



## Agronic Disc and Trailing Shoe Spreading Ramps



### Intended Application

To apply slurry to crop roots or to grasslands during growing season by means of shallow groove, with as little damage to the crop as possible. The technology has been in use for over 20 years.

- ✓ Improved use of slurry nutrients.
- ✓ Reduced odour and nitrogen loss.
- ✓ Increase in beneficial soil microbes.
- ✓ Improved soil structure.
- ✓ Better harvest.
- ✓ Reduced run-off contamination of waterways.
- ✓ Reduced need for chemical fertilizers.
- ✓ Improved field hygiene, improved feed quality, and reduced feed contamination.

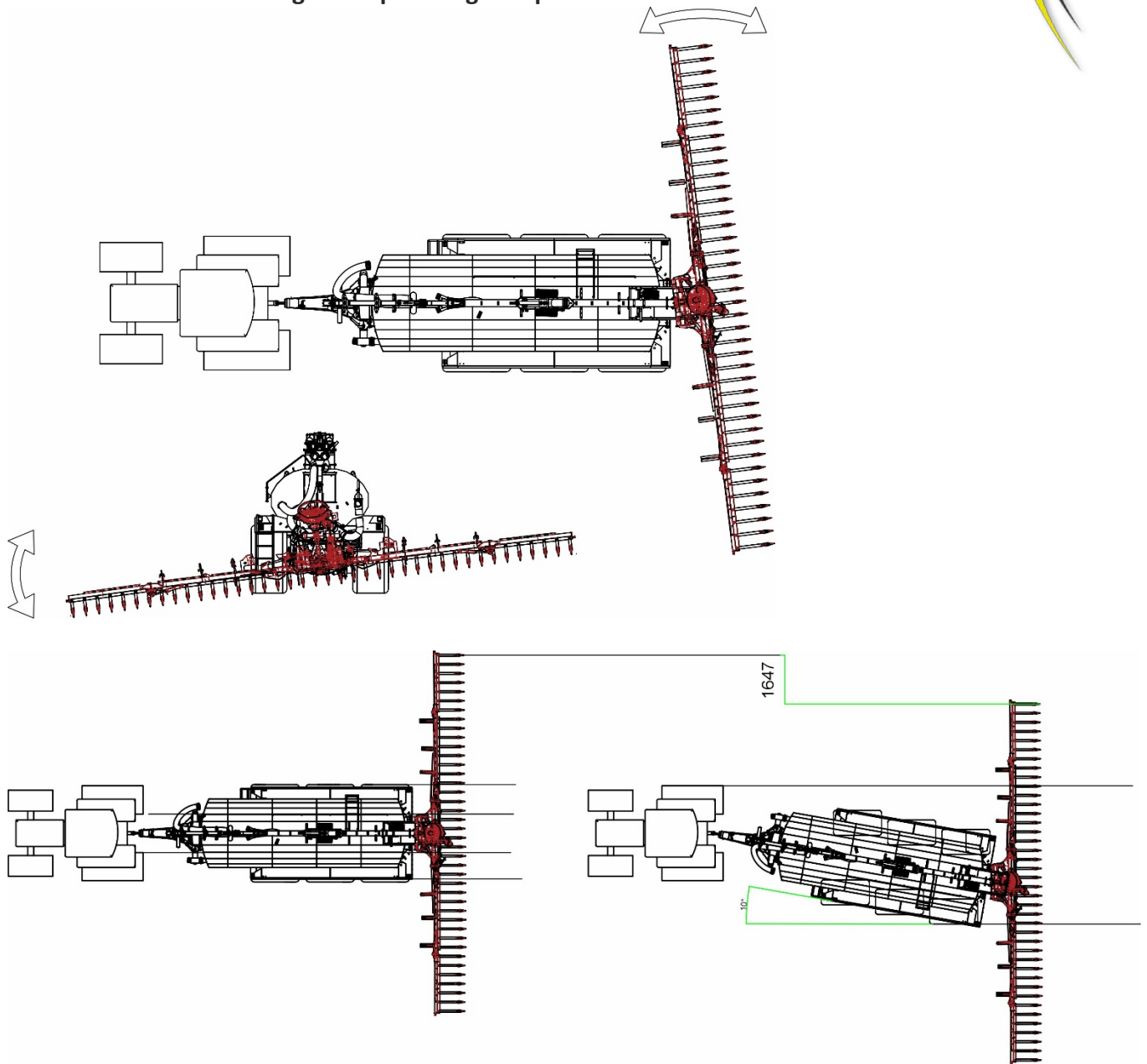
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## General Information on Agronic Spreading Ramps



The spreading ramp is not rigid. All Agronic spreading ramps can swivel and tilt regardless of the position of the slurry tanker.

As a result, Agronic ramps can be used in curves, as well as on slurry tankers equipped with crab steering.

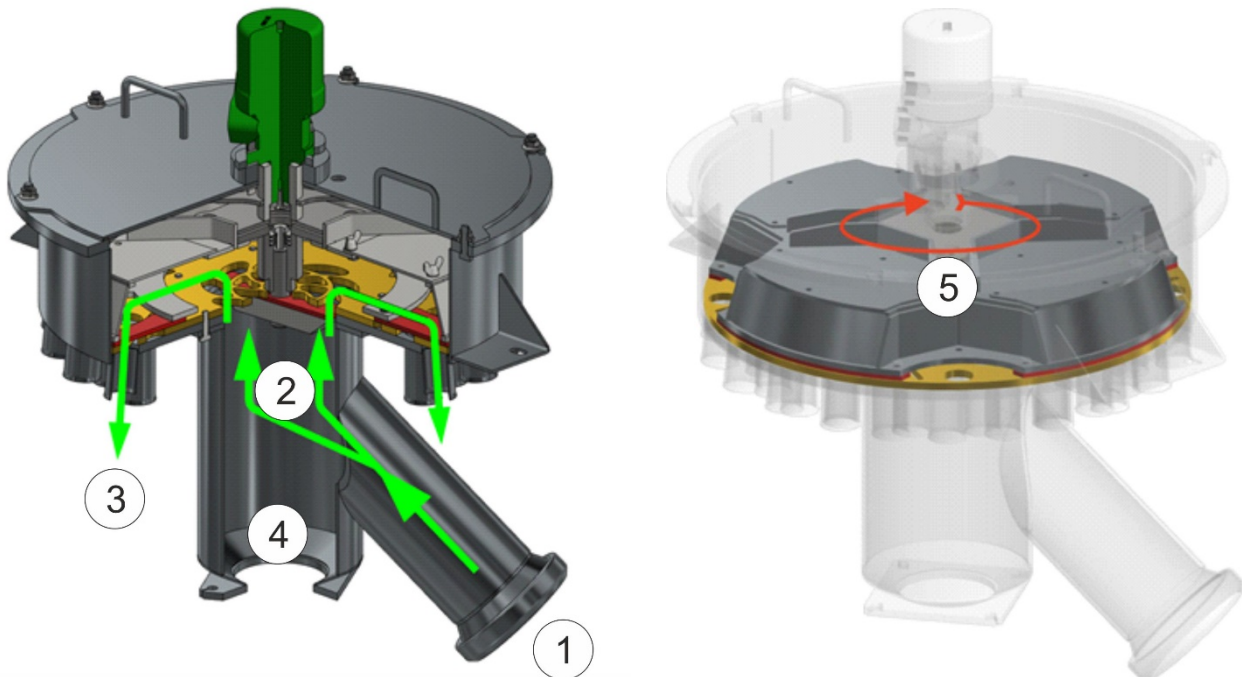
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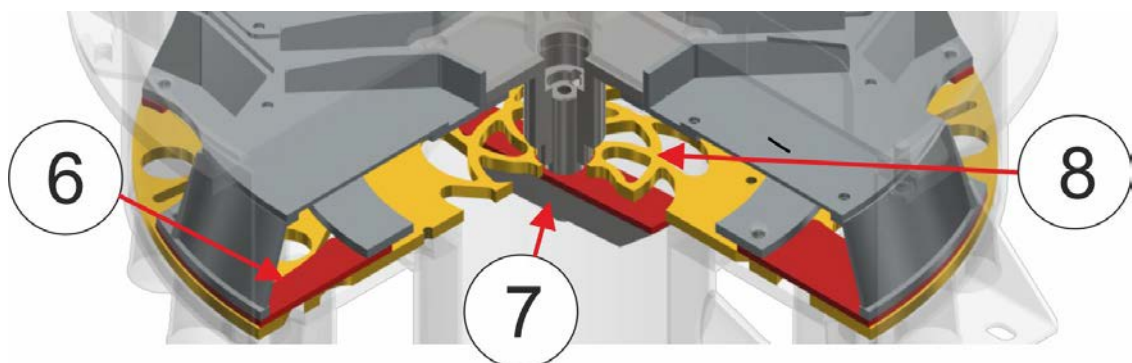
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## Operating Principle of the Distributor Head.



- ✓ The slurry is supplied to distributor head from the hose (1), then passes through the macerator (2), to the distributor manifold, and is precisely distributed via the outlets (3) to the distributor hoses.
- ✓ Stones and other material than can not pass through the distributor head end up in the stone trap (4). The stone trap can be emptied by the hydraulically operated slide valve at the bottom.
- ✓ The four part manifold (5) is rotated by a Danfoss OMH 315 hydraulic motor..
- ✓ The manifold features replaceable HARDOX wear parts (6). The blade (7) located below the manifold shreds the slurry passing through the grate (8).



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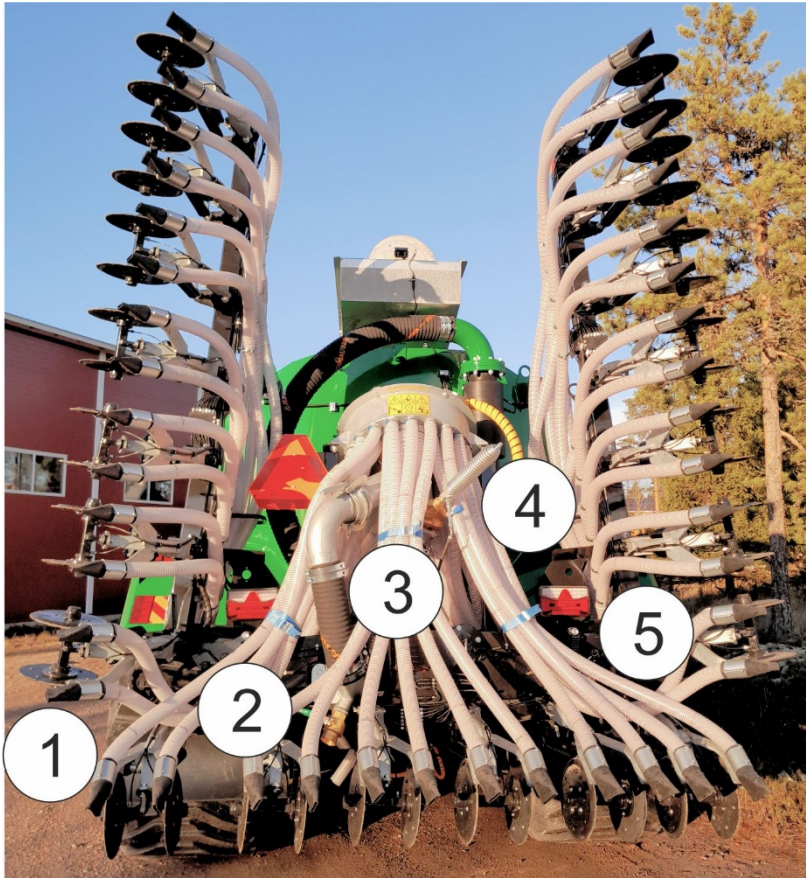
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## Agronic Disc Spreading Ramp



- ✓ Two models with working width of 6,4-m and 8.0-m
- ✓ Nozzles with an opening of 12-mm (1).
- ✓ Drainage for winter storage can be done with the 2" valve (2).
- ✓ Slurry supply hose with an interior diameter of 127-mm (3).
- ✓ Application hoses with an interior diameter of 50-mm 26 or 40 pcs.
- ✓ Hydraulically-driven macerator.
- ✓ Hydraulic stone trap (4)
- ✓ LED traffic lights also fitted to the spreading ramp.
- ✓ Swiveling frame allows for proper field contour following and operation with crab steering.
- ✓ Discs mounted in pairs, with helicoidal springs, and swiveling mounts.
- ✓ Tapered roller bearings in each disc
- ✓ Disc diameter: 300-mm
- ✓ Disc spacing: 200-mm
- ✓ Max. Working depth: 8.0-cm
- ✓ Ground pressure max. 245-kg/disc

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- ✓ Accessories:
- ✓ Additional spacers to increase the cutting opening from 11-mm (standard) to 18-mm.
- ✓ Following harrow to lightly cover the slurry with soil or straw.
- ✓ Automatic working depth control (Requires computer control on tanker).
- ✓ Spreading plate.
- ✓ Three-way selector valve for ramp or spreading plate

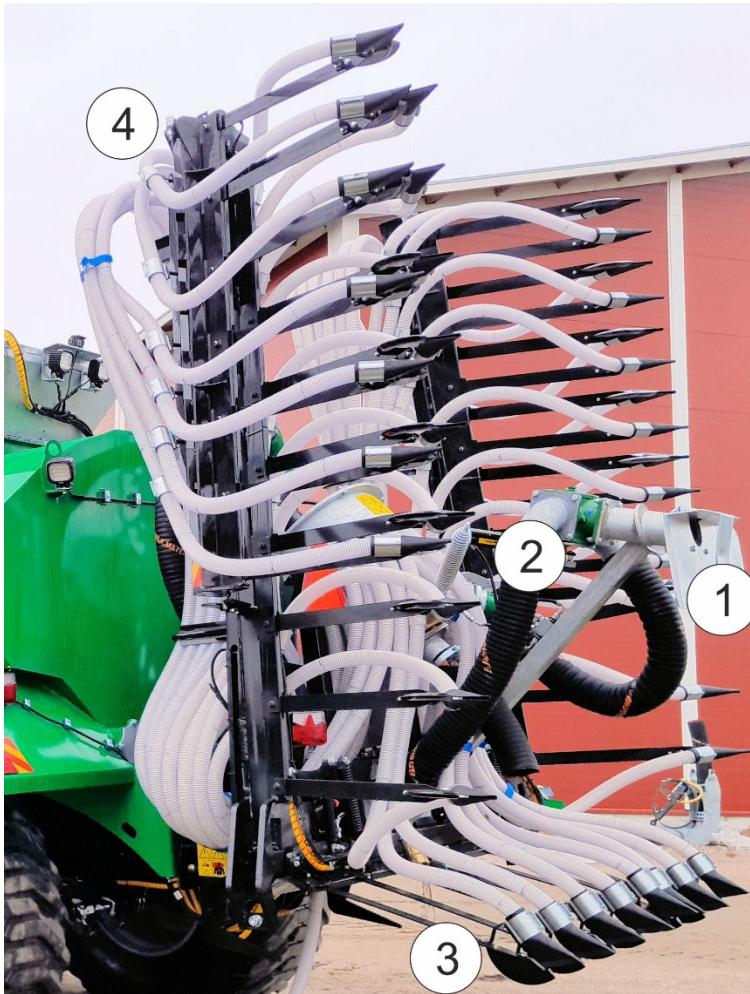
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## Agronic Trailing Shoe Ramp



- ✓ Three models with three different working widths: 8.0-m, 12.0-m, and 15.0-m.
- ✓ Flexible nozzles with a 12-mm opening (3).
- ✓ Accessories: 3-way valve (2), and spreading plate (1).
- ✓ Ramp folded for transport (4).
- ✓ Application hoses with a diameter of 50-mm. Depending on the model: 26, 40, or 54 pcs.
- ✓ Hydraulic slurry distributor.
- ✓ Hydraulic stone pocket.
- ✓ LED traffic lights also fitted to the spreading ramp.
- ✓ Swiveling frame, allows for proper field contour following and operation with crab steering.
- ✓ The trailing shoes are individually mounted and can turn individually.
- ✓ Inter-shoe spacing of 300-mm.
- ✓ Shoe pressure of 15-kg.

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## Suitable for Use with which Tanker:

- ✓ Suitable for all Agronic tankers, however the 15,0-m version is not possible for tankers with a capacity of less than 17 m<sup>3</sup>.
- ✓ Also possible to install on other brands of tankers.

## Retrofitting:

- ✓ Agronic slurry tankers are constructed with mounting points for Agronic ramps.
- ✓ The ramps feature their own lifting equipment.
- ✓ A 3pt linkage lifting system can be installed on the tanker.

## Surface Treatment:

- ✓ Hot-dip galvanized where possible.
- ✓ Zinc phosphating, two-component polyurethane paint, and lacquering.

## Material:

- ✓ S-355 steel.
- ✓ Knife elements for the trailing shoe ramp are manufactured from 6-mm spring steel.
- ✓ Discs for the disc ramp are manufactured from 4-mm thick, hardened Boron steel.
- ✓ Applicator hoses featured an interior diameter of 50-mm.
- ✓ Supply hoses feature an interior diameter of 127-mm.
- ✓ Disc ramp: Width: 6,4-m, Weight: 1450 kg. Width: 8.0-m, Weight: 1850-kg
- ✓ Trailing Shoe: Width: 8,0-m, Weight: 145- kg. Width: 12,0-m, Weight: 1650 kg, Width: 15,0-m, Weight: 2250 kg.

## Maintenance and Special Features:

- ✓ All joints are greaseable.
- ✓ Disc ramp features tapered roller bearings for the disc elements
- ✓ The distributor head is symmetrical and can be rotated in either direction, and features HARDOX wear parts.

## Hydraulic Requirements:

- ✓ Electronics and hydraulics are normally supplied by Agronic, and are controlled via the tanker's functions. A customer normally does not have to be concerned with the below.
- ✓ Hydraulic flow of 80 l/min at an operating pressure of 180 bar
- ✓ 1x Pressure supply for the distributor motor, ½" male quick-connect coupler.

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- ✓ 1x free-flow return with a 3/4" quick-connect coupling, with the lowest possible back pressure. Alternatively, if there is a need for rotation, a double-acting 1/2" valve with a male quick-connector for both directions.
- ✓ 1x free-flow return with 3/8" quick-connect coupler
- ✓ 1x Double-acting spool for raising/lowering the ramp, 1/2" male quick-connect coupler.
- ✓ 1x Double-acting spool for opening/closing the wing sections, 1/2" male quick-connect coupler.
- ✓ 1x Single-acting spool for the transport lock release, 1/2" male quick-connect coupler
- ✓ 1x Single-acting spool for the stone trap, 1/2" male quick-connect coupler

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