HUMIDITY FOR HOSPITAL AND HEALTHCARE FACILITIES

Healthcare facilities strive to maintain an environment that encourages healing and recovery. Proper humidity control is for the benefit of patients and to ensure doctors, nurses, and staff are comfortable performing in their challenging roles. Therefore, indoor air quality (IAQ) is a cornerstone of environmental health, and humidification is a crucial component of (IAQ).

Benefits of humidification in healthcare facilities and hospitals

- **Reduce infection risk in patients**
- **Improves patient outcomes and quality of care**
- **Lowers transmission risk for viral diseases like COVID-19.**
- **Better operational conditions for complex diagnostic equipment such as MRIs**

Hospitals and healthcare facilities require more ventilation than a typical office building. During colder months, heated outdoor air is ventilated into building spaces because cold air holds very little moisture, creating dry indoor conditions.

Dry indoor air affects the respiratory system. The lungs' mucous membranes are our prime defence against airborne infections and particulates. Drying out these membranes causes particles to be trapped in our lungs and increases exposure to pathogens.

Dry air can also prevent proper wound healing, whether abrasion or post-surgery incision. This can create exacerbated risks for infection in patients. In addition, in the maternity ward, dry air can cause distress to sensitive newborns. This is particularly the case for neonatal care units.

Humidifiers add moisture to the dry air to create a healthier environment for building occupants. Hospital and healthcare facilities generally require a minimum relative humidity of 30%. However, particular spaces, such as operating rooms or MRI facilities, require a relative humidity of up to 55%.

neptronic®

General Recommendations of Humanity Levels in Healthcare Facilities		
Room	**Temperature (°C)**	**Relative Humidity (%)**
Operation Theatre	18-20	50-55
Imaging Department: X-ray room, MRI, CT Scanner, Mammography, Ultrasound, Fluoroscopy, Angiology	22-24	50
Pathology Department: Dark room, Biology Lab, Chemical lab, Immunology, Hematology	22-24	50

Since the arrival of the COVID-19 pandemic, researchers have further explored the link between indoor humidification and the transmission and severity of communicable diseases such as influenza or coronavirus. Multiple studies have shown that humidifying indoor spaces leads to a lower rate of information and improved recovery of those experiencing symptoms.

Neptronic manufactures a complete line of humidifiers suited to healthcare applications, with key operational features suitable for humidifying critical environments. Contact us to learn more about how our humidifiers can be part of an indoor air quality solution for your healthcare facility.

Hospitals and Healthcare Facilities that have improved their indoor air quality with Neptronic Humidifiers		
University of Colorado Health	Truman Medical Center	Children's Hospital Cincinati
Kaiser Permanente	VA Hospital System	Mercy Health System
Mayo Clinic	Kaiser Permanente	Quest Diagnostics

If you are looking for the ideal products to humidify and provide clean/ healthy air in hospitals and healthcare facilities,

NEPTRONIC HAS YOU COVERED WITH HIGH QUALITY!

SKE4 | Electric Steam Humidifier

- Capacities from 6-300 lb/hr (2.7-136 kg/hr)
- Separate and isolated plumbing, controls, and high-voltage sections
- Remove the stainless-steel evaporation chamber with ease, no tools required!

SKG4 | Gas Fired Humidifier

- Capacities from 110-810 lb/hr (50-370 kg/hr)
- Turn down ratio of 10:1 (minimum) up to 40:1 (maximum)
- Functions with Tap, RO or DI water

SKH | High Pressure Atomizer

- Up to 21.5 °F (12°C) of free cooling
- Close control humidity
- Uses energy from ambient air
- Fast and easy maintenance
- Up to 3 zones

SKS4 | Steam to Steam Humidifier

- Capacities from 17-1250 lb/hr (8-570 kg/hr)
- Stainless steel (for raw steam) heat exchangers
- Comprehensive scale management system
- Uses domestic, RO or DI water