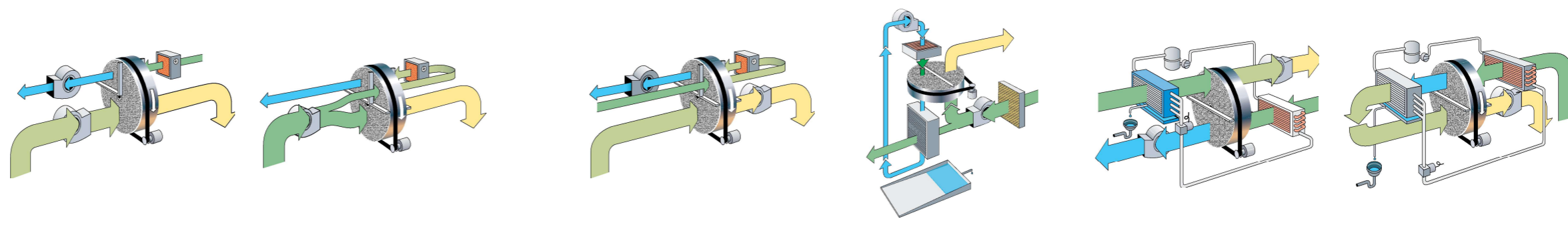


In sorption dehumidification, the basic principle is that a rotating rotor in the dehumidifier continuously adsorbs moisture from the process air. Then through a regeneration cycle the moisture is driven out of the rotor and exhausted in different ways, the principle pictures are demonstrating how.

- Incoming moist air
- Outgoing dry air
- Outgoing wet air, either passed or condensed out



The **Consorb** principle is best used at lower regeneration temperatures, typically where waste heat is available or where the air inlet moisture content is very high. The Consorb principle is also used in balanced 'closed' type systems where the dry process air is recirculated.

Recusorb DR has an internal heat recovery with one fan that produces both the dry airflow and the wet airflow. Used for introducing dry fresh air into a process or to an 'open' or 'total loss' system where the dehumidified air is ducted into the object. Can be used on both 'open' and 'closed' type systems.

Recusorb R has an internal heat recovery to improve operating efficiency. Heat transferred to the rotor during regeneration is effectively recovered by the incoming regeneration air, thus reducing the amount of energy required by the regeneration heater. The process air outlet is both cooler and drier when compared to other desiccant dryers.

Aquasorb basically functions as a Consorb but moisture in the wet air is condensed through an air cooled condenser. One centrifugal fan is used for both the dry air and the condenser cooling air, so all energy released during the process accumulates in the room. Commonly used where it is impractical to use ducting for the reactivation air system.

Econosorb combines a heat pump with the sorption rotor in a unique way, providing very low energy consumption with a low dry air temperature. It's probably the most energy efficient dehumidifier on the market, with approximately 25% of the total energy consumption of regular sorption dehumidifiers. Econosorb has both condensation and wet air flow.

Frigosorb is used in applications where it is difficult to remove a wet air flow. Thanks to the heat pump function Frigosorb is very energy efficient, using approximately 33% of the total energy consumption of regular sorption dehumidifiers.