



## ABBI-AEROTECH COOL SYSTEM





## **Results:**

- 8-15 degrees lower temperature
- better growth/production on hot days
- better feed conversion
- higher density possible
- Iower mortality
- dryer litter

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The system is easy to install, also in existing buildings. The construction of a so-called pad house provides greater flexibility for the use of combined ventilation systems.



## Abbi-Aerotech B.V.

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The highly efficient "Aerocool" panels are easy to install and control.

Atomisers, spray nozzles and pads are all very effective in dry climatic conditions. However, in hot and humid regions not all systems are equally suitable. In that case pad cooling systems may be a better solution. A well-installed pad system limits production loss and can be recovered in two or three seasons.

An Aerocool system reduces the air inlet temperature by some 6-12 degrees and under ideal circumstances even more. This modular system consists of customised aluminium panels that when assembled create the housing for the pads. The upper part has a water supply line with holes and special guides for dividing the water across the pad. The lower part bears the pad and is at the same time the return gutter for the excess water.

The pad is the heart of the system and is made of special cellulose material that is impregnated with several insoluble types of glue and stiffeners. Every pad consists of a number of corrugated sheets that are glued together. Every other curve points in another direction and is at a different angle to the other. The steeper curves carry the water to the outside of the system, whilst the gentler curves guide the outside air inwards. The depth of the pad is usually 15 cm.

The water that is pumped across the pad via the water pump and supply line is exposed to the airflow. The airflow evaporates the water and the air cools off. The fans then draw the cooled-off air through the building. The aim is to reach an air speed sufficient to lower the wind-chill factor for the animals, remove the heat they produce and maintain production.

The pad system is installed at the end of the building, with the fans at the opposite end. First, tunnel ventilation is applied; as soon as the temperature reaches 29 degrees, the water pump starts and the cooling starts to function.

