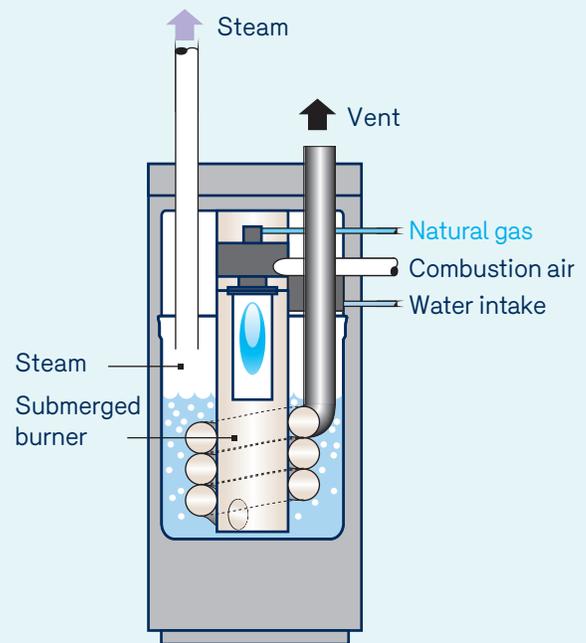


# Natural gas humidifier

## Concept

A humidifier is an appliance that is used to produce and inject humidity into the air. Air can naturally absorb or contain a certain amount of humidity, measured as a percentage compared with the maximum value it can contain at a given temperature, i.e. relative humidity. A natural gas humidifier produces steam using a natural gas burner. The steam can be produced from tap water or from softened or demineralized water. Unlike water, steam contains no mineral salts. When steam is produced, the mineral salts remain in the water reservoir and accumulate there, forming scale. Scale is particularly harmful for electrode humidifiers. Gas humidifiers differ from electrode humidifiers in that they are much less susceptible to scale and calcium deposits.

**The illustration shows that the humidifier injects steam into the ventilation duct and that the appliance can be controlled by a central system.**



## Advantages

- More economical to operate than an electric electrode humidifier
- High efficiency appliance – 83% and over
- Easy maintenance
- Smaller footprint than steam boilers

## Applications

- Schools
- Hospitals
- Museums and public buildings
- Textile industry
- Agrifood industry
- Paper and cardboard mills
- Printing companies
- Electronics industry
- Etc.

## List of manufacturers

Here is a non-exhaustive list of manufacturers. This list may be revised and amended as needed.

- Armstrong
- DRI-STEEM
- gaSteam de Carel
- JS Humidificateurs
- Neptronic
- NORTEC
- Vapac

## Energy Efficiency Financial Assistance\*

Technology eligible for the Feasibility Studies and Implementation of Energy Efficiency Measures Grants. See [energir.com](http://energir.com) for more details.

### Selection criteria

- Choosing a humidifier calls for a technical calculation that takes into account the ambient air conditions, the final humidified air conditions and the percentage of fresh air intake in the building.
- Humidifiers are selected according to their steam production capacity in pounds per hour (lb/hr) or kilograms per hour (kg/hr).
- Standard ASHRAE 62.1 gives the humidity levels recommended for various types of buildings and industries.

### Installation standards

According to the manufacturer's instructions.

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\* Certain conditions apply. The financial assistance is subject to change without prior notice.

These data are provided for guidance only. This Information Sheet is for general use and must not be considered advice. Please ask for assistance on the questions that concern you and do not rely only on the text in this Information Sheet.

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