Recoh-multivert

Heat recovery from waste water of hotels, swimming pools, nursing homes, etc.

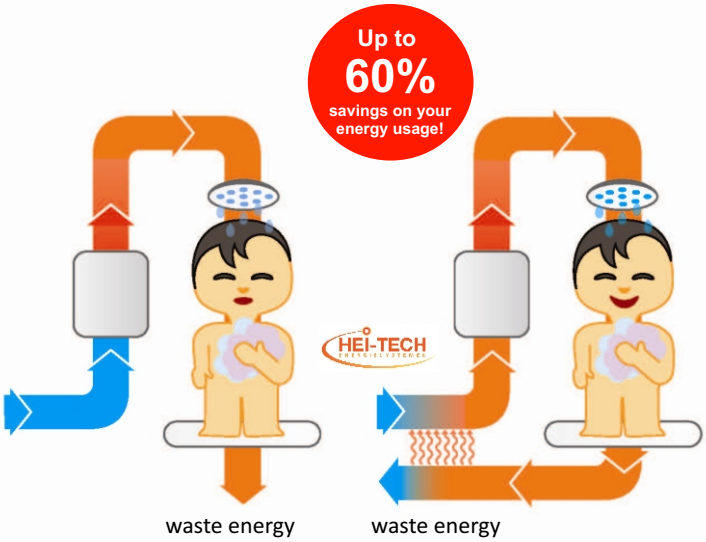
Heat recovery from shower water. Saves money and good for the environment

When showering a lot of heat is going directly into the sewer together with the waste water. With the Recoh® heat exchangers from Hei-Tech heat can be recovered from the waste water. Without a heat exchanger from Hei-Tech all the energy from the hot waste water flows away into the sewer. Overall a waste of energy.

As a result of climate change the need to save energy is very high. The Recoh® heat exchangers can make a substantial contribution to the need to save energy and thereby reduce the emissions of the greenhouse gas Co2.

The Recoh®-multivert is suitable for heat recovery in buildings with a lot of showers, such as swimming pools, sports facilities, apartement buildings, hotels, hospitals, nursing homes, etc.

Also in industrial enterprises the heat from the waste water can be easily utilized.



The principle is simpel.

The combined waste water from the showers in a building flows through pipes to the Multivert heat exchanger. In the Multivert the mains water for the showers is pre-heated with the hot waste water.

The highest efficiency is achieved when both the cold water to the showers as the cold water to the auxiliary heater is pre-heated. If only the water to the auxiliary heater is pre-heated, it has to be taken into account that the efficiency is approx 60% of what is achievable.

The result is really amazing.

Depending on the chosen system, savings of 30 to 60% can be achieved. This results in a pay-back time of generally between 3 to 6 years.

There are no pumps required. However, when the showers are on the same floor as the Recoh®-Multivert the waste water has to be pumped up so it can flow away through the heat exchanger.

Without the heat exchangers from Hei-Tech all the energy from the hot waste water will flow into the sewer. Overall a waste of energy.

The Recoh® multi-vert heat exchanger

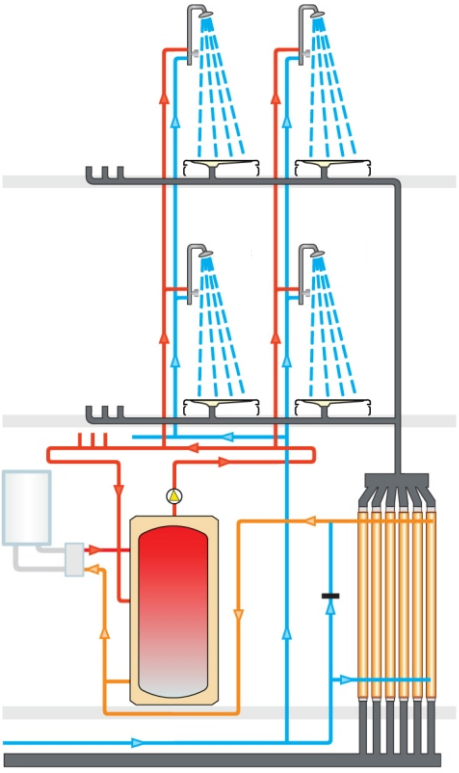
The multivert heat exchanger consists of 4, 6 or 8 parallel joined tubular heat exchangers, type Recoh®-Vert. The supplied water from the showers spread over the heat exchangers by means of a divider and flows to the sewer under gravity. At the same time the cold mains water flows up through the heat exchanger. The heat exchangers follow EN guidelines with regard to double wall separation between sewage and drinking water.

The drain unit.

The drain unit should be used when the showers are on the same floor as the Multivert. The drain unit consists of a container for the waste water from the showers, a pump and a float valve. If the level of the waste water in the container rises, the pump starts to operate and the waste water is pumped to the heat exchangers.

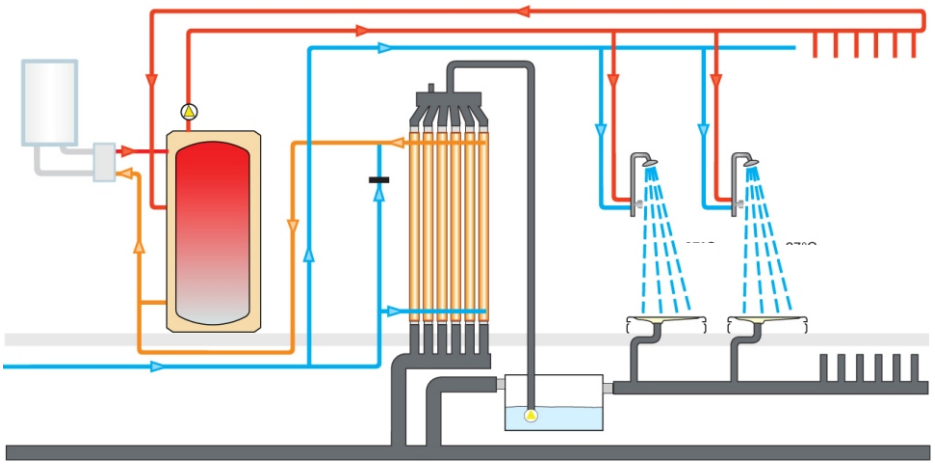
The number of people that shower simultaneously can greatly vary. To get a good return the flow of the pump continuously adapts to the amount of water coming from the showers. This is done through a float valve that allows more water to go through when the water level in the container rises and less when the level goes down.

The container is equipped with an overflow so the water can drain into the sewer when the pump malfunctions.



The Recoh®-multivert, installed in a building where the equipment room is situated on the ground floor and the showers on the upper floors.

The advantages:
Small investment
Large savings
Short pay-back time
Simple to install
Maintenance free
Reliable



The Recoh®-multivert installed in a building where the equipment room is on the same floor as the showers, as for example in swimming pools is often the case.

The Recoh®-Multivert has been successfully applied in The Netherlands in recent years.
Besides The Netherlands, the Recoh® series is also sold in other countries like the United Kingdom, Ireland, Denmark, Sweden, France, Belgium, Luxemburg, Greece and the United Arab Emirates.

With the heat exchangers of Hei-Tech you save money and make a positive contribution to climate change worldwide.
This method of energy saving is applicable in many types of buildings and is possible in virtually any climate.

Maintenance and inspection.

Maintenance is basically not necessary. The experience is that, due to the high velocity of the water that flows along the wall of the inner tube, the heat exchanger remains clean. This is easy to inspect. The applied pump is suitable for dirty water. If there is a problem with the pump it is easily exchanged and cleaned. The float valve requires no maintanance.

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