




Advanced air washers for
industrial & agricultural sector



Heat recovery from washing water

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Heat recovery from washing water

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Combine your air washer with a heat recovery system and use exhaust stable heat to warm up incoming cold ventilation air. It could even be used for floor heating in your stables. The energy consumption in the stables for heating the incoming air and underfloor heating can be reduced by up to 65%.

The AHP has a robust casing and is made with high-quality components which makes the heat pump extremely suitable for the agricultural sector. Although the heat pump was developed for the agricultural sector, it is also used successfully in industrial applications.

Stainless steel tube heat exchanger for (heat from) water

Heat pumps are known as energy-efficient heat sources. However: with systems using ground heat (approximately 10 °C) the COP value does not exceed 4 to 4.5. With agricultural systems that make use of ground heat, tube exchangers and/or ventilation heat using an absorption box in the ventilation duct, the COP value can be as high as 5.5!

How do they extract heat?

An absorption box extracts the heat from the stable air through a heat exchanger. A tube exchanger extracts the heat from the washing water of the air washer. A ground heat exchanger extracts heat from the ground water. This can also be used for cooling.



Stainless steel tube heat exchanger for (heat from) water

A stainless steel tube exchanger uses the washing water from the air washer as heat source, by running the heated water from the tube exchanger over an inlet exchanger, you can easily and effectively heat the incoming ventilation air. When more heat is required, the tube exchanger can be upgraded by a heat pump. The heat can be used in a low thermal heating system such as underfloor heating as well.

The stainless steel tube exchanger consists of a large stainless steel tube with many smaller stainless steel tubes inside. The contaminated hot washing water flows inside these smaller stainless steel pipes, while the clean cold water flows along the outside. The heat is being exchanged and the heated water is transferred to the heat pump where more heat gets added.

The heat pump can raise the hot water temperature up to 50 degrees Celsius.

