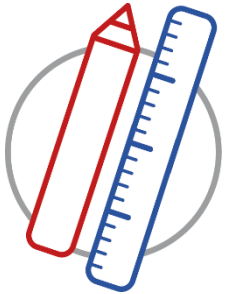
GEOKOAX®
geothermal systems



geoSIM®
simulations

Reliability and Accuracy in planning your geothermal energy projects

geoSIM – your tool for simulating and sizing

of borefields with GEOKOAX

- Simulation tool to assist geologists, construction planners, architects, drilling companies and heating and/or cooling engineers.
- For easy and quick planning of any size of geothermal ground heat exchanger systems – from small systems with only few kW up to complex large-scale systems including District Energy Systems (DES).
- Tool tests and analyzes the variables between the required heating and cooling capacities, peak and base loads, ground conditions, heat exchange fluid requirements and probe lenghts and spacing.
- Allows for the inclusion of Thermal Response Test (TRT) results and to control the simulation process with individual borehole resistance values.

The tool‘s easy and intuitive user interface and its quick calculating times help reduce your daily workload and are customizable for your individual needs.

A wide range of design and planning options

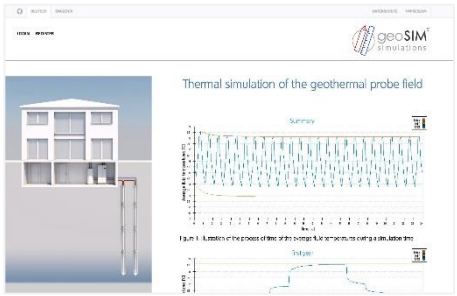
for all energy load requirements and circumstances

https://geosim.de/en

geoSIM simplifies your work and offers reliability!

Register and access geoSIM for free.

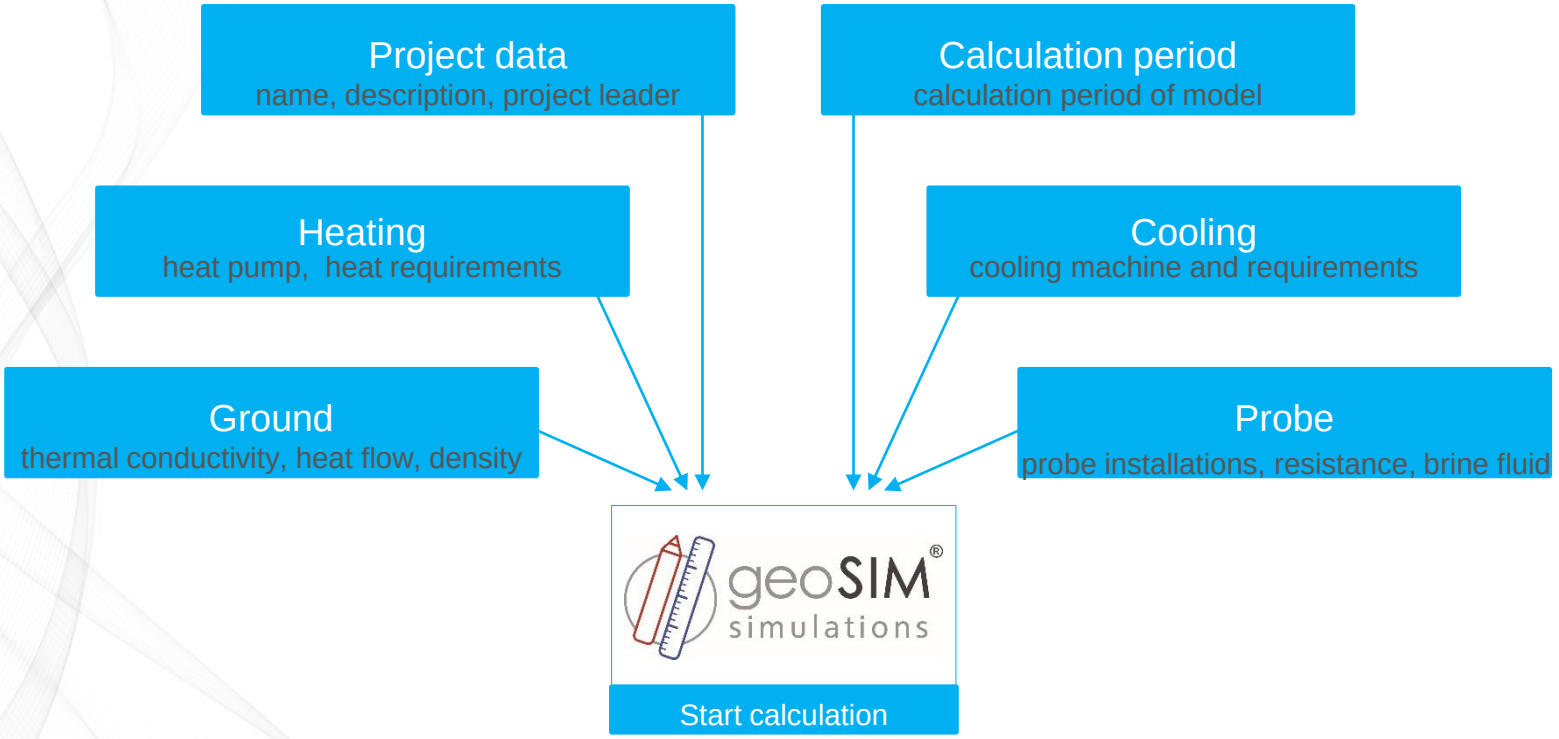
Registration



Start and customize your projects.

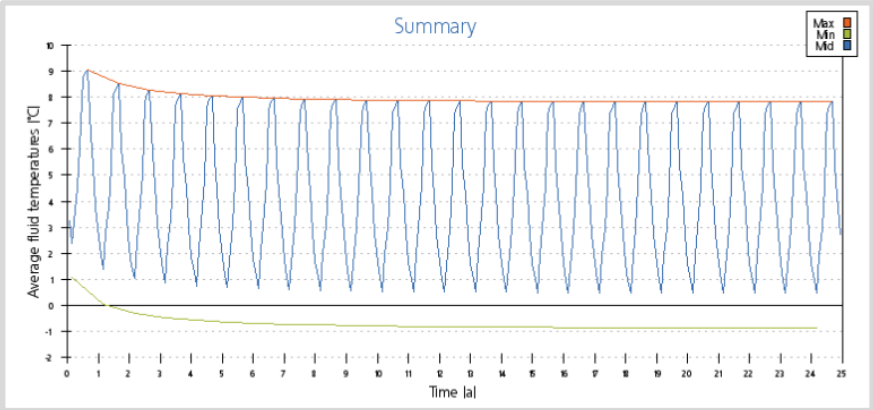
Reliability and accuracy in planning your geothermal energy projects – project calculation, management and archiving at the same time.

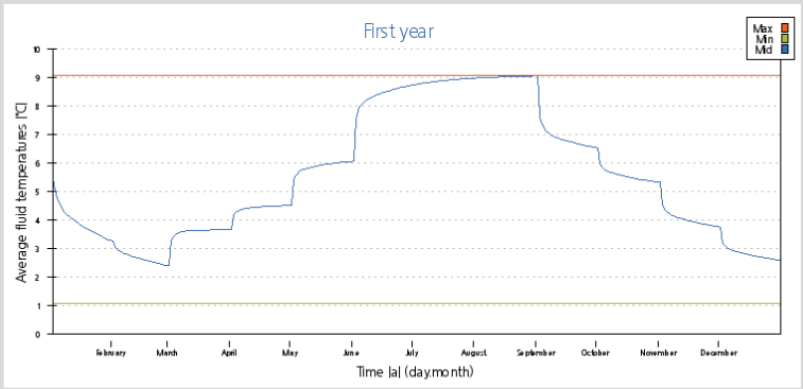
Start a new project – input parameters

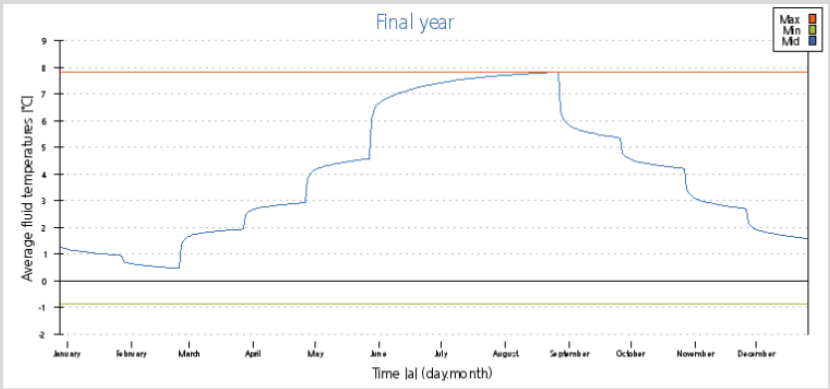


Thermal simulation of probe fields

Predictive calculations of thermal borefields over a duration of 25 years







Know-how of various technical institutes

For a worldwide unique solution – geoSIM simulations

- The GEOKOAX GHX features up to 6.5 times as much carrier fluid volume as conventional probe systems.
  - The coaxial tube is filled with a heat carrier liquid with particularly low viscosity and serves to store heat. This permits a precise release of the required energy at a constant temperature and also longer down-times of the heat pump, which are relevant for annual performance figures.
  - Therefore, GEOKOAX GHX allow much higher liquid temperatures and save up to 50 % bore meters.

- This different physical behaviour requires a fundamentally different and sophisticated calculation approach, because the rather short-term behaviour of the system containing of heat pump / cooling machine as well as geothermal probe needs to be represented dynamically.

- geoSIM as planning and simulation tool was successfully developed despite high demands on the details of the model. A tool with which probe fields and also complex borefields can be simulated and calculated within a few seconds over a time simulation period of many decades.

geoSIM – start now

https://geosim.de/en