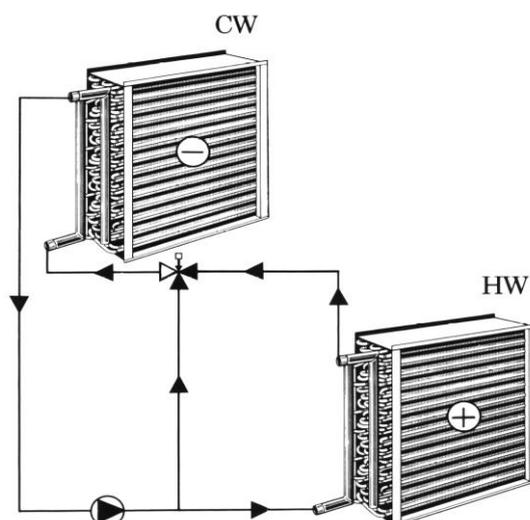


Applications

TTC heat recovery coils gives effective energy savings. This system is perfect for energy recovery at projects with a distance between cold air inlet and hot air outlet. Some systems need full separation between the ducts to avoid contamination of fresh air inlet. TTC heat recovery system is a perfect choice for installations at:

- Hospitals
- Indoor sports areas
- Schools
- Indoor swimming pool
- Factories
- Exhibition centres
- Offices



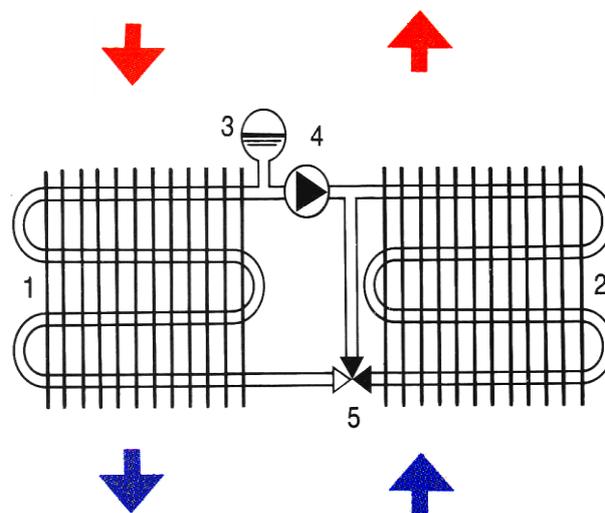
Wherever the valuable energy in hot air is “wasted” into open air

System description

The system consist of two exchangers made as standard fin coils with Cu tubes and Al fins. Other material combinations on request.

One coil (1) is installed in the hot air stream (exhaust air) and the other (2) in the cold airstream (fresh air inlet).

The coils are connected to a closed circuit with a pump (4). The fluid contains normally a mixture of water and glycol to avoid frost damage to the system. The fluid transports the heat from the hot air outlet to the cold inlet air. The heat recovery efficiency depend on the temperature difference between hot exhaust air and cold inlet air.



The three-way-valve (5) can adjust the heat recovery based on temperature in the air inlet coil. TTC heat recovery coils can include several exhaust- and fresh air inlets in one system. The exhaust coils are equipped with a drain pan to collect condensate from chilled exhaust air.

Area of use

Almost any HVAC system and industrial process can utilize TTC Heat Recovery System.

Fluid circulated systems are the preferred alternative:

- for installation in existing ventilation systems.
- when a complete separated duct system is required.
- when there is a long distance between exhaust air and fresh air inlet.
- when the dimensions of fresh air- and exhaust air ducts are different.

Fluid circulated systems do not transfer any air contamination (dust, gases, odour or bacteria), and there is no danger of fire moving between the two duct systems.

Recent years of constant product development and manufacturing of fluid connected systems with first class workmanship regarding corrosion protected materials lead us to an increasing use of such heat recovery system in industrial processes.

Available material combinations:

| Tubes | Fins* | Framework |
|--------------------|--------------------|--------------------|
| Cu | Cu | Galvanized steel |
| CuSn | CuSn | Cu |
| CuNi | AlMg3** | AlMg3 |
| Al | AluP*** | AISI 304L and 316L |
| AISI 304L and 316L | AISI 304L and 316L | |
| Titanium | Titanium | |

*There are a limited selection of fin spacing available for some material combinations.

**The aluminum alloy (AlMg3) is a seawater resistant alloy.

***AluPaint is an aluminum fin protected with polyester paint.

TTC Heat Recovery System advantages:

- High efficiency
- Low cost
- Easy to install
- Limited need for maintenance
- Easily fitted to existing ducts and AHU system
- Separated air streams

To enable us to make a quick and exact system design we will need:

1. Air inlet flow (m³/h)
2. Air outlet flow (m³/h)
3. Air inlet temperature
4. Air outlet temperature
5. Air outlet relative humidity (RH%)
6. Required efficiency (%)
7. Ev. Glycol content (%)
8. Ev. dimensional limitation
9. Ev. info on air qualities
10. Type of installation (duct, wall or AHU)



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