



# **Rain Maker**

The ideal cooling system for poultry houses with tunnel ventilation

### RainMaker

## The efficient evaporative cooling system for your poultry house

RainMaker is a pad cooling system developed by Big Dutchman that features a clever and unique frame system. Its main benefits include:

- efficient cooling of the barn,
- ✓ minimum installation requirements and
- easy monitoring and maintenance.

The system uses evaporation to cool barns and

is therefore mainly installed in climate regions with hot and dry summers. The higher the temperature and the lower the relative humidity, the higher the cooling effect.



RainMaker with plastic pads and protection against direct sunlight, dust and wind

# How RainMaker works

The pads are soaked with water from above. Due to the negative pressure ventilation in the barn, warm fresh air is drawn inside, flowing through the moist pads. The air absorbs the humidity and cools down. Excess water is collected in the water reservoir and returned to the cycle. Together with a certain amount of fresh water, this excess water is pumped up by the centrifugal pump in order to wet the pads again.

In combination with tunnel ventilation, this leads to a very efficient cooling effect.





# Use of high-quality plastic pads

We recommend using our high-quality plastic pads. Compared to cellulose pads, they have the following advantages:

- the pads can be cleaned thoroughly with a high-pressure cleaner;
- ✓ their life span is significantly longer;
- ✓ water consumption is lower, i.e. humidity
- in the barn does not increase too much;
  the climate computer ViperTouch controls
  the temperature very exactly: absolutely

precise cooling!

### Unique frame system with top profile and pad holder

The core part of the frame system is the top profile, i.e. the entire upper part of the frame. Water flows through the top profile onto the pads below.

- the top profile is designed as an open system, i.e. the water flow is always visible to detect clogging easily and there
- is no hiding place for birds and rodents;

  the special deflector ensures that water is evenly and widely spread on both the front
- and the back of the pads for ideal wetting;
   an integrated roof prevents bird droppings from falling onto the pads for high biosecurity;
- all parts of the top profile are clicked into the wall bracket for easy and fast mounting without tools;
- every pad is fastened by a pad holder that ensures quick removal and installation of the pads.



Top profile and practical pad holders



Top profile with perforated pipe and deflector for an even distribution of water on the pads

# Water reservoir, centrifugal pump and supply unit with float valve

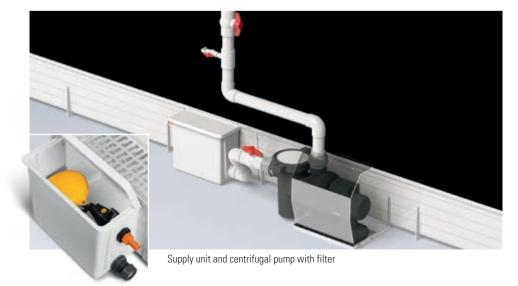
The lower part of the frame system functions as a water reservoir. Excess water is collected in this reservoir and returned to the cycle. The special profile is designed to provide stability. The reservoir is large enough that no additional water tank is needed. The cover supporting the pads is simply mounted onto the water reservoir and can easily be removed for maintenance purposes. The special perforation of the cover ensures that the

excess water flows back while also preventing rodents from entering the system.

The supply unit facilitates maintenance tasks since it provides easy access to the float valve. The rinsing opening of the water reservoir makes it easier to clean the reservoir.



Water reservoir for up to 48 litres per running metre



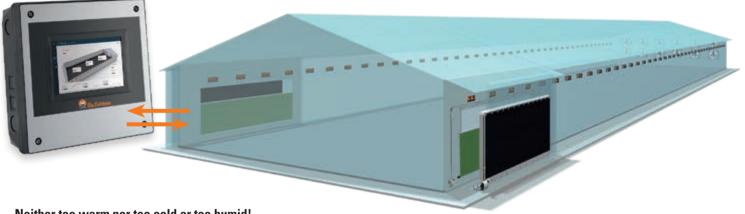


Rinsing opening at the end of the water reservoir

### Tunnel or CombiTunnel ventilation with RainMaker

When using RainMaker, we recommend offsetting the pads from the walls with a corridor or "dog-house". Air inlets in the walls can then be kept much smaller. This has the following advantages:

- ✓ the required air speed can be precisely
- adjusted, which leads to a better air distribution in the barn, especially wide
- ✓ the barn can be sealed airtight by means of a roller curtain, fresh air shutters or tunnel
- ✓ good protection against wind and rain overall:
- service and maintenance tasks can be performed irrespective of whether the barn is occupied or not, and no water enters the



#### Neither too warm nor too cold or too humid!

RainMaker with plastic pads in combination with ViperTouch ensures ideal temperatures inside the barn thanks to the precise control.



Tunnel inlet with roller curtain



Protection of RainMaker against direct sunlight



Double RainMaker for high cage houses

# **Technical specifications**

- the entire frame system consists of highquality, UV-resistant plastic;
- system length: up to 36 m;
- pad thickness: 15 cm (6");
- ✓ pad height: 0.5 m to 2.5 m, can be extended up to 3.0 m with an intermediate frame;
- water reservoir: 48 L per running metre;
- centrifugal pumps incl. filter with 0.33 kW or 0.75 kW available.



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