



# MicroCool Fog Systems

## MicroCool High Pressure Nozzles

### MicroCool

World leaders in adiabatic cooling and environmental solutions.

### Applications

- Process Cooling
- HVAC Pre-Cooling
- Industrial Humidification
- Agriculture & Horticulture
- Dust & Odor Control
- Environmental (Outdoor) Cooling.

### MicroCool Value

#### Added Features

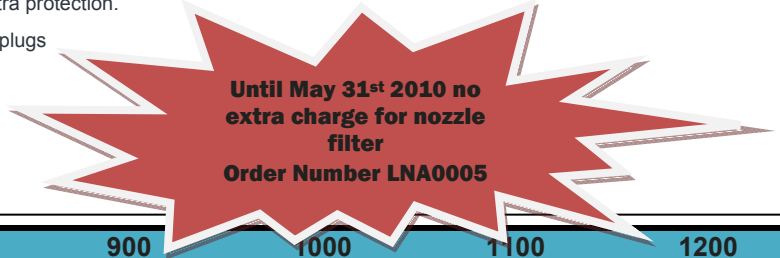
- USA made and patented nozzle design
- USA Manufactured pump modules and equipment.
- In house custom engineering and design.
- Extensive application and implementation experience.



- MicroCool nozzles operate at 1,000 psi (70 Bar) to deliver billions of small droplets less than 1/10<sup>th</sup> width of a human hair (median 10µ\*).
- Since the evaporation process only takes place from the surface, MicroCool nozzles deliver optimum sized droplets to the surrounding air.
- The Viton ball and anti-drip spring ensure that the nozzles close as soon as pressure is cut.
- Nozzle Options include:-
  - All stainless steel (0.005" & 0.008" only)
  - Stand alone (without anti-drip)
  - Double anti-drip for extra protection.
  - Nozzle extenders and plugs



- For nearly thirty years, the MicroCool nozzle has been fulfilling the needs of cooling and humidification users throughout the world.
- Frequently copied and imitated, the MicroCool original nozzle cannot be matched for performance, durability and strength.
- Manufacturing processes (in the USA) have exceptionally tight tolerances that ensure that each nozzle matches MicroCool's high performance standards giving:-
  - Consistent fog pattern
  - Uniform distribution.
  - Steady flow rates.
- The new design for 2010 features a special 20 µm (micron) filter included in the anti-drip body. The filter will:-
  - Protect the nozzle from suspended solids.
  - Further fractionate the water to provide even finer water droplets.
  - Trap algae before reaching the nozzle orifice.
- Extend the operating life of the nozzle.



Pressure psi	800	900	1000	1100	1200
<b>Nozzle Orifice</b>	USGPM – lb/hr	USGPM – lb/hr	USGPM – lb/hr	USGPM – lb/hr	USGPM – lb/hr
0.005"	0.014 – 7.0	0.015 – 7.5	0.017 – 8.5	0.018 – 9.00	1.019 – 9.5
0.008"	0.020 – 10.0	0.023 – 11.5	0.024 – 12.0	0.025 – 12.5	0.026 – 13.0
0.020"	0.065 – 32.5	0.070 – 35.0	0.076 – 38.0	0.080 – 40.0	0.085 – 42.0
<b>Pressure Bar</b>	55	62	69	76	83
<b>Nozzle Orifice</b>	Lpm – kg/hr	Lpm – kg/hr	Lpm – kg/hr	Lpm – kg/hr	Lpm – kg/hr
0.12mm	0.053 – 3.2	0.057 – 3.4	0.064 – 3.8	0.066 – 4.0	0.072 – 4.3
0.20mm	0.083 – 5.0	0.087 – 5.2	0.091 – 5.5	0.095 – 5.7	0.102 – 6.1
0.50mm	0.246 – 14.8	0.265 – 15.9	0.288 – 17.3	0.303 – 18.2	0.318 – 19.1

Full specifications available on request Note: all flow rates shown are nominal.  
 0.005" / 0.12mm nozzles should only be used with pure reverse osmosis water.  
 \* refers to 0.008" / 0.12mm nozzles.