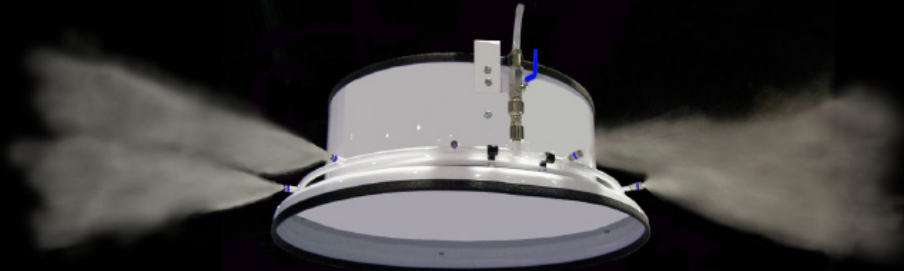




- Fan Based High Pressure (1000 psi) Misting/Fogging Atomizing System (Accelerated Moisture Evaporation)



## 360Mist

**Low Velocity Fan Based 360° Horizontal Misting/Fogging – High Pressure (1000 psi) Atomizing System**

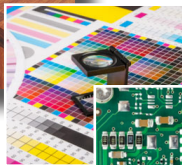
**Automatically Maintains 24/7 Your Standard for Indoor Relative Humidity During Winter Manufacturing Operations**

*A Universal Design Standard for Relative Humidity Control  
in U.S. Industrial Manufacturing Operations*

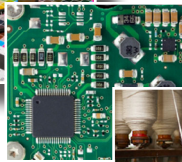
**– 45% RH @ 72°F –**



**WOODWORKING**



**PAPER/PRINT/LABEL**



**ELECTRONICS**



**TEXTILES**



**OTHER**

- Greenhouses
- Paint / Finish
- Cold Storage
- Food / Baking
- Labs / Pharma
- Leather

*• Preserving the Equilibrium Moisture Content (EMC) for Hygroscopic Sensitive Raw Materials and Work in Process.*

*• Controlling Static Electricity (ESD).*

*• Assisting in Dust Control.*



- Fan Based High Pressure (1000 psi) Misting/Fogging Atomizing System (Accelerated Moisture Evaporation)

### 360Mist Overview

#### ► Fan-Based 360° Evaporation

*Ten nozzles arrayed in an even 360° spread for uniform distribution.*

Combining 2100 cfm velocity air with high pressure (1000 psi) water atomization. Air flows from above the unit downward in an axial pattern toward the deflector plate converting the air movement into a horizontal lift underneath the nozzle mist. The affect causes an increased air hang time for the moisture to fully evaporate.

Evaporated moisture quickly migrates to fill your entire air space until it reaches your RH set point (Equilibrium according to Dalton's Law of Partial Pressure).



- 115V or 230V
- 1.8 amps
- 1/4 hp motor

#### ► Fully Integrated and Automatic 24/7 Operation

*Input your desired RH set-point and let it run.*

The system is completely integrated sequentially by the operation of the PLC controlling the on/off timing of both the pump and fan cycles of operation. The zone Blueprint humidistat/sensor controller reads the real time humidity and sends a call for humidity to the PLC which cycles the system on. The pump then sends 1000 psi water to all fans until humidity is satisfied according to your RH set-point in the Blueprint controller and then signals the PLC to power off the system, first the pump followed by the fans on a one minute delay.



#### ► Flexible High Pressure Tube with Slip-Lok Fittings

*An "installer friendly" piping system.*

The 3/8" flexible nylon tube was made for high pressure use (rated at 3500 psi burst pressure). The tube can be easily fixed to walls and/or run in the ceiling areas using zip ties. The system comes with a tube cutter for precision cuts. The connection is made by sliding the tube into the Slip-Lok fittings for a leak proof seal which is long lasting for years of dependable performance.



- Fan Based High Pressure (1000 psi) Misting/Fogging Atomizing System (Accelerated Moisture Evaporation)

### 360Mist Essential Components / Functions / Specifications

#### High Pressure Pump Station With Integrated PLC Controls



- 1000 psi output designed up to 10 GPM flow rate.
- Triplex plunger pump with pulley drive technology.
- White pump enclosure with stand (zinc prime / powdercoat)
- Hour meter, circuit breaker & fuse protection.
- Hi/Low pressure safety switch.
- Pre-pump and post pump micron filters.
- Danfoss stainless steel EDV (Multiple zones use 3/2 valves).
- 115V, 230V up to 480V.



#### Neptronic Digital Zone Humidistat/Controller (one per zone)

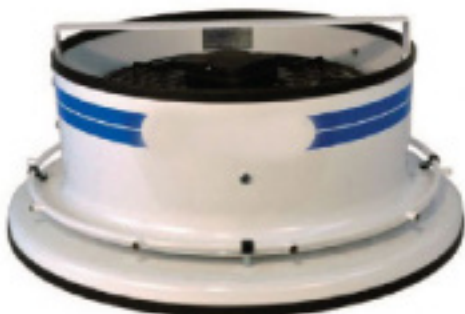
- Controls humidity for each zone.
- Remote located with built in sensor.
- Separate day and night set-points.
- Humidity control range 10-90%; ± 3% RH.
- Power supply: 22 - 26 Vac 50/60 Hz.
- Display shows real time RH percentage.
- Dimensions 2.85" wide x 4.85 high" x 1" deep; weight 0.3 lbs.



#### High Pressure Tube & Slip-Lok Fittings

- 3/8" OD Flexible Nylon High Pressure Tube (rated 3550 burst pressure).
- Slip-Lok Push-to-Connect Fittings. Nickel plated with locking ferrules / compete leak proof seal.

#### Industrial 360° Fan Distribution



- 24" Diameter x 10"h fan with 360° misting; White powder coated; Ceiling mount with bracket (mounts flush to dropped ceiling or chain hung); Weight 40 lbs.
- Quiet axial fan (64 Db) with a UL507 listed outdoor rated fan; 2100 cfm 1/4 hp motor / 60Hz/115V/1.8 amps w/ 20' cord (available 230V).
- Stainless steel misting ring w/ 10 stainless steel anti-drip nozzle positions (5, or 8 lbs/hr/nozzles), 10/24 male thread. All moisture evaporated within 20' diameter.



- Fan Based High Pressure (1000 psi) Misting/Fogging Atomizing System (Accelerated Moisture Evaporation)

### Additional System Info – Installation – Warranty – Maintenance – Operation



#### Detailed Installation Instructions

- Provided with each project prior to equipment delivery and installation for all electrical and plumbing connections. Prior to install, customer is responsible for completing required plumbing & electrical services. All plumbing and electrical connection points must be within 6' of equipment locations.



#### User Manual

- Provided for all system equipment.



#### Warranty for Workmanship and Materials

- Five years pump – Two years fan, humidistat/controller, tube, fittings and nozzles – IHC does not warranty components due to normal wear such as pump seals, belts and nozzle viton/o-rings, OR component misuse and/or abuse.



#### Standard Spares and Maintenance Kit (Per Project)

- Includes 1 ea 5 micron pre-filter and pre-filter wrench, 1 nozzle per 10 nozzles/project, extra nozzle plugs, pump valve kit #123, pump seal kit #167, pump plunger kit #159, & 2 each 16 oz pump oil for 2 oil changes.



#### Routine Maintenance

- Pump (normal pump life 7-10 yrs with routine maintenance):
  1. Change pump oil every 500 hours.
  2. Change seals and valves as needed. Note: belt driven pumps spin at lower rpm's dramatically improving maintenance intervals.

- Water Filters:
  1. Change Pre-Pump 5 Micron Filters once per season (Oct 15 - Apr 15);
  2. Clean / change post pump 100 micron filter yearly.



#### Spring Seasonal Shut Down

- Generally in mid April – shut down the system until September Startup. All pressurized water lines should be drained (see manual – detailed instruction).



#### Fall Seasonal Startup

- Flush water lines before season startup (generally in late September).

#### Year Round Operation

- If the system is left in operation all year, run system once every 2 weeks for ten minutes to maintain pressurized water lines free of stagnant water.



#### Recommended Water Treatment

- Use only recommended water treatment to insure optimum performance within your specific facility and production quality control requirements.



#### Supplier Contact Info

- Industrial Humidity Control LLC – Gaston IN – 765-702-4083 – *Industrial High Pressure (Water Atomizing Type) Humidity Control Systems.*  
Ray Reiff Project Director – rreiff@industrialhumiditycontrol.com – 765-702-4083.