

CID'R18

AIR MANAGEMENT



www.systel-international.com

THE DEVICE THAT DISINFECTS THE AIR ENTERING THE BUILDING.

The only system that has proven an effective destruction
of the avian influenza virus of at least 98.8%.



18 000 m³/h



Find the online version
on our website !

SYSTEL®
Heating mastermind





TECHNICAL CHARACTERISTICS

A DEVICE CAN RESPOND TO A VARIABLE FLOW RATE BETWEEN 4000 AND 18,000 M³/H.

THE APPARATUS IS BROKEN DOWN AS FOLLOWS:

- 1 windbreak net to protect our G4 filter and limit its fouling.
- 6 G4 filters standard iso coarse 90% which allows to filter particles up to 10 microns.
- 1 integrated 70KW hot water battery connected to a condensing gas boiler that maintains a temperature above 18°C at the power plant outlet.
- The battery ensures the maintenance of a temperature allowing us to guarantee an optimal life and efficiency of the reactors.
- 6 reactors, each composed of two catalyst frames with 6 UV-C lamps and a chassis.
- Weight: 300KG.
- Power consumption (excluding fans): 1980 Watts.
- Total system load loss: 120 Pascal at 18,000 m³/h.
- Waterproof product, 100% stainless steel.

THE REACTOR PRINCIPLE OF OPERATION :

- Chemical catalyst impregnated on reactor grids.
- Rows of UV-C lamps.
- Chemical catalyst + lamp radiation = oxy-reduction reactions.

THE RESULT:

- Destruction and neutralization of chemical contaminants:
 - harmful gases or volatile organic compounds (VOCs)
 - microbiological-bacterial micro-contaminants (viruses, spores and fungi)



CID'R18 OBJECTIVES

Its objective is to eliminate and neutralize all chemical contaminants (harmful gases, VOCs, viruses, bacteria, spores) from the incoming air.

CONDITIONS OF THE CID'R18 EFFECTIVENESS TESTS

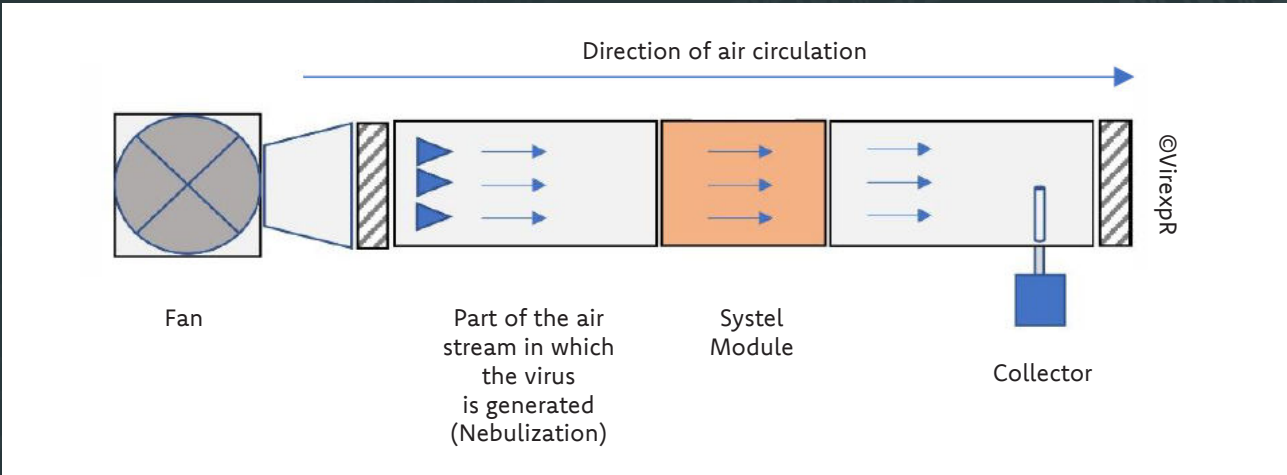
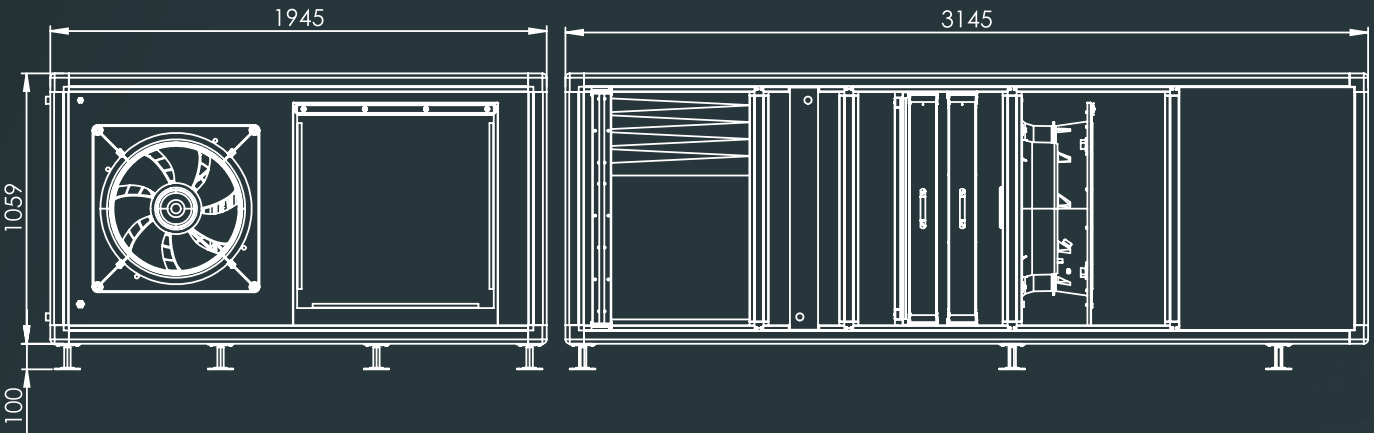
The tests were carried out at the VirexpR laboratory in Lyon on the H7N1 virus, 'which has a very similar behaviour to the avian influenza H5N1 virus'.

The H5N1 virus is highly pathogenic and requires specific permissions.

A very high concentration of infectious viral particles was generated with 700,000 viral particles/millilitre of air (7.00.105/mL).

This high concentration, 1000 times higher than in the real environment, was intended to demonstrate the high performance of the system.

CID'R18 was tested in a single pass («one pass»).





RESULTS

The results show a 98.79% efficacy on the infectious properties of viral particles.

CID'R18 thus helps to protect the poultry herd of breeders as well as the genetic heritage of integrators by avoiding slaughtering animals.

