

ULV Fine Spray Unit

MAFEX[®]

Potato Fruit



Up to 4 atomisers!
New control unit!

For application
of liquid pesticides



Proven successful with potatoes since 1975

For dressing prior to planting out

For fighting storage rot

For inhibition of sprouting

Also for treatment of fruits



The MAFEX Potato and Fruit fine spray unit is based on ULV (Ultra Low Volume) technology, through which the required output volume can be reduced significantly thanks to optimal dispersion of active ingredients with uniform size of droplets. It has been used for many years, in particular for the optimal protection of potato harvest yield with germ inhibitors and fungicides, as well as for fruits with wax and fungicides.

best available technology

MANTIS ULV[®]
SPRAYING SYSTEMS

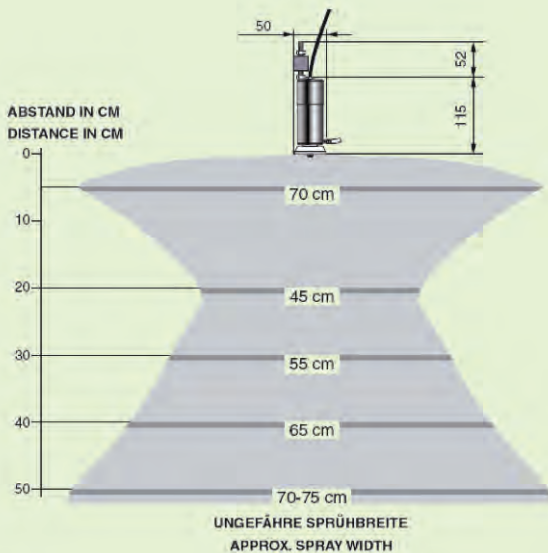
MAFEX[®] Potato / Fruit



ATOMISER UNIT WITH ROTARY ATOMISER BL:

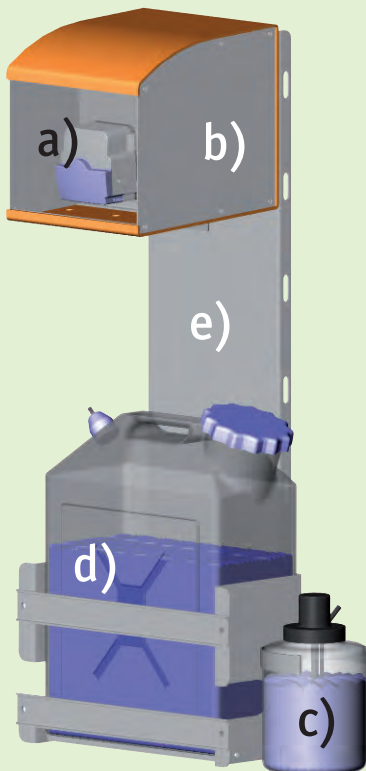
Technical specifications:

- Length of atomiser: 122 mm
- Diameter of housing: 38 mm
- Hose connection: 5 x 22 mm
- Diameter of atomiser disc: 50 mm
- Voltage: 12 - 18 V
- Starting current: 8 A
- Continuous current: 2,0 A
- Rotational frequency: 12.000 - 18.000 rpm
- Maximum flow rate: 220 ml/min
- Size of droplets approx.: 40 microns
- Spray width and depth up to: 80 cm



CONTROL UNIT:

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



PUMP UNIT

(incl. power supply unit)

- a) Low-maintenance hose pump
- b) Housing with power supply unit (input voltage 110-230 V, output voltage 15.6 V)
- c) Automatic scavenge pump with tank
- d) 10 litre tank for the chemical agent being applied
- e) Pump unit bracket made of stainless steel

MAFEX[®] Potato / Fruit



The fine spray unit MAFEX-Potato / MAFEX-Fruit is available with up to four special rotary atomisers. The illustration shows possible application above a sorting table for fruit.

Working method of the MAFEX process

The all-round wetting of the nodular surface is indispensable for fighting pests. Individual active agent particles must cover the surface with the least possible separation gap. In order to achieve an equal distribution, the chemical agent available must be dispersed in a multitude of uniformly sized droplets.

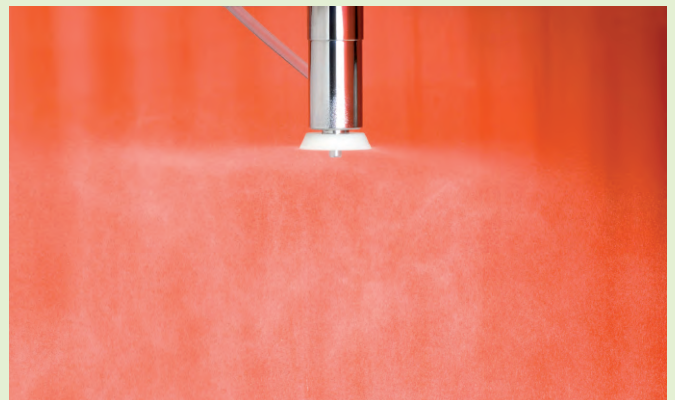
On the MAFEX unit, this is accomplished by means of centrifugal force using a specially developed rotation disc that generates approx. 30 million droplets from 1 ml of liquid. The droplets are uniformly deposited on the surface through the vertical air stream generated by the rotation disc and gravity, as well as by the rotating and falling motion of the potatoes or fruit. In this manner, an optimal effectiveness is achieved.

Automatic priming of the system, meaning a check of all functions and the conveyance of liquid to the atomiser(s) prior to the start of application, is made possible by a modern control unit. Desired volumes can be set directly on the control unit. During operation, atomiser function is monitored and an alarm function is triggered in the event of a malfunction. A flow rate controller is also available as an option.

Deployment applications

In general, the MAFEX unit can be used to apply any liquid. Its most common usage is for the liquid treatment of potatoes with seed dressing agents, fungicides and anti-sprouting agents (e.g. Fungazil[®] 100 SL, GRO-STOP[®] Basis, NeoNet[®] Start, MonCut[®], Magnate[®] 100 SL and Cuprozin[®] Liquid), as well as for the treatment of citrus and other fruits with various types of wax and fungicides. It is possible to apply water with MAFEX for dust binding.

Mounting of the atomisers for use with potatoes, for example, can be made on de-earthers, box fillers or conveyor belts, with preferred positioning above a step-down drop. With fruits, atomisers can be mounted above the sorting table for example.



Fine spray unit MAFEX-Potato / MAFEX-Fruit

Pump capacity per atomiser: 3-220 ml/min
 Performance: 110-230/3-18 Volt
 400 Volt, CEE adapter 16 A

MAFEX-Potato/1	1	80x80 cm	3-20 ml/min.	1,6	102640
			7-55 ml/min.	3,2	102651
			10-114 ml/min.	4,8	102652
			20-220 ml/min.	8	102653
MAFEX-Potato/2	2	80x120 cm	6-40 ml/min.	1,6	102654
			14-110 ml/min.	3,2	102655
			20-228 ml/min.	4,8	102656
			40-440 ml/min.	8	102657
MAFEX-Potato/3	3	80x120cm + 80x80 cm	9-60 ml/min.	1,6	102661
			21-165 ml/min.	3,2	102662
			30-342 ml/min.	4,8	102663
			60-660 ml/min.	8	102664
MAFEX-Potato/4	4	80x120 cm + 80x120 cm	12-80 ml/min.	1,6	102665
			28-220 ml/min.	3,2	102666
			40-456 ml/min.	4,8	102667
			80-880 ml/min.	8	102668

Accessories

		Article-No.
Flow control	MAFEX-Potato/1	102658
	MAFEX-Potato/2	102659
	MAFEX-Potato/3	102669
	MAFEX-Potato/4	102670
Horn with flashlight, 12V		101684
Automatic switch-off (AUTO OFF)		102671

Mantis has more than 30 years of experience in the development and manufacturing of ULV spraying systems. The following products, like MAFEX, stand for quality and efficiency with the use of fluid preparations:

MANKAR[®]

- Weed control

MANKAR[®] ULV spraying systems for use in gardening and landscaping, in nurseries, in fruit and wine-growing, as well as in the communal area.

ROFA[®]

- Control of insects

ROFA[®] ULV fine spray device for application of pyrethrum preparations and other insecticides, e.g. in pigsties, cow and poultry barns.

Contact



Mantis ULV-Sprühgeräte GmbH
 Vierlander Straße 11a · D-21502 Geesthacht, Germany
 phone: +49 (0)4152 / 8459-0 · fax -11
 mantis@mantis-ulv.eu · www.mantis-ulv.eu