

# ULV Fine Spray Unit

# MAFEX<sup>®</sup> Silage



## For application of liquid silage support agents



Optimisation of the silage process

Minimum application volumes

Optimal distribution of active agent

Flexible mounting

The MAFEX Silage fine spray unit is based on ULV (Ultra Low Volume) technology, through which the required output volume can be significantly reduced. The low-maintenance hose pump and enhanced rotary nozzle ensure an optimal distribution of active agent with uniform droplet size.

Depending on the type of chopper, unit mounting options are very flexible. Stationary installations on conveyor systems, for example, are also possible.

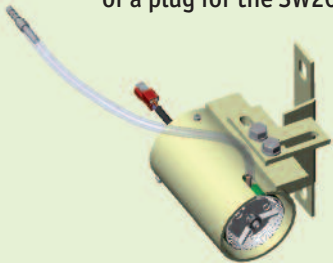
A GERMAN REGISTERED COMPANY

**MANTIS ULV<sup>®</sup>**  
SPRAYING SYSTEMS

# MAFEX<sup>®</sup> Silage

## Fine Spray Unit MAFEX-Silage

Capacity up to maximum 500 t/hr  
Connection to the on-board power supply with a RG90 plug  
or a plug for the SW20 cigarette lighter



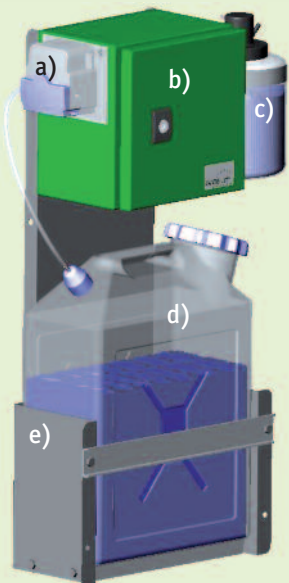
### NOZZLE UNIT

MAFEX rotary nozzle with protective tubing  
Mounting adapter (depicted with adapter for Claas choppers; adapters for other choppers available)  
Droplet size approx. 40 micron



### CONTROL UNIT:

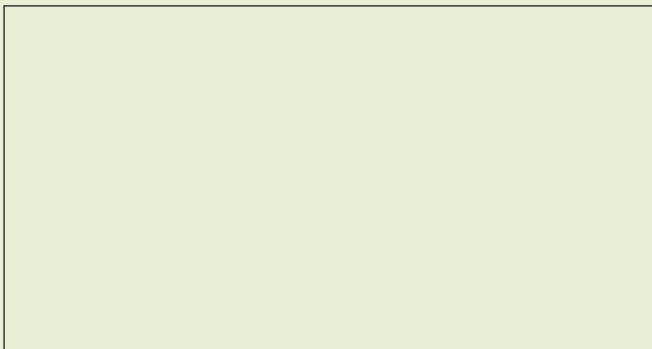
- Large display
- Dust and water repellent membrane keypad
- Fully automatic system priming
- Volume adjustment
- Nozzle monitoring
- Flow rate controller
- Alarm function



### PUMP UNIT:

- a) Low-maintenance hose pump
- b) Housing with electric motor
- c) Automatic scavenge pump with tank
- d) 10 litre (≈2.642 US gallons) tank for silage support agent
- e) Pump unit bracket made of stainless steel

Sales & service partner:



## Working method of the MAFEX process

In order to achieve optimal effectiveness of the silage support agent, even distribution is essential. For this, the volume of chemical agent must be distributed in a multiple of uniformly sized droplets. On the MAFEX unit, this is accomplished by means of centrifugal force using a specially developed rotation disc that generates approx. 30 million droplets from 1 ml (≈0.038 US fl. oz.) of liquid in a uniform size of approx. 40 micron.

Automatic priming of the system, meaning a check of all functions and the conveyance of liquid up to the flow rate controller prior to the start of silage support agent application, is made possible by a modern control unit. Desired volumes can be set directly on the control unit. During operation, nozzle function and chemical agent flow rate are monitored and an alarm function is triggered in the event of a malfunction.

## Assembly

Nozzles are installed in protective tubing at an appropriate location with an adapter suited to the chopper. The nozzle cannot clog thanks to its special design and installation angle. On John Deere choppers installation by the accelerator, for example, takes place so that plant parts are evenly covered by the droplets as they are discharged. On the other hand and depending on the year of manufacture, nozzles on New Holland choppers are installed near the feed rollers or, likewise, by the accelerator. As a rule, installation is possible on any chopper (e.g. Claas, Krone, etc.).



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