.
  - Hydraulic gate valve as standard.
  - Injector brackets are standard
  - LED light kit and mud guards
  - Lacquered paint.
  - Available Sizes: 10m<sup>3</sup> & 12m<sup>3</sup>
- Excellent driving performance
- low center of gravity, tank directly on shaft on.
  - oval shaped container.
  - a lower tank, sufficient to weigh the load to the end.
  - high quality radial tires.



1050/50R32 radial tires as a standart.





# AGRONIC Fg Series Slurry Tankers with Pendulum Bogie Axle

There is no compromise on the quality, or on the standard features with the **Agronic Fg Series**. For example, the discharge pump is the still the standard 5-winged version as found on the other Agronic tankers. The same Nokian tires, with a low operating pressures, help to ensure reduced surface compaction.

We proudly present the new Agronic Fg Series slurry tankers featuring a fiberglass tank body, and a capacity of 15,5 m³.

**The tanker is lighter, shorter, and offers increased agility** when compared to standard slurry tanks manufactured from steel. The increased agility of the tank comes down to the increased length of the drawbar, when compared to standard slurry tank designs. Making tighter turns possible, even if the tractor is equipped with large tires or a dual wheel system.

**Comprehensive Standard Equipment:** Tandem pendulum bogie axle with steering, hydraulic brakes, 750/55R26,5 steel-belted radial tires, level indicator, mounts for hydraulic blocks, anti-slosh baffles, spreading plates with a working width of 10 to 25 meters, drain valve, wide angle PTO shaft, and towing eye coupling.

**Customize with Just the Right Accessories:** Road lighting, fenders, 850/R30.5 tires, side-mounted pumping arm, and various types of spreading ramps.

### Technical Specifications:

Capacity: 15.5m³ (15,500 litres / 4100 US Gallons)  
Length: 776cm (7.76 meters / 25 ft. 5 in.)  
Width: 310cm (3.10 meters / 10 ft. 2 in.)  
Height: 326cm (3.26 meters / 10 ft. 5 in.)

Unladen Weight with Standard Equipment: 4800 kg (10,582 lbs.)

Series 6 wide-angle PTO shaft as standard



The side mounted pumping arm reaches to a maximum depth of 3.2 meters with standard version, with an extendable version having a maximum reach of 5.2 meters. Optionally, the slurry can also be unloaded through the foam tube.

The above photo shows the tanker equipped with 850/R30.5 tires, side-mounted pumping arm, HD filling pump, discharge via the foam hose, fenders, road lighting, electro-hydraulic controls, and a dual disc spreading ramp.

With a double spreading plate, the tanker can be emptied in half the time normally required, with the spreading width being maintained at a constant 16 meters.





# Slurry tankers AGRONIC with pendulum bogie-type axles.

The base models can also be customized to meet the customers individual requirements.

While the attachment points for the spreading ramps are standard, a choice of several Agronic spreading ramps is possible. These include the dribble bar system, trailing shoe, and the reliable Agronic disc ramp.

A choice of either center-mount or side-mount pumping arms are also available, allowing for a single tractor and operator operation to be undertaken from start to finish.

Among **the comprehensive list of other accessories**, a choice of tractor coupling systems (including ball-type hitch), and options such as a top-fill funnel and access hole are also available.

The base models feature pendulum bogie-type axles ADR, equipped with hydraulic brakes as standard. Also ride is ensured mechanical leaf-spring suspension.

The 17 and 20m<sup>3</sup> versions **can be equipped with a Crab steering**.

Crab steering allows for the tanker to be run in an offset position from the tractor's center, distributing the weight over a larger surface, helping to reduce the effects of vertical compaction.

As an option, the axles can also be equipped with hydraulic brakes on all four wheels. A third axle can be fied on the 17 and 20m<sup>3</sup>versions, for improved weight distribution.





# AGRONIC HS ja HXA- system with hydraulic suspension.



**HS- self steering tankers.**

**HXA- system tankers always have electronic forced steering and crab steering.**

Hydraulic suspension offers further advantages than just a smooth ride, it can be adjusted on the move to change the ride height, and offer pressure equalization between the axles.

The hydraulic suspension system also features less wearing parts, making maintenance a considerably less arduous process. Swaging and wandering during transport is also decreased, and axle loading is also reduced.

Two size of **radial tires Nokian ELS SB** are available: 750/55R22,5 and 850/50R30,5

Axles:

- Manufacturer ADR.
- Hydraulic or air pressure brakes
- Load capacity: 27- 42 tones.
- **Max. travel speed 60 km/h.**

**As a standard these tankers have a third liftable front axles.**

Further minimizing the tanker's foot print, and helping to increase fuel economy



The HS and HXA series feature a chassis that is narrower than most tankers on the market. The provides unmatched angility and a very large steering angle.

The HXA models are equipped with electronic forced steering, and crab steering. This means no control cables, steering rods, and tie-rod joints to wear. Eliminating the need for sharp steering angles from the tractor, to steer the tanker in the desired direction.

**The intelligence of the HXA system is impressive.** When leaving the field to the higher travel speeds of the road, the HXA system automatically locks the axles into the center position and the crab-steering system, a standard feature on HXA models, is automacally disengaged.

As the speed is reduced, from turning off the road into the field, the HXA system automacally unlocks the axles and brings the crab steering into a setting ready for action.

Control can be independently set, and on the road, there is no swaying or wandering at speed. Safe, stable, and Hi-Tech.

**The HXA system is equipped with electronic forced steering, crab steering, tractor reverse gear detection, brakes and LS hydraulics.**





## Crab steering control.



Tankers with pendulum bogie can be equipped with crab steering control. All axles will be turnable. Crab steering allows for the tanker to be run in an offset position from the tractor's center, distributing the weight over a larger surface, helping to reduce the effects of vertical compaction.

If a tractor equipped with 900mm wide tires, and a tanker with 850mm wide tires, **the weight is spread over a surface area 520cm wide**, with tractor and tanker running at a less than 50% overlap.



Another useful feature, is the ability to engage the crab steering axle on the headlands or while running close to a ditch or fence, drawing the spreading width away from an undesired area. The crab steering axle is also capable of being locked for transport.

The turning angle is so small that it does not cause noticeable torque to the tractor, but the tractor passes effortlessly straight forward.

Here you can see the difference:  
on the left crab steering system is  
switched off,  
on the right it is switched on.





## The third axle.

17 ja 20 m<sup>3</sup> **AGRONIC tankers with hydraulic suspension** can be equipped with a third lifting axle, this also capable being installed on the pendulum bogie base models.

The third lifting axle offers a wide range of movement, in combination with the ride benefits of a hydraulic suspension. The third axle can have a load bearing of up to 5,000kg, and allows for the total weight to be divided equally over all three axles. **For example, on a 20m<sup>3</sup> tanker the axle weight loading can be kept below 10,000kg per axle.**

The third axle is also fully road legal, and can be kept engaged on the road at full weight. Hydraulic brakes are standard, as well as full steering capability, and the axle can be raised or lowered as required.

On tankers equipped with a third lifting axle, the main axles are located further back on the tanker. A weight transfer system can also be added, further increasing the fuel economy and improving the driving characteristics.



Here is Agronic 20 m3 HS tanker, self steering axles, hydraulic suspension, front liftable axle and road tires.

The tankers is narrower, lower, If necessary, it can be equipped with spreading ramps. Ask for an offer!





# Center mounted pumping arms

Center mounted pumping arms can be swiveled to either the left or right side of tanker, and employ an oversized pinion gear system, similar to that found in modern forestry cranes.

It is fully extendable, and be equipped with an optional third joint, and it can be fitted as a transfer arm with a discharge valve.

For tractors with generous hydraulic capacity, a center mounted pumping arm with a hydraulically-powered piston pump is a good option. This system maintains a capacity of 8000-litres/min.

It is also highly effective in thick slurry, thanks to a very aggressive impeller, that also aids in mixing.



150mm foam tubes, while filling is first via a 168mm dia. tube, which is split into twin 125mm tubes.

The tanker filling process is designed around the idea of **keeping the foam level as low as possible**, the foam tubes direct the foam back to slurry pit, so that the level of liquid slurry being handled can be kept to the maximum.

### Technical Data

Piston Motor Pump:	Aber MBI 80M7, with a requirement of 80-litres/min. oil flow. Driving one pump.
Hose Size:	2x 125mm
Max. Capacity:	8000-litre/min.
Standard reach:	1,5m over fence/wall. 4.2 m deep.
Hydraulic Requirements:	3-4 double acting spools, in addition to constant flow and free-return.

# Side-mounted pumping arms

Side-mounted pumping arms are a cost-effective solution for filling the tanker, and for maintaining a single tractor/operator solution.

The side-mounted pumping arms can extend up to 3,2 meters from the right-hand side of the tanker, and a telescopic extension to allow for a maximum reach of up to 5,2 meters is possible.

Hydraulic pump, that works to shred the incoming material. The filling tube is positioned at the boom of the tanker, reducing the possibility of foaming.



Two different pumps for the side-mounted pumping arms.

Standard Pumping Arm: With a maximum capacity of 5500-litres/min. and requiring 50-litres/min. of tractor hydraulic power.

Piston Motor Pump: With a maximum capacity of 8000-litres/min. and requiring 80-litres/min. of tractor hydraulic power



### Technical Data

Motor:	Danfoss OMR 50, with a requirement of 50-litres/min oil flow. Driving one pump.
Piston Motor Pump:	Aber MBI 80M7, with a requirement of 80- l/min. oil flow. Driving one pump.
Hose Size:	1x 168mm
Capacity:	5500 or 8000 l/min
Working Depth:	3,2m in working depth.
Hydraulic Requirements:	2-3 double acting spools, in addition to constant flow and free-return



# AGRONIC Spreading Ramps: Dribble Bar



The transport position is compact, the wing turning is automated.

Dribble Bar: The dribble bar range consists of 12,0 and 16,0 meter working width models. The trailing hoses feature a diameter of 50mm, and depending on the working width of the ramp, from 40 to 54 hoses are used, with a spacing of 30cm.

The boom is of galvanized construction, and features **a drip prevention system as standard.** The hoses feature supports, which prevent the hoses from kinking during work and during transport.

The hoses are manufactured in the 3 parts, with a closed end design to prevent entanglement.



# Trailing Shoe

These spreading ramps allow for slurry application on grassland during the growing season, by applying slurry directly in the ground.

Shoes or skates working in combination with injector nozzles, allow for greater quantities of slurry to be applied, while minimizing odors and keeping the grassland surface intact.

A maximum of 40 spring-loaded shoes work to slice grooves, from 5 to 40mm in depth, into which slurry is supplied from the application nozzles.

The trailing shoe system works very well in lighter and in sandy soils.



Distributor Head with 4 knives



Slurry is applied through 12 mm wide rubbered nozzles. The articulated frame of the ramp provides for very good terrain following, and it is an ideal system when working with a slurry tanker equipped with crab steering.

## Technical Data

Model	Trailing Shoe:			Dribble Bar:	
Working Width:	8 m	12m	15m	12m	16m
Distributor Head:			4 directions		
Number of Hoses:	26	40	54	40	54
Oil Flow Requirement:			30l/min		
Coverage per Hour:			10-80 t/ha.		
Coulter Spacing:			30 cm.		
Coulter Pressure:		15 kg/coulter			
Spreading Plate:			Optional		
Hydraulic Stone Trap:			Standart		
Hydraulic Working Depth Adjust.:			N/A		





Disc Spreading Ramps: The crown jewel of the Agronic spreading ramp range are the AG8000 disc ramp models. The disc ramps allow for the application of slurry on to growing crops, grassland with minimal surface disruption, and on to cultivated land.



The distributor head features 4 knives with a diameter of 220mm.

**Chopping or shredding of the material takes place in two stages.**

Before entering the splitter bar, the material is first shredder/chopped in the distributor head. Then it is further shredded at the end of the distribution booms by cutting blades. The cutting blades are reversible, and manufactured from HARDOX.



The splitter can be rotated in either direction as required, and **ramp drainage can be done through a hydraulic dump valve.**

## Disc Spreading Ramps AG 8000

**AGRONIC** The system allows for slurry application on grassland during the growing season, by applying slurry directly in the ground.

The individually mounted 300mm discs have a tripping height of 50cm, providing an adequate safety margin against stones.

A generous inter-disc spacing allows for blockage-free operation in substantial amounts of crop residue. A following harrow can be added for leveling and distribution of straw or crop residue. The discs are linked in pairs, and are designed to follow as the tanker steers, making it possible to spread in curbs without lifting the ramp.



Accurate following of ground contours is achieved by using an articulated mounting frame. **The frame is articulated in the middle, so that the outer wing sections can swivel or turn** as needed, this action is also controlled and secured through the use of shock absorbers.

The ramp frame can support up to 40 discs, with a cutting angle of 1.5°, producing an opening of up to 11mm wide, with a working depth of between 30 to 60mm.

An optional furrow opening coulter can be used, which produces an opening of 18mm wide, and two additional spacer rings can be installed on either of the disc.



The discs are manufactured from tempered **boron steel**, and have very long working life. Slurry is applied into the cut channels by nozzles with a 12mm wide opening.

The slurry is placed where needed, minimizing the odors, and helping to ensure the maximum benefit of its nutrients.



### Technical Data

Distributor Head:	4 knives
Hoses:	40 or *26 pcs 50 mm
Oil Requirement:	30 l/min,
Output:	8000 l/min.
Coverage per Hour: :	10-60 t/ha
Working Width:	AG8000 8 m. or *AG6000 6,4m.
Coulter Opening (Max.)	20 cm.
Operating Pressure:	Max. 245 kg/dics
Base Curb Weight:	1850 kg or *1450 kg
Overload Protection:	Accumulators with safety valve

\* info for 6,4m







# Computer & Joysck Controls: Designed in-house by Prodevice

The CANBUS control systems employed on Agronic tankers are designed and manufactured in-house by the Prodevice Oy division.

This technology makes connection to the tanker very simple, requiring only a pressure and free-flow return from the tractor.

The control system can be easily expanded, and the filling pump control is integrated into the system. Pumping arm and spreader control are straightforward and logical.

Locking of controls, distributor head, and control of the bogie axle are all done with switches. Locking of the bogie, pump arm, and application rate are all monitored.

A joystick control can be supplemented with the onboard computer. The trip computer allows for the monitoring of distribution rate, working hours, and the surface area covered. Data from up to 200 clients can be stored in the system.

Standard equipment includes control over the amount of automatic functions, control to adjust the application rate, and the PTO speed.

The onboard computer also makes work on the headlands easy, with the push of a button the spreader is engaged, the distributor head starts, and the necessary adjustments commence.

With a second push of the button, the spreader disengages. The bogie locks, and the rotation g-

uard of the distributor engages.

Automatic depth control for AGRONIC disc injector is available.



## Accessories.

With accessories tailor-made for the tanker, you can choose the equipment you need.

**Ball coupling:** Eliminates excessive wear in connecting to the tractor. Improves safety and security for transport.

**Load transfer:** Improves in-field traction, and security on the road. Weight can be shifted by cylinder with accumulators to the drawbar, rear tractor axle, or on to the tanker axles as needed. Helps to eliminate slippage and swaying.

**Tool Box:** Generously sized toolbox allows for tools and needed material to be carried.

**Transverse Mixing Screw:** Provides in-tank mixing, and mixing of incoming slurry from the pumping arm inlet. Provides good and connuous mixing in slurry with material that easily seles.

**Bauer-type Quick connectors:** Allows for boom filling or emptying into the slurry pit.

**Foam relief tube:** Goes to the highest point on the tanker, to decrease the foam from the incoming slurry, and is also equipped with a checkvalve, to prevent the slurry from being pulled out of the tanker

**Air inlet:** Air can be let into the pumping hose, so that it neatly drains back into the slurry pit when pumping is finished.

**Diffuser Plate:** Broadcasts slurry directly from the spreader on to the ground. Spreading widths depend on the PTO-rpm used, generally between 10-30 metres is possible.



### Technical Data:

System: CANBUS

Client Storage Capacity: 200 Slots available.

Features: Volume control, application rate per ha., surface area covered, working hours, headland management, transfer times, automated control, and adjustment of other functions.

Hydraulic Requirements: 1x supply and 1x load-sensing line

Bogie locking: Pressure control and warning light as standard equipment.

Steering Control: Standard on HXA tankers





**AGRONIC, designed and  
produced in Finland.**





## Technical Data:

Volume	10m3	12m3	14m3	15,5m3	17m3	17m3	20m3	20m3	25m3	30m3
Axles	1	1	2	2	2	3	2	3	3	3
Height cm	269	269	280	326	287	270	295	295	316	317
Lenght cm	662	697	808	776	870	949	938	938	938	1064
Width cm	299	299	316	310	328	316	328	328	328	328
Weight kg	3580	4290	5150	4800	6150	8600	7600	9300	9500	10530
Tire size (starts from)	1050/50R 32	1050/50R 32	750/55R 26,5	750/55R 26,5	850/50R 30,5	750/50R 26,5	850/50R 30,5	850/50R 30,5	850/50R 30,5	850/50R 30,5

### Standard equipment:

Hydraulic gate valve, camera bracket, work light brackets, overload valve, hydraulic block brackets, mud mounts, slow vehicle triangle, overhead lights, loops, Nokian ELS radical tires, spreading width 10-25 m. Mudguards, hydraulic brakes on one or two axles, LED lights, access hole, ball coupling, and etc.

### Accessories:

Mixing, foam pipe, hydraulic or mechanical filling hatch, Trailing Shoe 8, 12 and 15 m, Drippler Bar 12-16 m, Disc Spreading Ramps 8 m or 6.4 m, additional discs or skates, stone trap system, three-way valve behind the tankers, spreader, diffuser plate, center or side mounted pumping arms, 3rd joint, joystick control, on-board computer and volume control, automatic working depth control, forced steering, crab steering system, ball coupling, different tire options, central lubrication, centralized lubrication, and etc.



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