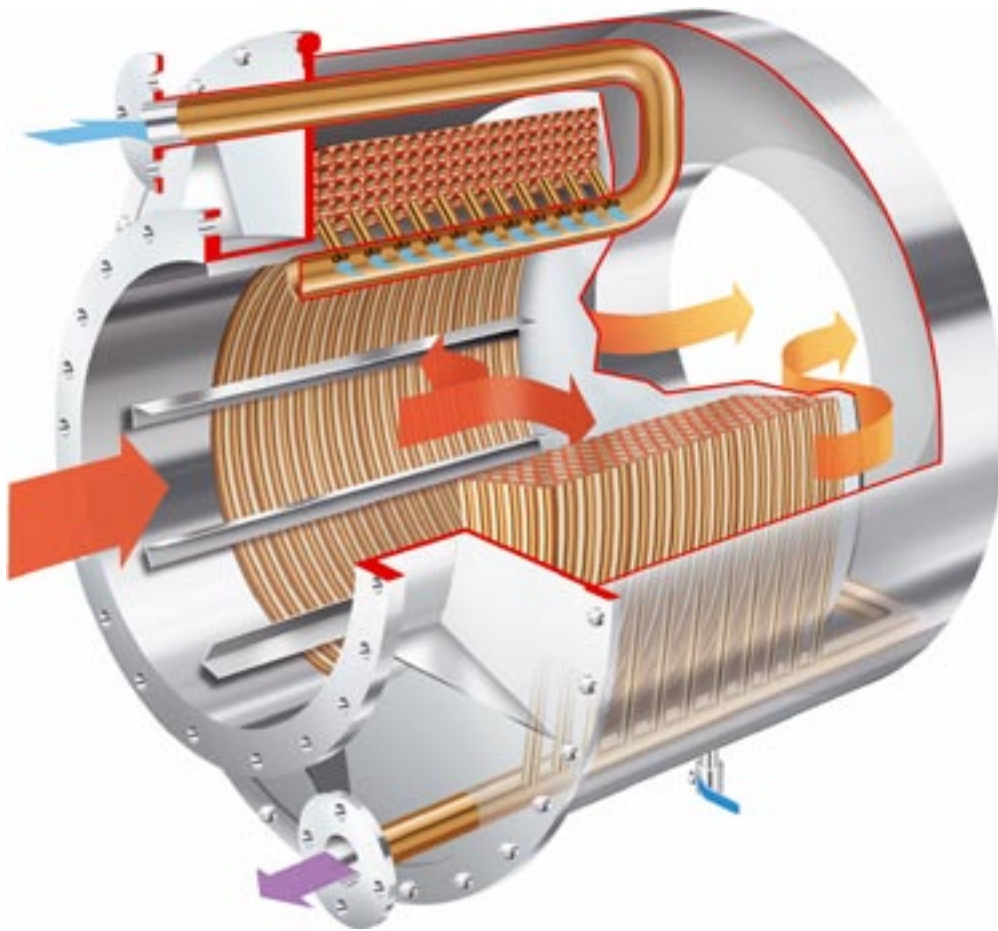


# HEAT EXCHANGER AIR/WATER



**Heat exchanger air/water from Läckeby Products has been developed to extend the service life of the membranes used in aeration tanks at sites such as wastewater treatment plants. The unit also recovers heat from the blower-produced air stream that can be used for the heating of ventilation air or tap water**

## Function

Compressed air flows into the heat exchanger axially via the air pipe. After being pressed against a wall at the far end of the heat exchanger, the air flows freely between a number of layers of surface-maximising copper loops in which the cooling agent circulates. The air is directed past the wall of the heat exchanger and then onwards in the air pipe.

## Technical features

- Effective temperature reduction of air passing through aeration membranes
- Free air flow around the surface-maximising copper loops, which contain a circulating cooling agent
- Axial mounting on the air pipe
- Concentrically arranged cooling system
- Flanged casing and front end
- Robust and compact design

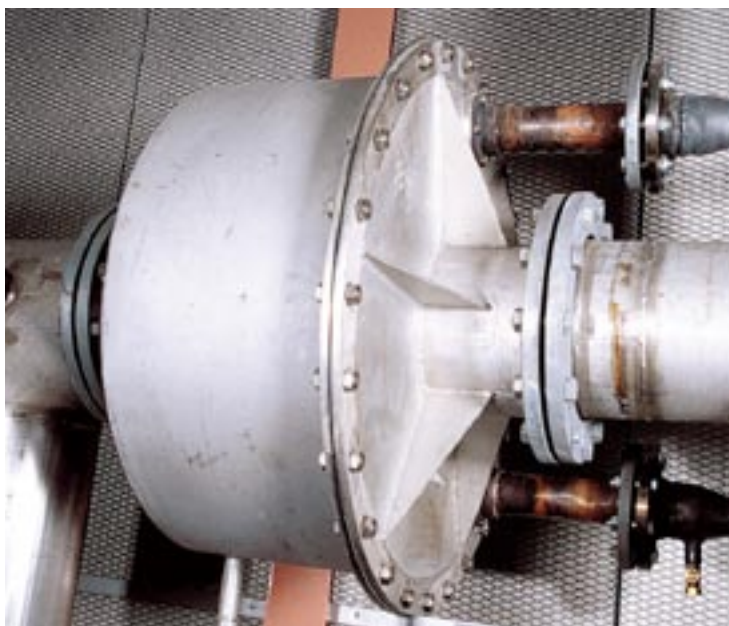
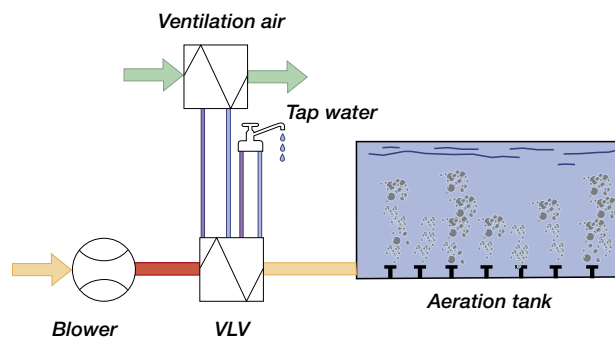
## Process benefits

- Extends service life of membranes, thereby reducing maintenance costs
- Reduces pressure loss and eliminates sensitivity to clogging on the air side
- Simplifies installation in both new and existing plants
- Makes disassembly easier for thorough inspection and maintenance

## Design

Flanged axial inlet and outlet makes installation easier in both new and existing plants, and the flanged casing facilitates easier inspection and maintenance. As standard, heat exchangers air/water are manufactured in stainless steel (1.4301) with copper cooling tubes.

	VLV 600	VLV 250
Air flow	15 000 Nm <sup>3</sup> /h	2 250 Nm <sup>3</sup> /h
Inflow air temperature	150.0 °C	120.0 °C
Outflow air temperature	59.3 °C	44.6 °C
Water flow	6.0 l/s	0.6 l/s
Inflow water temperature	10.0 °C	10.0 °C
Outflow water temperature	29.4 °C	34.3 °C
Power	489 kW	61 kW
Air pressure loss	2.0	1.8



A heat exchanger air/water VLV installed at the Djupadal wastewater treatment works in Sävsjö.

## References

Läckeby Products has installations at municipal and industrial plants both in Sweden and abroad. Heat exchangers air/water from Läckeby Products are in operation at wastewater treatment plants such as Käppala and Henriksdal in Stockholm, and Rya in Gothenburg.

*Läckeby Products develops, designs and manufactures heat exchangers. Coordinated expertise and production ensures high quality service and delivery. Läckeby Products can also participate in the planning stage and take on responsibility for everything from dimensioning to installation. Through our involvement at the planning stage, we can offer a total process guarantee.*

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