



HUMBOLDT

Hydrafog DRH, Direct-Room Humidifier H-2750 & H-2750.4F



H-2750



UltraMist Curing Room Humidity System Kit

ASTM C511

The Hydrafog DRH system is a humidistat-controlled dry fog humidification system that comes with a 4-stage reverse osmosis filtration system included. The system is designed to maintain a steady relative humidity for any small to medium-sized indoor spaces. The system has a "closed" design, so there are no reservoirs to be cleaned. It provides a clean, low maintenance alternative to ultrasonic humidification, while being more energy efficient than traditional steam humidifiers. The system's small footprint easily integrates with all applications.

The Hydrofog DRH system provides energy-efficient control of temperature and humidity of cement mixing and storage rooms. It is designed to maintain the room's atmosphere to ASTM C511 standards of (23+/-4°C) for temperature and >50% RH for humidity.

The Hydrofog DRH provides lower output 4.4 lbs/hr (0.52 gal). It uses a piezoelectric nebulizer eliminating the need for air compressors. It also used less water, due to minimal water drain per nozzle.

Features:

- Cost-effective small footprint
- Easy installation
- Low-maintenance alternative to ultrasonic humidification
- Prevents electrostatic discharge (ESD)

H-2750 & H-2750.4F

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Specifications:

- Energy-Efficient Humidity Control
- ASTM C511 Requirements for Cement Mixing Rooms: Temperature Requirements (23+/-4°C), Humidity Requirements (>50% RH)
- Low output: 4.4 lbs/hr (0.52 gal)
- Nozzle: piezoelectric nebulizer
- Low water usage: minimal drain water per nozzle.
- Data logging and real-time monitoring: data logged in 5-minute to 15-minute (customer preference) intervals and saved to .csv file.
- Low maintenance: change filters, clean nozzles, check lines every six (6) months.
- Maintains ASTM C511 standards in rooms up to 6,500 cu ft.
- Larger units available. Please inquire for more information.

System Includes:

- Humidifier Enclosure
- PLC Controller Box
- Humidistat
- Reverse Osmosis System
- Reverse Osmosis Water Tank
- Touch screen controller with full-color LED display. (Wall-mount)
- Heated probe temperature and humidity sensor. (Wall-mount)
- 12-Micron Humidifier. (Flexible wall-mount)

Operation

Water from the reverse osmosis supply is filtered by included reverse osmosis system to remove dissolved hardness from water. If not filtered, hardness dust from evaporated vapor may collect on surfaces or product. Filtered water then runs to water pressure regulator, solenoid valve and flow restrictor on Humidifier. When the system is calling for humidity, the water solenoid valve opens and sends water to the nebulizers. The water pressure to nozzle enclosure is regulated down to around 1.5 psi.

When the water reaches the nozzle enclosure, it passes through the nebulizers and out the drain line at a very slow flow rate. As water is passing through the nebulizers, it becomes atomized into droplets around 12 or 20 microns (depending on specified unit) in size and discharges into air tubes. The air tube pushes the atomized droplets out into the humidor.

The droplets evaporate into the air and raise the relative humidity inside the humidor. When the relative humidity inside reaches set point, the system shuts off by signal from the PLC controller.

When the relative humidity drops 2 points below set point, the system will automatically turn on and raise the level back to set point, then shut off.



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H-2742

The optional TriOBreeze™ Room Sanitizer is sold separately.



Hydrafog DRH control panel