

ULV Aerosol Generators

Made in Germany

iGEBA®

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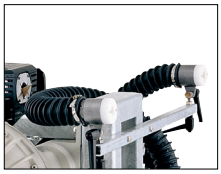
ENGINE DRIVEN



U 5 M

1 Nozzle

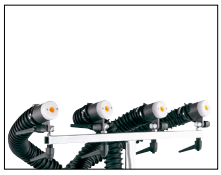




U 15 HD-M

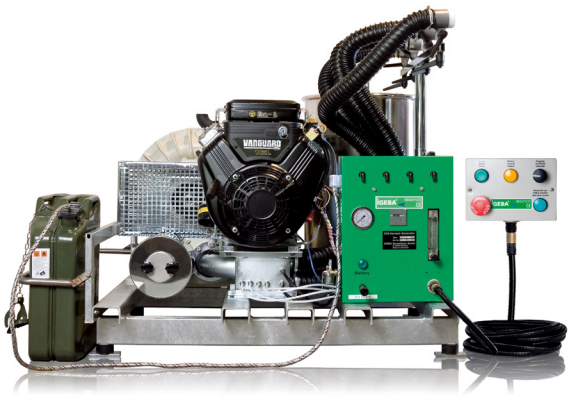
2 Nozzles





U 40 HD-M

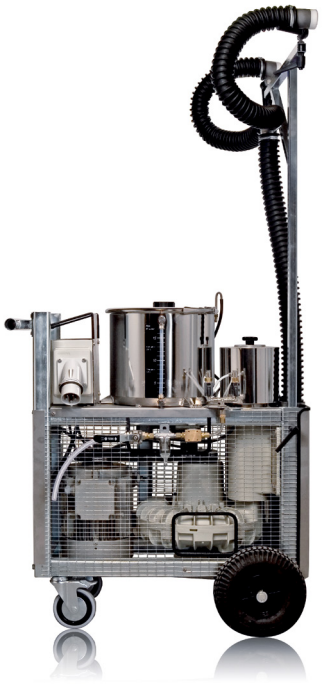
4 Nozzles



ELECTRIC DRIVEN



Unipro 5



U 15 E





PERFECTION DOWN TO THE LAST DETAIL

This has been our mission since the early 1980s. All this time IGEBA ULV aerosol generators have proved reliability in many fields of application and under extreme conditions.

Operators all over the world trust IGEBA ULV aerosol generators.

WHY ULV-APPLICATION?

The aim is to keep the application rate as low as possible and thereby diminish both the cost of the total quantity applied as well as the actual treatment time.

The chemical preparation is conducted to the spray heads where a powerful blast of air from the blower breaks up the chemical substance into minute droplets. On its way to the spray head, the biocide passes through a dosage nozzle or flow meter to ensure a constant application rate and produce droplets of uniform size. This shortens the treatment time and reduces the quantity of active agent applied, achieving the highest standards of efficiency and optimum coverage of the target area.

That means that a certain application rate applied by the ULV method produces more droplets compared to the traditional spraying or LV method. The smaller the droplet size, the more droplets are produced.

EXAMPLE

1 ml liquid applied
with 20 microns droplet size = 239 Mio. droplets produced – with 100 microns droplet size = 1,91 Mio. droplets produced

IGEBA ULV aerosol generators operate with a special method, whereby the atomizer nozzles are designed in a 2-step-system. Through the special aerosol nozzle the concentrated droplet stream is leaving the nozzle without touching its inner surface.

APPLICATION

The use of environmentally-compatible technologies is becoming increasingly important. IGEBA technology helps to prevent environmental damages with minimum application quantities per surface area.

FIELDS OF APPLICATION

- vector Control (Malaria, Dengue, Chikungunya etc.)
- public Hygiene
- pest control against flying and crawling insects
- plant protection in Greenhouses
- disinfection in intensive livestock, stables, silos etc.
- disinfection in food industry
- odour control
- stored products control
- control of mildew and fungus
- bird control

SPACE TREATMENT

IGEBA ULV aerosol generators produce aerosol droplets, using highly concentrated formulations. The rate of application depends upon active ingredient and formulation used but usually ranges from 0.5-4 l/ha. If mounted on a vehicle the forward speed of the vehicle should not exceed 10 km/h. EC (Emulsion concentrates) and ULV formulations can be diluted with diesel, kerosene or water.

BENEFITS

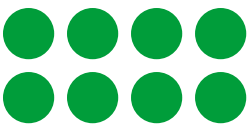
- universal application, for pest control, disinfection/hygiene
- suitable for acid based disinfectans only "Unipro5"
- adjustable spray heads 360°
- every nozzle can be operated individually
- low noise level of electrically driven units
- excellent distribution
- high penetration depth without requiring additional ventilation (more than 120 m under favourable conditions with U 40 HD-M)
- all pesticides can be apllied
- extremely economical pesticide consumption
- complete control for automatic operation (electrical driven unit)
- mixer for solution tank on several models available (particulary important when using wettable powders or BTI)



Aerosol jet - IGEBA ULV-Aerosol-Sprayhead



40 microns



20 microns

DROPLET SIZE: (enlarged view)

One 40 micron droplet will give 8 droplets of 20 microns which will increase their density, distribution and therefore their efficiency.

TECHNICAL DATA

Model (Engine driven)	U 5 M	U 15 HD-M	U 40 HD-M
Engine (4 cycles) HP/KW	3.5 / 2.6	13 / 9.6	18 / 13.2
Dimensions L x W x H in cm	60 x 53,5 x 58	87 x 79 x 91	110 x 95 x 68
Weight (empty in kg.)	38	166	196
Drive	1 belt drive	2 V-belts	2 V-belts
Remote control	-	5 m cabel	5 m cabel
Discharge rate (m³/min.)	1.0	3.0	6.0
Pressure (bar)	0.2	0.3	0.3
Control system	Fogging ON / OFF - Motor (handstart system)	Electric starter for engine, solenoid valve for fog solutions, metering device for output	
Fuel tank capacity in l.	2	6	20
Fuel consumption approx. in l/h	0.85	2.5	4.5
Solution tank capacity in l.	20*	60**	75**
Battery	n/a	12 V DC, 36 Ah	12 V DC, 36 Ah
Nominal output in l/h	10 l with dosage nozzle 0.8	20	40
Output (max.), in l/h	–	30	60
Air filter	Faom filter	Paper star filter	Paper star filter
Number of nozzles	1	2	4
Aerosol-Spray-heads	horizontaly up to 135° - vertically up to 50°	horizontaly adjustable 360°	horizontaly adjustable 360°
Droplet spectrum VMD-water only 10 liter per nozzle	< 25 microns	< 15 microns	< 15 microns
Optional:			
10 m extension hose with nozzle	• (5 m)	• (10 m)	• (10 m)
Agitator in solution tank	–	–	•
Transport device	•	–	–
Remote control	• External baterie 12 V DC necessary for power supply Motor handstart system - Fogging ON / OFF	standard	standard

* PE-HD ** Stainless steel

Model (Electric driven)	Unipro 5	U 15 E
Drive motor (KW)	1.5	2 pole 4
Motor type	1 Phase AC-Motor	3 Phase Motor
Mains voltage (V) Overload protection	230	3 x 380 / 400*
Frequency (Hz)	50	50
Rated current (ampère)	9.25	8.2
Speed (rpm)	2845	2850
Air Compressor:		
Discharge rate (m³/min.)	1	3
Air filter	Foam filter	Paper star filter
Drive	1 belt drive	2 belt drives
Pressure (bar)	0.22	0.28
Speed (U/min.)	14000	3990
Air velocity at the nozzle (m/sec.)	200	200
Solution system:		
Solution tank in l.	20 (standard) 45 (optional)	17
Output quantity	approx. 10 l/h with dosage nozzle 0.8 approx. 14 l/h with dosage nozzle 1.0 approx. 18 l/h with dosage nozzle 1.2	depending on nozzle size: 18 l/h to 30 l/h (with water)
Dosage nozzle	0.8 (1.0/1.2)	2 x 0.8 (1.0)
Number of nozzles	1	2
Solution line	Teflon	Teflon
Droplet spectrum VMD-water only (10 liter per nozzle)	< 20 microns	< 20 microns
Aerosol-Spray-heads	horizontaly adjustable 360°	horizontaly adjustable 360°
Control	manual or semi-automatic	manual / semi or fully automatic
Chassis:		
Type	zinc coated frame	zinc coated frame
Wheels	2 pneumatic wheels	4 pcs. (2 fixed pneumatic wheels, 2 steeringgs rollers)
Dimensions L x W x H in cm	59 x 57 x 116	88 x 57 x 100
Weight (empty in kg.)	56 (standard)	115
Optional:		
Agitator for solution tank with control system	•	•
10 m extension hose with nozzle	•	•

* other voltages upon request

Nozzle output	Liquid	´D (v, 0,5)	´D (v, 0,9)
20 l/h through two nozzles (one nozzle measured only)	water	13,4 µm	36,4 µm
10 l/h through one nozzle	water	11,8 µm	27,9 µm
10 l/h through two nozzles (one nozzle measured only)	water	11,8 µm	28,2 µm

Droplet size data for the IGEBA ULV aerosol generators by:

Ambient temperature: 21.4° C

Formulation temperature: 22.0° C

DIN EN ISO 9001:2008

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Technical modification without prior notice. 01-2015