

## Condensation Fog Generator

## CFG 290



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The hand-held Condensation Fog Generator CFG 290 has been designed for use in clean rooms and for visualisation of air flows according to ISO 14644-3 Annex B7 and VDI 2083-3.

### Principle

The fog generation in the CFG 290 is based on the evaporation of fog fluid at about 300°C and subsequent condensation. The fluid consists of polyhydric alcohol and ultrapure water. Because of the hygroscopic effect of the alcohol droplets a part of the surrounding humidity is absorbed and stabilized as fog droplets.

The Condensation Fog Generator generates a very dense, highly visible fog. This cloud of fog has a longer life in rooms. Any deposition of fog droplets on surfaces evaporate after some time without any residue. According to the principle this kind of fog is sterile, non-toxic and free of oil and grease.

The Condensation Fog Generator is designed for mobile use. Power is supplied by a modern LiPo battery.

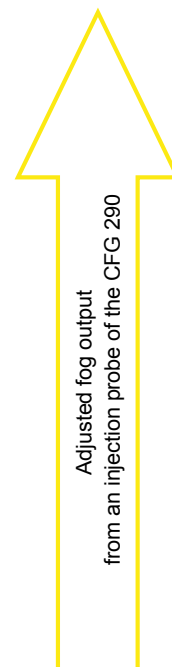
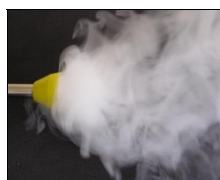
The device can be equipped with various fog distributing systems by means of a connection on the outlet of the aerosol.

### Special Advantages

- Very short preparation time between fog triggering and fog generation
- Quick shut-off, no re-evaporation
- Adjustable fog flow
- Low output speed

### Applications

- Visualization of airflows in rooms and air-conditioning systems
- Particularly suitable for use in clean rooms
- Visual leak tests of systems and components
- General use as test aerosol or challenge aerosol, e.g. for filter testing



## Specifications

### Details

The outstanding feature of the CFG is a special evaporator ensuring the fog generation in a very short time (few seconds only) after triggering the fog output.

The heating power is applied only for the actual time of generation. No stand-by heating is required due to the short reaction time. This technology provides a long battery life and a long period of use in mobile operation.

Due to an innovative new solution (utility model protection) it is possible to immediately stop the production of fog, without re-evaporation.

The fog outlet of the injection probe is equipped with a separator where the condensate droplets from the injection probe as well as very large droplets of the fog are deposited. Thus, an unnecessarily high amount of fog fluid in the test room is avoided.

In the fog distribution system the CFG 290 can create sufficient overpressure to ensure uniform outflow from several openings into the environment.

### Technical Data

Evaporator temperature	approx. 300 °C
Tank capacity for the fog fluid	80 ml
Consumption of fog fluid (non-stop operation)	approx. 1.5 ml/min
min. fog output	0.15 ml/min
max fog output	1.5 ml/min
Fog fluid "TopFog"	Mixture of a polyhydric alcohol with ultrapure water
Option	Aerosol distributing rake
Power supply	LiPo battery; 11.2 V; 2.1 Ah
Dimensions	L 440 mm (without injection probe); T 70 mm; H 120 mm
Weight	1.2 kg



Turbulent output via tube outlet



Laminar output via porous surface



Aerosol distributing rake with outflowing aerosol

QMS certified to DIN EN ISO 9001.



12 100 11908 TMS

For more information please visit our website at [www.topas-gmbh.de](http://www.topas-gmbh.de)

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