KASTT

A subsidiary of VINCI ENERGIES

ENERGY FOR NEW SOLUTIONS

NEW GENERATION OF ROTOR

It brings the highest possible amount of returned energy for HVAC systems.

- HIGH EFFICIENCY
- HIGH PERFORMANCE
- HIGH-TECH

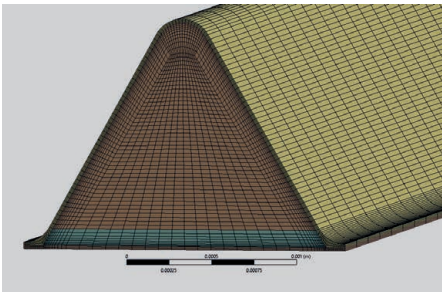
MAIN BENEFITS:

- **maximum possible efficiency of heat and humidity transfer**
- **for all rotor types - temperature, enthalpy, sorption**
- **timeless fulfillment of ecodesign requirements for ventilation units**
- **significant savings for the future**

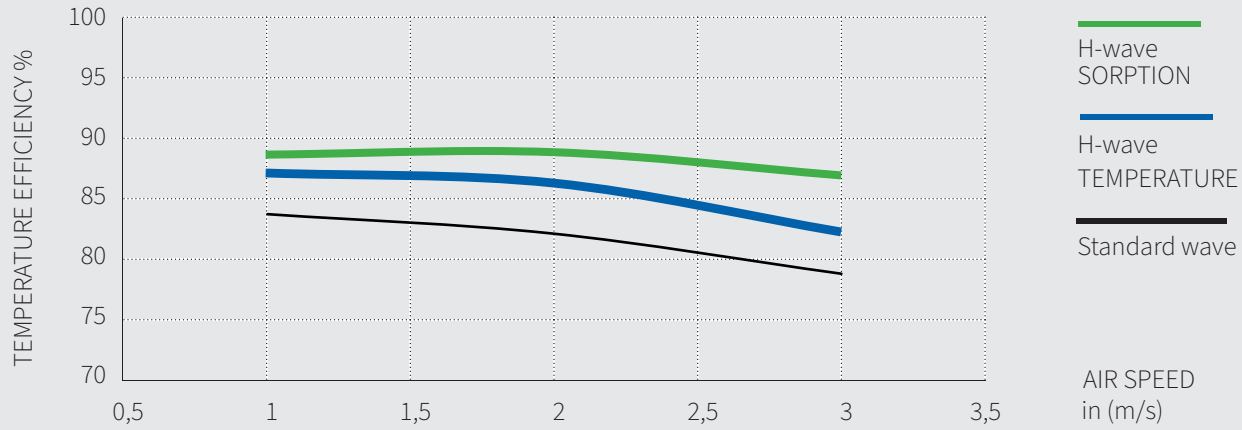
The new H-Wave rotor has the potential for the highest heat and humidity transfer efficiency. **Our technology** is now ready to meet the ever-increasing legislative requirements for ecodesign, and with 100% certainty it is **a step in the right direction in the benefits of savings for the future**.

For more information visit www.kastt.cz

The final parameters of the new rotor geometry resulted from **simulation calculations using CFD (Computational Fluid Dynamics) method** followed by numerous measurements in the test room.



TEMPERATURE EFFICIENCY



Our rotary heat exchangers meet:

- Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy related products and its implementing Commission Regulation (EU) No 1253/2014 (Ecodesign requirements for ventilation units).

Thanks to our development, we have managed to significantly push the boundaries of energy efficiency of rotary heat exchangers.

H-Wave rotor is wound alternately from a straight and corrugated layer of Al alloy foil.
The newly developed waveform is a major factor in optimizing temperature efficiency due to the warm core of the airflow approaching the duct wall.

Optimizing the wave geometry of the rotor of a rotary heat exchanger means an increase in temperature efficiency compared to a standard wave of up to 5%. In real use this means that rotary heat exchangers with the H-Wave rotor are able to achieve a temperature efficiency of almost 90% (condensing type of rotor). Humidity efficiency for hydroscopic rotor design is even up to 95%.

THE SUCCESS OF OUR DEVELOPMENT IS:

- optimal wavelength for the most efficient energy transfer with regard to the pressure loss of the duct,
- perpendicular strength of individual layers and thus the rigidity of the entire rotor,
- the most suitable shape of the duct and the most optimal thickness of the Al foil,
- optimization of energy transfer and rotor statics,
- improved economy and production efficiency.

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