



Corrigan

Corporation of America

Ripening Room Humidity Systems
Simple • Robust • Innovative



VaporDry™

Humidity Systems

Maintaining proper humidity levels is crucial to the success of the ripening process. Relative humidity levels should be around 90% to ensure ripened fruit arrives in optimal condition.

VaporDry™ produces a non-wetting, dry fog that supports the ripening process, resulting in a longer shelf life that prevents loss and increases profits. Corrigan offers a wide range of humidity sensors and controls and the flexibility to integrate with an existing HVAC system.



Perishables can be maintained in a high humidity environment, without the dripping and dampness on walls, racking and floors.

VaporDry™		Patent Pending
Water particle size	~ 2-10 microns	
Output per nozzle	8.34 lbs/hr (3.78 kg/hr)	
Compressed air consumption/nozzle	3.0 cfm (84.9 L/m)	
Operating air pressure	30-35 psig (207-241 kPa)	
Water pressure setpoint for nozzle	3-5 psig (21-34 kPa)	
Nozzle material construction	304 Stainless Steel	
Control		
Modulation Control (On/Off or PID) with % RH sensor feedback		
Sensor Options		
Option A: Capacitive +/-2.0% accuracy for non-condensing applications, <90 %RH		
Option B: Capacitive with +/-1.3% accuracy. Heated probe. 0-100 %RH. Condensing applications acceptable.		

...Almost No Maintenance.

“The system has completely changed the way we look at humidity for bananas. The most surprising thing is that it requires almost no maintenance. Our old system needed frequent and expensive service to keep it going and we had to manually disassemble and sanitize each unit every single week. The ROI for maintenance labor alone was reason enough to switch.”

Head of Engineering
at a Major Produce Warehouse.

A Reputation for Creating Value Through Quality Equipment



Humidity Without Wetness!

Corrigan continues to innovate and push industry standards with its larger space humidity systems designed to offer high relative humidity by achieving a non-condensing dry fog.

VaporDry™ produces the largest volume of dry fog from a single nozzle and a water droplet size as small as 2 microns and consistently well below 10 microns.

VaporDry™ Benefits

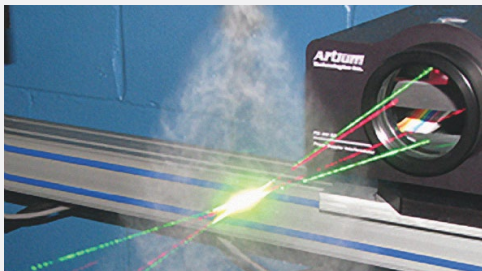
- Simple timer operation (or easy-to-set humidity controller)
- Humidity fills room without wetting walls and floors
- Ease of installation
- Very low maintenance
- Best industry warranty

Slow Ripening



Precise Humidity

Longer Shelf Life

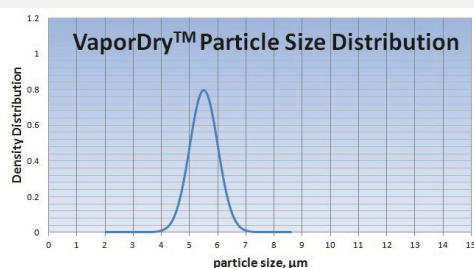


Controlled Dry Fog Particle Size Distribution

Our precision machined technology, along with accurately controlled air and water pressures, allows for droplet sizes as small as 2 microns and consistently well below a 10 micron size water vapor.

Corrigan optimized the parameters needed to consistently produce dry fog by using a 632.8 nm HeNe laser diffraction Particle Analyzer. The analyzer measures drop size based on the diffraction pattern of the laser caused by the water vapor passing through the sampling area.

The Result: VaporDry™ produces dry fog particles that rapidly evaporate before saturating or condensing on any surface.



A Reputation for Creating Value Through Quality Equipment

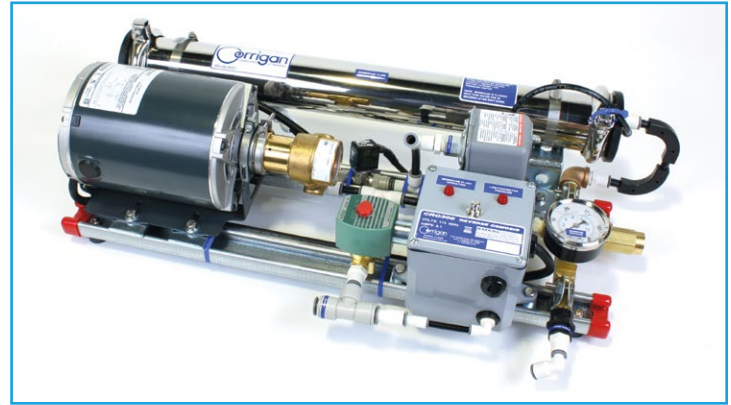


SYSTEM COMPONENTS



VaporDry™ Humidity System

Each system has a capacity of 8.3 lbs/hour and consumes 2.5 CFM at 35 psi. The VaporDry system can be specified to meet the exact requirements of any application. Quantity determined by room size, desired temperature, desired relative humidity and fresh air turnover.



Reverse Osmosis System

Reverse osmosis water filtration system has a permeate auto-flush cycle extending the life of the membrane. System rejects 99% of dissolved solids and produces up to 1700 gallons per day.



Compressor

Low profile design for installation ease with adjustable water regulator for added humidity control. Fractional horsepower units allow for flexibility with multi-room layout.



Control Panel

Controllers come in various configurations. From simple one panel readouts to NEMA rated enclosures, control panels are specified to meet any application.



Non-Heated Transmitter

+/- 2.0% accuracy for non-condensing applications, <90% RH. This polymer capacitance humidity sensor comes with a sintered filter and radiation shield and is not affected by fog, high humidity, or contaminants.



Heated Transmitter

+/- 1.3% accuracy. Heated probe. 0-100% RH. Accurate and long term stable measurement under continuous high humidity and in demanding climate conditions.



Worldwide Sales / Nationwide Service

Corrigan Corporation of America • 104 Ambrogio Drive, Gurnee, IL 60031
Ph: 800-462-MIST (6478) • Fax: 847-263-5944 • Email: sales@corriganmist.com
www.corriganhumidity.com • www.corriganmist.com

