# **Fog Misting Typical Installation**



### Mistcaping

It requires trenching the Feed line throughout the landscape area and inserting Miscaping Risers where need for desired effect. The risers are generally hidden amongst the landscaping which provides a rolling fog effect without exposing the tubing or nozzles.

#### System Location:

Throughout the landscape area

## Nozzle Spacing:

Determined by size /scope of the project

#### Nozzle Size:

0.012", 0.016", 0.020"

#### **Required Equipment:**

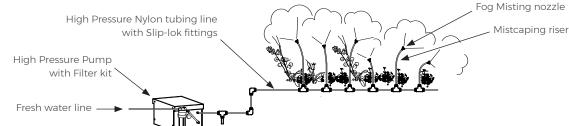
Misting Nozzle, Mistcaping riser,

High Pressure Nylon Tubing,

Slip-Lok fittings,

High pressure pump,

Filter Kit.





Fog Misting System

## **Dust Control**

Outdoor dust control usually involve creating a perimeter outside of which the dust cannot escape. Indoor dust control require the entire area to have an even distribution of fog to cause the dust to intermix with the fog and fall to the ground.

#### System Location:

Multiple lines strategically placed to allow for even distribution throughout the length of the warehouse.

### **Mounting Height:**

35' to 40'

# Nozzle Spacing:

15' with 15' line spacing

#### Nozzle Size:

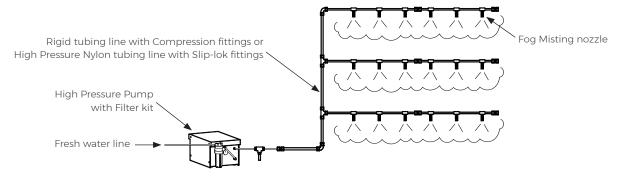
0.012"

Filter Kit.

### **Required Equipment:**

Rev. 0

Misting Nozzle, High Pressure Nylon Tubing, Slip-Lok fittings, High pressure pump,



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Fog Misting Series

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Model No.



## **Outdoor Cooling System**

Can provide dramatic temperature reductions. The system should surround all open sides of the area to be cooled. Incorporating Fans would facilitate the evaporation process and allow for increased nozzle spacing. Higher temperatures, uncovered areas, increased mounting height, eastern or western exposure, and heavy wind conditions may require closer nozzle spacing or larger orifice. Lower temperatures, higher humidity levels, or restricted airflow may require spacing the nozzles further apart or using smaller nozzle orifice.

### System Location:

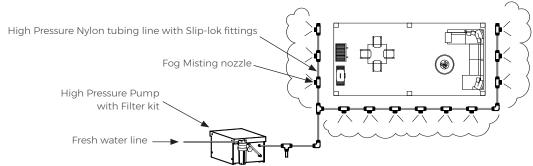
Around the perimeter of all open sides of the area to be cooled.

Mounting Height: 10' to 12'
Nozzle Spacing: 30"

Nozzle Size: 0.012"

### Required Equipment:

Misting Nozzle, High Pressure Nylon Tubing, Slip-Lok fittings, High pressure pump, Filter Kit, and mounting hardware.





### Greenhouse Humidification

Treated water will ensure minimal nozzle plugging and will eliminated any possible adverse development due to TDS or calcium present in the water supply. The system may also require the inclusion of temperature and humidity sensors to control the operation of the fog system. Increasing airflow will always improve the cooling and humidification capabilities of the fog system.

#### System Location:

Multiple lines strategically placed to allow for even distribution throughout the length of the warehouse.

Mounting Height: 12' to 15'

Nozzle Spacing: 48" Nozzle Size: 0.012"

#### **Required Equipment:**

Misting Nozzle, High Pressure Nylon Tubing, Slip-Lok fittings, High pressure pump, Filter Kit.

Rigid tubing line with Compression fittings or High Pressure Nylon tubing line with Slip-lok fittings	Fog Misting nozzle
High Pressure Pump with Filter kit	
Fresh water line	

Fog Misting System Fog Misting Series Model No. Rev. 0

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## **Odour Control Application**

By providing a chemical injector and the appropriate type of chemical, any Fog system can be used to control odour.

#### System Location:

Throughout the perimeter

#### Nozzle Spacing:

Determined by size /scope of the project

#### Nozzle Size:

0.012", 0.016", 0.020"

# Required Equipment:

Misting Nozzle,

Misting Nozzle with chemical resistant O-rings,

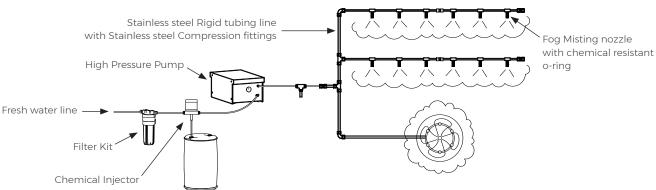
Stainless steel Tubing,

Compression fittings,

High pressure pump,

Filter Kit.

Chemical Injector and appropriate type of chemical.



## Designing a System

When beginning the process of designing a system, it is important to consider all variables that affect the systems performance. The following are important considerations.

- First review the site condition and determine all variables that may affect the system. Document the height and overall size of the job site. Consider the expectations or needs for system before defining the system design.
- Determine the best placement for the tubing (or fog fans) while accounting for these variables.
- Once the tubing placement is defined, pick the appropriate nozzle size and determine the nozzle and line spacing. Layout the entire system and calculate the required water flow (qty of nozzles X nozzle flow) and the total tubing length. Use this to determine the required pump size and Fog line tubing size.
- Pick the most suitable pump depending on the system workload and customer expectations. Locate the power supply and water supply. Use this to determine the best possible ump site.
- Determine the length and placement of all Feed line and Branch line tubing from the pump site to the Fog line. Add this length to the Fog line length to determine total system tubing length. Use this length, along with the system flow requirements, to determine the necessary feed line tubing size and the possible requirement for branch line transitions between the feed line and fog line.
- Lastly, consider the water condition as rated Total Dissolved Solids (TDS) and the Calcium content as rated in Parts Per Million (PPM) to determine the proper in-line filter housing and cartridge.

Fog Misting System Fog Misting Series Model No. Rev. 0

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# **Fog Misting System**

Fogco misting systems efficiently use water to cool air on hot days, increase humidity levels, control odor, suppress dust, and add special effects to pools or patios. Our commercial and industrial misting systems help companies keep guests cool on restaurant patios or golf courses, and meet government regulations in greenhouses and warehouses.

# Fog misting Nozzles

Thread Size: 10/24F

Dimensions: Ø9.5 x 25mm



0.020"

0.17

85°

9.5μ - 49.9μ ; MD=15.2μ

Green

# Fog misting Nozzle Adoptors and Accessories

#95036



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Model No.	Description	Measurement
#10252	Black Nozzle O-ring	Ø9mm x 75mm
#93598	Red 'Viton' Nozzle O-ring (chemical resistant o-ring)	Ø9mm x 1mm
#92788	Anti-drip spring	
#93354	Anti-dip stemmed ball	
#92100	Nozzle Removal Tool	Ø25mm x 75mm

# Fog misting 50Hz High Pressure Pump



\* 24/7 use under Normal operating conditions



\* 8hr per day use under Normal operating conditions

Model No.	Description	Flow (LMP)	Motor HP	Current (Amps)	Pressure	Weight (Kg)
#7100215		1	1	7.1		55
#7200215	50Hz Pulley Drive	2	1	7.1		55
#7400215	Industrial duty Misting Pump Input Voltage: 230V AC	4	1	7.1	(1000psi)	55
#7800215	Dimension:	8	1.5	11.3	703.25m head	67
#7120215	762 x 508 x 559mm	12	3	13.4		68
#7140215		14	3	13.4		68
#8100215		0.8	1	7.1		29
#8200215	50Hz Direct Drive Industrialduty Misting Pump	1.6	1	7.1	(1000psi)	90
#8300215	Input Voltage: 230V AC  Dimension: 394 x 597 x 356mm	3.5	1	7.1	703.25m	31
#8400215		4.4	1	7.1	head	32
##37000095sure	Pumps are pre-assembled with filter and	acce@@ries	upon þ <u>f</u> sler.	11.3		33

# Fog misting Filters (Spare Parts)







Model No.	Description	Measurement
#93613	Water pre-treatment kit (1/2" Port)	
#93614	Water pre-treatment kit w/ scalex cartridge for calcium carbonate scale prevention	
#92609	10"Filter housing (1/2" Port)	Ø120mm, Height = 300mm
#92611	10"Filter housing (1/2" Port)	Ø175mm, Height = 330mm
#10109	Calcium inhibitor filter, 3/4" FGHT x 3/4" MGHT	Ø50mm, Height = 150mm
#92613	9-3/4", Scalex filter cartridge (for 92609)	Ø75mm, Height = 250mm
#92603	9-3/4", 1 micron filter cartridge (for 92609)	Ø75mm, Height = 250mm
#92608	9-3/4", 5 micron filter cartridge (for 92609)	Ø75mm, Height = 250mm
#93039	9-3/4", Phosphate filter cartridge (for 92609)	Ø75mm, Height = 250mm
#92612	Dual filter cartridge	Ø130mm, Height = 250mm

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# Fog Misting System - Nylon Tubing and Slip-lok fittings

#### **Function**

Nylon tubing and Slip-lok fittings assembly allows a quick and simple installation. High pressure nylon tubing's has an operating pressure of 1000psi. Slip-lok fittings has a unique design allowing them to be easily removed, replaced, or reinstalled anytime after the initial installation (no crimping required). These are rated at 1500psi.

Misting nozzles are specially placed in line around the perimeter to connected to a high pressure pump. Available in orifice sizes from 0.2mm to 0.5mm. Spray patterns vary from 45° to 90° depending on the size and type of the nozzle.

Synflex tubing is a 1/4"flexible feed line with working pressure of 1500psi. Synflex fittings allows the feed line to be cut to length and assembled on site. No crimping required.



Model No.	Description	Measurement
#94500	1/4" High pressure Nylon tubing - 500ft / roll	Ø1/4" , Length = 152 meters
#90425	1/4" High pressure Nylon tubing - 25ft / roll	Ø1/4" , Length = 7.5 meters
#94501	1/4" High pressure Nylon tubing - per foot	Ø1/4"
#93072	3/8" High pressure Nylon tubing - 500ft / roll	Ø3/8" , Length = 152 meters
#90063	3/8" High pressure Nylon tubing - 100ft / roll	Ø3/8" , Length = 30 meters
#92700	3/8" High pressure Nylon tubing - 50ft / roll	Ø3/8" , Length = 15 meters
#93562	3/8" High pressure Nylon tubing - per foot	Ø3/8"
#90550	1/2" High pressure Nylon tubing - 500ft / roll	Ø1/2" , Length = 152 meters
#90551	1/2" High pressure Nylon tubing - per foot	Ø1/2"



#92680	1/4" Vinyl coated Steel clamp	for Ø1/4" tubing
#93328	3/8" Vinyl coated Steel clamp	for Ø3/8" tubing
#92714	1/2" Vinyl coated Steel clamp	for Ø1/2" tubing







#94858	1/4" Slip-lok x 1/8" Male thread adoptor	for Ø1/4" tubing
#94853	1/4" Slip-lok x 1/4" Male thread adoptor	for Ø1/4" tubing
#94707	1/4" Slip-lok x 3/8" Male thread adoptor	for Ø1/4" tubing
#93163	3/8" Slip-lok x 1/8" Male thread adoptor	for Ø3/8" tubing
#92712	3/8" Slip-lok x 1/4" Male thread adoptor	for Ø3/8" tubing
#92707	3/8" Slip-lok x 3/8" Male thread adoptor	for Ø3/8" tubing
#92708	3/8" Slip-lok x 1/2" Male thread adoptor	for Ø3/8" tubing
#92854	1/2" Slip-lok x 3/8" Male thread adoptor	for Ø1/2" tubing
#92855	1/2" Slip-lok x 1/2" Male thread adoptor	for Ø1/2" tubing

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Fog Misting System	Fog Misting Series	Model No.	Rev. 0

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Model No.	Description	Measurement
#92507	3/8" Slip-lok x 1/4" Female thread adoptor	for Ø3/8" tubing
#92709	3/8" Slip-lok x 3/8" Female thread adoptor	for Ø3/8" tubing
#94132	1/2" Slip-lok x 3/8" Male thread 90° elbow adoptor	for Ø1/2" tubing
#94131	1/2" Slip-lok x 1/2" Male thread 90° elbow adoptor	for Ø1/2" tubing
#94130	1/2" Slip-lok x 1/2" Male thread 45° elbow adoptor	for Ø1/2" tubing
#92702	3/8" Slip-lok coupling	for Ø3/8" tubing
#92703	3/8" Slip-lok elbow	for Ø3/8" tubing
#92704	3/8" Slip-lok 3-way T	for Ø3/8" tubing
#92711	3/8" Slip-lok 4-way cross	for Ø3/8" tubing
#94630	1/4" Slip-lok T w/o nozzle	for Ø1/4" tubing, Thread 10/24
#92630	3/8" Slip-lok T w/o nozzle	for Ø3/8" tubing, Thread 10/24
#93923	3/8" Mistcaping Adoptor	for Ø3/8" tubing, Thread 10/24
#93225	3/8" Slip-lok Mistcaping Riser (w/12" length memory tube)	for Ø1/4" tubing, Thread 10/24
#93226	3/8" Slip-lok Mistcaping Riser (w/ 24" length memory tube)	for Ø3/8" tubing, Thread 10/24

# Synflex tubing



#92706

3/8" Slip-lok end plug

Model No.	Description	Measurement
#94001	1/4" Synflex tubing - 500ft / roll	Ø1/4" , Length up to 152 meters
#94144	1/4" I.D. Synflex x 1/4" NPT Male thread adoptor	for Ø1/4" Synflex tubing
#94145	1/4" I.D. Synflex x 1/4" NPT Female thread adoptor	for Ø1/4" Synflex tubing

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for Ø3/8" tubing

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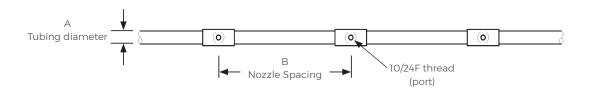
# Fog Misting System - Copper tubing & Solder fittings

#### **Function**

Fog misting copper tubing line made by soldering copper tubes and Solder fittings is extremely durable, impermeable to contaminants and requires little or no maintenance.

Misting nozzles are specially placed in line around the perimeter to connected to a high pressure pump. Available in orifice sizes from 0.2mm to 0.5mm. Spray patterns vary from 45° to 90° depending on the size and type of the nozzle.

Pre-fabricated copper mist tubing is available in 10ft lengths with misting nozzle holes spacing of 18", 24" and 30". Custom tubing lengths and custom mist nozzle ready holes spacing is also available on request.







Model No.	Description	Measurement
#92680	1/4" Vinyl coated Steel clamp	for Ø1/4" tubing
#93328	3/8" Vinyl coated Steel clamp	for Ø3/8" tubing
#92807	3/8" 2 hole copper tubing clamp	for Ø3/8" tubing

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## **Brass Compression fittings**

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Model	o. Description	Measurement
#9282	3/8"Brass compression x 1/4" male thread adaptor	for Ø3/8" rigid tubing
#9282	3/8"Brass compression x 3/8" male thread adaptor	for Ø3/8" rigid tubing
#9282	3/8"Brass compression x 1/4" female thread adaptor	for Ø3/8" rigid tubing
#9282	3/8"Brass compression x 3/8" female thread adaptor	for Ø3/8" rigid tubing
#9282	3/8" Brass compression union	for Ø3/8" rigid tubing
#9290	1/2" Brass compression union	for Ø1/2" rigid tubing
#9283	3/8"Brass compression x 1/4" compression reducing adoptor	
#9282	1/2"Brass compression x 3/8" compression reducing adoptor	
#9282	3/8" Brass compression elbow	for Ø3/8" rigid tubing
#9290	1/2" Brass compression elbow	for Ø1/2" rigid tubing
#9282	3/8" Brass compression 3-way T	for Ø3/8" rigid tubing
#9290	1/2" Brass compression 3-way T	for Ø1/2" rigid tubing
#9282	3/8" Brass compression 4-way Cross	for Ø3/8" rigid tubing
#9283	3/8" Brass compression cap	for Ø3/8" rigid tubing
#9291	1/2" Brass compression cap	for Ø1/2" rigid tubing

Fog Misting System	Fog Misting Series	Model No.	Rev. 0	
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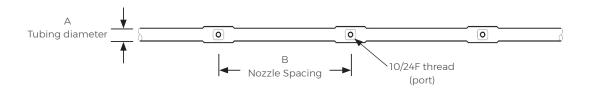
# Fog Misting System - Rigid tubing & Compression fittings

#### **Function**

Pre-fabricated Stainless steel mist tubing can withstand pressures of up to 3000psi and is recommended for misting system that utilizes treated water or chemical injection. Available in 1/2" and 3/8" outside diameter pipes with standard spacing of 18", 24" and 30". Custom lengths with varied nozzle spacing and configurations are also available on request.

Compression fittings are high pressure rated double ferruled fittings with an operating pressure of 3000psi.

Misting nozzles are specially placed in line around the perimeter to connected to a high pressure pump. Available in orifice sizes from 0.2mm to 0.5mm. Spray patterns vary from 45° to 90° depending on the size and type of the nozzle.





	Model No.	Description	A Tubing diameter	Nozzle spacing	Length (mm)	Number of ports
	#92900	3/8" Stainless steel blank tubing, 20ft length	3/8"	-	6096	-
	#92951	3/8" Stainless steel Pre-fab, 19.5ft Length with 18" nozzle spacing	3/8"	457	5944	13
	#92952	3/8" Stainless steel Pre-fab, 20ft Length with 24" nozzle spacing	3/8"	609	6096	10
	#92953	3/8" Stainless steel Pre-fab, 20ft Length with 30" nozzle spacing	3/8"	762	6096	8
	#93080	3/8" Stainless steel Pre-fab, 10ft Length with 24" nozzle spacing	3/8"	609	3048	5
-	#93081	3/8" Stainless steel Pre-fab, 10ft Length with 30" nozzle spacing	3/8"	762	3048	4
	#92839	1/2" Stainless steel blank tubing, 20ft length	1/2"	-	6096	-
	#93577	1/2" Stainless steel Pre-fab, 19.5ft Length with 18" nozzle spacing	1/2"	457	5944	13
	#93578	1/2" Stainless steel Pre-fab, 20ft Length with 24" nozzle spacing	1/2"	609	6096	10
	#93579	1/2" Stainless steel Pre-fab, 20ft Length with 30" nozzle spacing	1/2"	762	6096	8



Model No.	Description	Measurement	
#93328	3/8" Vinyl coated Steel clamp	for Ø3/8" tubing	
#92714	1/2" Vinyl coated Steel clamp	for Ø1/2" tubing	

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D (mm)

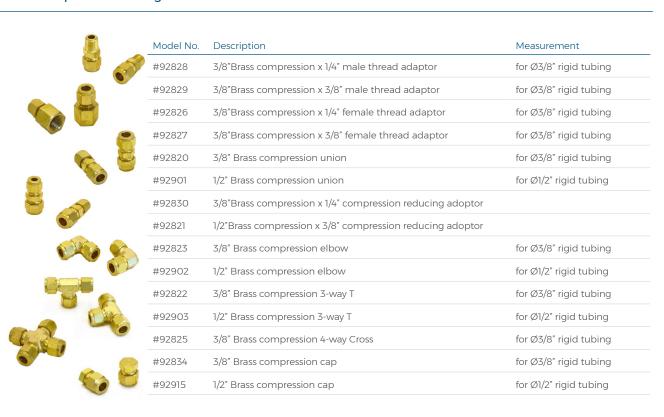
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Model No.	Description	Measurement
#92812	3/8" Stainless steel compression union	for Ø3/8" rigid tubing
#92860	1/2" Stainless steel compression union	for Ø1/2" rigid tubing
#92835	1/2" x 3/8" Stainless steel compression reducing union	
#92837	3/8" Stainless steel compression elbow union	for Ø3/8" rigid tubing
#92863	1/2" Stainless steel compression elbow union	for Ø1/2" rigid tubing
#92836	3/8" Stainless steel compression 3-way T	for Ø3/8" rigid tubing
#92862	1/2" Stainless steel compression 3-way T	for Ø1/2" rigid tubing
#92852	3/8" Stainless steel compression cap	for Ø3/8" rigid tubing
#92874	1/2" Stainless steel compression cap	for Ø1/2" rigid tubing
#92847	3/8" Stainless steel compression x 3/8" NPT male thread adaptor	
#92869	1/2" Stainless steel compression x 3/8" NPT male thread adaptor	

# **Brass Compression fittings**

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