#### Huber Technology Middle East



#### Home Products Energy from Wastewater

**Energy from Wastewater** 



Wastewater contains thermal energy, and we can recover some of this energy with heat pumps.

With our HUBER ThermWin system for heat recovery from sewage we withdraw sewage from the sewer, screen it, pump it through above-ground Heat Exchangers, and then return it back into the sewer.

Because we screen and pump the sewage, we can use compact and cost-effective heat exchangers, wherein we generate a welldefined and turbulent flow for efficient heat transfer.

For screening we use a vertical screw screen HUBER Pumping Stations Screen ROTAMAT® RoK4 that is compact and lifts the screening through its vertical auger. Returned sewage flushed the lifted screenings over a chute back into the sewer.

### Products

- HUBER Heat Exchanger RoWin
- HUBER Pumping Stations Screen ROTAMAT® RoK4

### Benefits

- Efficient use of renewable and sustainable energy
- Unlimited availability, secure supply
- Local and free, decentralized heat source
- Cost-effective from a dry weather flow of around 10 L/s
- Negligible effect on wastewater treatment (sewage cooling by 1 2 °C only)
- Independence from sewer size

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- Use of compact, efficient and cost-effective heat exchangers
- Heat exchangers above ground (easy access for installation and maintenance)
- Little construction work (narrow manhole beside sewer)
- Minimal interference of existing sewers (only drilling of two holes)

# **Case Studies**

- Energy input to the heating instead of sewage: Technische Hochschule Mittelhessen, a university of applied science, uses HUBER ThermWin for heating and cooling with wastewater
- Energy from wastewater the HUBER RoWin Heat Exchanger is becoming increasingly popular
- Three HUBER projects for wastewater heat recovery in Switzerland
- First HUBER ThermWin plant for wastewater heat recovery in Switzerland
- Economic efficiency of heat recovery from wastewater
- HUBER ThermWin utilizes wastewater heat
- Reducing the discharge temperatures of industrial wastewater treatment plants utilisation concepts for excess heat

## Downloads

Brochure: HUBER Heat Exchanger RoWin [pdf, 390 KB] Further information

Brochure: Heat Recovery from Wastewater (HUBER ThermWin process) [pdf, 412 KB]

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