

TECHNICAL SPECIFICATIONS

Motor 3 x 400 V 1.1 A 0.3 kW **Volume flow** Fan blade pitch

12,000 m³/h @ 0 Pa

Chimney diameter 760 / 740 mm

Damper Turnina

Materials ABS and stainless steel

Fasteners/brackets Stainless steel

AISI 304/A2

COTONAD - air intake for poultry production

In order to achieve good results as a poultry producer it is essential that the climate in the poultry house is optimal. Effective regulation of temperature and humidity requires that air from outside is brought to the house in precise quantities.

During the growth period and depending on the time of year, the CoronaD very precisely mixes the fresh air from the outside with the warm air in the house. This makes sure that only heated air is distributed among the animals. This eliminates cold air fall out, draught and wet litter - and reduces your expenses for heating by as much as 50 %.

Climate optimization and energy savings

During the growth period - and depending on the climate outside - the mixing of air is automatically changed always adding the exact amount of air that is needed to maintain the optimum climate in the house. The mixture of fresh air from the outside and warm air from the house ensures a good climate and thereby optimum welfare for the animals. The constant circulation of heated air among the animals keeps the litter dry and removes CO₂ and other gaseous waste products.

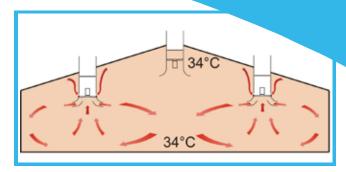
Marked reduction of heating costs

The very precise mixture of warm air from the house and fresh air from outside in the CoronaD unit makes it possible to reduce heating costs by as much as 50 % when compared to traditional ventilation systems. The CoronaD utilize the warm air already in the roof space simply by sucking it in down, mix it with air from outside and distribute this temperate air in the room and among the animals. A simple solution ensuring optimum climate conditions in the house and bringing big savings on heating - year in, year out.



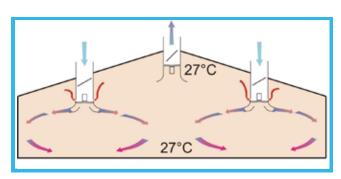
Destratification

At low ventilation rates (when it is very cold outside and/or when the birds are small), the CoronaD preheats the air by mixing a minor quantity of cold incoming air with warm room air, before distributing the air evenly throughout the house, thereby eliminating draught and cold air fall out. Depending on the damper position in the chimney, the mixing percentage of incoming air/warm room air automatically changes. The breeze of tempered air effectively removes pollutants and keeps the litter dry. The result is an optimum climate keeping the animals healthy and in good growth.



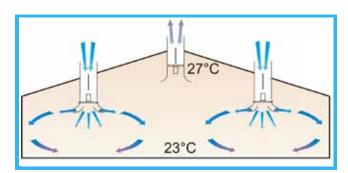
Mixing

When the weather gets warmer, the CoronaD works with partially opened dampers and mixes a larger quantity of incoming, cool air with warm room air. Still depending on damper position, the mixing percentage of incoming air/warm room air automatically changes. The desired temperature in the bird zone adjusts quickly and efficiently, ensuring even and appropriate temperatures, high air quality and comfort. As the need for higher air exchange rate in the house increases, the air flow pattern gradually changes from horizontal to a slightly downwards flow. As the temperature is still a mixture of warm air from the house and air from outside, further savings on the heating bill is possible, and the air among the animals will always be temperate.



Full flow

When the weather is hottest, the dampers are in vertical position for maximum airflow. The mixing action is suppressed by the main flow. At this stage, the centre venturi acts as an extra discharge that allows for vertical air distribution. The CoronaD forces the cool air outwards and downwards, giving maximum airflow and air speed in the occupied zone. This unique air distribution pattern ensures abundant air supply and a high degree of thermal comfort. Fully opened dampers are used during hot weather with full grown birds.



Higher cooling effect

Studies have shown that the vertical air distribution pattern leads to significantly higher cooling effect than tunnel ventilation systems with equivalent air capacity, thereby reducing the heat load under hot weather conditions. The adjustment of the damper in the chimney is computer controlled, and no manual adjustment is needed.

