

Innovative use of capillary tube injection with Venturi for better distribution of the liquid and thus higher efficiency (patent pending)

In order to generate the desired supply of air conditions in central air handling and air conditioning units the sucked in outside air must be conditioned. Conditioning includes heating, cooling, humidifying and dehumidifying the air. By using heat recovery, the need for thermal energy to heat or cool the air in a boiler (heating water) or water chiller (cold water) can be significantly reduced. Thus, heat recovery is one of the most efficient, ecological and economic measures for saving energy in HVAC systems.

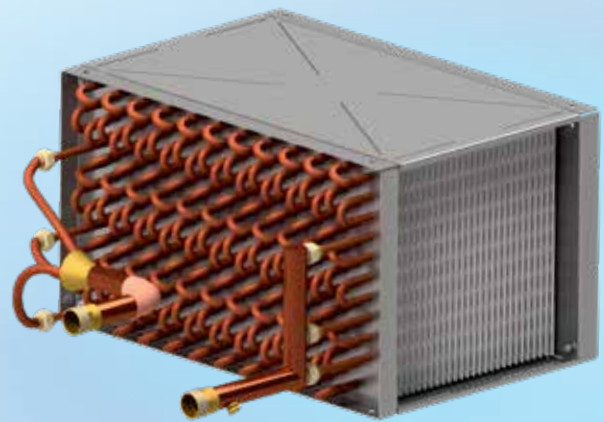
Calculation of the thermal efficiency:

$$\eta_t = \frac{t_1 - t_{AUL}}{t_{ABL} - t_{AUL}}$$

t_1 [°C]: Temperature of preheated outside air after heat recovery

t_{AUL} [°C]: Temperature of the outside air

t_{ABL} [°C]: Temperature of the exhaust air



Unique selling point:

- Increased efficiency to 72% (at 1.8 - 2.0 m/s)
- Compact device in counter flow interconnected
- Cleanable to the core at all times according to VDI 3803
- Integration of turbulators possible (further increase in performance)
- **New: capillary tube injection with Venturi for better distribution of the liquid and thus higher efficiency (patent pending)**

Advantages:

- Best price performance ratio
- Wätas as a partner of the ventilation equipment manufacturers
- Own design and technical calculation program available (training required)
- Also available in other material combinations than copper/aluminium (stainless steel/aluminium)
- Savings potential at the pressure stations
- Certifiable