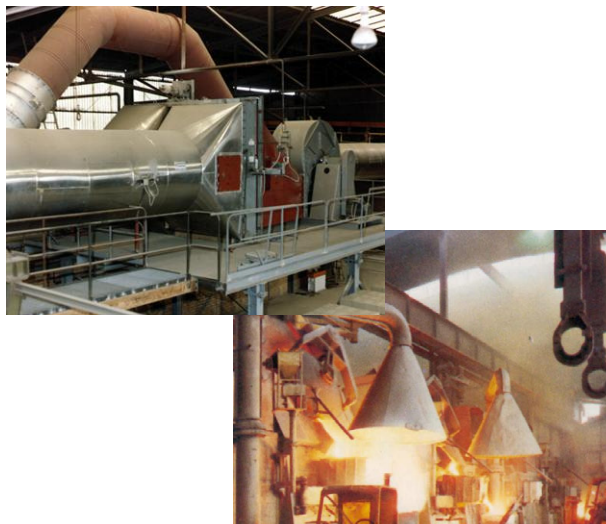


Regenerative Heat Recovery in High Temperature Applications



Applications

- Firing in process technology
- Dryer installations
- Catalytic oxidation
- And plenty more ...



Economic efficiency

- In industrial processes considerable amounts of energy can be recovered from exhaust air or exhaust gas
- In many cases the payback period amounts only a few

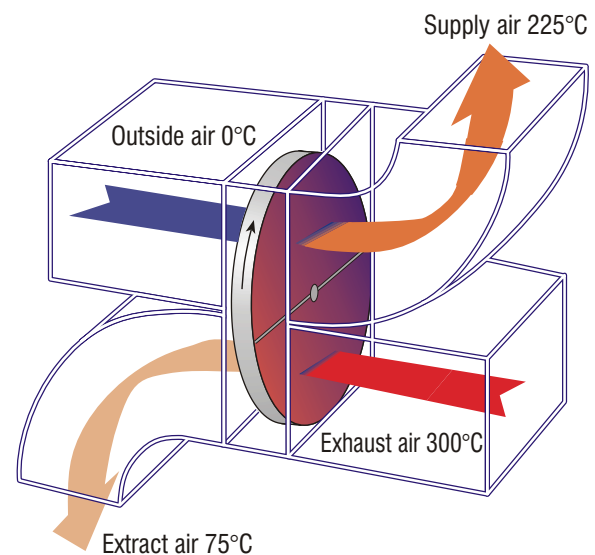
Rotortypes EM and EH

- Type EM up to 300°C, sizes up to Ø 3500 mm
- Type EH up to 650°C, sizes up to Ø 2650 mm
- Matrix out of chrome steel foil (1.4301, 1.4571 or 1.4539)
- Housing out of steel or stainless steel
- Heavy duty, welded steel casing with inner and outer shell and thermal insulation.
- High efficiency

Functional Characteristics

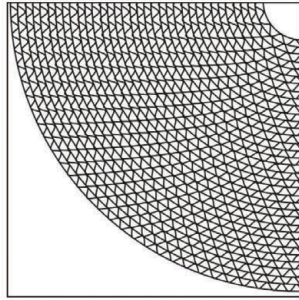
The wave-shaped rotor wheel is heated by the hot flow of exhaust air and transfers this warmth by means of constant rotation to the cold outside air flow. The outside air is warmed up there and up to 70% of the energy which would otherwise have been lost is re-used.

Example:



The matrix

- Lamellar rotor wheels with integrated welded spoke construction.
- High level of self cleaning due to a wide free cross-section and due to the fact that the airflows are in counterflow



Height of waves

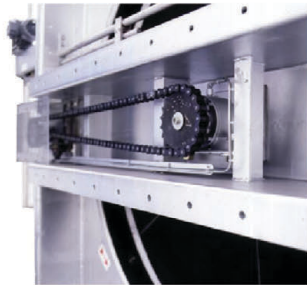
- 2,1 mm for applications where fouling of the exhaust air can be expected
- 3,1 mm for applications with a high degree of exhaust air fouling

Material

- Chrome steel 1.4301, 1.4571 oder 1.4539.

Drive

- We use a gear-motor and an external chain drive.
- The motor is installed outside of the casing.
- The heat wheel is running with constant or variable speed.

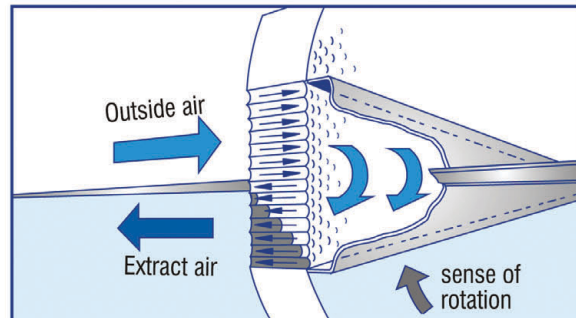


Bearings

The heat wheel lie on outside anti-friction bearings and can be adjusted. For temperatures up to 300 °C (570 °F) we use well dimensioned heat stabilized anti-friction bearings. For higher temperatures heat stabilized special bearings are used. Lubrication of bearings by external mounted units.

Cleaning sector

The rotors can be delivered complete with a cleaning sector which limits the transfer of exhaust gases or discharge air in the supply air flow. In order to enable this, the arrangement of the ventilators must ensure a pressure difference from the outside air to the extract air.



Fansealing

In certain applications, the required difference of pressure may not be able to be taken into consideration for processing reasons. In such cases, the addition of a fan is possible which limits the transfer of exhaust gases into the supply air.

Automatic Cleaning Devices

For the cleaning we offer two cleaning systems:

- For slight pollution, the use of compressed air only is sufficient.
- In other cases, we recommend to use both, compressed air and high pressure water or steam.



In case you plan rotors for process air technology a consultation with our head office is necessary in any case. Just contact us!

