



EUROTEC

HVAC Business Unit

Newsletter

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Isothermal vs Adiabatic humidification
humiFog celebrates 20 years
Product Preview: NEW Testo 560i
digital refrigerant scales



SPOTLIGHT ON: Isothermal vs Adiabatic humidification

Do you know the difference between isothermal and adiabatic humidification?

Correct humidity control improves indoor air quality, however we know that sometimes it is not easy to choose which humidifier is best suited to the needs of each specific environment.

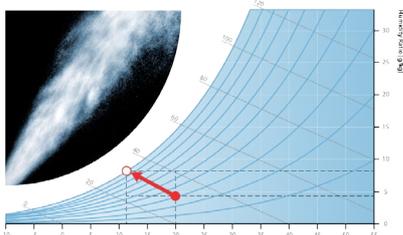
If you have already used the CAREL CPQ selection tool, you will know how easy it is to enter your project data and find out whether you need an isothermal or adiabatic solution.



So, what exactly does adiabatic and isothermal humidification mean? Which humidifier models use these systems?

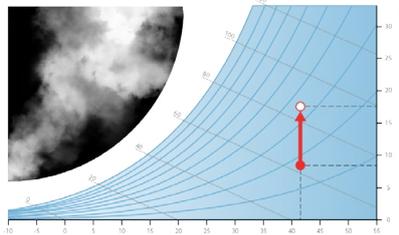
Adiabatic Humidification

Adiabatic humidifiers involve direct evaporation of water into the air without adding external energy, and therefore without raising the temperature; the heat required for evaporation is supplied by the humidified air, which is consequently cooled.



Isothermal Humidification

The introduction of steam into a stream of air will cause it to be humidified. The change in state from liquid to gas has already taken place elsewhere, with the necessary addition of energy and thus the humidification process occurs without the typical lowering of the temperature as occurs with atomisation or evaporation of water.



CAREL's offering for adiabatic humidification includes:

- Pressurised water humidifiers
- Centrifugal humidifiers
- Ultrasonic humidifiers
- Compressed air water humidifiers
- Evaporative cooling atomisers

Models include:



humiDisk
Centrifugal Adiabatic Humidifier



humiFog
High-Pressure Adiabatic Humidifier



humiSonic
Ultrasonic Humidifiers

CAREL's offering for isothermal humidification includes:

- Immersed electrode humidifiers
- Centralised steam distributors
- Gas-fired humidifiers
- Heater humidifiers
- Atmospheric pressure steam distributors

Models include:



heaterSteam
Electrical Steam Humidifiers



humiSteam
Immersed Electrode Steam Humidifiers



ultimateSAM
High Efficiency Centralised Steam Distributors



gaSteam
Gas Fired Isothermal Humidifier

Product News

humiFog is CAREL's best-selling adiabatic humidifier and it has now been on the market for 20 years!



Since 2002, products that use adiabatic humidification have become ever more reliable, tested, and safe.

This humidifier, developed to guarantee improvements in indoor air quality, has however not always remained the same: it has evolved and adapted for use in all types of environments, whether industrial, commercial, or healthcare. If you are interested in learning about the operation of adiabatic systems and effective indoor air quality control, we recommend reading the article entitled "Indoor air quality and relative humidity control, old concepts new traction", by Andrea Oscar Frisiero, CAREL Application Manager - Indoor Air Quality and Climate Control.

[Go to the article](#)

Unveil the latest adiabatic humidifier!

Increases in the cost of energy is making it harder to manage systems that require high energy consumption to ensure optimal operation. Choosing an adiabatic humidifier is one potential strategy for achieving the same efficiency at lower costs than when using an isothermal equivalent.

In Carel's free webinar on 4 May at 4 pm CEST, this topic will be the starting point for explaining the development of the new humiFog Multizone Touch adiabatic humidifier.

[Sign up for the webinar!](#)

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Product Preview

NEW! Testo Digital Refrigerant Scale

Be sure. **testo**

Introducing the testo 560i Digital refrigerant scale with Bluetooth and intelligent valve.

The innovative refrigerant scale testo 560i makes charging refrigeration systems and heat pumps revolutionarily simple.

The scale and intelligent valve enable automatic charging according to the target value thanks to patented technology, and work as a team with testo digital manifolds and the testo Smart App for your smartphone and tablet.

COMING
SOON!



For further information or to pre-order your 560i scale contact us on 09 579 1990 or email sales@eurotec.co.nz

[FIND OUT MORE](#)

Testo 560i at a glance:

- Wireless measurement of the refrigerant weight
- Automatic and precise refrigerant charging according to target value with intelligent valve
- Operation by testo manifolds and testo Smart App via Bluetooth
- All measured values at a glance in the manifold and App
- Storage of measurement data in the App
- Especially handy thanks to compact housing, low weight, practical carrying handle and sturdy shoulder bag
- Compatible with Testo manifolds, Testo Smart Probes and testo Smart App

