HIGH PRESSURE FOG HUMIDIFICATION





- >>> Reduce Static
- Control Humidity
 - Zero Wetting

DESCRIPTION

Achieving optimal humidity levels, with precise control, is imperative across a variety of industrial applications. From improving production rates and maintaining product quality to mitigating static buildup and ensuring worker safety, the impact of proper humidity management cannot be overstated.

MicroCool high-pressure fog systems disperse micron-sized droplets into the air, rapidly elevating humidity levels through flash evaporation. By producing smaller water droplets, fog systems maximize the evaporation surface area, allowing for instant evaporation. With droplets as minuscule as 1/10th the diameter of a human hair, MicroCool systems generate a fine mist that effectively cools and humidifies the air without causing wetness.

MicroCool provides a scalable solution through a diverse range of integrated fog delivery systems. These systems feature patented nozzles, high-pressure pumps, water filtration systems, UV sterilization, and a UL 508A listed control panel designed to meet the specific requirements of any humidification application.

FOCUS PUMP SYSTEM

The MicroCool Focus system is an energy efficient high-pressure humidity control system. The system has a UL listed industrial control panel and is controlled by a Siemens PLC and an industrial duty WEG variable frequency drive.

- Closed loop system design.
- Pressure stabilizer maintains consistent pressure between 1000 PSI and 1200 PSI through the entire closed loop manifold hose.
- Sterile water is supplied to the nozzles free of dissolved mineral solids, bacteria, and chemical contaminants at all times.
- Reverse osmosis water treatment unit, ultraviolet water filter (UV filter), 1 micron carbon filter and a 1-micron sediment filter.
- A sterilization purge sequence operates every 24 hours prohibiting waterborne viruses.

VALUE ADDED BENEFITS

- Ensure Clean Fog MicroCool Fog
 Systems feature UV Light as a final water
 treatment, eradicating any potential
 waterborne viruses, thus ensuring 99%
 bacteria free fog.
- Eliminate static electricity Crucial for precision operations such as electronics manufacturing and printing industries.
- Reduce contaminants MicroCool
 FOCUS pump systems are equipped with
 an automatic "purge" cycle that cleans
 and recirculates water every 24 hours to
 eliminate the chance of waterborne
 viruses.
- Enhance Product Quality Prevent production failures. Improve the end quality of products to meet regulatory standards.
- Preserve Equipment Reduce equipment downtime and product loss. Meet equipment specification requirements to ensure dimensional stability for production environments.







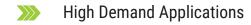
IBEX SYSTEM ADVANTAGES

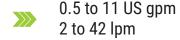
- Variable frequency drive Automatically adjusts pump speed to meet water flow demands and maintain 1,000 PSI (69 BAR) pressure.
- **Compact, quiet** Less intrusive, can be mounted closer to production areas.
- Saves energy, money Electricity usage reduced by more than 60%.
- VFD Extends pump life Less wear and tear on the pump.
- **Inlet pressure switch** Prevents the system from running dry and damaging the pump.
- Pressure transducer Maintains optimal system pressure for MicroCool nozzles.
- External connections Ties into external sensors, BMS systems and climate control systems.
- **Drain valve** Using a PLC controller, the valve opens just enough to release the pressure, saving valuable water usage.
- Control panel built to UL 508A standard Safety and reliability.
- Powder coated aluminum frame Strong, long lasting durability.
- 1-year warranty Backed by responsive MicroCool support.
- Stainless Steel or Flexible line Accomodates challenging installation parameters.



WHISPER

Equipped with a powerful 520 CFM fan, it effortlessly disperses fog across a broad 10 ft radius. The Whisper Fan achieves an impressive output of 80 lbs of fog per hour, ensuring optimal coverage and cooling efficiency.





Multi-Zone Configuration

STAINLESS STEEL ROC LINE



MicroCool's integrated ROC nozzle and stainless steel line system offers the ultimate in strength and flexibility. The ROC (Rapid Orientation Collar) allows 360° nozzle adjustments with little or no effort while the lightweight yet robust steel line handles the most demanding of installations.



World leaders in fog and mist technology for cooling, humidification, air quality control

