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Home HUBER Report Energy from wastewater - the HUBER RoWin Heat Exchanger is becoming increasingly popular

Energy from wastewater - the HUBER RoWin Heat Exchanger is becoming increasingly popular

A sewage treatment plant in Witzenhausen, a retirement home in Switzerland, and an office building in France – What do they have in common? The answer is: They all use eco-friendly, regenerative energy from wastewater during the next heating period. This demonstrates the wide range of applications the HUBER RoWin Heat Exchanger offers. In the shadow of the large order HUBER received from the Ministry of the Interior in Stuttgart it have been the smaller orders which show the wide field of application of the HUBER ThermWin® System.



WWTP Witzenhausen

On WWTP Witzenhausen for example the energy contained within the wastewater is used to heat the digester, the chamber filter press and the operator building. Previously, especially during winter, the block heat and power plant (operated with sewage gas) could not supply enough energy. Mineral oil had to be used additionally. But as huge amounts of (warm) wastewater are present on sewage treatment plants anyway, the wastewater is an ideal alternative energy source. HUBER developed a conclusive concept for the heat supply on site, which includes a HUBER RoWin Heat Exchanger and heat pump. This concept is certainly suitable to be applied on many other wastewater treatment plants as well.

More than 500 km south of Witzenhausen lies Münchenstein, a small town of 12,000 residents near Basel in Switzerland. In 2000, Münchenstein was officially put on the list of 'energy cities'. The people living there are proud that they can contribute to achieving the climate goals and preserving our living environment. But as the list status is verified every three years, Münchenstein must continuously make efforts to stay on the list. It is therefore no surprise that the local retirement and nursing home Hofmatt decided to use regenerative energy sources when they renovated and expanded their care facility. For the first time, the HUBER RoWin Heat Exchanger is fed exclusively with the wastewater from their buildings. Short ways within the buildings, combined with a certain buffer effect of the heat exchanger, ensure that the heat level at the connected heat pump is high. The heat pump operates with a high

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New retirement and nursing home Hofmatt in Münchenstein

performance and therefore provides an economical and efficient solution of water heating and hot water supply for the buildings. Such innovative 'recycling' of heat energy saves fossil fuels so that Münchenstein can rightly hope for even more awards.



Office building in Tours (in the planning stage)

Another 700 km west of Münchenstein lies Tours in France, between Orléans and the Atlantic coast. In autumn 2012, the first HUBER ThermWin® unit in France will be installed in Tours with its 140,000 residents. An office building of about 2,100 m² area is being erected in the city's district Saint Pierre des Corps as space to be leased to companies and authorities. The local employment office will be the first to move in. The HUBER ThermWin® system will be used for heating and cooling, like at Winterthur in Switzerland, a previous HUBER project. The French investor made his decision in favour of the HUBER solution after they had visited the HUBER project in Straubing. The operators in Straubing had told them about the high operational reliability of the system and the resulting constant heat transfer.

Applications where heat pumps save energy on sewage treatment plants, support heating plants in housing developments and public facilities, or climatise office buildings, are nothing special. It is however unusual that municipal wastewater is used as an energy source in such applications. Wastewater is an ideal energy source with a high heat capacity and high temperatures during the heating period. Its energy value is outstanding, and the HUBER RoWin Heat Exchanger impressively eliminates the disadvantage that it is contaminated water. Germany and Switzerland were the first to make use of energy from wastewater, now also France is jumping onto the 'energy-from-wastewater train'. Packed with solutions for the most different applications and profitable cost-saving solutions, it will

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