

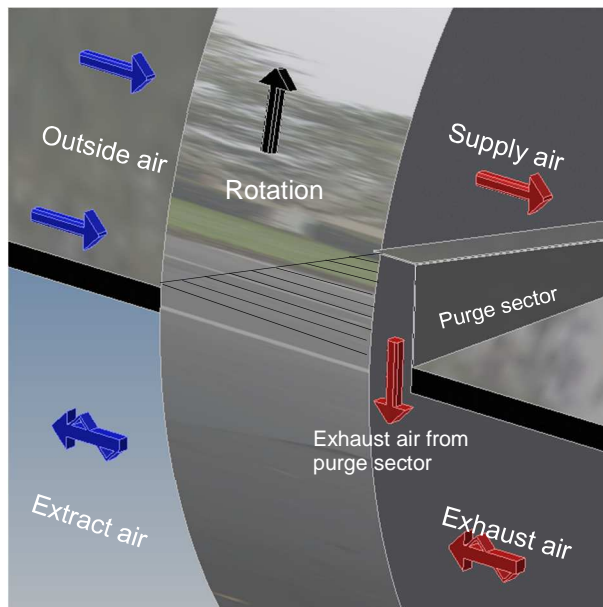
Rotary heat exchanger – Purge sector

Carry over

The heat exchanger matrix rotates between two contra-flowing air streams. When the rotor passes the divider between the air streams, the air trapped in the matrix is transferred from one duct to the other. This phenomenon is called *carryover*. If no action is taken, trapped air will be constantly transferred between the air streams. In this way, a small part of the exhaust air can get mixed with the supply air, which is not acceptable in many installations as exhaust air often can be contaminated with pollutions.

Purge sector

To prevent exhaust air mixing with supply air by carryover, the heat exchanger is installed with purge sector. (See picture)
Its function is to flush the rotor matrix outside air before it rotates into the supply air duct. In this way only outside air is present in matrix and no carryover of exhaust air to supply air is possible.



The purge sector is located on the supply side of the supply air duct.
The purge process is ensured by allowing sufficient air to flow through the rotor matrix as it passes the purge sector.
Angel of purge sector is 5°.