AGRONIC®

Made in Finland

VLM Series Umbilical Slurry System
2019 Product Presentation

Umbilical Systems Built for Nordic Conditions

- Founded in 1993
- Pioneer in the design, development, and production of slurry tankers within Scandinavia. Market leader in Finland.
- Umbilical system designed for use with medium-sized farms and smaller contractors.
- Employing experience and technology developed from years of experience in design, production, and operation of spreading ramps throughout Scandinavia.
- Finnish technology, know-how, and quality manufacturing.

Efficient and Environmentally Friendly Application of Slurry Without the Slurry Tank

- A carefully conceived idea for application of slurry, directly from the pit or receiving container, while minimizing soil compaction.
- Less time spent with transport, higher-hourly application rate, means slurry can be applied over a greater surface area per hour.
- VLM system is designed to be straightforward, easy-to-use, and of optimum capacity for most medium-sized farms and contractors.
- Cost-effective system.

Proper Receiving Tower

- Receiving tower features a swivel system, which is designed to work in combination with the tool bar, to avoid reversing on the headlands.
- The design of the receiving tower is optimized to avoid dragging the umbilical under the tool bar.
- Connection pipe in the receiving tower can be folded for transport and storage.
- Umbilical hose is easy to connect.

A well Engineered Design.

- Tractor’s 3pt. linkage is kept in a constant operating position.
- The position of the tool bar is done by the system’s own hydraulic cylinders.
- Tool bar can be tilted for operation, and locked for transport
- Automatic control for the working depth can be supplied as an optional accessory.
- Tool bar does not twist during cornering.
- Pivot point between the tractor and the tool bar at the center of gravity.
- Reduced torque loading on the tractor.

Easy-to-Use Controls

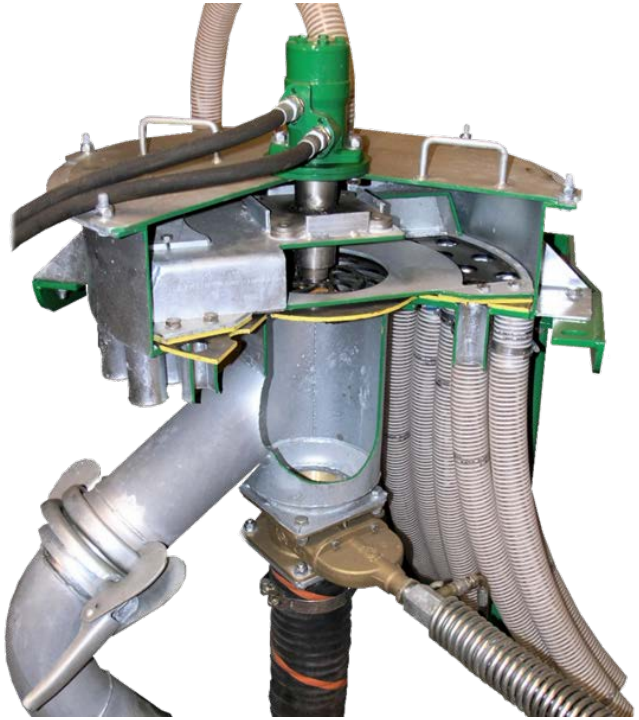
- Optional automatic control box.
- Electro-hydraulic controls, that include headland functions, displayed on 5” screen.
- Requires only a supply line and free-flow return from the tractor.
- Flow meter is part of the standard spec.

Choice of Application Elements

- Proven technology sourced from the Agronic spreading ramp range.
- Trailing shoe and disc injector systems that function in even the most difficult operating conditions.
- Proven effective and reliable in Nordic conditions.
- Multiple working widths available.

The Legendary Agronic Distributor Head

- Fanous for it’s reliability and performance.
- Two-stage chopping system, with a high flow capacity, and excellent accuracy, which Agronic is known for.
- Frame and flow divider manufactured from galvanized steel.
- Chopping aggregate manufactured from HARDOX with increased wear resistance, and longer operational lifespan.
- Direction divider for extreme operating conditions such as very thick slurry and higher operating speeds.
- Integrated hydraulic stone trap as standard.



Disc Injectors

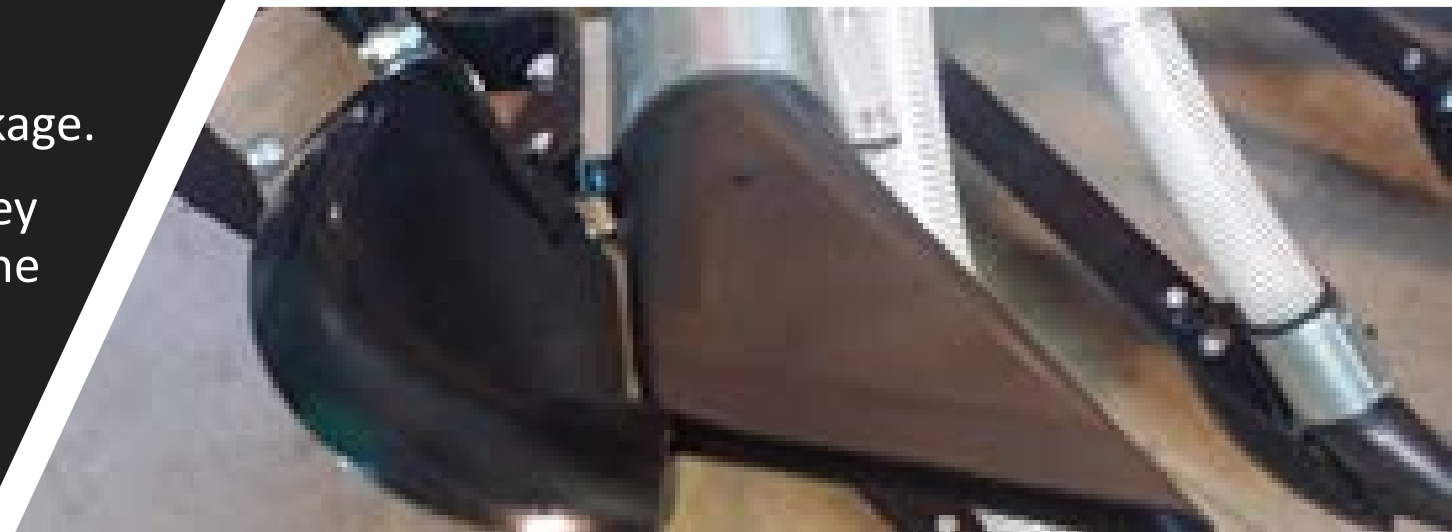
- Available in working widths of 6.4 and 8.0 meters, with either 32 or 40 discs, with an inter-element spacing of 20cm for uniform application.
- Discs are working in pairs, which increases their ability to follow the terrain, and their ability to clear obstacles.
- The coil spring suspension for each pair of discs has a travel height of 50cm, allowing for most obstacles to be cleared.
- Manufactured from hardened boron steel, with excellent wear characteristics.
- Discs have a low power requirement and provide clean quality work.
- Slurry injector nozzles have a 12mm opening, to work in combination with the 1.5° cutting angle of the discs, to provide for better slurry placement and absorption.
- Discs are equipped with adjustable tapered roller bearings.
- Can be equipped with wider support wheels and shield for working in organic soils.
- Beam design allows for turning and tilting to follow field and terrain contours.
- Based on proven technology from the Agronic AG series disc spreading ramps.

A Perfect Opening by Agronic

- Discs have a diameter of 300mm.
- Standard opening is an 11mm wide cut.
- A wider opening can be created by installing 1 or 2 bushings with an 8mm thickness behind the discs.
- A pair of discs can also be replaced by a single knife in conditions where there is an enormous amount of crop residue.
- In all cases the nozzle allows for precise placement of the slurry into the cut.

Trailing Shoe

- Ideal for use on grassland, as the Suffolk-type coulters do minimal damage to surface, and work well in all conditions. No risk of dirt build-up, even in lighter soils.
- Working widths of 8 and 12 meters, with each coulter featuring it’s own spring suspension.
- Inter-coulter spacing of 30cm, 12mm opening, and manufactured from wear-resistant rubber. Almost no risk of blockage.
- When mounted on the VLM tool bar, they can swing and move independently of the tractor.



Working Performance of the Suffolk Coulters

- Design meets proper soil working requirements.
- Coulter pressure of 15 kg per element.
- Penetration depends on soil type, hardness, crop type, and tractor tread pattern.

In-House Designed Hose Reel

- Designed and manufactured in Finland.
- Available as either a single or double section reel.
- Reel power comes from 2x OMR 250 hydraulic motors, using a 1” drive chain. Motors are protected against overload by relief valves.
- When used with the pumping trailer, the reel can be carried on the trailer for road transport and storage.
- Reel is as standard with a EURO loader coupling, and optionally available with a CAT. II 3pt linkage mounting.

A Tailor-made, Powerful, Pumping Unit, Made in Finland.

- Custom-designed, self-priming, linkage-mounted, pumping unit.
- Operating pressure is 18 bar with a capacity of 350m³ per hour.
- Equipped with integrated shredding system.
- Hydraulic stone trap as standard.
- Practical application rate is 150m³ to 200m³ per hour.
- Optional suction boom, 1m³ or 4m³ compressor, or hydraulic pump for difficult conditions are available as optional accessories.

Pumping Trailer – Perfect for Contractors

- Facilitates road transport.
- Trailer is fitted with 550/R50-22,5 tires.
- Equipped with pumping arm, Doda charge pump, PTO shaft for pump drive, lift for hose reel, tool box, mud guards, lights, and rear hitch for pulling a slurry receiving container.
- Can be optionally equipped with a 4000-liter/min. compressor, which requires an oil flow of 104-liters/min. for operation. An automatic Pneumatic stop system, including all required valves and hoses, is also available.

Directly From the Pit or From the Receiving Container.

- Standard pump or pumping allows for pumping from either the pit on the farm, or in the field from a slurry container.
- Container in field allows for lower cycle times between farm and field, as truck or slurry tanker can empty into container without waiting.
- Only one tractor in field doing the work.
- Reduced soil compaction, single operator, simplified process chain.

Advantages of Working with an Umbilical System

- Large surface area covered by single tractor and operator.
- Reduced soil compaction, as tanker traffic has been decreased.
- Cost savings from reduced road travel time and simplified logistics.
- Season can start earlier and end later.
- Reduced loss of valuable nitrogen.
- High capacity of 150m^3 to 200m^3/hr.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