Efficiently Filtering PRRS Viruses from Incoming Air

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GLOBAL - Porcine reproductive and respiratory syndrome (PRRS) confronts pig producers throughout the world with big problems, says Big Dutchman: the pandemic disease severely affects the health of their animals.

The filter module consists of three air-purifying phases

To avoid economic losses that inevitably occur once the disease has hit a stock, Big Dutchman offers a new modular PRRS capturing filtration system with integrated cooling for pig buildings.

Its unique feature is that, unlike conventional filtration procedures, the new AirProTec operates under positive pressure ventilation. Fresh air will not be allowed into the houses without being filtered, thus significantly reducing the number of viruses entering the house. Combined with the day-to-day hygiene measures, pig producers can ensure a high state of health of their stock.

Each filter module basically consists of three air purifying phases: The first phase is accomplished by a wind breaking net or mesh to block coarse dirt particles from entering the unit. In the second phase, the air must pass through the actual antimicrobial filter medium that is able to filter out smallest particles such as the PRRS virus. The clean air finally passes through the evaporative cool pad system, which will cool down the air if needed.

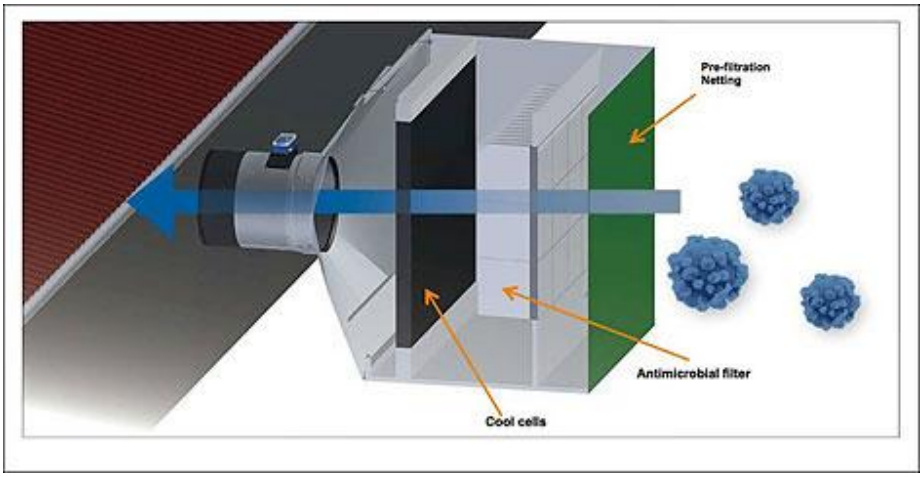
AirProTec filtration units are generally 7.9 feet (2.40 metres) in width and height, and the total length including the connecting duct is 10.6 feet (3.22 metres). However, alterations are possible.

A small service door on the side of the unit provides easy access to the unit for effortless maintenance.

The filter units are simply placed on the outside of the building and connected by an air duct with fan and shutter, blowing filtered air into the attic of the house. The airflow is then directed into the house or individual rooms through respective ceiling inlets, while an integrated control unit monitors the system and regulates proper ventilation pressure..

AirProTec can be used during all stages of pig production. The filtration system is suited for the management of sows and boars as well as piglet rearing and can be used in all climate zones of the world.

AirProTec filtration units installed in a breeder farm in Spain



Working principle of AirProTec

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