

Nortec's Guide to the Best in Humidification



Humidification and Evaporative Cooling



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Overview

The Condair Group has been the world's leading manufacturer of commercial and industrial humidification products for nearly 70 years. As a long-time member of this group that shares its passions for quality, reliability and modernization, Nortec Humidity has become world-renowned for its dedication towards continued innovation and excellence in the field of humidification. Our company history has helped to make our line of humidification products the most efficient and reliable on the market.

Basic humidification involves adding moisture to the air of an interior space, but we go beyond the basics by introducing breakthrough technologies and carefully engineered innovations designed to make any environment healthier and safer for all. In addition, this helps to maintain proper relative humidity (RH) levels for all applications. Nortec's humidifiers utilize different methods to achieve optimal processes.

In this humidification product guide, you'll learn what technologies we offer, how they work, the benefits associated with introducing our humidifiers to your facility and which of our high-performance and low-maintenance products is suited to your application.



Condair is the leading manufacturer of commercial and industrial humidification.



We love humidity for every application.





Methods

Isothermal Humidification

Our isothermal humidifiers generate clean steam by boiling water. They are designed in either electric, gas or steam-to-steam variations, each utilizing specialized components to meet the requirements of any indoor environment. While our electrode steam humidifiers operate strictly on potable water as they utilize its minerals to generate heat, we also have resistive element type systems available that can use almost any water type. Alternative technologies include our high efficiency gas-powered humidifiers as well as live steam (steam to steam) systems that can feed off existing boilers.

Regardless of which system you consider, load size required, or what energy supply is available, we have the ideal solution. Our electric, gas and steam-to-steam humidifiers are simple to use, simple to maintain and are reliable products. Tried and trusted for more than 40 years, they are designed to be efficient and benefit any interior environment.



The Nortec GS gas-powered steam humidification system is the industry's first fully condensing and efficiency-leading.



The RS-OC is the most compact, easy to maintain and cost effective outdoor electric humidifier on the market.





Methods

Adiabatic Humidification (Evaporative Cooling)

Adiabatic humidification utilizes heat to promote evaporation as a means of supplying adequate humidification to an environment and maintaining suitable relative humidity (RH) levels. This process allows water to evaporate and humidify air while lowering temperatures, an effect known as evaporative cooling. Not only can our adiabatic humidifiers maintain required air humidity levels, but they can also provide cooling and save energy depending on the application and its specific needs. As our concerns for the environment continue to grow, many of us seek solutions in order to decrease our carbon footprint while maintaining a comfortable living standard. As an environmentally conscious option, Nortec offers a range of high-performing and thoroughly energy efficient adiabatic humidifiers. Designed for applications in need of a large humidification loads such as office buildings and factories, these products are available in both in-duct and in-space variations.

The real work takes place in our evaporative media designed with a special corrugated pattern, which provides a large surface area where air and water can interact with one another. These channels enable air to efficiently flow through this media while maximizing evaporative output. To bolster the effectiveness of the media in our adiabatic humidifiers, fiberglass is used.

Adiabatic humidification is ideal for a large range of operating environments such as paint workshops that require spray-on layers to adhere consistently, server rooms sensitive to static discharge associated with low relative humidity, offices in need of properly humidified air to reduce absenteeism stemming from health issues and even condominium developments looking to efficiently maintain a healthy environment for their residents.



Condair Dual in an air handling unit (AHU). To achieve an optimal indoor climate, air humidification is an indispensable part of an overall ventilation and air-conditioning.



Direct room humidification solutions enhance productivity, improve quality during storage and enable conservation of value of cultural assets, or the reduction of absenteeism rates due to a cold or the flu.





The Nortec Difference

Regardless of what Nortec humidifier you are considering, there are many benefits associated with the technological innovations that we provide in our systems.

We've made it our mission to meticulously finetune and improve products through continued innovation, resulting in these performance-focused and highly efficient humidifiers that will complement your environment.

We're proud to offer systems which are simple to clean and maintain, the most energy efficient in the industry, highly flexible and effective for any application.



We understand our customers' specific needs and under-take to advise and support them professionally, delivering energy-optimized solutions for productivity, sustainability and health.





Benefits of Investing in a Nortec Humidifier

lealth	Maintenance	Value
 Reduce spread of airborne contagions. 	 Quick and steamlined installation. 	 ✓ Greater energy efficiency, particularly with Nortec ME and DL Series adiabation
 Maintains skin and hair hydration. 	 Scheduled cleaning sequences for faster 	humidifiers.
	maintenance than ever	✓ Large range of humidifier
 Reduces bateria spread 	before.	capacities and technologies
by minimizing time spent		to meet any application.
airborne.	✓ Easily replaceable	
	long-lasting media and	 Quality construction
 Reduced allergen impact on 	premium components.	materials to prevent wear
sensitive individuals.		and corrosion.
	 Easily replaceable 	
 Reduced absenteeism. 	humidifier cylinders that can be directly ordered	✓ Warranties included.
	from your local agent.	 ✓ Support with large knowledge base from 40+
	✓ Reduced customer	years of humidification
	maintenance costs due to higher quality components.	experience.





Which Humidifier is Right for You?



EL Series Electrode Steam Humidifier (5-200 lbs/hr)

Health care facilities, residential home humidification, offices, educational facilities, clean rooms/laboratories, hot yoga studios, data centres and museums. Can be applied anywhere with available electricity and potable water.



RS Series Resistive Steam Humidifier

Educational facilities (schools, libraries, museums, galleries), electronics manufacturing, aerospace manufacturing, warehousing, clean rooms, laboratories, pharmaceuticals and paint booths. Particularly applied in areas requiring tight humidity control.

RH2+ Series Residential Steam Humidifier

The RH2+ Series humidifier features the same state-of-the-art electronic technology as our commercial units, delivering accurate and dependable humidification to your home.





Which Humidifier is Right for You?



GS Series Gas-Steam Humidifier (50-600 lbs/hr)

Offices, educational facilities (schools, libraries, museums and galleries), manufacturing facilities, laboratories and clean rooms, health care facilities, printing plants. Suitable for all commercial and most industrial environments.



SE Series Steam Exchange Humidifier

Health care facilities, educational facilities (museums, galleries, schools), laboratories and clean rooms, various forms of manufacturing.



LS Series Pressure Steam Humidifier

Healthcare, automotive manufacturing, aerospace manufacturing, pulp & paper and textile manufacturing.





Which Humidifier is Right for You?



ME Series Evaporative Humidifier and Cooler

Data centres, electronics manufacturing, aerospace manufacturing, office environments, printing, paint booths, educational facilities and laboratories.



ML Series Direct Room Humidifier

Suitable environments depend on model – manufacturing and production areas in all industries, including those with high ceilings. Also suitable for small work areas and offices.



HP Series High Pressure Adiabatic Humidifier

Paint and coating application facilities, automotive manufacturing, laboratories and clean rooms, health care facilities, educational facilities, electronics manufacturing, data centres and tech storage facilities, aerospace manufacturing.





Which Humidifier is Right for You?



AF Series Compressed Air & Water Nozzle Humidifier

Woodworking, all manufacturing (automotive, textiles, aerospace, electronics), warehousing, paint booths, storage systems, printing, concrete curing, warehousing.



Draabe Series Direct Room Humidifier

Suitable environments depend on model, but printing is the principle application. Others include small work areas, offices and low ceiling work areas.



B500 Direct Room Humidifier

Educational facilities (galleries, museums, libraries), small offices, residual home humidification.



DL Series Hybrid Humidifier

Aerospace manufacturing, data centres and warehousing, health care facilities, educational facilities, laboratories and clean rooms, electronics manufacturing.





Contact us today to book a free consultation with your local Nortec representative.

Nortec manufactures a comprehensive range of humidifier and evaporative cooling systems across all humidification technologies. Nortec's humidification engineers are able to provide the right solution to meet the needs of every environment. Contact us today and ensure you have the best humidification solution for your wind energy facility.

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