NSL Technology Resources (s) Pte Ltd
No 280 Woodlands Industrial Park E5,
#09-11 Harvest @ Woodlands,
Singapore 757322
Tel : +65 67957477, 7747 Fax : +65 63162368
Email : sales@nsltechnology.com

VORTEC Spray Nozzles

Provides Ultra-Fine, Controlled Spray

Vortec Spray Nozzles provide ultra-fine droplet-sized sprays for evaporative cooling, atomization, humidification and wetting. Superior to conventional hydraulic and piezoelectric nozzles, Spray Nozzles produce spray patterns that can be widely diffused or directed. The liquid stream is entrained by high velocity compressed air to create a range of micron-level spray droplets, resulting in greater surface coverage than conventional nozzles.

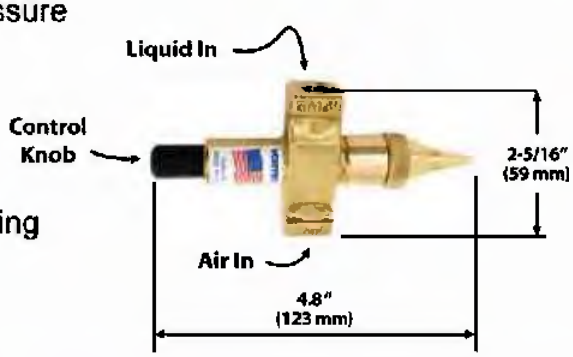
With this more efficient use of the liquid, Spray Nozzles accelerate air-liquid interaction to give more effective cooling, humidifying, wetting and dust control.

Features

- Produce controlled, ultra-fine droplet sizes
- Removable nozzle tips for easy cleaning and replacement
- Interchangeable nozzle tips give flexibility for fogging, atomizing and humidifying
- Can be used with a wide viscosity range of 1 – 1100 cPs
- Deliver a wide range of liquid flow rates (6 – 30 gallons per hour)
- Require no electrical connection at the nozzle
- Allow low pressure liquid supply (2 – 20 psig)
- Use only 12 scfm of compressed air
- Liquid entrainment using compressed air minimizes clogging

Benefits

- More efficient use of liquid as it is entrained by the compressed air
- Consistent, effective cooling of surfaces reduces heat distortion of parts
- Eliminates damage to wood and other water sensitive surfaces due to low humidity
- Provides even coverage when applying coatings, rust inhibitors, lubricants, preservatives, etc. to parts, wood, rubber, plastic, food, and more
- Reduces noise levels
- Speeds testing for humidity effects due to varying humidity levels
- High pressure liquid flows are not required
- Precise. adjustable flow rates minimize usage of expensive coatings, preservatives, rust inhibitors, etc.
- Produce finer drops than with hydraulic nozzles
- Droplet size and production is not dependent on liquid pressure
- Air and liquid mix externally to minimize clogging



Air Knife Applications:

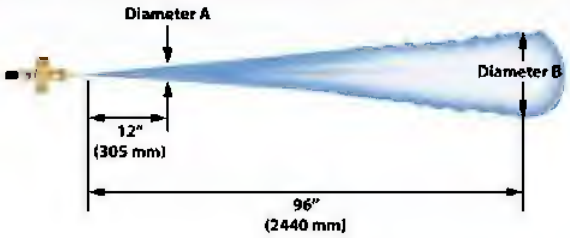
- Evaporative Cooling
- Mist Cooling
- Moisturization
- Dust Suppression
- Static Neutralization
- Pressure Spray Cleaning
- Humidification
- Sanitizing or Deodorizing
- Wetting
- Lubrication
- Atomizing
- Spray Applications

VORTEC Spray Nozzles

Provides Ultra-Fine, Controlled Spray

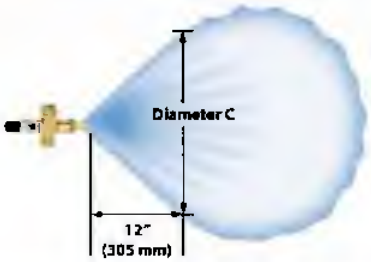
Model 1703 Features

- Fogging nozzle that produces 20 – 60 micron droplets
- Fogging mist covers a 30 inche swath at 8 feet from nozzle
- Handles liquids with viscosities up to 1100 cP



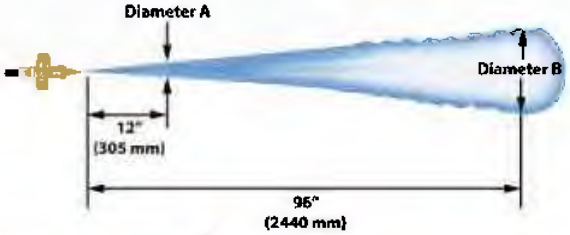
Model 1707 Features

- Humidifying nozzle that produces 20 - 200 micron droplets
- Wide humidifying mist extends over 6 feet at only 12 inches from the nozzle
- Handles liquids with viscosities up to 100 cP



Model 1713 Features

- Atomizing nozzle that produces 60 - 200 micron droplets
- Mist covers a 30 inches swath at 8 feet from nozzle
- Handles liquids with viscosities up to 1100 cP



Model No.	Pattern Dia.		Water Flow Rate (GPM)				
			0.1	0.2	0.3	0.4	0.5
Fogging and Atomizing	A	in.	5	5	5	5	5
		mm	127	127	127	127	127
	B	in.	30	30	30	30	30
		mm	762	762	762	762	762
			0.10	0.15	0.20	0.25	
Humidifying	C	in.	80	48	44	30	
		mm	2030	1218	1117	761	

90 PSIG air, 15 PSIG water
Sprayvectors have 1/4" NPT(F) Compressed Air/Liquid Ports

Model No. Nozzle	Model No. *System	Spray Pattern	Droplet Size	Suggested Applications
1703	1723	Fogging	20-60 microns	Moisturizing, coating, evaporative, cooling, dust suppression
1707	1727	Humidifying	20-200 microns	Mist coating, humidifying, moisturizing, evaporative cooling, spray drying
1713	1733	Atomizing	60-200 microns	Washing, applying lubrication

* All systems include a filter and liquid strainer