



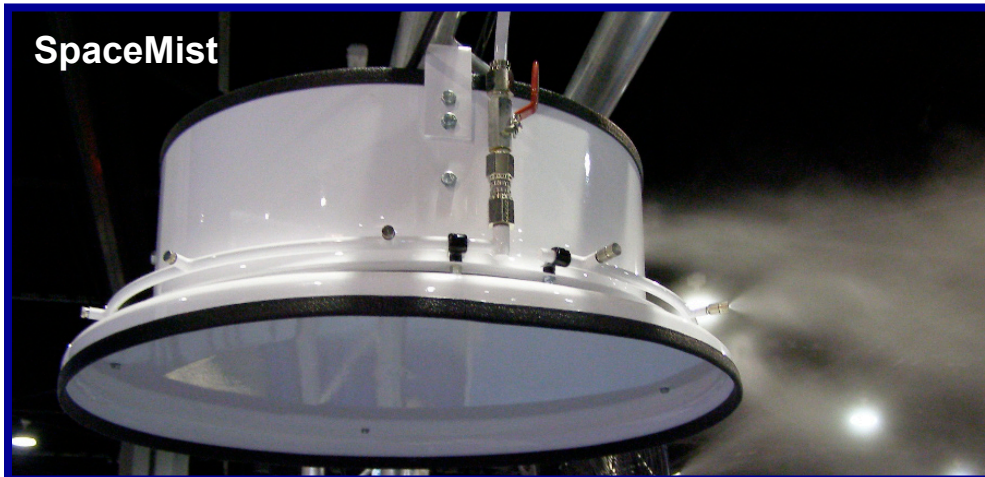
AIR and WATER SYSTEMS

INDUSTRIAL HUMIDIFICATION • INDUSTRIAL COOLING

PO Box 49276 Charlotte NC 28277 • Off 704-588-2603 • Fax 704-588-2604 www.airandwatersystems.com

SpaceMist

Industrial High Pressure Humidity Control System



SpaceMist 360° Horizontal Misting Fans

*Humidity Control
for ceilings
as low as 8'*

SpaceMist Featuring Ceramic Insert Nozzles – the Key to Low Maintenance –



**CAP
with
Ceramic
Insert**



**350 PSI
SPRING
ASSEMBLY
for
Zero Leaks
& Precision
Atomization**



**ANTI
DRIP
BODY
Prevents
Nozzle
Tip Drip &
Seepage**



**CERAMIC INSERT
STAINLESS STEEL
NOZZLE**

SpaceMist Features

- 1000 psi Atomized Water Evaporated Into 2100 cfm Velocity Air
- Automatically Maintains Relative Humidity Set Point (eg 45% @ 72°F).
- The “Shearing Effect” of High Velocity Air – Accelerates Evaporation.
- Complete Evaporation within 20’ Dia. Above all Equipment & Workspace.
- “No-Clog – No-Leak” Ceramic Insert Stainless Steel Nozzles.
- Aggregating 10 Nozzles for Easier Routine Maintenance.
- “Installer friendly” Flexible Hose & Slip-Lok Fittings.
- Built-In Flexibility for Making Changes or Adding More SpaceMist Fans.

SpaceMist System Specifications

Pump Control Station



Plug-In Humidistat Sensor Controller

SpaceMist Misting Fans



- .5 gpm 1/2 hp Pump Control Station (110V):** US Mfg 1000 psi direct drive pump – preplumbed, prewired & tested – ready to spray; 5 Micron Pre-Filter; Auto Stop for water disruption; Auto Pressure Relief Electric Drain Valve. **3 Year Warranty.**
- Humidistat / Sensor Controller (Plug-In Type):** Automatically operates the pump on/off cycle maintaining within $\pm 3\%$ of your humidity set point. 120V / 15 amps with large display screen.
- Flexible 3/8" High Pressure Hose:** 3550 psi rated burst pressure hose – requires only a cutting tool (included in spare parts kit).
- 3/8" Slip-Lok Fittings:** Push-to-Connect nickel plated w/ locking ferrules & over sized O-ring for complete leak proof seal.
- 24" SpaceMist 360° Horizontal Misting:** Quiet Axial Fan (64 Db) with a UL507 listed outdoor rated fan; White powder coated housing; Ceiling mount with bracket (mounts flush to dropped ceiling or chain hung); 2100 cfm 1/4 hp motor / 60Hz/110V/1.9 amps w/ 20' cord; Stainless steel mist ring/1/4" SS Ball Valve w/ 90 micron filter & 10 nozzles. 24" dia. x 9.75" h • 25 lbs. • **3 Year Warranty. All moisture evaporated within twenty foot diameter.**
- Ceramic Insert Stainless Steel Nozzles (10 ea/SpaceMist Fan):** Ceramic “no plug – no stick” surface; 350 psi spring assembly for “zero leaks & drips”; all Viton seat / o-rings – high wear resistance.
- Spare Parts / Installation Materials:** Includes 1 extra nozzle, 2 nozzle plugs & tube cutter & Install materials.

SpaceMist System Operational Information

- Warranty:** 3 year system warranty except filter, three years pump station & SpaceMist Fans.
- Pump Operating Cost:** 180 days/year (60% op. time) = \$87/year.
- Fan Operating Cost:** 180 days/year (100% op. time) = \$45/year/fan.
- Load Formula for Sizing System:** Total Area $\text{ft}^3 \times (\text{grains}/\text{lb}_a - 8 \text{ grains}/\text{lb}_a) \times \text{air x's}/\text{hr} \div 13.5 \text{ ft}^3/\text{lb}_a \times 7,000 \text{ grains}/\text{lb}_w = \text{Total lbs}/\text{hr}$ of moisture to be added.
- “Installer Friendly” Installation:** SpaceMist Fans are ceiling hung above all equipment and workspace and daisy chained together by a 3/8" flexible hose & slip-lok fittings from the pump station. The pump station is plugged into the plug-in sensor, located in the area being humidified AND in proximity of a drain to allow a slight pressure release in the hose during cycle off.
- Routine Maintenance:** Change: 1. Pump oil once/month; 2. Pre-Pump 5 Micron Water Filters every month; 3. Post Pump 90 Micron Filters (change/check yearly); 4. Flush/drain water lines before season startup.
- Operation:** Automatically maintains RH “set point” for from a $\pm 3\%$ RH zone sensor which cycles on/off the pump control station supplying 1000 psi water to each SpaceMist Fan (fans run continuously).