

SELF-SUFFICIENT DISTRICT HEATING (0.96 MW) AND DISTRICT COOLING (0.83 MW) AS THE ENERGY CONCEPT OF THE FUTURE



The ZESS research center on the MARK 51°7 site

Photo: agn

Initial situation

A future-oriented energy concept has been installed on the former Opel site Mark 51°7. For the first time, an area of 70 hectares in size is supplied with heating and cooling obtained using geothermal energy.

- Low primary energy factor below 0.5 through use of geothermal energy for heating and cooling supply.
- Feeding of surplus energy into the local FW grid by the companies.

Various users such as RUB ZESS and also DHL are attached to the total area of the former Opel site.



Station for district cooling transfer

The Ruhr-University Bochum (RUB) operates the research center ZESS here with a building size of about 20,000 m². In the Research Center for the Engineering of Smarter Product-Service Systems, scientists work on issues related to Industry 4.0.

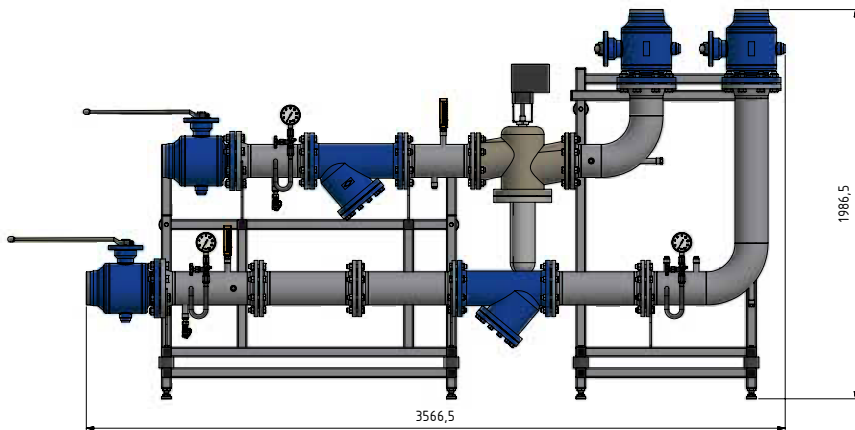
Hydraulic diagrams and Technical drawings of the two stations on page 2.

If you have any questions, please feel free to contact us at any time.



Station for district heating transfer

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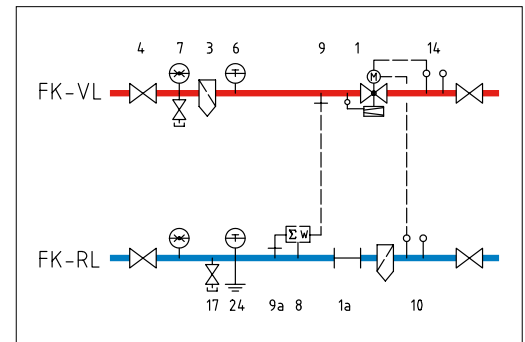


Drawing of the district cooling compact station

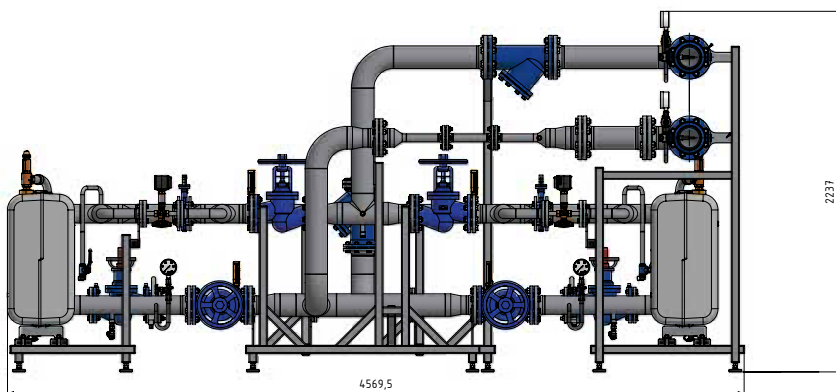
The ewers solution

District cooling compact station

- Power: 830 kW
- Nominal width: DN150 / DN150



Hydraulic representation

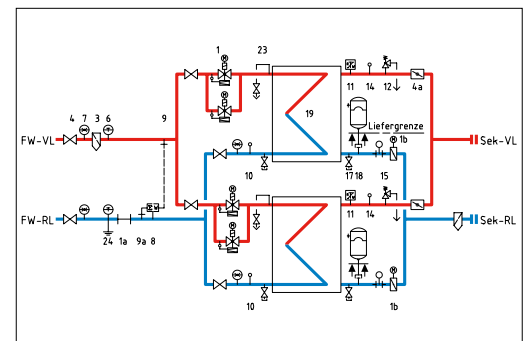


Drawing of the district heating compact station

The ewers solution

District heating compact station

- Power: 960 kW
- Nominal width: DN125 / DN125



Hydraulic representation