KEYWARM®

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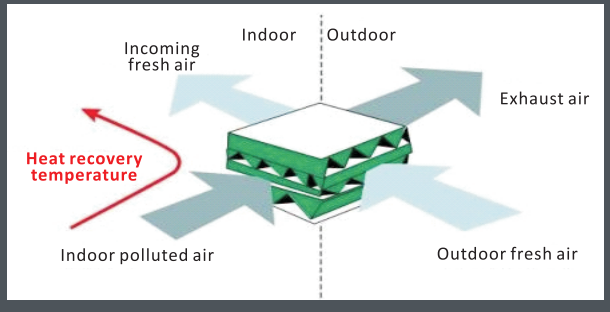
KWHRV2500
Heat Recovery Ventilator

HOW IT WORKS

This product integrates the functions of intake and exhaust, making it particularly suitable for environments that require a large amount of outdoor fresh air. It significantly improves the breeding environment and effectively addresses the contradiction between ventilation and heat dissipation.

The heat recovery ventilator has two fans inside, one exhausting the humid and warm air from the room, and the other drawing in fresh cold air from the outside. When the hot air and cold air pass through the heat exchange core, the fresh air is preheated, reducing heating costs and minimizing cold stress.



Features

- Ventilation volume: 2,500 m²/h
- Corrosion-resistant aluminum heat exchange core with high heat transfer efficiency, corrosion resistance, and easy cleaning
- Automatic defrost function to prevent blockage of the heat exchange core (optional feature)
- Compatible with environmental control systems, achieving coordinated operation between heat exchange and heaters, significantly reducing heating costs and temperature fluctuations.

Applications

- Pig houses
- Chicken houses
- Supporting dehumidification systems for non-plague high-temperature drying rooms

Advantages/Benefits

- Substantially reduce fuel consumption during the heating season.
- Achieve energy savings of up to 30-50% depending on different environmental temperatures.
- Reduce temperature fluctuations inside the shed, ensuring even air temperature distribution.
- Lower concentrations of ammonia and carbon dioxide inside the shed, improving air quality.
- Keep manure dry, reducing the amount of bedding material and minimizing issues like bumblefoot and hock burns.
- Increase weight gain and feed conversion rates (FCR).
- Enable localized ventilation in specific areas (e.g., brooding areas) to avoid heat loss.

Top Left Imagec: Heat recovery ventilator installed outside the pigsty.

Bottom Left Image: Heat recovery ventilator mounted on the interior wall of the pigsty.

Right Image: Heat recovery ventilator installed on the exterior wall of the drying room (used in conjunction with the drying machines).

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Technical Parameter

Model	Control Power	Supply Power	Ventilation Rate	Size(excluding air outlet)	Weight
KWHRV2500	220V/50Hz/5W	220V/50Hz/800W	2x2,500m³/h	L1050xW605xH1150	90kg

Installation and Usage Precautions:

In extremely cold weather, the intake side of the heat exchanger is prone to ice (frost) blockage, and timely defrosting is crucial.

Due to the high dust content in the air inside livestock and poultry houses, the exhaust side of the heat exchanger is often blocked by dust deposition. Optional automatic flushing (high-pressure water or compressed air) can prevent airflow reduction and keep carbon dioxide and ammonia concentrations at ideal levels. Manual flushing must also be performed regularly. At the end of each breeding cycle, the entire heat exchange system should be thoroughly cleaned to restore it to maximum efficiency.

The heat exchanger is responsible for the first step in the minimum ventilation process. Carefully adjust the heat exchanger control (equal pressure) to the main ventilation system control (negative pressure), ensuring a gradual transition without causing stress to the animals. If the heat exchanger control is integrated with the ventilation computer, the effect is optimal.

Ensure that fresh air is correctly distributed throughout the entire livestock and poultry house, avoiding any areas without fresh air circulation.

If the intake port through the heat exchanger is disabled, the ventilation system should automatically switch to the main ventilation system. However, the exhaust of the heat exchanger should continue to operate to filter out any excess fine particles.