



Slurry Processing
Equipment

Effective Slurry Processing



Vacuum tankers

- Vacuum bars

Drip hose tankers

- Pump loaders
- Pump bars

Injectors

Drip hose systems

Pump mixers

Mixers



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VEPI vacuum tankers

The shell and the heads of the tank are made of 6 mm thick steel to extend the tank's service life. The tanker's structure has been approved and production follows the standard SFS-EN 13445 and Pressure Equipment Directive 97/23/EC. All vacuum tankers are checked twice during the manufacturing process, first by X-raying the welds and finally by a water-pressure test. Vepi vacuum tankers have a wide range of accessories from which you can choose the most suitable ones for your needs.

Please tell your dealer what kind of requirements you have for your tanker. Our flexible factory order system, broad experience and know-how guarantee and ensure that we can meet even your most demanding requests.

The basic gear of the vacuum tanker contains:

- Compressor
- Overload prevention device
- Perforated mixing tube at the bottom of the tank
- Manometer
- 4" diameter, 6 m long vacuum hose
- Carrying hooks for the hose
- Access blank at the rear of the tank
- Spreader pipe and plate which can be replaced with a vacuum hose
- Rear lights, reflectors, triangle for slow vehicle
- Supporting leg
- Outline marker lights if the vehicle's overall width exceeds 2.6 m

Available accessories, for example:

- Brakes
- For monitoring the slurry's surface level:
 - * Display aperture 3"
 - * Glass tube level indicator 2.5"
 - * Gauge displaying the slurry's surface level
- Sprung tow bar
- Mudguards
- Hydraulic closing valve for the spreader pipe
- Hydraulic hatch for the filling hole
- Hydraulic operation of the compressor
- Sprung turning bogies
- Extra suction with a hand operated shutter
- Over fill pipe
- Lift coupling for fastening the vacuum hose and over fill pipes
- Precipitate container
- Oil collection from the compressor's exhaust air, also functions as a silencer



A 15,100 litre vacuum tanker model with the following accessories: 12 m drip hose system; sprung bogie unit with a mechanically controlled rear steering axle; 700/50R26.5 tyres; 12m³/min compressor; precipitation container; oil receiver for exhaust air from the compressor; needle gauge; hydraulic-powered filling hole; hydraulic-powered closing valve for spreader pipe; down fill combination; lift coupling.



A model designed specifically for property maintenance whose equipment facilitates the emptying of septic tanks. All the required equipment travels easily. The tanker's dimensions: width 2.6 m, length 6.8 m and capacity 11.3 m³. Due to its size, this tanker is convenient for use in tight spaces.



The vacuum arm is welded to the side of the tank. It ensures easy use and reach. The tank can be filled without leaving the tractor.



Manometer and overload prevention device.



VEPI drip hose tankers

The tank's shell and heads are made of strong Finnish 5 mm thick steel plate. The basic gear of this tanker contains, for example, a centrifugal pump, mixer shaft, filling funnel, spreader pipe and spreader plate.

The centrifugal pump in a Vepi drip hose tanker with basic gear ensures even and efficient spreading from start to finish while the mixer shaft mixes the slurry in the tank. If the slurry does not easily become sediment and there is no need for powerful mixing, the centrifugal pump at the rear of the tank can be exchanged for a pump powered by a hydraulic motor. Another alternative is to place the centrifugal pump at the front end of the tank, in which case it is rotated by the tractor's PTO.

Vepi drip hose tankers have a broad selection of accessories. Please tell your dealer what kind of requirements you have for your tanker. Our flexible factory order system, broad experience and know-how guarantee and ensure that we can meet even your most demanding requests.

The basic gear of the drip hose tanker contains:

- Centrifugal pump, powered by a hydraulic motor or articulated shaft, either at the front or rear end of the tank
- Filling funnel on top of the rear of the tank
- Evacuation plug for the tank
- Peep hole in the front wall of the tank
- Spreader pipe and plate
- Rear lights, reflectors, triangle for slow vehicle
- Supporting leg
- Outline marker lights if the vehicle's overall width exceeds 2.6 m

Available accessories, for example:

- Brakes
- Mudguards
- Power filling placed at the front end of the tank in connection with the centrifugal pump and pump loaders or pump bars set there.
- For monitoring the slurry's surface level:
 - * Display aperture 3"
 - * Glass tube level indicator 2.5"
 - * Gauge displaying the slurry's surface level
- Hydraulic closing valve for the spreader pipe
- Down fill pipe + hand operated valve
- Return pipe: set in connection with down fill
- Lift coupling for attaching the vacuum hose and over fill pipe
- Three-way valve, makes it possible to apportion and mix the slurry during transportation, available as hydraulic and hand operated
- Hydraulic cover for the filling funnel
- Sprung tow bar

Pump bars and loaders

The two-piece bars of the **pump loader** turn 95 degrees to both sides of the tanker's centre line and pump slurry into the drip hose tanker with the help of the hydraulic centrifugal pump, which is located at the end of the bars. The pump loader is installed on the towbar. The pumping depth is 3-4 m, depending on the size of the drip hose tanker's tank and the length of the pump loader's bars. With a standard centrifugal pump, the pumping capacity is 3,000-6,000 l/min, depending on the lifting height, slurry and the tractor's hydraulic capabilities.



Pump loader



The **pump bar** is welded either to the side or front end of the tank. The wire rope attached to the end of the pump bar and the pressure hose support the hydraulic centrifugal pump at the end of the pressure hose. The pumping capacity of this pump is approximately 3,000-6,000 l/min with a standard accessory centrifugal pump.

The reach of the pump bars is excellent (at the minimum 4 m to the side and 4-5 m down). The reach depends on the length and diameter of the tanker's tank. A pump bar that is fixed to the side of the tank can be welded on either side of the tank. If the pump bar is fixed to the middle, the tank can be filled from either side of the tanker, with some small adjustment work that takes approximately 30 minutes.



Pump bar that is fixed to the middle



Pump bar that is fixed to the side



Shallow injector

The working width of Vepi shallow injectors ranges between 3.6 and 8 metres. The shallow injector is specifically designed for spreading over grassland, corn shoots and stubble. The disk cutters' row width is 15 cm, thickness 1.5 cm and working depth maximum 5 cm. These and the rubber nozzle that is flattened at the end and that spreads the slurry in the cut made by the disk cutters ensure a clean spreading result and this makes it possible to cover a large amount of hectares without unnecessary damage. The Vepi distributor device cuts straw and grass and crushes lumps of slurry. It is very secure and guarantees, for its part, even spreading.

The disk cutter pairs are equipped with vertical spring suspension and they can turn on a vertical axis, making it possible to spread slurry even in curves and to contend with stones and uneven ground. How strongly the injector presses into the ground is adjusted steplessly with hydraulic pressure regulating valves. The highest possible pressure is 80 kg per disk cutter. The relative forces with which the middle part and the wings press down to the ground is shielded with hydraulic accumulators, as well as with laminated springs. Hydraulic lock valves, hose breakage valves and accumulators make transport drives safe and comfortable.

A new hoist and frame structure with quick fasteners, which is suitable for all Vepi spreader equipment, makes quick tool changing and removal from the back of the tanker possible.



Deep injector

Vepi deep injectors are available with 6-14 disk cutters, with working widths ranging from 2 to 4.5 metres. The deep injector is specifically designed for stubble, ploughed areas and harrowed ground, with injection depths ranging from 5 to 15 cm.

The 18" disk cutters with safety releases make a cut in the ground for a narrow slurry hose, and a ground-seeking claw ensures the desired working depth. The tractive resistance of the Vepi injector is small, only 7-12 kW per injector. The injector's stem posts yield vertically and turn sideways which is why they follow easily in curves and conform to uneven ground.

The new framework allows for the quick removal and changing of the injector for another Vepi device. The injector can be installed both on a Vepi drip hose tanker and vacuum tanker.

As an accessory for the deep injector, a hydraulic distributor device can be purchased which cuts straw and grass and crushes lumps.



Drip hose system

Spreading with a drip hose system is accurately focused and, for all its ease, an efficient way to fertilise. The slurry can be directly spread, even on the roots of vegetation that is already growing. The working width of the bars is up to 16 metres and the hoses can be re-adjusted steplessly to the appropriate height according to the crop.

The distributor device is very secure, as the crusher cuts straw and lumps alike. Because the bars fold away to the sides, the total system width does not increase. The drip hose gear can be used with all Vepi slurry tankers.

Accessories for Vepi spreader equipment include, for example: an electrically, with probe valves, pre-set hydraulic control wheel to control the functions of the drip hose system.



Slurry mixer

Vepi slurry mixers are attached to the lifter of the tractor and the tractor's PTO powers them. Due to the articulated frame structure, the mixer is easy to put down and lift up to its working position without having to leave the tractor.

Vepi mixers have crusher blades which chop straw and crush lumps. The protection tunnel around the propeller directs the flow, adds mixing power and prevents the propeller from crashing into the wall or bottom of the tank.



Slurry pump mixers

Tractor driven models

Vepi slurry pump mixer is attached to the tractor's lifter and the tractor's PTO powers it. Due to the articulated frame structure, the slurry pump mixer is easy to put down and lift up to its working position without having to leave the tractor.

The pumping power of all the models is 6,000 l/min, while the mixing power is 8,000-10,000 l/min. The mixing nozzle can be turned approximately 300 degrees from side to side and 60 degrees vertically. Therefore mixing can be done quickly and efficiently even in big tanks.

Electrical model

The electrical pump mixer is equipped with a steady lifting handle and a handy shutter. It can be used as the slurry tank's mixer or as a normal pump.





A well designed, efficient system

The VEPI slurry processing equipment includes drip hose tankers, vacuum tankers, drip hose systems, injectors, slurry pump mixers, slurry mixers and a wide range of accessories.

The tow bar and beam axles of the tankers are designed and installed in such a way that their weight is evenly distributed. They are easy to use even with twin wheels and in

demanding conditions. The shaft system has been designed to meet the requirements set by the tanker's size and various tyre types.

The beam axles are produced from 8 mm thick steel, the frame from 6 mm and the fastening flanges of the tow bar from 25 mm thick steel. The frame, which follows the shape of the tank, is welded tight to the tank, making it strong. The frame and tank are blasted with

steel fibre balls and painted, and the inner surfaces are epoxy pitch-coated.

Our flexible factory order system and wide range of accessories guarantee that your VEPI slurry tanker will meet your requirements. Please talk to your dealer about what kinds of accessories you want to have with your tanker.

Technical data

Drip hose tankers											
Capacity/litres	10,600	11,300	12,300	13,500	14,800	16,100	17,300	18,600	19,900	22,000	25,000
Length of tank, mm	5,000	5,500	5,000	5,500	6,000	6,700	7,200	7,700	8,200	7,600	8,200
Total length, mm	6,500	7,000	6,500	7,000	7,500	9,200	9,700	10,200	10,700	10,200	10,700
Type of pump	Centrifugal pump *										
Total width, m	Depending on the beam axles and tyres 2.4 - 3.5 m										
Weight without tyres, kg	3,000	3,100	3,300	3,400	3,700	4,000	4,300	4,600	4,900	4,800	5,200

* There are three alternatives for the centrifugal pump:

1. A mixer axle at the bottom of the tank which is rotated by the tractor's PTO. This mixer axle powers the centrifugal pump (540 rpm) at the rear of the tank.
2. A centrifugal pump (no mixer axle, 1,000 rpm) at the rear of the tank powered by a hydraulic motor.
3. A centrifugal pump (no mixer axle, 1,000 rpm) powered by the tractor's PTO which is at the front of the tank.

Vacuum tankers													
Capacity/litres	5,400	6,100	7,700	8,600	9,500	10,600	11,300	12,600	13,900	15,100	16,400	17,700	
Length of tank, mm	4,000	4,500	4,600	5,100	5,600	6,100	4,700	5,200	5,700	6,200	6,700	7,200	
Total length, mm	6,000	6,500	6,800	7,300	7,800	8,300	7,200	7,700	8,400	8,900	9,400	9,900	
Recommendation for a compressor, power m ³ / min	5~6	5~6	5~6	6~8	6~8	8~10	8~10	8~10	8~10	10~12	10~12	10~12	
Total width, m	Depending on the beam axles and tyres 2.4 - 3.5 m												
Weight without tyres, kg	1,900	2,100	2,400	2,800	3,200	3,500	3,700	4,000	4,300	4,600	4,900	5,200	

Shallow injectors				
Model	3610/12	4810/16	6010/20	8110/27
Disk cutters, pcs	24	32	40	52
Working width, m	3,6	4,8	6	8
Disk cutter distance	15	15	15	15
Injection depth, cm	~3-7	~3-7	~3-7	~3-7

Deep injectors					
Model	2060/6	2560/8	3160/10	4060/12	4560/14
Disk cutters, pcs	6	8	10	12	14
Working width, m	2	2,5	3,1	4	4,5
Disk cutter distance	~35	~35	~35	~35	~35
Injection depth, cm	~5-10	~5-10	~5-10	~5-10	~5-10

Drip hose systems		
Model	4232/12	4232/16
Working width, m	12	16
Hose size Ø, mm	38	38
Number of hoses	40	52
Bars	zinc coated	zinc coated

Slurry mixers			
Model	SV 4000	SV 5000	SV 6000
Frame length, m	4	5	6
Max depth from the ground	2,8	3,6	4,4

Slurry pump mixers						
Tractor driven models					Electrical model	
		TV 25	TV 30	TV 35	TV 40	V 7530
Pumping depth, m		1,7 - 2,5	2,2 - 3,0	2,7 - 3,5	3,2 - 4,0	3
Lifting height, m		25	25	25	25	12
Max pumping power, l/min	6,000	6,000	6,000	6,000	2,500	
Max mixing power, l/min	8,000-10,000	8,000-10,000	8,000-10,000	8,000-10,000	3,500	
Electric motor, kW						7,5

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