

---

# DUSTion, fine dust reduction by ionisation

---

DUSTion works according to the ionisation principle and is easy to install, with effective operation offering a high level of particle reduction.

The result is not only a reduction of fine dust emission, but also a significant improvement of the climate inside poultry houses.

Features and benefits:

- Flexible; can be installed in any poultry house
- No obstacles on the floor
- Easy to maintain
- Improvement of the climate conditions inside poultry houses
- High-voltage generator with high output power, therefore fewer generators are needed
- High contrast LED screen indicating the adjusted parameters
- LED's to indicate the status of the generator

## Operation

An effective ionising system requires sharp pointed emitters on which a high voltage is applied. For this application a corona wire is used in the form of barbed wire. The corona wires are installed in a poultry house and connected to an adjustable high voltage generator. As a result of the ionisation, the dust particles will be statically charged and will be deposited inside the poultry house. In particular the fine dust PM10 (due to the small diameter of the dust particle) is very effectively “captured”.

The result is a bright poultry house with a high percentage of fine dust reduction.



*Bright poultry house*



*Fine dust deposit (in the background)*

## Installation

Installing DUSTion ionisation is simple and easy and can be done by the farmer as well.

The corona wires are hung up between the front and the rear inner walls of the poultry house (in longitudinal direction) with insulators at both ends. The corona wires are pulled tight using springs. At approximately every 5 meters special insulating wires are attached to the ceiling to support the corona wires, for safety and for proper operation. The corona wires are connected to the DUSTion high voltage generator using special high voltage cables.

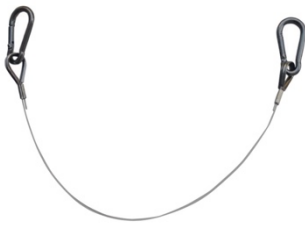
## Components



*DUSTion high voltage generator*



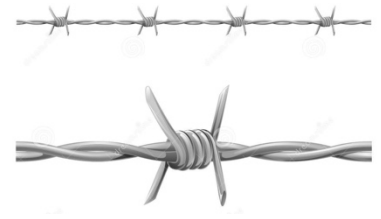
*Insulator and spring*



*Support wires*



*High voltage cable*



*Corona wire*

## Product specifications

### DUSTion high voltage generator

Input voltage:

90-250 Volt AC – 50/60 Hz

Output voltage:

0-30 kilo Volt DC – 5 mA max.

Connections:

4 high voltage connections

Displays:

High contrast LED screen

Led indication high voltage ON/OFF

Led indication for OVERLOAD

Controls:

Dust-proof switches on the front

Dimensions:

315mm x 337 mm x 106mm

### Other components

Insulator:

Length 540 mm with stainless steel D-shackles

Spring:

Length 215 mm, stainless steel

Support wires:

Length 400 mm with stainless steel fasteners

High voltage cable:

Flexible cable, diameter 5,2 mm / 60 kilo Volt max.

Corona wire:

Galvanized barbed wire



Serutech Agri

[www.serutech-agri.nl](http://www.serutech-agri.nl)

[info@serutech-agri.nl](mailto:info@serutech-agri.nl)

+31 (0) 546 604 414



Optiklep

[www.optiklep.nl](http://www.optiklep.nl)

[info@optiklep.nl](mailto:info@optiklep.nl)

+31 (0) 544 481 895