

# ZE SOL

**manual for dimensioning tool**

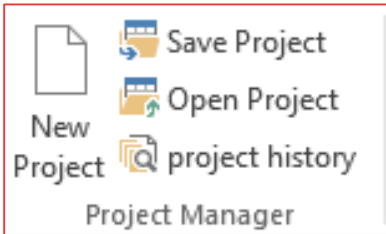


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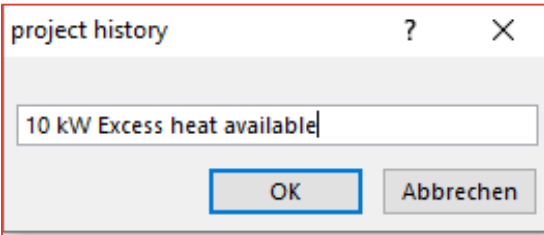
**AdCalc:****Accurate &  
State of the Art**

- Statistical weather data obtained from Meteonorm data base are used to calculate accurate results
- Software is updated and maintained regularly to insure an optimal designing experience and up to date results
- An online version is currently under construction

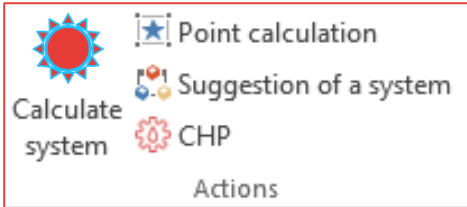
## Project data



- In the [Project Manager](#), the user can create a new project, save it, or load a previously saved project.
- By clicking on [project history](#) the user can load different versions of the project that were previously saved.



- After the project is saved the first time, each time the user clicks on [Save Project](#), a new version of the project will be saved.
- The user can then write a specific name for that version to be saved in [project history](#).

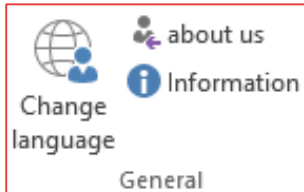


- In Actions, the user can perform the following:
  - By clicking on [Calculate system](#), the simulation results will be calculated based on the current inputs and a report will be generated
  - In [Point calculation](#), the user can calculate the capacities and the thermal COPs of the different adsorption chiller models at different inlet and outlet temperatures, and a short report can be generated.
  - In [CHP](#), the user can configure a CHP system for tri-generation projects

## Project data



- In Navigation, the user can switch between the [Cockpit](#), where all the input fields and functions are located, and the [Report](#) that is generated after clicking [Calculate system](#).



- The user can choose between 4 languages for the [Cockpit](#) and the [Report](#): German, English, Greek, Italian, and Polish.
- A user guide will appear when the user clicks on [Information](#).

## Project data

### Project data

Project name	Solar cooling - Hong Kong
Project number	23.01.2020.I
Project address	Hong Kong
Contact Person	Client
Autor	Bashir Kanawati

- In [Project data](#), the user can enter a name and number for the project as well as the project address and contact person.

### General Information

Location

HONG KONG INTL ARPT

- In [General Information](#), the user can choose a project location from the list. The simulation results will then be based on hourly weather data obtained from Meteonorm for that particular location.

## Project data

### Heating demand

Heat source temperature

90,0 °C / 80,0 °C

- The user can specify the available [heat source temperature](#) (inlet/outlet), as this will affect the capacity and thermal COP of the adsorption system.

Heat source

max. driving heat

60,0 kW

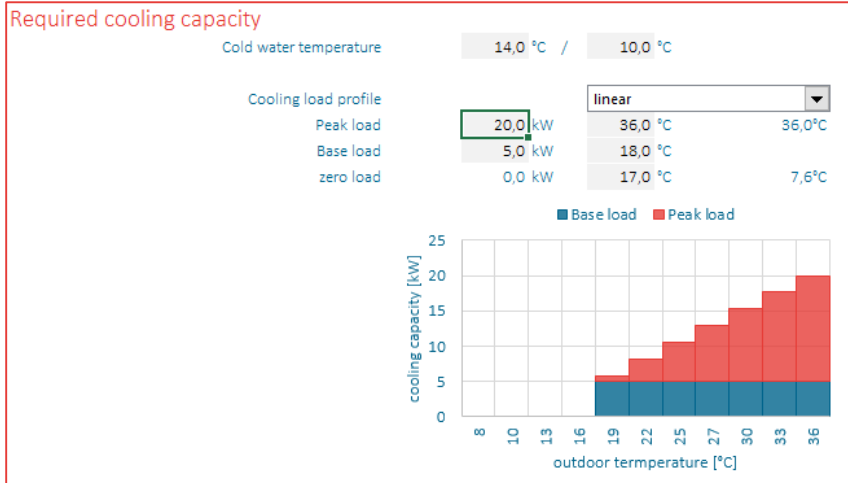
other

Priority of the heat supply

Heating demand

- The user can enter the available heat in kW from the heat source that will be used in this project.
- Choosing the [Priority of the heat supply](#) ([Heating demand](#) or [Cooling demand](#)) is only relevant when a heating profile is defined, which is usually the case for projects, where the heat source is a CHP plant.

## Project data



- The user can specify the **Cold water temperature** (inlet/outlet) that suits their cooling application.
- The user can choose the type of the **Cooling load profile**; either linear, constant, or logarithmic, depending on the cooling application.
- The required **Peak load** is usually set at the highest ambient temperature at the location, which is written also in blue next to the input field.
- A **Base load** can also be specified if needed. This is usually the case when cooling of a server room or a process is involved.
- The temperature input field at **zero load** refers to the ambient temperature at which the cooling will start.

## Project data

Month	From	January	▼	to	December	▼
Monday	From	07:00	▼	to	19:00	▼
Tuesday	From	07:00	▼	to	19:00	▼
Wednesday	From	07:00	▼	to	19:00	▼
Thursday	From	07:00	▼	to	19:00	▼
Friday	From	07:00	▼	to	19:00	▼
Saturday	From	07:00	▼	to	19:00	▼
Sunday	From	07:00	▼	to	19:00	▼

- The user can specify the cooling period (starting month to last month), as well as the weekly operation hours.

## System configuration

Product description

1x Zeo M 10

Connection code

11()

Glykol

0,0%

- In [Product description](#), the user can configure the adsorption system they want to simulate the results for.



## Project data

System separation	0,0 Piece	---	▼
		Glykol	0,0%
kind of recooling		dry reccoler	▼
Dry cooler	1,0 Piece	eRis 20   58	▼
free cooling		with	▼

- A [System separation](#) is needed when glycol has to be used in the external re-cooling circuit, for each adsorption chiller there is a suitable system separation that the user can choose.
- The user can choose what [kind of recooling](#) will be used in this project ([dry](#), [with spray system](#), [cooling tower](#), [geothermal](#), or [adiabatic](#)).
- The user can then specify how many [dry coolers](#) of a particular type will be used, and whether [free cooling](#) will be required in this project.