

humidifier sizing and selection software

CAREL

The background features architectural drawings of a building, including floor plans and elevations, rendered in a light green color. On the right side, there is a grid of thin, curved lines that create a sense of depth and perspective, extending from the top right towards the bottom left.

humidITools

complete tool

guides through all the steps in the sizing process and provides all the useful information relating to the project, including **tender specifications**

dedicated to professionals

designed by CAREL to provide reliable and certain results with significant time savings, being the only tool that uses a certified climate **database**

available online!

from any point in the network, at any time, a quotation can be requested on the system being sized with the consultation of a **CAREL specialist**

inputs



1 choose the type of installation...

...in the room

for humidification in rooms occupied by people (offices...) or industrial and manufacturing environments.

...with centralised steam

for large residential/commercial structures and hospital complexes.

...in AHUs/ducts

for air humidification inside ventilation systems.

...for steam baths

for wellness centres and personal health and care institutions.



2 specify the air renewal requirements

The data can be specified by choosing one of the cities or climatic zones from the databases or by entering the values manually.

The databases contain the climatic data from the last 10 years or more, collected by qualified and certified weather bureaus.

3 set the conditions of the humidified air

In this step, set the desired air temperature-humidity conditions following humidification

4 enter the installation data

Before calculating the humidification requirement, humiTOOLS offers the possibility to further specify the details of the application.

Freecooling operation can be set, either linear or in steps, with reference to the temperature or the enthalpy.

In addition, a series of values can be entered relating to the air-tightness of the building, so as to allow a more precise calculation.

For further information on this topic, see "Air humidification", the book published by CAREL in collaboration with a well-known expert in the sector, which covers the technical, health and energy aspects of the humidification process.



www.carel.com



access the homepage and click the banner to open humiTOOLS...

registration



...once registration is complete, a password will be sent via email to access humiTOOLS.



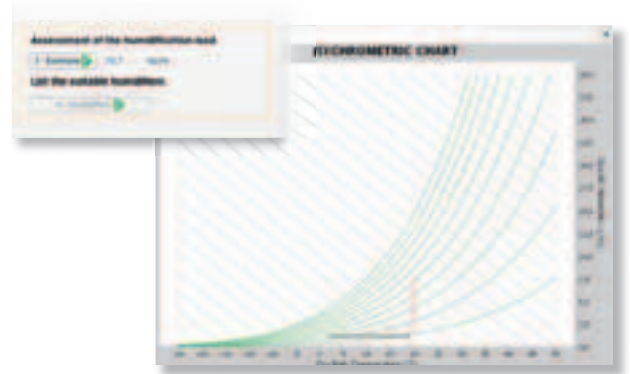
outputs

5 estimated humidification requirement

This step displays the humidity load required to reach the desired air temperature-humidity conditions.

The estimate is the result of a very complex and arduous calculation that is simplified by humiTOOLS using the special algorithms developed by CAREL.

This innovative tool, with its simple and intuitive interface, therefore ensures significant time savings. With humiTOOLS, CAREL provides professionals the experience and know-how that make it the leader in the sector.



6 list of compatible humidifiers

CAREL offers a complete series of humidifiers that can satisfy the needs of any type of application, both adiabatic and isothermal. Based on a given humidification requirement, humiTOOLS proposes a selection of humidifiers that are compatible with the installation specifications.

Furthermore, for each product the program provides a series of very useful additional information to help understand which solution is most suitable for the specific application:

- a detailed description of the unit;
- the possibility to download all the latest documentation relating to the unit and its accessories;
- the tender specifications (with specific reference to the unit selected);
- a summary of the complete design.

The user can return to the previous step at any time, modify the data and run a new calculation.



print

the sizing calculation, complete with the installation data



save

the sizing calculation on your PC



request

a quotation directly from a CAREL expert



languages and units of measure

languages available: Italian and English.
units of measure: metric and Imperial.



help

click the symbol for help

additional modules

Acceptability of the supply water



This application checks compatibility between the supply water available and the humidifiers.

Based on data from a standard water analysis, the software indicates the treatments required to make the water compatible with each humidifier



Linear steam distributors



This application has been developed to simplify the choice of the distributors in situations where a source of steam is already available.

Setting the air conditions before and after the humidification process, and specifying the characteristics of the duct, the software provides a list of linear steam distributors that are suitable for the duct, specifying, where necessary, compatibility with the estimated steam flow-rate.

