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High Performance Fog Generators



SN 50
SN 81
SN 101





Andes/Amazon expedition 1951 with SWINGFOG



In the early days: Mosquito control at the Lake of Constance

At the end of the 1940's, the first SWINGFOG thermal fogging machine was built.

Originally, the engine principle served for the propulsion of rockets. Further development of this technology resulted in the so-called SWINGFIRE process. This idea has been successful in the market for more than 50 years, and the SWINGFOG brand name has become synonymous worldwide for thermal fog technology. Our present manufacturing program is the result of our competence and experience, continuous development, as well as the permanent improvement of our products.

Today, SWINGFOG means: Engineering at a high level combined with a complete utilization know-how. In other words: Technology and application under one roof.



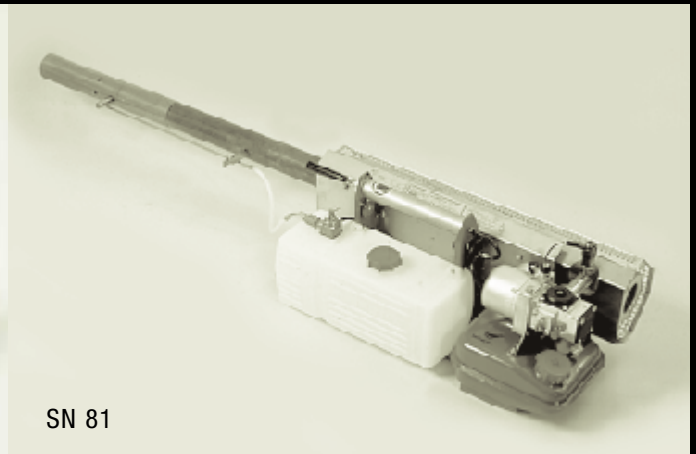
We are certified as compliant with DIN EN ISO 9001.

SWINGFOG fogging technology is the efficient and economic method for:

- Mosquito and pest control
- Plant protection in plantations and greenhouses
- Stock protection in warehouses, silos and plants for processing foodstuffs, agricultural products, textiles and tobacco
- Disinfection in the foodstuff industry, in areas occupied by people and in the livestock industry



SN 50



SN 81



SN 101



SN 101 Pump

SWINGFOG SN 50

Portable machines, available with four types of spraying tank made of stainless steel or synthetic material (polyethylene).

SWINGFOG SN 81

Stationary machines, available with two types of spraying tank made of stainless steel or polyethylene, or a third variant equipped with an electric pump to draw the spraying mixture from a separate tank.

SWINGFOG SN 101

Vehicle mountable large fogging machines with turntables. Available with manually operated starting pump (SN 101 M) or with an electrical starter (SN 101 E and SN 101 Pump).

Both of the SN 101 M and SN 101 E types are equipped with stainless steel spraying tanks that have a capacity of 68 l. The SN 101 E is supplied with a rechargeable battery and a battery charger. The SN 101 Pump has no spraying tank, but a large fuel tank with a capacity of 21.3 l which allows for a continuous operation of approximately 5 hours. The spraying mixture is drawn, by means of two electrically driven pumps, from a separate tank. Power to start the SN 101 Pump and to drive the spraying liquid pumps is drawn, via a cable, connected to the battery of the vehicle (12V).

On request, the SN 101 E and the SN 101 Pump types can be equipped with a remote control (optional accessory).



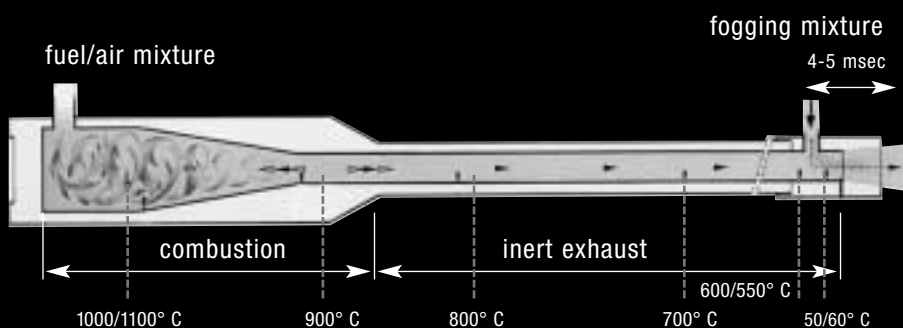
SWINGFOG fogging machines run with regular grade petrol/gasoline (unleaded or leaded) in accordance with the SWINGFIRE principle. A fuel/air mixture is ignited in the combustion chamber and the deflagrations oscillate a column of gas in the resonator pipe between 80 and 110 times per second (depending on the type of machine). At the end of the resonator, the spraying mixture is injected into the air stream emerging at high velocity, and is dispersed into fine aerosol droplets, which are distributed into an extensive, dense fog. Fuel and spraying mixture are conveyed by a small positive pressure in the tanks*. The system has, with the exception of diaphragms, no moving parts and, therefore, practically no wear. Electrical energy is only required to start the machines and is supplied by standard batteries (electrical power is also required to operate the spraying mixture cut-off device for the SN 81 Pump and SN 101 types).

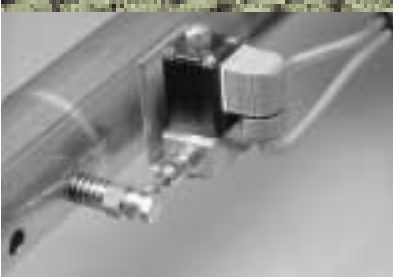
* For the SN 81 Pump and SN 101 Pump types, the spraying mixture is drawn by electrically driven pumps.



Standard fogging tube for oil-based spraying mixtures.

High performance fogging tube for water-based spraying mixtures (optional accessory). Using this device for the application of water-based spraying mixtures, an excellent droplet spectrum is generated, which is almost identical to that of oil-based spraying mixtures.





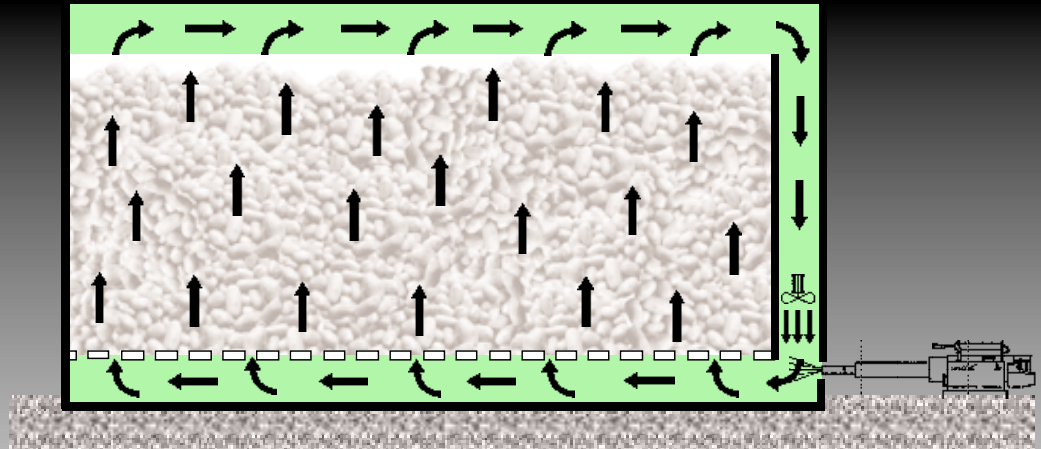
Automatic cut-off device for the spraying mixture by means of an electromagnetic valve. Standard equipment for all models of SN 101 and SN 81 Pump.



Automatic, mechanically acting cut-off device for the spraying mixture. Optional for all models of SN 50 and for the SN 81 and 81 PE types.



The illustration shows the treatment of a potato store with a germination inhibitor.





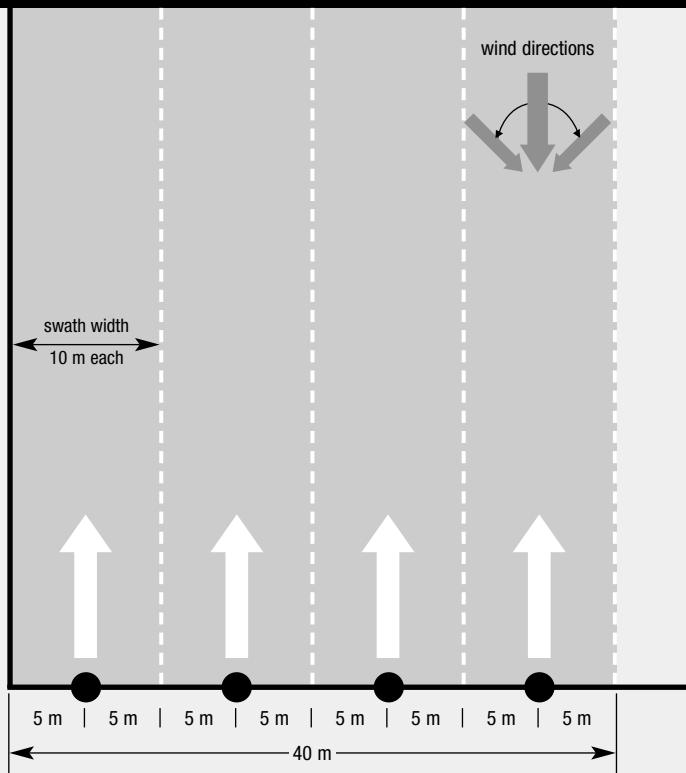
Special type SWINGFOG SN 50 A

Using this special fog applicator, it is possible to direct the fog into the smallest of apertures. Application example: Combat against leaf-cutting ants in subterranean ant nests. The fog outlet is put directly into one of the ant nest entrances and the complete nest is saturated with fog. All models of SN 50 are available in a special "A" version.



SN 50A

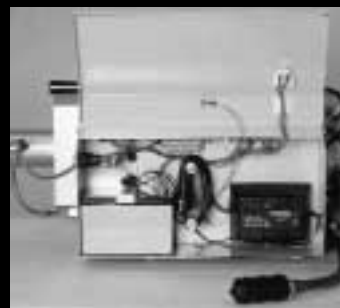
Example of plant protection measures in plantations.



Pest control in a grain store.

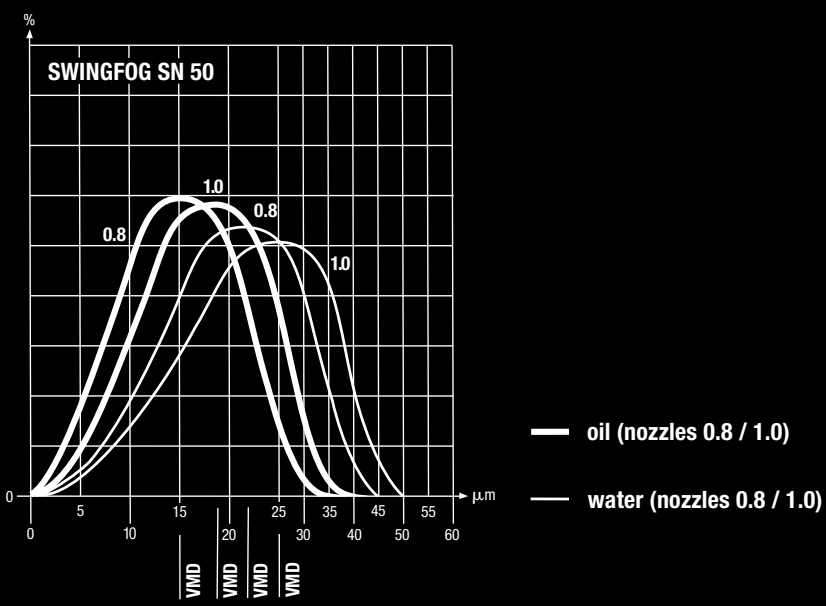
SWINGFOG SN 81 Pump with electrically driven pump to draw the spraying mixture. The battery and the battery charger/power supply device for the operation of the pump are built-in. The pump can be driven either via battery or via the battery charger/power supply device. The spraying mixture is drawn from a separate container.

Remote control for the SN 101 E and SN 101 Pump. All operational functions can either be controlled via the remote control from the cabin of the vehicle or directly at the control panel of the machines.





Typical droplet distribution generated by SWINGFOG.
 Our advantage: Using water-based spraying mixtures, together with the high performance fogging tube, an excellent droplet spectrum is achieved, which is usually only possible with oil-based mixtures.



Control panel of SWINGFOG SN 101 E and SN 101 Pump.



Technical Data (approx.)	SWINGFOG SN 50	SWINGFOG SN 81	SWINGFOG SN 101	
Power, combustion chamber	18.7 kW/25.4 hp 16,100 kcal/h	37.4 kW/50.8 hp 32,200 kcal/h	42.1 kW/57.3 hp 36,200 kcal/h	
Fuel Consumption	2 l/h	4 l/h	4.5 l/h	
Fuel Tank Capacity	1.4 l	4.5 l	SN 101 M/SN 101 E: 5.8 l SN 101 Pump: 21.3 l	
Spraying Tank Capacity	SN 50: 6.5 l SN 50 PE: 7.0 l SN 50-10: 9.0 l SN 50-10 PE: 10.0 l	SN 81: 9.0 l SN 81 PE: 10.0 l Not applicable to SN 81 Pump	SN 101 M/SN 101 E: 68 l Not applicable to SN 101 Pump	
Overpressure in the fuel tank	0.08 bar	0.12 bar	0.12 bar	
Feed Pressure in the spraying tank	0.3 - 0.4 bar	0.3 - 0.4 bar, Not applicable to SN 81 Pump	0.3 - 0.4 bar, Not applicable to SN 101 Pump	
Ignition	Through 4 dry batteries in series (negative on ground) Electronic ignition coil	Through 4 dry batteries in series (negative on ground) Electronic ignition coil	SN 101 M: Through 8 dry batteries in series (negative on ground) SN 101 E: Through rechargeable battery 12 V/12 Ah SN 101 Pump: Through connection to the vehicle battery, 12 V Electronic ignition coil	
Output Quantity* in relation to the nozzle size			SN 101 M, SN 101 E	SN 101 Pump
* The indicated output quantities vary, dependent on the viscosity properties of the liquids used. The output values should be considered as a guideline, measured with water. The maximum output can be further increased by approx. 25 %, when larger nozzles are applied, but this may cause an unsatisfactory droplet spectrum.	Nozzle 0.7 – 10.0 l/h Nozzle 0.8 – 14.0 l/h Nozzle 0.9 – 17.5 l/h Nozzle 1.0 – 20.5 l/h Nozzle 1.1 – 23.5 l/h Nozzle 1.2 – 27.0 l/h Nozzle 1.4 – 32.0 l/h Nozzle 1.7 – 42.0 l/h	Nozzle 1.0 – 23 l/h Nozzle 1.1 – 26 l/h Nozzle 1.2 – 31 l/h Nozzle 1.4 – 39 l/h Nozzle 1.7 – 52 l/h Nozzle 1.9 – 62 l/h	Nozzle 1.3 – 32 l/h Nozzle 1.6 – 50 l/h Nozzle 1.9 – 67 l/h Nozzle 2.2 – 82 l/h Nozzle 3.0 – 110 l/h Nozzle 4.0 – 120 l/h	Nozzle 1.1 – 30 l/h Nozzle 1.2 – 35 l/h Nozzle 1.4 – 48 l/h Nozzle 1.7 – 69 l/h Nozzle 1.9 – 81 l/h Nozzle 2.0 – 86 l/h Nozzle 2.6 – 112 l/h Nozzle 3.0 – 119 l/h Nozzle 4.5 – 128 l/h
Weight, empty	SN 50/SN 50 PE: 8.8 kg SN 50-10: 9.3 kg SN 50-10 PE: 9.1 kg	SN 81: 14.7 kg SN 81 PE: 14.5 kg SN 81 Pump: 23.0 kg	SN 101 M: 40 kg SN 101 E: 46 kg SN 101 Pump: 37 kg	
Dimensions (LxWxH)	SN 50: 133x29x33 cm SN 50 PE: 133x29x33 cm SN 50-10: 133x34x33 cm SN 50-10 PE: 133x34x33 cm	173x39x33 cm	SN 101 M/SN 101 E: 177x63x55 cm SN 101 Pump: 177x58x38 cm	

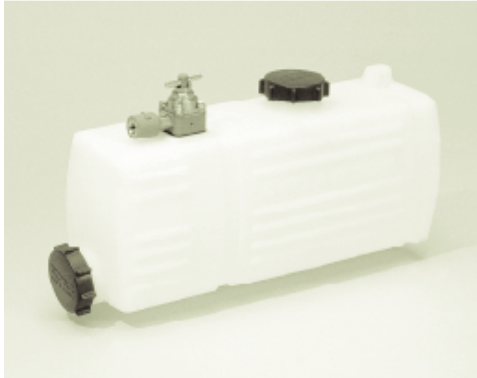
Special Types/Accessories	SN 50	SN 81	SN 101
Automatic cut-off device for the spraying mixture	Δ	Δ SN 81/SN 81 PE • SN 81 Pump	•
Special fog applicator SN 50 A	Δ	–	–
Output nozzles	• 1.0 (installed)/0.8/1.2 ○ 0.7/0.9/1.1/1.4/1.7	• 1.4 (installed)/1.2/1.7 ○ 1.0/1.1/1.9	• SN 101 M/SN 101 E: 1.6 (installed)/1.3/1.9 • SN 101 Pump: 1.7 (installed)/1.2/1.9/2.6 ○ SN 101 M/SN 101 E: 2.2/3.0/4.0 ○ SN 101 Pump: 1.1/1.4/2.0/3.0/4.5
Standard fogging tube	•	•	•
High performance fogging tube for water-based spraying mixtures	○	○	○
Silencer	○	○	•
Rechargeable battery with battery charger, 12 V/12 Ah	–	• SN 81 Pump – SN 81/SN 81 PE	• SN 101 E – SN 101 Pump/SN 101 M
Remote control	–	–	○ SN 101 E/SN 101 Pump – SN 101 M
Turntable	–	–	•
Fuel funnel with strainer	•	•	•
Spraying mixture funnel with strainer	•	•	•
Tool kit	•	•	•
Cleaning equipment	•	•	•
Set of spares (gaskets, O-rings, diaphragms)	•	•	•
Carrying strap	•	•	–
Instruction manual	•	•	•

- Standard accessory (supplied with every machine) ○ Optional accessory (available at extra cost) – Not applicable
Δ Special type (only available when installed at our factory)

Subject to technical modifications.



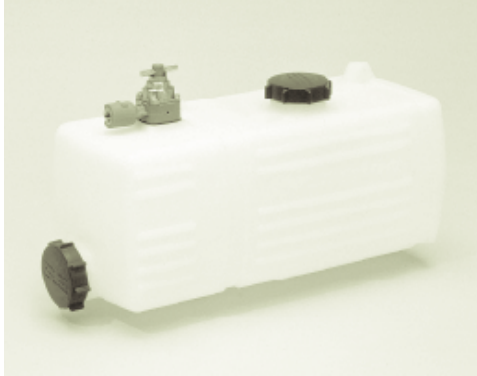
Spraying tank, stainless steel, capacity 6.5 l
SWINGFOG SN 50



Spraying tank, polyethylene (UV light resistant), capacity 7 l
SWINGFOG SN 50 PE



Spraying tank, stainless steel, capacity 9 l
SWINGFOG SN 50-10 and SN 81



Spraying tank, polyethylene (UV light resistant), capacity 10 l
SWINGFOG SN 50-10 PE and SN 81 PE

Standard equipment supplied with every SWINGFOG machine

- Spraying mixture funnel with strainer
- Fuel funnel with strainer
- Bag with tool kit and cleaning equipment
- Set of spares, containing all important gaskets, O-rings and diaphragms
- Set of nozzles
- Carrying strap (for SN 50 and SN 81 types only)
- Instruction manual with operation, maintenance and repair instructions and with a complete spare parts list (not shown in the picture)

