

5. Conclusion and Summary

The objective of this work is to develop the concept of the hydraulic system for a diffusion-Absorption cooling machine (DACM) of 5 kW in winter and summer.

The system of technologies to which the DACM belongs is planned to be used in winter and summer in order to warm up and cool down a part of the installations of the Center for Bauphysic of the Stuttgart University of Applied Sciences in Vaihingen.

Taking in consideration the different working temperatures of the components of the DACM; and the temperature working range of the components of the system of technologies; such as geothermal heat exchanger and solar collectors; the disposition of the equipments was established. Additionally, equipments such as cooling tower, cold storage tank and fired heater are also included in order to cover the cooling and heating demand of the system in extrem conditions.

In future projects considering the building of this system of technologies, improvements and establishment of best operation parameter can be obtained.