

HIGHRISE OFFICE BUILDING - WINTERTHUR, SWITZERLAND—ENERGY FROM WASTEWATER

CASE STUDY

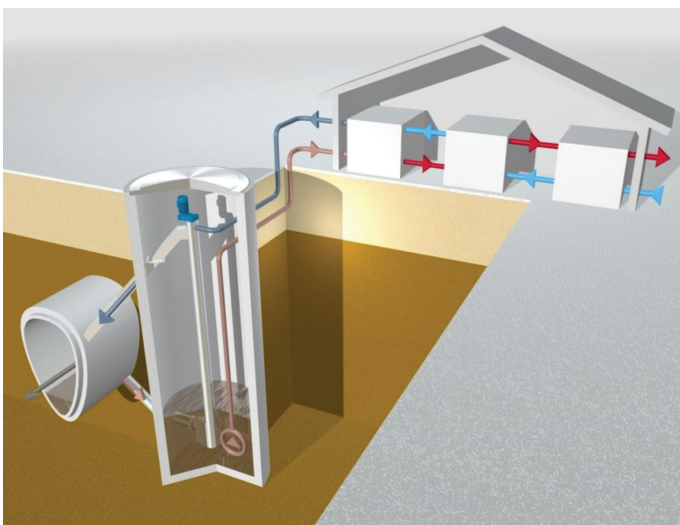
Wastewater is a rarely used, but is an excellent heat source for effective and economical operation of heat pumps. Generally the temperature of wastewater is in a range of 10 °C - 20 °C all year round. However to utilize this heat source, screening of the wastewater is essential to allow use of a compact heat exchanger and prevent blocking of the heat exchanger pathways. To allow easy operation and maintenance of the system, all components of a HUBER system, (i.e. the screen as well as the heat exchanger), are located outside of the sewer and are thus easily accessible.

The Wintower building stands 99m high, has 28 floors of office accommodation and a penthouse apartment on the top.

HUBER Recovery System For this project, HUBER designed, supplied, installed and commissioned a sewer mining system, which yields 440kW of heating, respectively of cooling.

The system operates with a Coefficient of Performance (COP) of approximately 5-6.

The HUBER ThermWin® system utilizes ROTAMAT® Pumping Stations Screen RoK 4 prescreening unit



The Wintower building is situated in Northern Switzerland.