



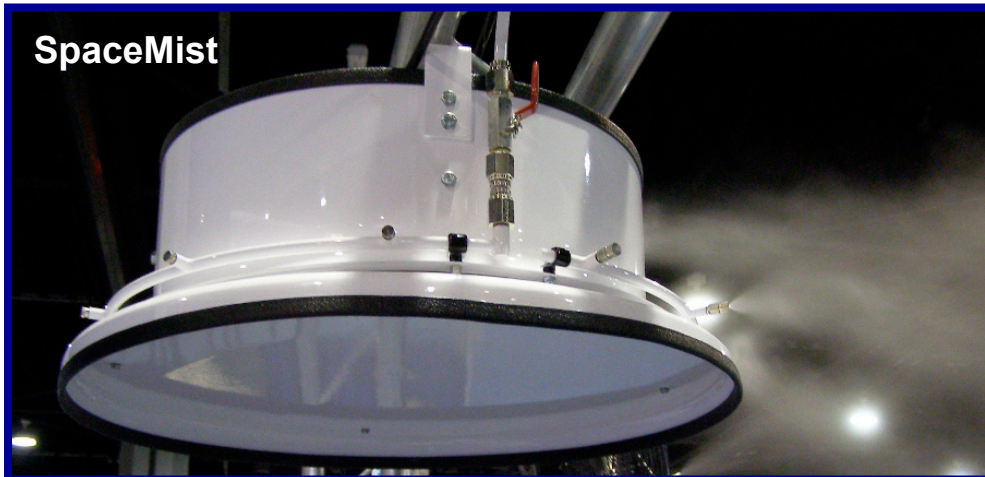
AIR and WATER SYSTEMS

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



- **.35 gpm 1/2 hp 175 lbs/hr Pump Control Station (110V):** US Mfg Pulley Driven 1000 psi Plunger Pump – preplumbed, prewired & tested – ready to spray; 5 & 1 Micron Pre-Filters; Auto Stop for water disruption; Auto Pressure Relief Electric Drain Valve. Dim: 20”w x 40”l x 15”h. Wt: 80lbs. **3 Year Warranty.**
- **Humidistat / Sensor Controller (Plug-In Type):** Automatically operates the pump on/off cycle maintaining within $\pm 7\%$ of your humidity set point. 120V / 15 amps w/ on/off indicator lights; 8” x 6” x 3.5”.
- **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:** 2 year system warranty except filters, three years pump station AND 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 ft³ x (grains/lb_a - 8 grains/lb_a) x air x's/hr ÷ 13.5 ft³/lb_a x 7,000 grains/lb_w = Total lbs/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 every 500 hours; 2. Pre-Pump 5 & 1 Micron Water Filters every 2-3 months; 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 $\pm 7\%$ RH zone sensor which cycles on/off the pump control station supplying 1000 psi water to each SpaceMist Fan (fans run continuously).