

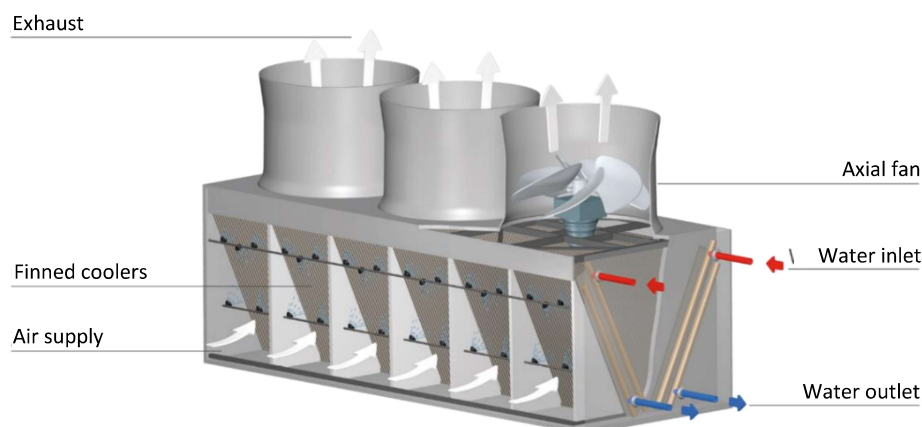
Hybrid cooler KAHV

Hybrid cooling combines the advantages of evaporative and dry cooling.



- Low cooling water temperatures
- Maximum hygiene requirements
- Good accessibility
- Customised solutions
- High changeover point

HYBRID COOLERS FOR THE CLOSED CIRCUIT WITH AXIAL FANS IN STAINLESS STEEL DESIGN



Application

The **KAHV** series (hybrid re-cooling plants) combines the advantages of the evaporative and dry cooling in one device. These are used in the following areas:

- Ventilating and air-conditioning systems
- Industrial process water cooling
- Locations with year round cooling requirements

Functional principle:

The temperature of the surroundings fluctuates widely in our latitude. **KAHV** uses the following for this:

In summer: Evaporative heat of the water

In winter: Discharge of the heat over the temperature difference into the surrounding air.

The device is operated during the transition time and in winter as a pure dry cooler.

In wet operation treated water is sprayed directly on the fins of the device. The water evaporates and cools the liquid in the heat exchanger through evaporation enthalpy. The use of the high-performance finned cooler enables reaching a high dry changeover point, which leads to maximum water savings .

Biocide-free

Through spraying of osmosis water, which is completely evaporated, an additional water treatment with anticorrosive agents, hardness stabilisers and biocides is completely omitted.

In this area no microorganisms can multiply, as the spray water is not recirculated.

Easy access

Large service hatch with integrated walkway in the interior of the device offers good accessibility to all components for maintenance and inspection.

Low-pressure spraying system

The low-pressure spraying system (max. 3.5 bar) for direct wetting of the fins in wet operation consists of stainless steel tubes and easy to replace plastic spray nozzles. The wettings of the cooling fins is done section-by-section through the water economy circuit.

Low-pressure spraying systems are significantly more economical and quieter than high-pressure spraying systems.

High changeover point

High changeover point between 17-20 °C guarantees a long dry operation with fewer wet operating hours over the year. This reduces the water costs and guarantees an economical operation .

Germ barrier

The multi-stage barrier system ensures maximum hygienic demands:

- Use of highly purified osmosis water in wet operation
- No recirculation of the circulating water
- Integrated time-cycled hygiene rinsing to prevent stagnation water in the spraying system.
- With spray lancing system designed with incline, for emptying without residues during the frost period or longer shutdown times.
- Angled tray bottom with 2% incline for a controlled flowing out of the excess water.

Optional: Hygiene filter with a filter fineness of 0.2 µm holds back germs contained in the spray water.