

# Types of humidifiers

## Hot water humidification systems (isothermal)

**Gas-fired humidifier**



- Need for chemicals use ==> Very low air quality
- Increase in air conditioning consumption
- Operating costs
- Increase the dew point
- Important initial investment

**Steam exchange humidifier**

**Electrode steam humidifier**

**Resistance steam humidifier**



- No minimum distance due to no water spraying
- Silent

## Cold water humidification systems (adiabatic)

**Centrifugal humidifier**



- Low pressure
- Low consumption

**Ultrasonic humidifier**



- Low pressure
- Greater efficiency
- Silent

**Humidifier with pressurized water**



- More energy efficient
- Lower operating costs

**AKIMist® Dry Fog humidifier**



- Almost no maintenance
- Flexibility of installation
- Accurate control of humidity level
- Spot humidification
- Non wetting spraying



- Bigger droplet sizes ==> Wet
- Decrease in efficiency over time
- Need for maintenance
- Small installation
- Less hygienic with risk of bacterias



- Decrease in efficiency over time
- Need for maintenance
- Small area coverage
- Less hygienic with risk of bacterias



- High pressure is a risk in case of leakage
- Harder to control the spray



- Need of compressed air

### Benefit of Cold water VS. Hot water humidifiers



- Much lower operating costs
- Reduction of air conditioning costs
- Instantaneous evaporation
- Dust suppression



- Need for osmosis water



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