



# In spraying terms,

ULV (Ultra Low Volume) is defined as the smallest volume of liquid required which is necessary to achieve the treatment objective. Generally, using the ULV spraying mode, the quantity of spraying liquid required lies between 0.5 and 50 litres per hectare, depending on the environment and treatment objective. As a rule, for mosquito control, the volume required tends to be at the lower end of the range, whereas for plant protection in plantations and greenhouses, it is at the higher end of the range.

In 1979, we introduced the first electrically driven Fontan ULV fine spraying applicator into the market, which founded our reputation as pioneers of fine spraying technology. The current programme of modern and efficient ULV aerosol generators is based on our wealth of experience.



Fontan ULV-E  
Our first electrically driven ULV spraying applicator

Fontan is our range of ULV cold fogging applicators for the efficient and economic control of insects, pests, fungi, viruses and bacteria:

- Plant protection in greenhouses for ornamental plants, fruit and vegetables
- Stock protection in warehouses, silos and plants for processing foodstuffs, agricultural products, textiles and tobacco
- Health and hygiene in public, private and commercial areas and also in the livestock industry (pest control, inhalation vaccination in intensive animal keeping)
- Disinfection measures in areas occupied by people and also in the livestock and foodstuff industries.

We are certified as compliant with DIN EN ISO 9001.



**Fontan Compactstar** ULV cold fogger with a blower/stator system. Available with two types of spraying tank, 15 l or 34 l capacity. Semi-automatic spraying operation. A timer is available as optional accessory



**Fontan Turbostar** ULV cold fogger with a blower/stator system, height adjustable. Spraying tank, capacity 34 l. Programmable fully automatic operation. Fontan Compactstar and Fontan Turbostar are identical with regard to output capacity and droplet quality.



**Fontan Twinstar** ULV cold fogger with two height adjustable blower/stator systems that can be operated in opposite direction or in parallel. Spraying tank capacity 34 l. Programmable fully automatic operation. In comparison with the Fontan Compactstar or the Fontan Turbostar, the Fontan Twinstar has double the output capacity with the same droplet quality.

**Fontan Starlet** ULV/LV cold fogger, portable, with a spray gun that has a trigger for intermittent fogging and a locking device for continuous operation. The spray gun can be hand-operated or fixed at the machine. Operation modes ULV (Ultra Low Volume) or LV (Low Volume). Available with three types of spraying tank having capacities of 6 or 11 or 34 l. The Fontan Starlet is designed to treat small rooms or greenhouse areas. The Fontan Starlet can be supplied in a standard version (housing made of lacquered steel) or in a stainless steel version, that is ideal for disinfection measures with aggressive disinfectants and for clean room application.



### The Fontan cold fogging applicators

Twinstar, Turbostar and Compactstar are driven by electric motors.

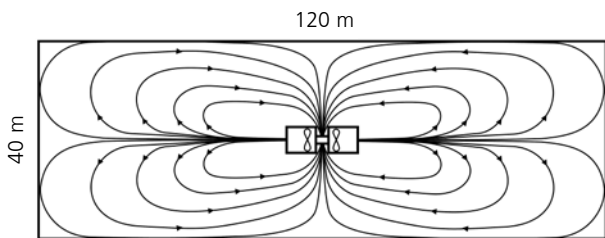
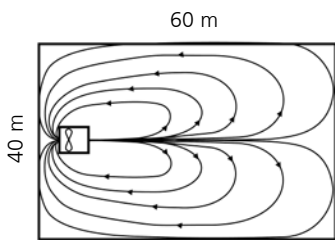
Maintenance-free, low pressure rotation pumps, which require no lubrication, produce an air flow at high velocity, which is further accelerated by a swirl vane in the nozzle module. The resulting Venturi effect produces a negative pressure, which draws the spraying liquid via the suction hose to the nozzle module, where the liquid is atomized into a fine aerosol fog.

The low pressure method makes it possible to use spraying nozzles that have relatively large bores, so that even wettable powder spraying mixtures can be applied without any problems.

Using the advanced design of the blower/stator system, the aerosol droplets are distributed up to a distance of 60 m per blower. Distribution is performed uniformly through horizontal and vertical air circulation.

The flow rate can be determined by a variety of dosage nozzles.

Fog application in a greenhouse

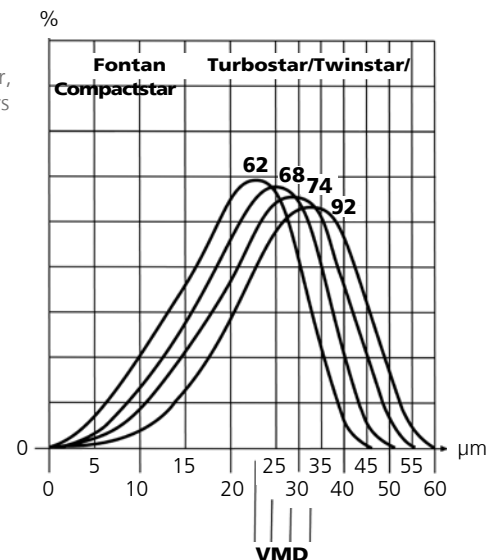


Droplet distribution and range of the Fontan Twinstar, 2 x 60 x 40 m (4,800 m<sup>2</sup>).

Range of the Fontan Turbostar and the Fontan Compactstar, 60 x 40 m (2,400 m<sup>2</sup>).

Much larger areas can be treated from a set position of the applicators by means of additional blowers.

Typical droplet distribution generated by Fontan Compactstar, Turbostar and Twinstar applicators using various nozzles.







Fontan Compactstar  
in a greenhouse

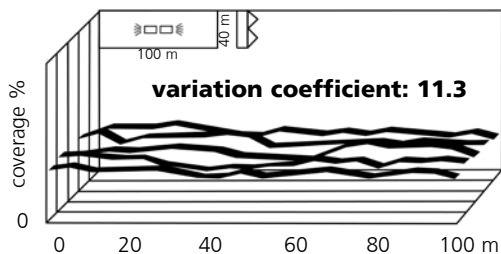
### Blower and stator system

The stator directs the air flow, without turbulence, and guarantees droplet transportation up to a distance of 60 m.

The power of the blower and the design of the stator provide a uniform coverage, even for large areas and rooms.



**Fog produced by**  
Fontan Turbostar, Twinstar  
and Compactstar



Our design of the blower/stator system guarantees an extremely even coverage of the complete treatment area.

The graph shows the result of a treatment having a variation coefficient of only 11.3 % between the highest and the lowest coverage.



**Operating and programming panel** of Fontan Turbostar and Twinstar with fully automatic programming functions:

- Timer for the preselection of the starting time.
- Permanent agitation of the fogging mixture to maintain a stable suspension in the spraying tank. It is possible to switch off this function.
- Permanent air circulation generated by the blower(s) for the transportation and optimized distribution of the fog droplets with programmable pre and post running time of the blower(s).
- The fogging time is directly related to the volume of liquid to be sprayed, i.e. the applicator operates for as long as it is necessary to fog the pre-set volume of spraying liquid, dependent on its viscosity.
- After fogging, the feed lines and nozzles are cleaned by a flushing process. The flushing time is adjustable.
- Automatic shutdown on completion of the entire process.

All functions can also be manually activated.



Fontan cold foggers being used in industrial premises

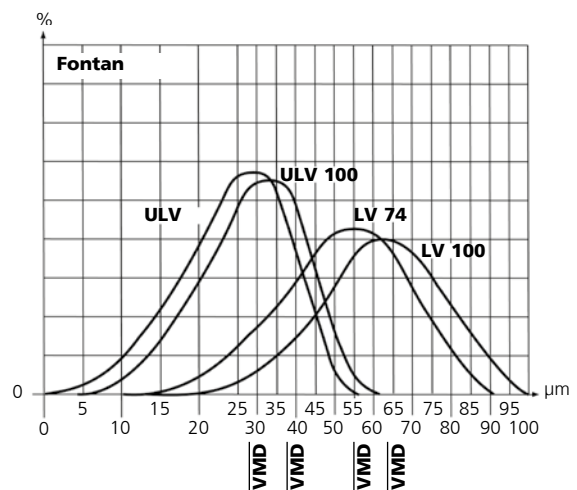




Disinfection in a hospital with Fontan Starlet



The **spray gun** of the Fontan Starlet has a trigger for intermittent fogging and a locking device for continuous operation. The Fontan Starlet can be operated in either ULV (Ultra Low Volume) application mode or in LV (Low Volume) mode. The flow rate is selectable by a variety of dosage nozzles.



Typical droplet distribution generated by the Fontan Starlet with dosage nozzles 74 and 100 in the spraying modes ULV (Ultra Low Volume) and LV (Low Volume).





**fontan**<sup>®</sup> + **swingfog**<sup>®</sup>  
QUALITY WINS